

# Monthly Energy Review

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February 2009

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**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, trade, and 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.

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

#### **Important Notes About the Data**

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

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

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

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

• Full report and sections: PDF files

• Report tables: PDF files

• Table data (unrounded): Excel and CSV files

• Graphs: PDF files

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

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

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# Monthly Energy Review February 2009

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

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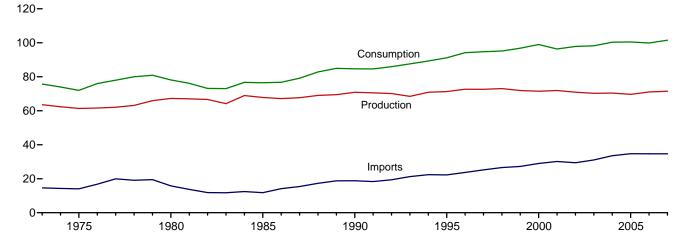
# **Energy Overview**



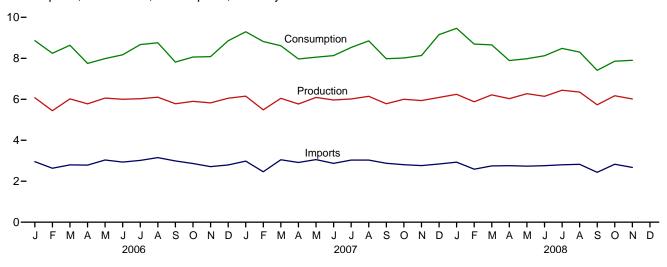
The continental United States at night from orbit. Source: National Oceanic and Atmospheric Administration satellite imagery; mosaic provided by U.S. Geological Survey.

Figure 1.1 Primary Energy Overview (Quadrillion Btu)

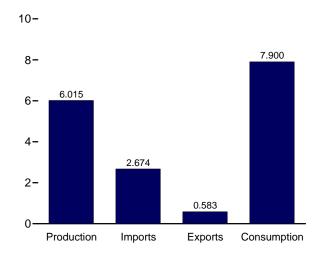
Consumption, Production, and Imports, 1973-2007



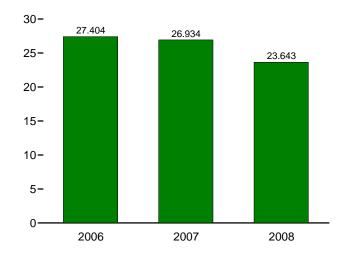
Consumption, Production, and Imports, Monthly



Overview, November 2008



Net Imports, January-November



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
73 Total		14.613	2.033	-0.456	75.708
75 Total		14.032	2.323	-1.067	71.999
80 Total	67.232	15.796	3.695	-1.212	78.122
985 Total	67.799	11.781	4.196	1.107	76.491
90 Total	70.870	18.817	4.752	283	84.652
995 Total		22.260	4.511	2.104	91.173
996 Total		23.702	4.633	2.466	94.175
997 Total		25.215	4.514	1.430	94.765
998 Total		26.581	4.299	139	95.183
99 Total	71.907	27.252	3.715	1.373	96.817
000 Total	71.490	28.973	4.006	2.518	98.975
001 Total	71.892	30.157	3.770	-1.952	96.326
002 Total		29.407	3.668	1.184	97.858
		R 31.061	4.054	.938	98.209
003 Total					
004 Total		33.543	4.433	.857	100.351
005 Total	69.647	34.710	4.561	.710	100.506
006 January		2.953	.360	R .193	R 8.862
February		2.632	.339	<sup>R</sup> .510	<sup>R</sup> 8.247
March	D	2.799	.383	R .198	R 8.633
April	_	2.787	.383	R435	R 7.747
•	<b>B</b>	3.037	.436	R670	R 7.989
May	D				
June		2.935	.419	R <sub>-</sub> .343	R 8.171
July	R 6.027	3.018	.403	R .028	<sup>R</sup> 8.670
August	6.099	3.152	.419	<sup>R</sup> 075	<sup>R</sup> 8.758
September		2.989	.460	<sup>R</sup> 496	<sup>R</sup> 7.814
October		2.863	.436	R266	R 8.061
November	_	2.712	.435	R019	R 8.082
December	R 6.050	2.795	.394	R .405	R 8.856
Total	R 71.054	34.673	4.868	<sup>R</sup> <b>970</b>	<sup>R</sup> 99.889
<b>007</b> January	R 6.152	2.982	.447	R .606	<sup>R</sup> 9.294
February	R 5.486	2.463	.349	<sup>R</sup> 1.220	<sup>R</sup> 8.819
March	<b>B</b>	3.046	.420	<sup>R</sup> 059	<sup>R</sup> 8.611
April		2.914	.416	R300	R 7.967
•	D			R646	R 8.052
May	_	3.056	.448		
June		2.871	.423	<sup>R</sup> 280	R 8.131
July		3.030	.498	<sup>R</sup> 020	R 8.529
August	R 6.142	3.033	.475	<sup>R</sup> .151	<sup>R</sup> 8.852
September		2.877	.436	R244	<sup>R</sup> 7.979
October		2.806	.439	354	R 8.013
		R 2.765	.559	R008	R 8.135
November					
December		2.841	.538	R .761	R 9.155
Total	R 71.473	34.685	5.448	R .826	R 101.537
008 January		2.930	.535	R .825	R 9.463
February	<b>B</b>	2.587	.565	<sup>R</sup> .791	R 8.692
March		2.749	.610	R .303	R 8.655
	D	2.760		R306	R 7.891
April			.593		
May	R 6.272	2.734	.624	R401	<sup>R</sup> 7.981
June	R 6.143	2.760	.625	<sup>R</sup> 152	<sup>R</sup> 8.125
July	R 6.440	R 2.803	R .608	<sup>R</sup> 152	R 8.482
August	B	R 2.823	R .586	R281	R 8.305
September		2.434	.519	R235	R 7.412
				R548	R 7.859
October		R 2.827	.590		
November		2.674	.583	207	7.900
11-Month Total	67.486	30.080	6.438	363	90.765
007 11-Month Total	65.383	31.844	4.910	.064	92.382
006 11-Month Total	65.004	31.878	4.474	-1.375	91.033

<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 withdrawals and balancing item; coal stock change, losses, and unaccounted for; and fuel ethanol stock change.

R=Revised.

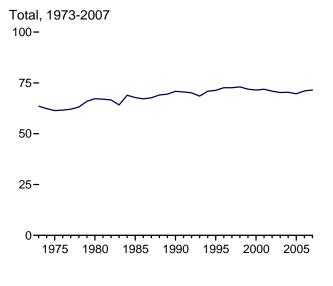
Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," in Glossary. • Totals may not equal sum of components

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

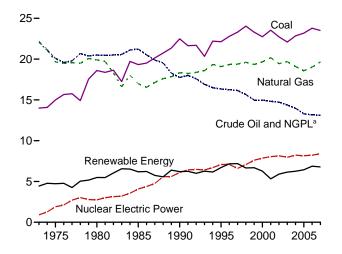
Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available data beginning in 1973.

Sources: • **Production:** Table 1.2. • **Imports:** Table 1.4a. • **Exports:** Table 1.4b. • **Consumption:** Table 1.3.

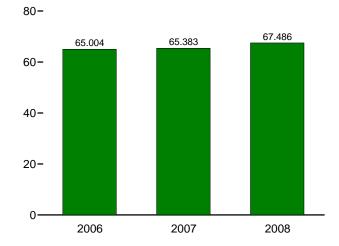
Figure 1.2 Primary Energy Production (Quadrillion Btu)



By Source, 1973-2007



Total, January-November



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

Total, Monthly

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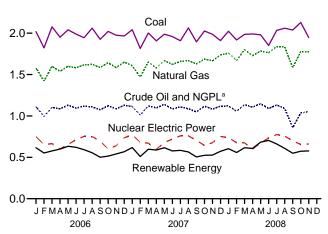
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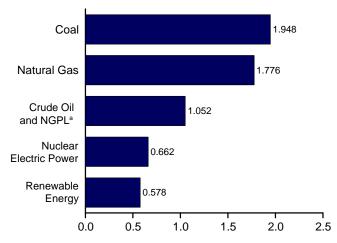


By Source, Monthly

2.5-



By Source, November 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						Renewabl	e Energy <sup>a</sup>			
	Coalb	Natural Gas (Dry)	Crude Oil <sup>c</sup>	NGPL <sup>d</sup>	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	.118	(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	19.344	13.723	2.530	58.387	7.087	3.590	.316	.071	.033	3.157	7.167	72.641
1997 Total	23.310	19.394	13.658	2.495	58.857	6.597	3.640	.325	.070	.034	3.111	7.180	72.634
1998 Total	24.045	19.613	13.235	2.420	59.314	7.068	3.297	.328	.070	.031	2.933	6.659	73.041
1999 Total	23.295	19.341	12.451	2.528	57.614	7.610	3.268	.331	.069	.046	2.969	6.683	71.907
2000 Total	22.735	19.662	12.358	2.611	57.366	7.862	2.811	.317	.066	.057	3.010	6.262	71.490
2001 Total	23.547	20.166	12.282	2.547	58.541	8.033	2.242	.311	.065	.070	2.629	5.318	71.892
2002 Total	22.732	19.439	12.163	2.559	56.894	8.143	2.689	.328	.064	.105	2.712	5.899	70.936
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
2006 January	2.018	<sup>R</sup> 1.579	.918	.194	R 4.709	.750	.272	.029	.006	.024	.286	.617	<sup>R</sup> 6.076
February	1.822	R 1.422	.819	.175	R 4.238	.653	.246	.026	.005	.019	.256	.552	R 5.443
March	2.076	R 1.599	.907	.196	R 4.778	.665	.244	.030	.006	.023	.274	.578	R 6.020
April	1.952	R 1.539	.892	.193	R 4.577	.601	.283	.027	.006	.025	.259	.600	R 5.777
May	2.040	R 1.600	.928	.202	R 4.770	.655	.306	.026	.006	.024	.270	.633	R 6.058
June	1.988	R 1.582	.898	.196	R 4.663	.714	.295	.028	.006	.020	.271	.621	R 5.998
July	1.945	R 1.617	.917	.202	R 4.682	.753	.252	.030	.006	.019	.284	.592	R 6.027
August	2.061	R 1.623	.910	.199	4.792	.751	.216	.030	.007	.016	.287	.555	6.099
September	1.926	R 1.585	.876	.198	R 4.585	.695	.171	.029	.006	.019	.277	.501	R 5.782
October	2.021	R 1.642	.918	.204	R 4.785	.600	.169	.030	.006	.024	.285	.514	R 5.900
November	1.975	<sup>R</sup> 1.583	.888	.197	R 4.643	.641	.201	.028	.006	.025	.280	.540	<sup>R</sup> 5.824
December	1.966	R 1.651	.929	.200	R 4.746	.735	.214	.030	.006	.025	.293	.568	R 6.050
Total	23.790	R 19.022	10.801	2.356	<sup>R</sup> 55.968	8.214	2.869	.343	.072	.264	3.324	6.872	<sup>R</sup> <b>71.054</b>
2007 January	2.042	R 1.606	.921	.192	R 4.762	.772	R .258	.031	.006	.024	R .298	R .618	R 6.152
February	1.816	<sup>R</sup> 1.470	.832	.177	<sup>R</sup> 4.295	.681	<sup>R</sup> .184	R .027	.006	.025	R .268	R .510	<sup>R</sup> 5.486
March	2.002	R 1.652	.918	.204	R 4.776	.671	R .240	.029	.007	.030	R .292	R .598	R 6.045
April	1.907	<sup>R</sup> 1.579	.903	.195	<sup>R</sup> 4.583	.598	.237	.028	.007	R .031	R .285	R .588	<sup>R</sup> 5.770
May	1.987	<sup>R</sup> 1.668	.934	.206	<sup>R</sup> 4.795	.678	R .258	.028	.007	R .029	R .293	R .616	R 6.089
June	1.960	<sup>R</sup> 1.623	.887	.198	<sup>R</sup> 4.667	.719	R .226	R .029	.007	R .026	R .289	R .578	<sup>R</sup> 5.964
July	1.908	<sup>R</sup> 1.658	.903	.205	<sup>R</sup> 4.674	.759	R .223	.030	.007	R .021	R .303	R .584	<sup>R</sup> 6.017
August	2.063	<sup>R</sup> 1.669	.883	.203	<sup>R</sup> 4.819	.759	.198	.030	.007	R .027	R .303	R .564	<sup>R</sup> 6.142
September	1.895	R 1.627	.850	.199	R 4.571	.705	R .146	.029	.007	R .028	R .295	R .505	R 5.782
October	2.026	<sup>R</sup> 1.688	.907	.211	R 4.832	.644	.147	.030	.007	R .033	R .307	R .524	R 6.000
November	1.986	R 1.665	.873	.209	R 4.734	R .677	.156	.029	.006	R .031	R .305	.527	R 5.938
December	1.910	R 1.737	.909	.210	R 4.766	.751	R.182	.030	.006	R .035	R .320	R .573	R 6.090
Total	23.501	R 19.643	10.721	2.409	R <b>56.274</b>	<sup>R</sup> 8.414	R <b>2.455</b>	R .349	.080	R .342	R 3.560	R 6.785	R 71.473
2008 January	2.023	RE 1.758	E .916	.205	R 4.901	.738	.222	.028	.006	.037	.311	.605	R 6.244
February	1.918	RE 1.668	E .860	.196	R 4.643	.678	.201	.026	.006	.032	.293	.558	<sup>R</sup> 5.879
March	1.985	RE 1.801	E .924	.212	R 4.922	.675	.227	.029	.007	.041	.312	.616	R 6.213
April	1.990	RE 1.728	E .898	.209	R 4.825	.598	.219	.029	.007	.045	.308	.607	R 6.030
May	1.980	RE 1.785	E .929	.219	R 4.912	.676	.280	.030	.007	.044	.323	.684	R 6.272
June	1.851	RE 1.764	E .889	.201	<sup>R</sup> 4.706	.733	.306	.030	.007	.043	.318	.704	R 6.143
July	2.033	RE 1.838	E .919	.213	R 5.003	.775	.257	.030	.007	.032	.335	.662	R 6.440
August	2.060	RE 1.833	E .880	.211	R 4.984	.757	.205	.030	.007	.026	.340	.608	R 6.349
September	2.038	RE 1.585	E .689	.171	R 4.482	.699	.164	.029	.007	.024	.326	.550	<sup>R</sup> 5.731
October	2.129	RE 1.777	E .835	.200	R 4.941	.655	.163	.030	.007	.041	.333	.574	R 6.170
November	1.948	<sup>E</sup> 1.776	E .859	.193	4.776	.662	.169	.029	.006	.044	.330	.578	6.015
11-Month Total	21.956	E 19.314	<sup>E</sup> 9.598	2.229	53.096	7.645	2.412	.320	.076	.409	3.528	6.745	67.486
2007 11-Month Total	21.591	17.906	9.812	2.199	51.507	7.663	2.273	.319	.074	.307	3.240	6.213	65.383
2006 11-Month Total	21.823	17.370	9.872	2.156	51.222	7.478	2.655	.313	.066	.239	3.030	6.303	65.004

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

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

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

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

<sup>&</sup>lt;sup>b</sup> Beginning in 1989, includes waste coal supplied. Beginning in 2001, also includes a small amount of refuse recovery. See Table 6.1.

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

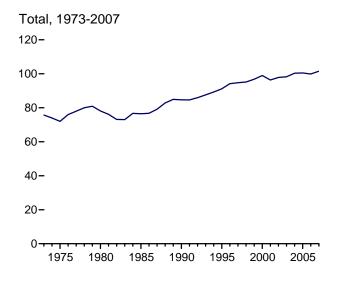
d Natural gas plant liquids.

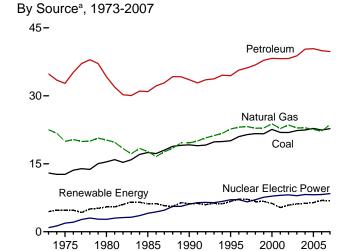
e Conventional hydroelectric power.

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

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

Figure 1.3 Primary Energy Consumption (Quadrillion Btu)





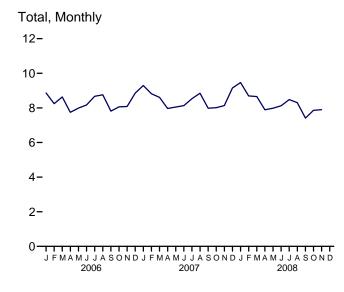
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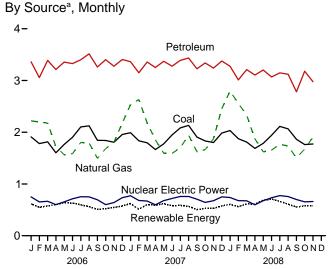
Total, January-November

2006

120-

2007





Petroleum

Natural Gas

1.905

Coal

Nuclear Electric Power

Renewable Energy

0.579

0 1 2 3 4

Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Source: Table 1.3.

By Source<sup>a</sup>, November 2008

2008

<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.

Table 1.3 Primary Energy Consumption by Source

(Quadrillion Btu)

		Fossil	Fuels					Renewable	e 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>
1973 Total	12.971	22.512	34.840	70.316	0.910	2.861	0.043	NA	NA	1.529	4.433	75.708
1975 Total	12.663	19.948	32.731	65.355	1.900	3.155	.070	NA	NA	1.499	4.723	71.999
1980 Total	15.423	20.235	34.202	69.826	2.739	2.900	.110	NA	NA	2.475	5.485	78.122
1985 Total	17.478	17.703	30.922	66.091	4.076	2.970	.198	(s)	(s)	3.016	6.185	76.491
1990 Total	19.173	19.603	33.553	72.333	6.104	3.046	.336	.060	.029	2.735	6.206	84.652
1995 Total	20.089	22.671	34.437	77.258	7.075	3.205	.294	.070	.033	3.104	6.705	91.173
1996 Total	21.002	23.085	35.673	79.783	7.087	3.590	.316	.071	.033	3.159	7.168	94.175
1997 Total	21.445	23.223	36.160	80.874	6.597	3.640	.325	.070	.034	3.108	7.178	94.765
1998 Total	21.656	22.830	36.817	81.370	7.068	3.297	.328	.070	.031	2.931	6.657	95.183
1999 Total	21.623	22.909	37.838	82.428	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	<sup>R</sup> 2.219	3.361	<sup>R</sup> 7.492	.750	.272	.029	.006	.024	.285	.615	R 8.862
February	1.781	R 2.197	3.056	R 7.038	.653	.246	.026	.005	.019	.254	.550	R 8.247
March	1.814	R 2.178	3.388	<sup>R</sup> 7.387	.665	.244	.030	.006	.023	.273	.576	R 8.633
April	1.603	R 1.722	3.212	R 6.540	.601	.283	.027	.006	.025	.261	.602	R 7.747
Mav	1.766	R 1.564	3.356	<sup>R</sup> 6.689	.655	.306	.026	.006	.024	.277	.640	<sup>R</sup> 7.989
June	1.903	R 1.587	3.326	R 6.822	.714	.295	.028	.006	.020	.281	.630	R 8.171
July	2.102	R 1.802	3.401	R 7.308	.753	.252	.030	.006	.019	.290	.598	R 8.670
August	2.123	R 1.794	3.515	R 7.434	.751	.216	.030	.007	.016	.293	.561	R 8.758
September	1.843	<sup>R</sup> 1.496	3.260	<sup>R</sup> 6.612	.695	.171	.029	.006	.019	.283	.507	<sup>R</sup> 7.814
October	1.840	R 1.683	3.402	R 6.938	.600	.169	.030	.006	.024	.292	.521	R 8.061
November	1.807	R 1.808	3.276	R 6.891	.641	.201	.028	.006	.025	.287	.547	R 8.082
December	1.956	R 2.174	3.405	R 7.539	.735	.214	.030	.006	.025	.299	.574	R 8.856
Total	22.447	R 22.224	39.958	R 84.690	8.214	2.869	.343	.072	.264	3.374	6.922	R 99.889
<b>2007</b> January	<sup>R</sup> 1.991	R 2.535	3.363	<sup>R</sup> 7.893	.772	R .258	.031	.006	.024	R .302	R .622	R 9.294
February	<sup>R</sup> 1.835	R 2.632	3.148	<sup>R</sup> 7.616	.681	R .184	R .027	.006	.025	R .271	R .513	<sup>R</sup> 8.819
March	R 1.795	R 2.181	3.358	R 7.333	.671	R .240	.029	.007	.030	R .296	R .601	<sup>R</sup> 8.611
April	<sup>R</sup> 1.665	<sup>R</sup> 1.853	3.250	<sup>R</sup> 6.770	.598	.237	.028	.007	R .031	R .287	R .590	<sup>R</sup> 7.967
May	R 1.775	<sup>R</sup> 1.595	3.371	R 6.744	.678	R .258	.028	.007	R .029	R .295	.618	R 8.052
June	<sup>R</sup> 1.947	<sup>R</sup> 1.591	3.277	<sup>R</sup> 6.821	.719	R .226	R .029	.007	R .026	R .292	R .580	<sup>R</sup> 8.131
July	R 2.083	R 1.699	3.389	<sup>R</sup> 7.169	.759	R .223	.030	.007	R .021	R .306	R .587	R 8.529
August	<sup>R</sup> 2.134	<sup>R</sup> 1.944	3.435	<sup>R</sup> 7.515	.759	.198	.030	.007	R .027	R .305	R .566	<sup>R</sup> 8.852
September	R 1.908	<sup>R</sup> 1.626	3.226	<sup>R</sup> 6.764	.705	R .146	.029	.007	R .028	R .295	R .506	<sup>R</sup> 7.979
October	<sup>R</sup> 1.832	<sup>R</sup> 1.663	3.339	<sup>R</sup> 6.834	.644	.147	.030	.007	R .033	<sup>R</sup> .311	R .528	<sup>R</sup> 8.013
November	R 1.801	<sup>R</sup> 1.875	3.240	<sup>R</sup> 6.921	R .677	.156	.029	.006	R .031	R .307	.529	<sup>R</sup> 8.135
December	<sup>R</sup> 1.984	2.457	3.377	<sup>R</sup> 7.821	.751	R .182	.030	.006	R .035	R .323	R .576	<sup>R</sup> 9.155
Total	R 22.751	R 23.651	39.773	R <b>86.200</b>	<sup>R</sup> 8.414	R 2.455	R .349	.080	R .342	R 3.590	<sup>R</sup> 6.816	R 101.537
2008 January	2.032	R 2.797	3.276	<sup>R</sup> 8.109	.738	.222	.028	.006	.037	.312	.606	R 9.463
February	1.875	R 2.555	3.011	<sup>R</sup> 7.443	.678	.201	.026	.006	.032	.295	.561	R 8.692
March	1.810	<sup>R</sup> 2.331	3.211	<sup>R</sup> 7.359	.675	.227	.029	.007	.041	.310	.614	<sup>R</sup> 8.655
April	1.687	R 1.871	3.106	R 6.672	.598	.219	.029	.007	.045	.313	.612	<sup>R</sup> 7.891
May	1.785	<sup>R</sup> 1.621	3.203	<sup>R</sup> 6.612	.676	.280	.030	.007	.044	.324	.685	<sup>R</sup> 7.981
June	1.941	<sup>R</sup> 1.655	3.069	<sup>R</sup> 6.674	.733	.306	.030	.007	.043	.323	.708	R 8.125
July	2.112	R 1.763	3.148	<sup>R</sup> 7.029	.775	.257	.030	.007	.032	.337	.663	R 8.482
August	2.065	R 1.738	3.121	R 6.924	.757	.205	.030	.007	.026	.341	.609	R 8.305
September	1.864	<sup>R</sup> 1.501	2.781	<sup>R</sup> 6.148	.699	.164	.029	.007	.024	.331	.554	<sup>R</sup> 7.412
October	R 1.762	R 1.677	3.179	R 6.619	.655	.163	.030	.007	.041	.338	.579	R 7.859
November	1.773	1.905	2.976	6.655	.662	.169	.029	.006	.044	.330	.579	7.900
11-Month Total	20.706	21.414	34.082	76.245	7.645	2.412	.320	.076	.409	3.553	6.770	90.765
2007 11-Month Total	20.767	21.194	36.397	78.379	7.663	2.273	.319	.074	.307	3.267	6.240	92.382
2006 11-Month Total	20.491	20.050	36.553	77.151	7.478	2.655	.313	.066	.239	3.075	6.348	91.033

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

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.

<sup>c</sup> 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.

e Conventional hydroelectric power.

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

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

Notes:

See "Primary Energy Consumption" in Glossary.

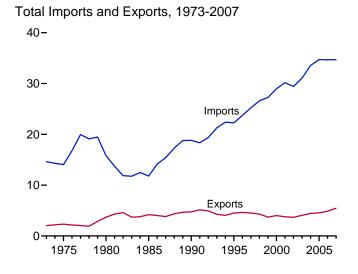
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<sup>•</sup> Geographic coverage is the 50 States and the District of Columbia.

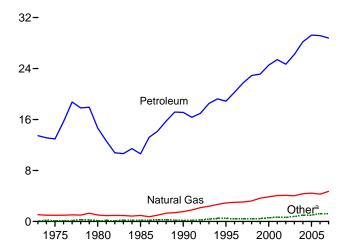
Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available data beginning in 1973.

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.

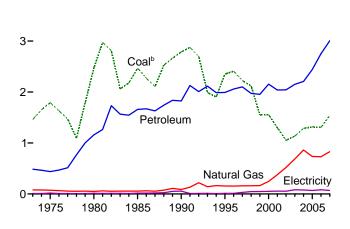
Figure 1.4a Primary Energy Imports and Exports
(Quadrillion Btu)



Imports by Source, 1973-2007

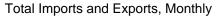


Exports by Source, 1973-2007

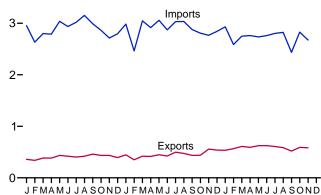


<sup>&</sup>lt;sup>a</sup>Coal, coal coke, fuel ethanol, and electricity.

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



4-

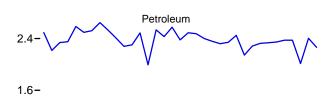


2007

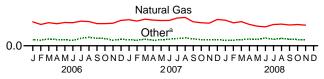
2008

#### Imports by Source, Monthly

3.2-

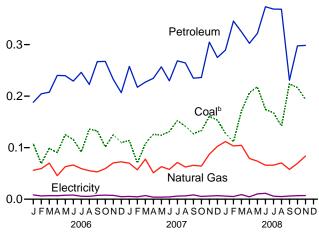


0.8-



#### Exports by Source, Monthly

0.4-



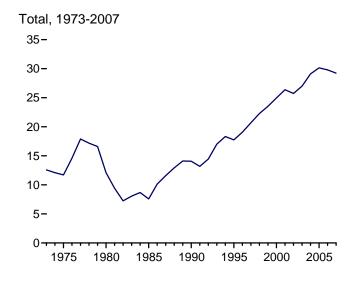
Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Sources: Tables 1.4a and 1.4b.

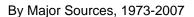
4-

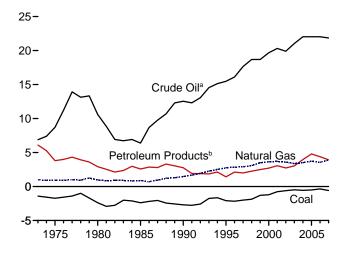
<sup>&</sup>lt;sup>b</sup>Includes coal coke.

Figure 1.4b Primary Energy Net Imports

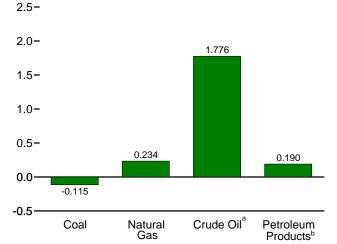
(Quadrillion Btu, Except as noted)







By Major Sources, November 2008

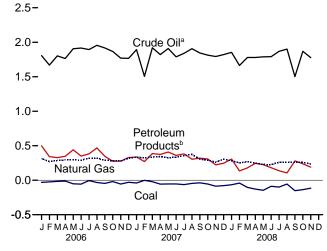


<sup>a</sup>Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

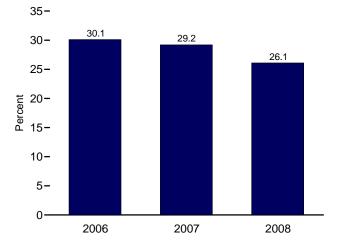
<sup>b</sup>Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include fuel ethanol.



By Major Sources, Monthly



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



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	R 31.061
2004 Total	.682	.170	4.365	22.082	6.114	28.196	.013	.117	33.543
2005 Total	.762	.088	4.450	22.091	7.157	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
2007 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	.016	3.056
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	R 2.765
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	.395	1.855	.594	2.449	.002	.017	2.930
February	.065	.006	.355	1.667	.477	2.144	.002	.016	2.587
March	.066	.009	.373	1.784	.499	2.283	.001	.016	2.749
April	.075	.011	.329	1.781	.545	2.326	.005	.014	2.760
May	.068	.007	.303	1.792	.544	2.335	.003	.018	2.734
June	.082	.013	R .293	1.794	.551	2.346	.006	.021	2.760
July	.064	.010	<sup>R</sup> .328	1.874	.501	2.375	.005	.021	R 2.803
August	.079	.009	R .334	1.908	.467	2.375	.007	.020	R 2.823
September	.069	.006	.320	1.509	.504	2.013	.009	.017	2.434
October	.073	.008	R .328	1.876	.528	2.404	.002	.012	R 2.827
November	.075	.005	E.318	1.782	.483	2.264	.001	.011	2.674
11-Month Total	.775	.089	E 3.676	19.624	5.691	25.315	.042	.183	30.080
2007 11-Month Total	.838	.053	4.316	20.089	6.350	26.439	.036	.161	31.844
2006 11-Month Total	.829	.095	3.898	20.313	6.552	26.865	.057	.133	31.878

<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 Ethapol. Tables 10.3 • Fletricity. Tables 7.1 and A6. 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. E=Estimate. NA=Not available. (s)=Less than 0.5 trillion Btu.

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

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

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

(Quadrillion Btu)

									1 -
					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
2002 Total	1.032	.020	.520	.019	2.023	2.042	.054	3.668	25.739
2003 Total	1.117	.018	.686	.026	2.124	2.151	.082	4.054	27.007
2004 Total	1.253	.033	.862	.057	2.151	2.208	.078	4.433	29.110
2005 Total	1.273	.043	.735	.067	2.374	2.442	.068	4.561	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
March	.097	.002	.070	.005	.202	.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	.106	.003	.073	.005	.202	.207	.005	.394	2.401
Total	1.264	.040	.730	.052	2.699	2.751	.083	4.868	29.805
<b>2007</b> January	.111	.003	.070	.002	.256	.258	.005	.447	2.536
February	.068	.002	.057	.004	.213	.217	.005	.349	R 2.114
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	2.608
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	R 2.442
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	R 29.238
<b>2008</b> January	.125	.003	.112	.002	.287	.289	.006	.535	2.395
February	.107	.004	.103	.003	.342	.346	.005	.565	2.022
March	.170	.001	.105	.005	.320	.325	.009	.610	2.139
April	.203	.004	.079	.002	.300	.302	.005	.593	2.167
May	.214	.004	.074	.003	.318	.322	.010	.624	2.110
June	.171	.004	.066	.004	.370	.373	.011	.625	2.135
July	.163	.005	R .066	.005	.364	.369	.006	R .608	R 2.194
August	.134	.008	R .070	.007	.361	.369	.005	R .586	R 2.237
September	.220	.004	.058	.007	.224	.231	.006	.519	1.915
October	.210	.007	.069	.008	.290	.298	.007	.590	R 2.237
November	.190	.004	E .084	.005	.293	.298	.007	.583	2.092
11-Month Total	1.907	.046	E .886	.052	3.469	3.522	.077	6.438	23.643
2007 11-Month Total 2006 11-Month Total	1.357 1.157	.031 .037	.727 .658	.054 .047	2.677 2.497	2.732 2.544	.062 .078	4.910 4.474	26.934 27.404

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

R=Revised. E=Estimate.

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.

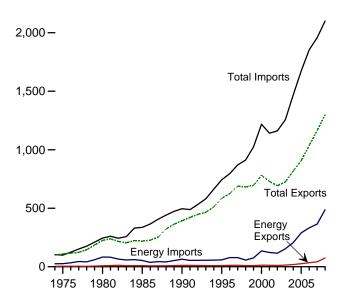
b Crude oil and lease condensate.

<sup>&</sup>lt;sup>c</sup> Petroleum products, unfinished oils, pentanes plus, and gasoline blending components.

Figure 1.5 Merchandise Trade Value (Billion Nominal Dollars<sup>a</sup>)

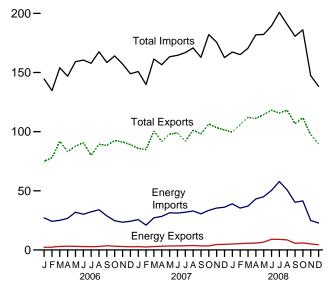
Imports and Exports, 1974-2008

2,500 -

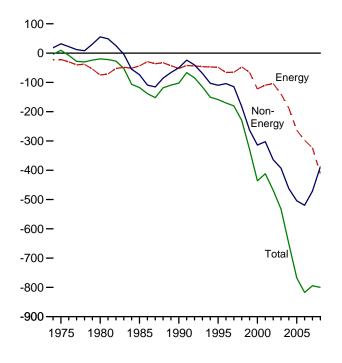


Imports and Exports, Monthly

250 <del>-</del>

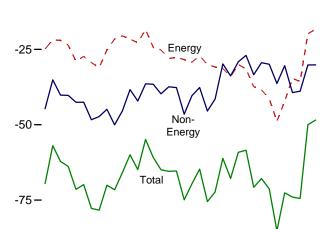


Trade Balance, 1974-2008



Trade Balance, Monthly

0.



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

<sup>&</sup>lt;sup>a</sup>See "Nominal Dollars" in Glossary. Note: Because vertical scales differ, graphs should not be compared.

**Table 1.5 Merchandise Trade Value** 

(Million Nominal Dollarsa)

		Petroleum <sup>l</sup>	)		Energy <sup>c</sup>		Non-	Т	otal Merchandis	e
	Exports	Imports	Balance	Exports	Imports	Balance	Energy Balance	Exports	Imports	Balance
1974 Total	792	24,668	-23,876	3,444	25,454	-22,010	18,126	99,437	103,321	-3,884
1975 Total	907	25,197	-24,289	4,470	26,476	-22,006	31,557	108,856	99,305	9,551
1980 Total	2,833	78,637	-75,803	7,982	82,924	-74,942	55,246	225,566	245,262	-19,696
1985 Total	4,707	50,475	-45.768	9.971	53.917	-43,946	-73,765	218,815	336,526	-117,712
1990 Total	6,901	61,583	-54,682	12,233	64,661	-52,428	-50,068	393,592	496,088	-102,496
1995 Total	6,321	54,368	-48.047	10,358	59.109	-48.751	-110.050	584,742	743.543	-158.801
1996 Total	7,984	72,022	-64,038	12,181	78,086	-65,905	-104,309	625,075	795,289	-170,214
1997 Total	8,592	71,152	-62,560	12,682	78,277	-65,595	-114,927	689,182	869.704	-180,522
1998 Total	6,574	50,264	-43,690	10,251	57,323	-47,072	-182,686	682,138	911,896	-229,758
1999 Total	7,118	67,173	-60,055	9,880	75,803	-65,923	-262,898	695,797	1,024,618	-328,821
	10,192	119,251		13,179	135,367	-122,188		781,918	1,218,022	-436,104
2000 Total			-109,059				-313,916			
2001 Total	8,868	102,747	-93,879	12,494	121,923	-109,429	-302,470	729,100	1,140,999	-411,899
2002 Total	8,569	102,663	-94,094	11,541	115,748	-104,207	-364,056	693,103	1,161,366	-468,263
2003 Total	10,209	132,433	-122,224	13,768	153,298	-139,530	-392,820	724,771	1,257,121	-532,350
2004 Total	13,130	179,266	-166,136	18,642	206,660	-188,018	-462,912	818,775	1,469,704	-650,930
2005 Total	19,155	250,068	-230,913	26,488	289,723	-263,235	-504,242	905,978	1,673,455	-767,477
2006 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
May	2,449	29,182	-26,733	2,979	31,876	-28,897	-42,522	87,746	159,164	-71,419
June	2,318	27,751	-25,433	2,848	30,176	-27,328	-42,537	90,622	160,487	-69,865
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	-40,376	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	-20,717 - <b>294,327</b>	41,725	<b>364,987</b>	-31,329 -323,262	-29,617 - <b>471,221</b>	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
	4,453	33,645	-27,206 -29,192		35,366 37,118	-30,026 -31,488	-29,123 -26,966	112,085	170,539	-59,151 -58,454
March	,	,		5,630					,	
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	-30,400	118,082	190,690	-72,608
September	4,086	37,206	-33,120	5,629	40,277	-34,648	-39,320	106,699	180,666	-73,968
October	4,589	38,673	-34,084	5,897	41,507	-35,610	38,858	111,586	_ 186,054	74,468
November	3,857	22,641	-18,784	5,127	24,942	-19,815	<sup>R</sup> -30,175	<sup>R</sup> 97,410	<sup>R</sup> 147,400	<sup>R</sup> -49,990
December	3,452	20,531	-17,079	4,429	22,728	-18,299	-30,146	89,832	138,277	-48,445
Total	61,567	449,907	-388,340	75,841	487,922	-412,081	-387,853	1,300,498	2,100,432	-799,934

components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands.

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

Sources: See end of section.

 $<sup>^{\</sup>rm a}$  See "Nominal Dollars" in Glossary.  $^{\rm b}$  Crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels.

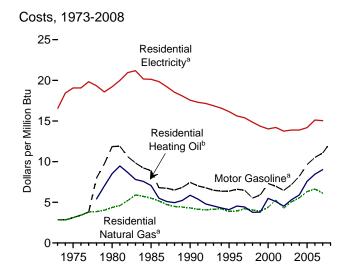
<sup>c</sup> Petroleum, coal, natural gas, and electricity.

R=Revised.

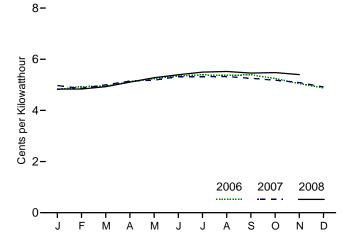
Notes: • Monthly data are not adjusted for seasonal variations. • See Note, "Merchandise Trade Value," at end of section. • Totals may not equal sum of

data beginning in 1974.

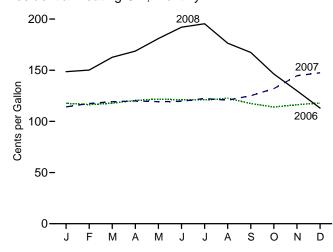
Figure 1.6 Cost of Fuels to End Users in Real (1982-1984) Dollars



#### Residential Electricity<sup>a</sup>, Monthly

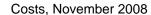


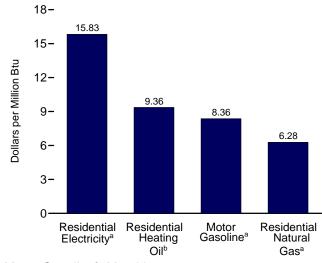
#### Residential Heating Oilb, Monthly



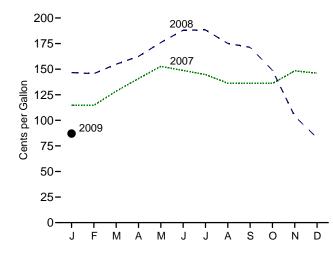
<sup>&</sup>lt;sup>a</sup>Includes taxes.

Notes: • See "Real Dollars" in Glossary. • Because vertical scales

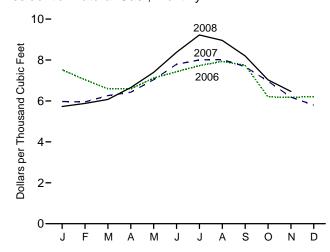




#### Motor Gasoline<sup>a</sup>, Monthly



#### Residential Natural Gasa, Monthly



differ, graphs should not be compared.

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

Source: Table 1.6.

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

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

	Consumer Price Index, All Urban Consumers <sup>a</sup>	Motor G	asoline <sup>b</sup>		dential ng Oil <sup>c</sup>		ential 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		79.1	6.37	56.9	4.10	397.6	3.87	5.51	16.15
1996 Average		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		73.3	5.91	52.6	3.79	401.6	3.91	4.90	14.36
2000 Average		90.8	7.32	76.1	5.49	450.6	4.39	4.79	14.02
2001 Average		86.4	6.97	70.6	5.09	543.8	5.28	4.84	14.20
2002 Average		80.1	6.46	62.8	4.52	438.6	4.26	4.69	13.75
2003 Average		89.0	7.18	73.6	5.31	523.4	5.07	4.74	13.89
2004 Average		101.8	8.20	81.9	5.91	569.1	5.54	4.74	13.89
2005 Average		119.7	9.64	105.1	7.58	650.3	6.32	4.84	14.18
2006 January	198.3	119.0	9.58	117.7	8.49	<sup>R</sup> 752.4	R 7.32	4.82	14.11
February	198.7	118.5	9.54	116.4	8.39	<sup>R</sup> 703.6	<sup>R</sup> 6.84	4.93	14.46
March	199.8	122.3	9.85	117.8	8.49	<sup>R</sup> 659.2	<sup>R</sup> 6.41	4.94	14.48
April	201.5	139.0	11.19	120.4	8.68	<sup>R</sup> 658.6	<sup>R</sup> 6.41	5.12	15.01
May	202.5	147.8	11.90	121.9	8.79	<sup>R</sup> 711.6	R 6.92	5.24	15.36
June		146.0	11.75	121.1	8.73	<sup>R</sup> 742.7	7.23	5.35	15.67
July		149.7	12.05	120.9	8.72	R 772.5	<sup>R</sup> 7.51	5.39	15.78
August		148.7	11.97	122.6	8.84	<sup>R</sup> 793.5	7.72	5.37	15.73
September		130.0	10.46	117.4	8.47	R 774.3	R 7.53	5.39	15.80
October		114.9	9.25	114.1	8.23	R 619.9	R 6.03	5.24	15.37
November		113.5	9.14	116.3	8.38	R 617.9	R 6.01	5.05	14.81
December		117.9	9.49	117.9	8.50	R 620.9	6.04	4.88	14.29
Average		130.7	10.52	117.3	8.46	R 681.1	6.63	5.16	15.12
<b>2007</b> January	202.416	114.7	9.23	114.2	8.23	597.3	<sup>R</sup> 5.80	R 4.97	<sup>R</sup> 14.57
February		114.6	9.23	117.5	8.47	<sup>R</sup> 595.1	<sup>R</sup> 5.78	4.86	R 14.24
March		128.5	10.34	119.3	8.60	626.2	6.09	<sup>R</sup> 5.00	<sup>R</sup> 14.66
April		140.7	11.33	120.0	8.65	R 642.5	R 6.24	<sup>R</sup> 5.14	R 15.07
May		152.7	12.29	119.3	8.60	R 703.5	<sup>R</sup> 6.84	5.18	15.18
June		148.8	11.97	119.6	8.62	R 779.0	R 7.57	R 5.32	R 15.60
July		144.6	11.64	122.4	8.82	R 800.3	7.78	5.31	<sup>R</sup> 15.58
August		136.3	10.97	120.7	8.70	R 802.2	R 7.80	R 5.32	R 15.60
September		136.2	10.96	125.1	9.02	<sup>R</sup> 767.4	<sup>R</sup> 7.46	<sup>R</sup> 5.26	R 15.41
October		136.1	10.95	132.1	9.52	R 696.4	R 6.77	<sup>R</sup> 5.18	R 15.18
November		148.4	11.94	144.6	10.43	<sup>R</sup> 618.5	<sup>R</sup> 6.01	5.09	R 14.92
December		146.1	11.76	147.5	10.64	579.4	R 5.63	R 4.92	R 14.41
Average		137.4	11.06	125.0	9.01	R <b>629.9</b>	R 6.12	5.13	15.04
2008 January	211.080	146.7	11.80	148.6	10.72	<sup>R</sup> 572.8	<sup>R</sup> 5.57	4.83	14.16
February		145.6	11.72	150.1	10.82	587.6	<sup>R</sup> 5.71	4.84	14.18
March		154.9	12.46	162.6	11.73	607.4	<sup>R</sup> 5.90	4.93	14.44
April		162.5	13.08	168.7	12.16	R 665.2	R 6.46	5.11	14.97
May		176.0	14.16	181.0	13.05	739.5	7.19	5.28	15.46
June		188.1	15.13	192.0	13.85	R 837.7	8.14	5.39	15.81
July		188.3	15.15	195.4	14.09	R 922.4	R 8.96	5.50	16.11
August		175.2	14.10	176.4	12.72	896.0	R 8.71	5.52	16.19
September		171.4	13.79	167.4	12.07	820.0	R 7.97	5.46	15.99
October		148.9	11.98	146.3	10.55	703.2	R 6.83	5.48	16.05
November		103.9	8.36	R 129.9	R 9.36	R 646.3	R 6.28	R 5.40	R 15.83
December		82.9	6.67	RE 113.0	RE 8.15	NA	NA	NA	NA
Average		154.1	12.40	<b>NA</b>	<b>NA</b>	NA NA	NA NA	NA	NA NA
<b>2009</b> January	211.143	87.1	7.01	NA	NA	NA	NA	NA	NA

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

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

District of Columbia.

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

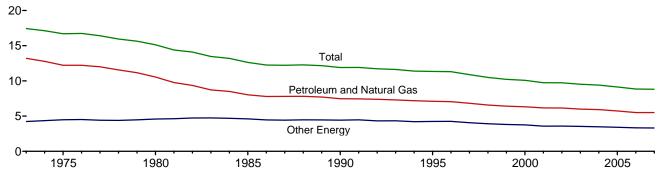
Sources: • Fuel Prices: Tables 9.4 (All Types), 9.8c, 9.9, and 9.11, adjusted by the CPI. • Consumer Price Index, All Urban Consumers: U.S. Department of Labor, Bureau of Labor Statistics, series ID CUUR0000SA0. • Conversion Factors: Tables A1, A3, A4, and A6.

b Includes taxes.

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



Note: See "Real Dollars" in Glossary.

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

Source: Table 1.7.

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

	Ene	rgy Consumptio	n	Gross	Energy Consumption per Real Dollar 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	12.22	4.48	16.70		
976 Year	55.520	20.492	76.012	4,540.9	12.23	4.51	16.74		
977 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	5,423.6	8.51	4.69	13.20		
985 Year	49.445 48.626	27.865	76.714 76.491	6.053.7	8.03	4.69	12.64		
	48.787		76.756	-,					
986 Year 987 Year	40.767 50.505	27.969 28.668	76.736 79.173	6,263.6 6,475.1	7.79 7.80	4.47 4.43	12.25 12.23		
				,					
988 Year	52.670	30.149	82.819	6,742.7	7.81	4.47	12.28		
989 Year	53.813	31.131	84.944	6,981.4	7.71	4.46	12.17		
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		
001 Year	60.959	35.367	96.326	9,890.7	6.16	3.58	9.74		
002 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		
2004 Year	63.226	37.125	100.351	10,675.8	5.92	3.48	9.40		
2005 Year	62.977	37.529	100.506	10,989.5	5.73	3.41	9.15		
2006 Year	R 62.182	37.706	R 99.889	11,294.8	<sup>R</sup> 5.51	3.34	8.84		
2007 Year	R 63.424	R 38.113	R 101.537	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.

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

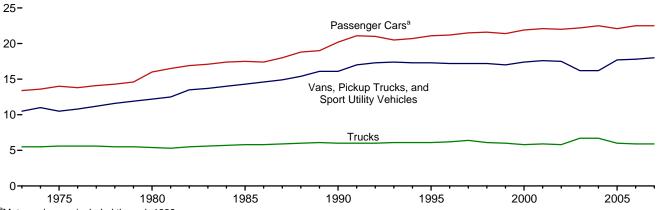
Sources: • Energy Consumption: Table 1.3. • Gross Domestic Product: 1973-2004—U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, August 2008, Table 2A. 2005 forward—U.S. Department of Commerce, Bureau of Economic Analysis, BEA News Release, January 30, 2009, Table 3, which is available at Web site http://www.bea.gov/bea/newsrel/gdpnewsrelease.htm.

Notes: • See "Primary Energy Consumption" and "Real Dollars" in

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

Figure 1.8 Motor Vehicle Fuel Rates, 1973-2007

(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

	I	Passenger Cars	a		ns, Pickup Truc Sport Utility Veh			Trucks <sup>c</sup>		A	II Motor Vehicle	All Motor Vehicles <sup>d</sup>			
	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			
2006	12,485	554	22.5	10,920	612	17.8	25,231	4,304	5.9	12,017	698	17.2			
2007₽	12,293	547	22.5	10,952	609	18.0	25,141	4,270	5.9	11,910	692	17.2			

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.

Infrough 1989, includes includey-less.
 Includes a small number of trucks with 2 axles and 4 tires, such as step vans.
 Single-unit trucks with 2 axles and 6 or more tires, and combination trucks.
 Includes buses and motorcycles, which are not shown separately.

Table 1.9 Heating Degree-Days by Census Division

			January			Cumulative July through January						
				Percent	Change				Percent	Change		
Census Divisions	Normala	2008	2009	Normal to 2009	2008 to 2009	Normala	2008	2009	Normal to 2009	2008 to 2009		
New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	1,246	1,131	1,417	14	25	3,708	3,504	3,898	5	11		
Middle Atlantic New Jersey, New York, Pennsylvania	1,158	1,024	1,288	11	26	3,349	2,964	3,459	3	17		
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	1,302	1,217	1,468	13	21	3,774	3,478	4,042	7	16		
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	1,390	1,365	1,456	5	7	4,085	3,899	4,218	3	8		
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia,	040	000	000		40	4.700	4.504			40		
West Virginia  East South Central  Alabama, Kentucky,	643	609	669	4	10	1,726	1,504	1,774	3	18		
Mississippi, Tennessee  West South Central  Arkansas, Louisiana, Oklahoma, Texas	820 593	825 582	822 527	(s) -11	(s) -9	2,230 1,498	1,991 1,365	2,272 1,414	-6	4		
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	951	1,009	849	-11	-16	3,098	2,938	2,768	-11	-6		
Pacific <sup>b</sup> California, Oregon, Washington	564	626	477	-15	-24	1,817	1,848	1,571	-14	-15		
U.S. Average <sup>b</sup>	917	883	953	4	8	2,656	2,455	2,676	1	9		

<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.

<sup>(</sup>s)=Less than 0.5 percent and greater than -0.5 percent.

Table 1.10 Cooling Degree-Days by Census Division

			January		
				Percent	Change
Census Divisions	Normal <sup>a</sup>	2008	2009	Normal to 2009	2008 to 2009
New England					
Connecticut, Maine, Massachusetts,					
New Hampshire, Rhode Island, Vermont	0	0	0	NM	NM
Middle Atlantic					
lew Jersey, New York, Pennsylvania	0	0	0	NM	NM
East North Central					
llinois, Indiana, Michigan, Ohio,					
Wisconsin	0	0	0	NM	NM
West North Central					
owa, Kansas, Minnesota, Missouri,					
Nebraska, North Dakota, South Dakota	0	0	0	NM	NM
		O .	O .	TVIVI	14101
South Atlantic Delaware, Florida,					
Georgia, Maryland and the District of Columbia,					
North Carolina,					
South Carolina, Virginia, West Virginia	34	24	19	NM	NM
East South Central					
Alabama, Kentucky, Mississippi, Tennessee	8	0	0	NM	NM
West South Central		•	•		
Arkansas, Louisiana.					
Oklahoma, Texas	14	12	6	NM	NM
Mountain Arizona, Colorado,					
Idaho, Montana,					
Nevada, New Mexico, Utah, Wyoming	1	0	0	NM	NM
acificb					
California, Oregon, Washington	2	0	0	NM	NM
		-			
J.S. Average <sup>b</sup>	9	6	4	NM	NM

<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.

b 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.

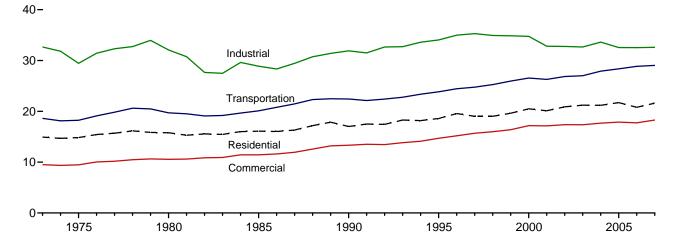
# **Energy Consumption by Sector**



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

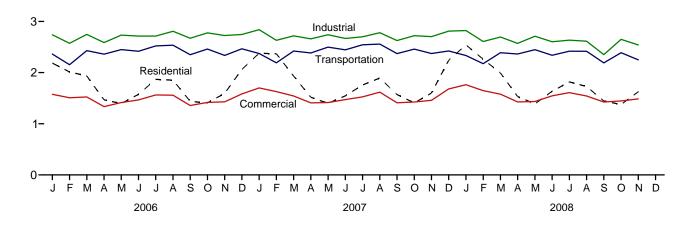
Figure 2.1 Energy Consumption by Sector (Quadrillion Btu)

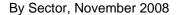
Total Consumption by End-Use Sector, 1973-2007

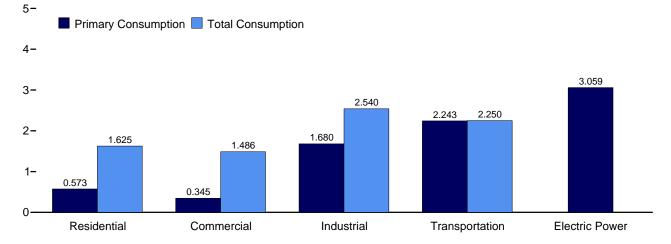


Total Consumption by End-Use Sector, Monthly

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.

**Energy Consumption by Sector** Table 2.1

(Trillion Btu)

				End-Use	Sectors				Electric		
	Resid	ential	Comm	ercial <sup>a</sup>	Indus	strial <sup>b</sup>	Transpo	ortation	Power Sector <sup>c,d</sup>	Polonoina	
	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Balancing 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	6,938	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	6,941	21,717	4,014	17,875	21,467	32,546	28,280	28,361	39,799	6	100,506
2006 January	906	2,185	493	1,575	R 1,870	R 2,739	2,356	2,363	3,238	(s)	R 8,862
February	897	2,012	487	1,508	<sup>R</sup> 1,718	R 2,574	2,148	<sup>R</sup> 2,154	2,998	-1	R 8,247
March	813	1,935	R 443	1,524	R 1,857	R 2,747	2,423	2,429	3,099	-2	<sup>R</sup> 8,633
April	504	1,468	R 293	1,335	R 1,705	R 2,587	2,354	2,360	2,893	-3	R 7,747
May	344	1,394	225	_ 1,415	<sup>R</sup> 1,769	R 2,732	2,443	2,449	3,210	-1	<sup>R</sup> 7,989
June	270	1,575	194	R 1,465	R 1,762	R 2,714	2,410	2,417	3,535	1	<sup>R</sup> 8,171
July	247	1,868	181	1,563	R 1,736	R 2,714	2,514	2,521	3,989	3	R 8,670
August	241	1,853	186	1,558	R 1,838	R 2,808	R 2,529	2,536	3,960	3	R 8,758
September	255	1,437	192	1,356	R 1,793	R 2,672	2,343	2,349	3,232	(s) -2	<sup>R</sup> 7,814
October	380	1,409	R 252	1,418	R 1,864	R 2,776	2,454	2,460	3,113		R 8,061
November	561	1,594	R 326	1,428	R 1,846	R 2,725	2,329	2,336	3,020	-1	R 8,082
December Total	798 <b>6,213</b>	2,062 R <b>20,793</b>	<sup>R</sup> 432 <sup>R</sup> <b>3,705</b>	R 1,583 R <b>17,725</b>	R 1,865 R <b>21,623</b>	R 2,744 R <b>32,532</b>	2,458 R <b>28,760</b>	2,465 R <b>28,839</b>	3,301 <b>39,589</b>	2 (s)	<sup>R</sup> 8,856 <sup>R</sup> <b>99,889</b>
2007 January	999	R 2,379	<sup>R</sup> 525	R 1,701	<sup>R</sup> 1,932	R 2.839	R 2,364	R 2,373	R 3,471	R 2	R 9.294
February	1.098	R 2.368	R 575	R 1,629	R 1,811	R 2,631	2,304	R 2,192	R 3,151	(s)	R 8.819
March	804	R 1,932	R 447	R 1,543	R 1,836	R 2,718	2,413	2,421	R 3,114	R <sub>-2</sub>	R 8,611
April	R 549	R 1,518	R 323	R 1,408	R 1,765	R 2,660	2.377	2.384	R 2.955	R -2	R 7,967
May	340	R 1,399	R 221	R 1,415	R 1,782	R 2,741	R 2,491	2,498	R 3,218	R -1	R 8,052
June	262	R 1,546	189	R 1,472	R 1,710	R 2,668	R 2,437	2,445	R 3,531	1	R 8,131
July	244	R 1,757	177	R 1.525	R 1,732	R 2.700	2,536	2.543	R 3.836	3	R 8.529
August	R 245	R 1,893	186	R 1,618	R 1.768	R 2,779	R 2,550	2,558	R 4,097	4	R 8,852
September	249	R 1,571	186	R 1,410	R 1,733	R 2,626	2,364	2,371	R 3,446	1	R 7,979
October	R 320	R 1,408	225	R 1.425	<sup>R</sup> 1.790	R 2,722	2,452	2,458	3,227	-1	R 8,013
November	<sup>R</sup> 575	R 1,601	R 340	R 1,459	R 1.792	R 2,703	2,366	2,373	R 3,063	-1	R 8,135
December	R 940	R 2,240	R 508	<sup>R</sup> 1,681	<sup>R</sup> 1,884	R 2,811	<sup>R</sup> 2,416	R 2,423	R 3,407	<sup>R</sup> 1	R 9,155
Total	<sup>R</sup> 6,625	R <b>21,609</b>	R 3,903	R 18,285	R 21,536	R <b>32,599</b>	R 28,950	R <b>29,038</b>	R 40,517	R <b>5</b>	R 101,537
2008 January	<sup>R</sup> 1,105	R 2,542	<sup>R</sup> 583	R 1,763	R 1,925	R 2,822	R 2,327	2,334	3,522	2	R 9,463
February	1,030	2,262	560	R 1,647	R 1,763	R 2,608	2,168	2,175	3,170	<sup>R</sup> 1	R 8,692
March	842	R 1,993	467	1,578	R 1,801	R 2,696	2,382	R 2,389	3,165	-1	R 8,655
April	548	1,531	327	R 1,427	R 1,698	R 2,572	2,356	2,363	2,963	-2	R 7,891
May	367	1,388	238	1,435	R 1,724	R 2,711	R 2,441	2,447	3,212	-1	R 7,981
June	277	1,635	R 193	1,547	R 1,648	R 2,602	2,332	2,339	3,673	R 2	R 8,125
July	253	R 1,817	186	1,608	R 1,685	R 2,634	2,411	2,418	3,942	R 4	R 8,482
August	240 R 236	1,729	182 R 4 9 4	1,543	R 1,683	R 2,614	R 2,411	R 2,418	3,787	2	R 8,305
September		1,445	R 184	1,425	R 1,484	R 2,351	2,183	2,189	3,324	1	R 7,412
October	R 350	R 1,377	R 245	R 1,445	R 1,768	R 2,650	R 2,382	R 2,388	3,115	-2	R 7,859
November 11-Month Total	573 <b>5,821</b>	1,625 <b>19,345</b>	345 <b>3,511</b>	1,486 <b>16,902</b>	1,680 <b>18,859</b>	2,540 <b>28,802</b>	2,243 <b>25,635</b>	2,250 <b>25,710</b>	3,059 <b>36,933</b>	-1 <b>7</b>	7,900 <b>90,765</b>
2007 11-Month Total	5.686	19.372	3.395	16.603	19.652	29.787	26.535	26.615	37.110	5	92.382
2006 11-Month Total	5,416	18,730	3,273	16,144	19,757	29,787	26,302	26,375	36,287	-2	91,033

<sup>&</sup>lt;sup>a</sup> Commercial sector, including commercial combined-heat-and-power (CHP)

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

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

Web Page: See http://www.eia.dog.gov/emgu/mgr/consump.html for all available.

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.

and commercial electricity-only plants.

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

c Electricity-only and combined-heat-and-power (CHP) plants within the NAICS

<sup>22</sup> category whose primary business is to sell electricity, or electricity and heat, to the public.

d Through 1988, data are for electric utilities only. Beginning in 1989, data are

for electric utilities and independent power producers.

<sup>e</sup> See "Primary Energy Consumption" in Glossary.

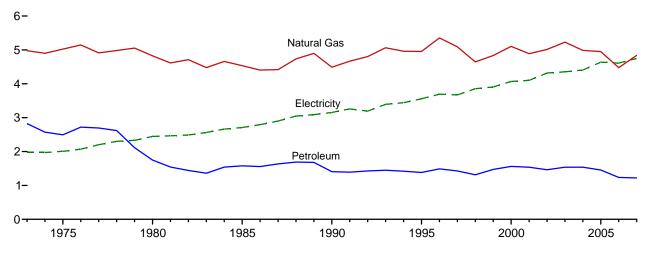
<sup>f</sup> Total energy consumption in the end-use sectors consists of primary energy consumption, electricity retail sales, and electrical system energy losses. See Note 2, "Electrical System Energy Losses," at end of section.

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

h Primary energy consumption total. See Table 1.3.

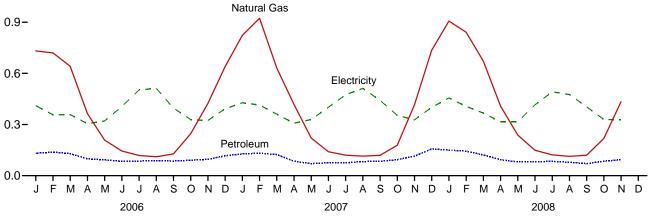
Figure 2.2 Residential Sector Energy Consumption (Quadrillion Btu)

By Major Sources, 1973-2007

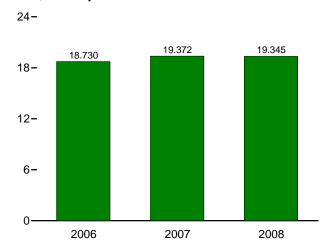


By Major Sources, Monthly

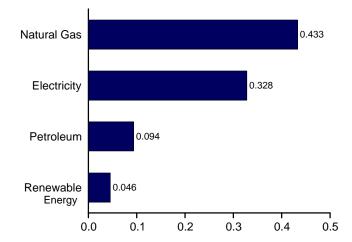
1.2-



Total, January-November



By Major Sources, November 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 Consump	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 1995 Total	31 17	4,491 4,954	1,407 1,383	5,929 6,355	6 7	56 65	580 520	641 591	6,570 6,946	3,153 3,557	7,291 8,075	17,015 18,578
1996 Total	17	5,354	1,488	6,859	7	65	540	612	7,471	3,694	8,397	19,562
1997 Total	16	5,093	1,428	6,537	8	65	430	503	7,040	3,671	8,315	19,026
1998 Total	12	4,646	1,314	5,971	8	65	380	452	6,424	3,856	8,741	19,021
1999 Total	14	4,835	1,473	6,322	9	64	390	462	6,784	3,906	8,931	19,621
2000 Total	11	5,105	1,563	6,679	9	61	420	490	7,169	4,069	9,250	20,488
2001 Total	12	4,889	1,539	6,440	9	60	370	439	6,879	4,100	9,127	20,106
2002 Total	12	5,014	1,463	6,489	10	59	380	449	6,938	4,317	9,619	20,874
2003 Total	12	5,230	1,539	6,781	13	58	400	471	7,252	4,353	9,603	21,208
2004 Total	11	4,986	1,539	6,537	14	59	410	483	7,019	4,408	9,750	21,178
2005 Total	8	4,951	1,455	6,414	16	61	450	527	6,941	4,638	10,139	21,717
2006 January	1	732	132	864	2	6	35	42	906	411	868	2,185
February	1	720	139	859	1	5	31	38	897	357	758	2,012
March	1	641	129	771	2	6	35	42	813	358	763	1,935
April	(s)	364	99	463	2	6	34	41	504	305	659	1,468
May	(s)	209	93	302	2	6	35	42	344	321	730	1,394
June	(s)	145	84 86	229 205	2 2	6 6	34 35	41 42	270 247	405 503	900	1,575
July August	(s) (s)	118 111	87	198	2	6	35	42	241	503 512	1,119 1,100	1,868 1,853
September	(s)	128	86	214	2	6	34	41	255	396	786	1,437
October	(s)	246	91	338	2	6	35	42	380	328	701	1,409
November	1	R 424	96	520	2	6	34	41	561	324	710	1,594
December	1	639	116	756	2	6	35	42	798	392	871	2,062
Total	6	4,476	1,236	5,718	18	67	410	495	6,213	4,611	9,968	R 20,793
2007 January	1	823	128	952	2	6	39	47	999	427	<sup>R</sup> 953	R 2,379
February	1	923	132	1,055	2	6	35	43	1,098	414	<sup>R</sup> 856	R 2,368
March	. 1	632	124	757	2	6	39	47	804	361	<sup>R</sup> 768	R 1,932
April	(s)	R 418	85	504	2	6	38	46	R 549	308	<sup>R</sup> 661	R 1,518
May	(s)	221	71 75	R 292	2	6	39	47	340	329	R 731	R 1,399
June	(s)	141 121	75 76	217 197	2 2	6 6	38 39	46 47	262 244	<sup>R</sup> 401 474	<sup>R</sup> 883 <sup>R</sup> 1.038	<sup>R</sup> 1,546 <sup>R</sup> 1,757
July August	(s) (s)	115	83	197	2	6	39	47	R 245	512	R 1,135	R 1,893
September	(s)	119	84	R 203	2	6	38	46	249	442	R 880	R 1,571
October	1	<sup>R</sup> 178	94	R 273	2	6	39	47	R 320	354	<sup>R</sup> 734	R 1,408
November	1	<sup>R</sup> 415	114	529	2	6	38	46	R 575	327	<sup>R</sup> 699	R 1,601
December	1	<sup>R</sup> 735	157	R 893	2	6	39	47	R 940	<sup>R</sup> 401	R 899	R 2,240
Total	6	<sup>R</sup> 4,840	1,222	<sup>R</sup> 6,068	22	74	460	556	<sup>R</sup> 6,625	<sup>R</sup> 4,750	<sup>R</sup> 10,234	R 21,609
2008 January	1	R 907	150	R 1,057	2	6	39	47	R 1,105	456	982	R 2,542
February	1	841	144	R 985	2	6	36	44	1,030	406	826	2,262
March	1	672	122	R 794	2	6	39	47	842	367	785	R 1,993
April	(s)	408	94	503	2	6	38	46	548	316	667	1,531
May	(s)	239	81	320	2	6	39	47	367	316	706	1,388
June	(s)	149	82	231	2	6	38	46 47	277	415	943	1,635 R 1 917
July August	(s)	122	84 79	206 193	2 2	6 6	39	47 47	253	491 476	1,073	R 1,817
September	(s) (s)	114 120	79 70	193	2	6	39 38	47 46	240 R 236	476 404	1,013 805	1,729 1,445
October	(s)	218	R 85	R 303	2	6	39	46 47	R 350	330	697	R 1,377
November	(5)	433	94	528	2	6	38	46	573	328	724	1,625
11-Month Total	6	4,223	1,083	5,311	20	68	421	509	5,821	4,305	9,219	19,345
2007 11-Month Total 2006 11-Month Total	6 5	4,106 3,838	1,065 1,120	5,177 4,962	20 17	68 61	421 375	509 453	5,686 5,416	4,350 4,219	9,337 9,094	19,372 18,730

<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 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.

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

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

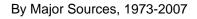
c Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
d Electricity retail sales to ultimate customers reported by electric utilities and,

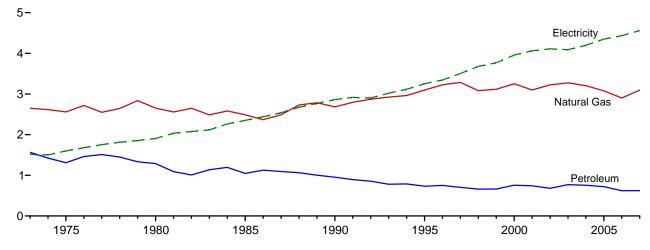
d Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
 e Total losses are calculated as the primary energy consumed by the electric

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

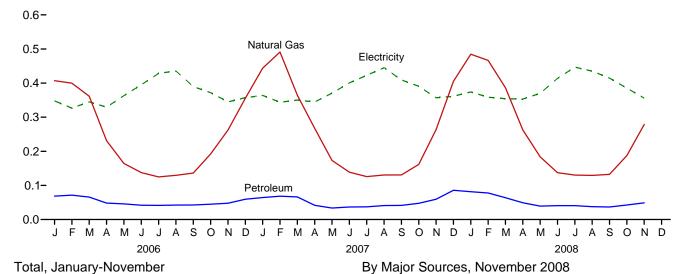
Web Page: See http://www.eia.doe.gov/emeu/mer/consump.html for all available data beginning in 1973.

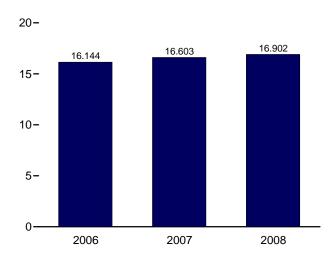
Figure 2.3 Commercial Sector Energy Consumption (Quadrillion Btu)

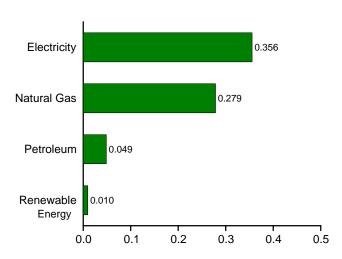




#### By Major Sources, Monthly







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

Source: Table 2.3.

**Table 2.3 Commercial Sector Energy Consumption** 

(Trillion Btu)

				Prima	ry Consum	ptiona						
		Fossil	Fuels			Renewak	ole Energy <sup>b</sup>					
	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 1975 Total 1980 Total 1985 Total 1995 Total 1995 Total 1996 Total 1997 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total	160 147 115 137 124 117 122 129 93 103 92 97 90 82 103 97	2,649 2,558 2,651 2,488 2,682 3,096 3,226 3,285 3,083 3,115 3,252 3,097 3,252 3,097 3,225 3,274 3,204 3,076	1,565 1,310 1,287 1,045 953 732 751 704 661 661 756 741 680 770 755 721	4,374 4,015 4,053 3,670 3,760 3,945 4,099 4,118 3,837 3,879 4,099 3,935 3,995 4,126 4,062 3,894	NA NA NA NA 1 1 1 1 1 1 1 (s) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NA N	7 8 21 24 94 113 129 131 118 121 119 92 95 101 105	7 8 21 24 98 118 135 138 127 129 128 101 104 113 118 119	4,381 4,023 4,074 3,695 3,858 4,063 4,235 4,257 3,964 4,007 4,227 4,036 4,099 4,239 4,180 4,014	1,517 1,598 1,906 2,351 2,860 3,252 3,344 3,503 3,678 3,766 4,062 4,110 4,099 4,198 4,351	3,609 3,845 4,582 5,398 6,615 7,382 7,603 7,935 8,338 8,610 8,993 9,043 9,043 9,023 9,023 9,023 9,023	9,507 9,466 10,563 11,444 13,333 14,698 15,181 15,694 15,979 16,384 17,176 17,141 17,367 17,351 17,664 17,875
2006 January February March April May June July August September October November December Total	7 6 4 4 5 5 5 4 6 7 8 <b>66</b>	407 400 362 231 R 164 R 137 125 R 129 136 192 R 262 355 R 2,902	69 72 66 48 46 42 41 42 43 45 48 59	R 482 478 434 284 215 184 171 R 176 183 243 317 422 R 3,587	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 8 8 8 9 8 9 8 9 8 9	10 9 10 10 10 10 10 10 10 10 10 10	493 487 R 443 R 293 225 194 181 186 192 R 252 R 326 R 432 R 3,705	348 327 345 329 363 395 428 436 390 372 345 357 <b>4,435</b>	735 694 736 712 827 877 954 936 774 793 757 794 <b>9,586</b>	1,575 1,508 1,524 1,335 1,415 R1,465 1,563 1,558 1,356 1,418 1,428 R 1,583 R 17,725
Pebruary February March April May June July August September October November December Total	7 7 7 5 5 5 5 5 5 6 7 8 <b>7</b>	R 444 R 491 R 364 R 267 R 173 R 139 R 126 R 131 131 162 R 264 R 405 R 3,095	64 68 66 42 34 37 37 41 41 47 59 86 <b>623</b>	R 516 R 567 R 437 R 314 R 212 R 180 R 168 176 177 R 215 R 330 R 499 R <b>3,790</b>	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	87888888888888888888888888888888888888	10 9 10 9 10 8 9 10 8 9 10 8 9 10 8 10 8	R 525 R 575 R 447 R 323 R 221 189 177 186 186 225 R 340 R 508 R 3,903	R 364 R 344 R 350 R 345 R 370 R 400 R 423 R 445 R 409 R 391 357 R 361 R 4,560	R 811 R 710 R 746 R 740 R 823 R 882 R 925 R 987 R 815 R 810 R 762 R 811 R 9,823	R 1,701 R 1,629 R 1,543 R 1,4408 R 1,415 R 1,472 R 1,525 R 1,618 R 1,410 R 1,425 R 1,681 R 1,681 R 18,285
2008 January February March April May June July August September October November 11-Month Total	7 7 7 5 5 6 5 5 5 6 8 64 64	R 485 466 R 386 263 184 R 137 R 130 129 132 188 279 2,780	81 78 64 49 39 41 41 38 37 8 43 49 559	R 574 551 457 317 228 184 176 172 174 R 236 336 3,403	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 8 8 9 9 9 9 9 8 8 9 9	9 9 10 10 10 10 10 10 10 10 10 10	R 583 560 467 327 238 R 193 186 182 R 184 R 245 345 3,511	374 358 354 353 370 414 447 435 415 385 356 4,261	806 728 757 747 827 939 975 926 827 815 785 <b>9,130</b>	R 1,763 R 1,647 1,578 R 1,427 1,435 1,547 1,608 1,543 1,425 R 1,445 1,446 16,902
2007 11-Month Total 2006 11-Month Total	64 58	2,691 2,547	537 561	3,291 3,165	1 1	13 13	90 94	104 107	3,395 3,273	4,198 4,078	9,010 8,793	16,603 16,144

a See "Primary Energy Consumption" in Glossary.

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

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

the 50 States and the District of Columbia.

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

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

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

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

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

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

e Conventional hydroelectric power.

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

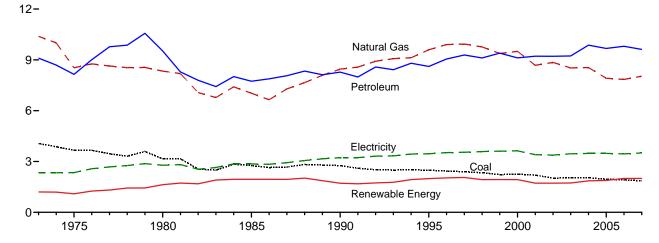
beginning in 1996, other energy service providers.

<sup>9</sup> 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

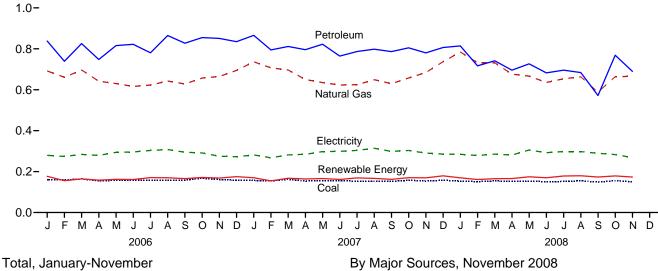
R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu.

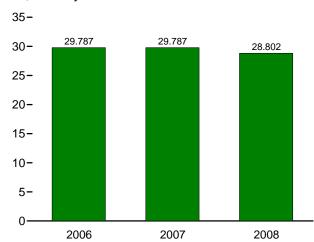
Figure 2.4 Industrial Sector Energy Consumption (Quadrillion Btu)

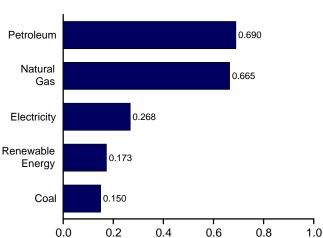




### By Major Sources, Monthly







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	ptiona						
		Fossi	l Fuels			<u> </u>	ole Energy <sup>b</sup>			1		
	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 <sup>9</sup>	Electrical System Energy Losses <sup>h</sup>	Total <sup>e</sup>
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 1995 Total	2,756 2,488	8,451 9,592	8,278 8,613	19,490 20,754	31 55	2 3	1,683 1,935	1,716 1,992	21,206 22,746	3,226 3,455	7,461 7,844	31,894 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 2005 Total	2,047 1,954	8,544 7,911	9,865 9,673	20,594 19,583	33 32	4 4	1,824 1,848	1,861 1,884	22,455 21,467	3,473 3,477	7,682 7,602	33,609 32,546
2006 January	161	R 692	838	R 1,693	4	(s)	173	177	R 1,870	279	590	R 2,739
February	159	<sup>R</sup> 661	739	R 1,563	3	(s)	152	155	R 1,718	274	582	R 2,574
March	164	R 696	825	R 1,692	2	(s)	162	164	R 1,857	284	606	R 2,747
April	155	R 641	748	R 1,547	2	(s)	156	158	R 1,705	279	603	R 2,587
May	157	R 630	816	R 1,607	2	(s)	160	162	R 1,769	294	669	R 2,732
June	157	<sup>R</sup> 616 <sup>R</sup> 623	822	<sup>R</sup> 1,601 <sup>R</sup> 1,565	2	(s)	159	161	<sup>R</sup> 1,762 <sup>R</sup> 1,736	296	656	<sup>R</sup> 2,714 <sup>R</sup> 2,714
July August	158 158	R 642	780 865	R 1,668	2 2	(s) (s)	168 168	171 170	R 1,736	303 308	675 662	R 2,808
September	158	R 628	827	R 1,627	2	(s)	163	165	R 1,793	295	585	R 2,672
October	168	R 657	855	R 1,692	3	(s)	168	172	R 1,864	291	621	R 2,776
November	161	R 665	851	R 1.677	4	(s)	164	168	R 1,846	275	604	R 2,725
December	158	R 694	835	R 1,690	3	(s)	172	175	R 1,865	273	606	R 2,744
Total	1,914	<sup>R</sup> <b>7,846</b>	9,801	R 19,623	29	`4	1,966	2,000	R 21,623	3,451	7,459	R <b>32,532</b>
<b>2007</b> January	157	R 736	R 866	R 1,762	R <sub>2</sub>	(s)	R 168	R 170	R 1,932	R 281	R 627	R 2,839
February	154	R 707	R 794	R 1,656	R 1	(s)	153 <sup>R</sup> 165	155	R 1,811	R 267	R 552	R 2,631
March	162	<sup>R</sup> 696 <sup>R</sup> 650	811	<sup>R</sup> 1,669 <sup>R</sup> 1,601	2	(s)	R 162	167 <sup>R</sup> 164	<sup>R</sup> 1,836 <sup>R</sup> 1,765	<sup>R</sup> 282 <sup>R</sup> 284	<sup>R</sup> 600 <sup>R</sup> 610	<sup>R</sup> 2,718 <sup>R</sup> 2,660
April May	154 156	R 635	796 <sup>R</sup> 822	R 1,616	2 2	(s) (s)	R 164	R 166	R 1,782	R 298	R 661	R 2,741
June	156	R 623	764	R 1,549	R 1	(s)	R 160	R 161	R 1,710	R 299	R 658	R 2,668
July	153	R 625	R 787	R 1,563	i	(s)	R 168	R 169	R 1,732	R 304	R 665	R 2,700
August	152	R 649	R 798	R 1,602	R 1	(s)	R 166	R 167	R 1,768	R 314	697	R 2,779
September	152	<sup>R</sup> 629	786	R 1,571	1	(s)	<sup>R</sup> 161	<sup>R</sup> 162	R 1,733	R 298	<sup>R</sup> 594	R 2,626
October	158	<sup>R</sup> 657	805	R 1,620	1	(s)	R 169	R 170	R 1,790	R 303	R 629	R 2,722
November	154	R 684	R 780	R 1,623	1	(s)	R 168	R 170	R 1,792	R 290	R 620	R 2,703
December <b>Total</b>	158 <b>1,865</b>	<sup>R</sup> 737 <sup>R</sup> <b>8,030</b>	<sup>R</sup> 806 <sup>R</sup> <b>9,616</b>	R 1,704 R <b>19,536</b>	2 R <b>16</b>	(s) <b>5</b>	<sup>R</sup> 177 <sup>R</sup> <b>1,980</b>	179 R <b>2.001</b>	R 1,884 R <b>21,536</b>	<sup>R</sup> 286 <sup>R</sup> <b>3,507</b>	<sup>R</sup> 641 <sup>R</sup> <b>7.555</b>	R 2,811 R <b>32,599</b>
	-	•	•	_			-	,			,	_
2008 January	153 151	<sup>R</sup> 785 <sup>R</sup> 732	814 717	<sup>R</sup> 1,756 <sup>R</sup> 1,602	2	(s)	167	169 161	<sup>R</sup> 1,925 <sup>R</sup> 1,763	284	R 613	<sup>R</sup> 2,822 <sup>R</sup> 2,608
February March	151 155	R 732	717 741	R 1,602	3 3	(s) (s)	158 162	161 165	<sup>R</sup> 1,763	279 285	566 609	R 2,608
April	152	R 676	696	R 1,532	2	(s)	163	166	R 1,698	281	593	R 2,572
May	154	<sup>R</sup> 666	727	R 1.549	2	(s)	172	174	R 1.724	305	682	R 2.711
June	151	к 636	682	K 1.477	1	(s)	169	170	r 1.648	292	663	^ 2.602
July	152	<sup>R</sup> 654	696	R 1.507	1	(s)	177	178	<sup>R</sup> 1,685	298	651	<sup>R</sup> 2,634
August	155	<sup>R</sup> 663	684	<sup>R</sup> 1,503	1	(s)	178	180	<sup>R</sup> 1,683	297	633	<sup>R</sup> 2,614
September	149	<sup>R</sup> 588	572	<sup>R</sup> 1,311	1	(s)	172	173	R 1,484	290	578	R 2,351
October	R 156	R 664	R 769	R 1,590	1	(s)	177	179	R 1,768	283	599	R 2,650
November	150	665	690	1,507	1	(s)	172	173	1,680	268	592	2,540
11-Month Total	1,678	7,462	7,787	16,969	18	4	1,867	1,890	18,859	3,163	6,779	28,802
2007 11-Month Total 2006 11-Month Total	1,707 1,757	7,293 7,152	8,810 8,966	17,831 17,933	14 26	4 4	1,803 1,794	1,821 1,824	19,652 19,757	3,221 3,178	6,913 6,852	29,787 29,787

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

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

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

a See "Primary Energy Consumption" in Glossary.
 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.

d 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.

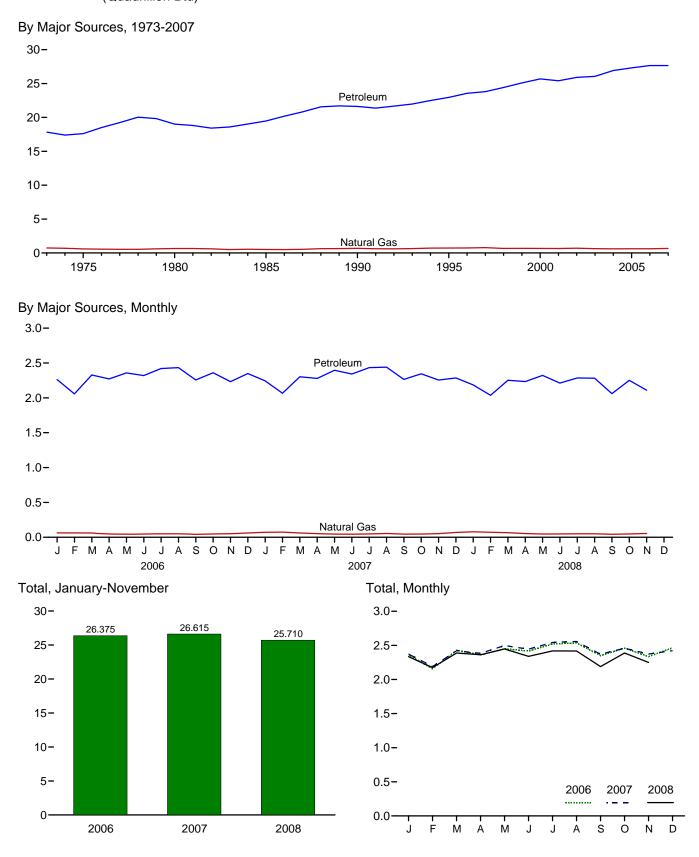
Conventional hydroelectric power.

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

beginning in 1996, other energy service providers.

<sup>h</sup> 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	nsumption <sup>a</sup>					
		Fossi	l Fuels		Renewable Energy <sup>b</sup>	Tatal	Electricity	Electrical System	
	Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Total	Biomass	Total Primary	Retail Sales <sup>e</sup>	Energy Losses <sup>f</sup>	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	( <sup>g</sup> )	519	19,471	19,990	51	20,041	14	32	20,087
1990 Total	(g)	680	21,625	22,305	62	22,366	16	37	22,420
1995 Total	(g)	724	22,954	23,678	115	23,793	17	39	23,849
1996 Total	(g)	737	23,565	24,302	82	24,384	17	38	24,439
1997 Total	( <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	( <sup>g</sup> )	625	27,309	27,934	346	28,280	26	56	28,361
2006 January	(g)	63	2,262	2,325	31	2,356	2	5	2,363
February	(g)	62	2,057	2,119	29	2,148	2	4	<sup>R</sup> 2,154
March	(g)	<sup>R</sup> 61	2,329	2,390	33	2,423	2	5	2,429
April	(g)	<sup>R</sup> 48	2,271	2,320	34	2,354	2	4	2,360
May	(g)	44	2,358	2,402	41	2,443	2	4	2,449
June	(g)	45	2,320	2,365	45	2,410	2	5	2,417
July	(g)	51	2,421	2,472	42	2,514	2	5	2,521
August	(g)	<sup>R</sup> 50	2,434	2,485	45	<sup>R</sup> 2,529	2	5	2,536
September	(g)	42	2,257	2,299	44	2,343	2	4	2,349
October	(g)	47	2,360	<sup>R</sup> 2,407	46	2,454	2	4	2,460
November	(g)	51	2,233	2,284	45	2,329	2	4	2,336
December	(g)	61	2,349	2,410	48	2,458	2	5	2,465
Total	(g)	R <b>625</b>	27,652	R 28,277	483	R 28,760	25	54	R 28,839
2007 January	(g)	<sup>R</sup> 72	2,245	2,316	48	R 2,364	<sup>R</sup> 3	6	R 2,373
February	(g)	<sup>R</sup> 75	<sup>R</sup> 2,066	2,141	43	2,184	2	5	<sup>R</sup> 2,192
March	(g)	<sup>R</sup> 62	2,303	2,364	48	2,413	<sup>R</sup> 3	5	2,421
April	(g)	52	2,279	2,331	46	2,377	2	<sup>R</sup> 5	2,384
May	(g)	45	2,396	2,441	50	<sup>R</sup> 2,491	2	5	2,498
June	(g)	45	2,342	2,387	51	R 2,437	2	5	2,445
July	(g)	_ 48	R 2,433	2,481	55	2,536	2	5	2,543
August	(9)	<sup>R</sup> 55	<sup>R</sup> 2,440	2,495	55	R 2,550	2	_ 5	2,558
September	(g)	46	2,265	2,311	53	2,364	2	<sup>R</sup> 5	2,371
October	(g)	R 47	2,345	R 2,392	59	2,452	2	R 5	2,458
November	(g)	53	2,255	2,308	58	2,366	2	5	2,373
December	(g)	69	2,285	2,354	61	R 2,416	2	5	R 2,423
Total	( <sup>g</sup> )	667	27,655	28,322	629	R 28,950	R 28	R <b>60</b>	R 29,038
2008 January	(g)	_ 78	2,186	2,264	62	R 2,327	2	5	2,334
February	(g)	R 72	2,037	2,108	60	2,168	2	5	2,175
March	(g)	66	2,252	2,317	64	2,382	2	5	R 2,389
April	(g)	53	2,234	2,287	69	2,356	2	4	2,363
May	(g)	R 47	2,322	R 2,369	72	R 2,441	2	5	2,447
June	(g)	47	2,212	2,259	73	2,332	2	5	2,339
July	(g)	50	2,285	2,335	76	2,411	2	5	2,418
August	(g)	<sup>R</sup> 50	2,282	2,332	79	R 2,411	2	5	<sup>R</sup> 2,418
September	(g)	43	2,060	R 2,104	79	2,183	2	4	2,189
October	(g)	48	R 2,252	R 2,300	82	R 2,382	2	5	R 2,388
November	(g)	54	2,110	2,165	78	2,243	2	5	2,250
11-Month Total	( <sup>g</sup> )	609	24,231	24,840	795	25,635	24	51	25,710
2007 11-Month Total 2006 11-Month Total	( <sup>g</sup> )	597 564	25,370 25,303	25,967 25,867	567 435	26,535 26,302	26 23	55 49	26,615 26,375

<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, "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."

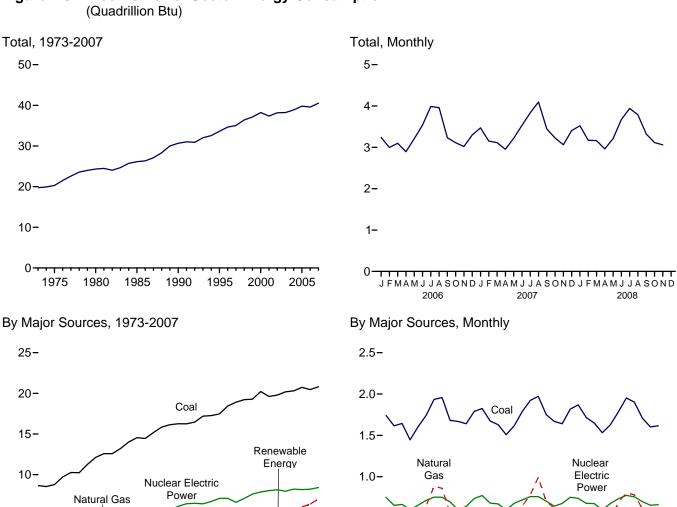
<sup>&</sup>lt;sup>e</sup> Electricity retail sales to ultimate customers reported by electric utilities and,

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>9</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



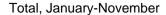
0.5-

2000

1995

2005

Petroleum



1975

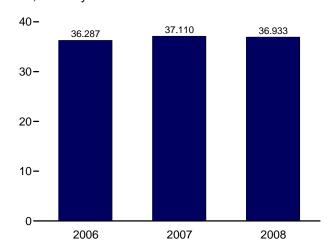
Petroleum

1980

1985

1990

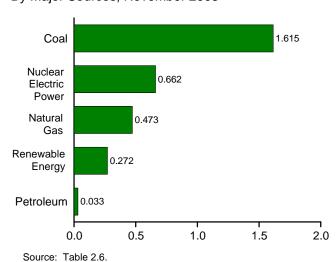
5-



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

By Major Sources, November 2008

2006



J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D

Renewable Energy

2008

32

**Electric Power Sector Energy Consumption** Table 2.6

(Trillion Btu)

						Prima	ry Consum	ptiona					
		Fossil	Fuels					Renewabl	e Energy <sup>b</sup>			Elec-	
	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	tricity Net Imports	Total Primary
1973 Total		3,748	3,515	15,921	910	2,827	43	NA	NA	3	2,873	49	19,753
1975 Total		3,240	3,166	15,191	1,900	3,122	70	NA	NA	2	3,194	21	20,307
1980 Total 1985 Total		3,778 3,135	2,634 1,090	18,534 18,767	2,739 4,076	2,867 2,937	110 198	NA (s)	NA (s)	4 14	2,982 3,150	71 140	24,327 26,132
1990 Total <sup>e</sup>		3,309	1,289	20,859	6,104	3,014	326	(s) 4	(s) 29	317	3,689	8	30,660
1995 Total		4,302	755	22,523	7,075	3,149	280	5	33	422	3,889	134	33,621
1996 Total		3,862	817	23,109	7,087	3,528	300	5	33	438	4,305	137	34,638
1997 Total	18,905	4,126	927	23,957	6,597	3,581	309	5	34	446	4,375	116	35,045
1998 Total		4,675	1,306	25,197	7,068	3,241	311	5	31	444	4,032	88	36,385
1999 Total		4,902	1,211	25,393	7,610	3,218	312	5	46	453	4,034	99	37,136
2000 Total		5,293	1,144	26,658	7,862	2,768	296	5	57	453	3,579	115	38,214
2001 Total 2002 Total		5,458 5,767	1,277 961	26,348 26,511	8,033 8,143	2,209 2,650	289 305	6 6	70 105	337 380	2,910 3,445	75 72	37,366 38,171
2002 Total		5,246	1,205	26,636	7,959	2,781	303	5	115	397	3,601	22	38,218
2004 Total		5,595	1,212	27,112	8,222	2,656	311	6	142	388	3,503	39	38,876
2005 Total		6,015	1,235	27,986	8,160	2,670	309	6	178	406	3,568	84	39,799
2006 January		326	61	2,128	750	268	26	(s)	24	37	355	5	3,238
February		355	50	2,020	653	243	23	(s)	19	34	319	5	2,998
March		417	39	2,101	665	242	27	(s) 1	23	35	327	6	3,099
April		437 517	46 44	1,928 2,166	601 655	281 304	24 23	1	25 24	30 33	360 384	5 5	2,893 3,210
May June		645	59	2,100	714	293	25 25	1	20	34	373	5	3,535
July		885	72	2,893	753	250	27	1	19	36	333	10	3,989
August		861	86	2,904	751	214	27	1	16	37	295	10	3,960
September		561	47	2,289	695	169	26	1	19	34	248	(s)	3,232
October		540	51	2,260	600	166	27	(s)	24	34	252	1	3,113
November		406	48	2,094	641	197	25	(s)	25	35	283	3	3,020
December Total		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>
<b>2007</b> January	. 1,826	<sup>R</sup> 459	60	R 2,345	772	R 256	27	(s)	24	R 39	347	6	R 3,471
February		<sup>R</sup> 436	R 88	R 2,197	681	183	R 24	(s)	25	R 32	R 264	10	<sup>R</sup> 3,151
March	. R 1,629	R 426	_ 53	2,108	671	R 238	R 25	(s)	_ 30	R 35	R 328	6	R 3,114
April		R 464	R 50	R 2,023	598	235	24	1	<sup>R</sup> 31	33	325	10	R 2,955
May		R 520	48	R 2,183	678	R 257	R 24	1	R 29	34	R 345	12	R 3,218
June		<sup>R</sup> 644 <sup>R</sup> 779	<sup>R</sup> 58 <sup>R</sup> 56	R 2,488	719	225 R 222	26 R 26	1	R 26	R 35	R 313	11	R 3,531
July August		R 993	R 73	<sup>R</sup> 2,758 <sup>R</sup> 3,039	759 759	R 197	<sup>R</sup> 26 <sup>R</sup> 26	1	<sup>R</sup> 21 <sup>R</sup> 27	36 <sup>R</sup> 36	<sup>R</sup> 307 <sup>R</sup> 287	13 12	<sup>R</sup> 3,836 <sup>R</sup> 4,097
September		R 700	R 50	R 2,500	705	R 145	26	1	R 28	35	R 235	5	R 3,446
October		<sup>R</sup> 619	48	R 2,335	644	146	27	(s)	R 33	R 35	R 241	7	3,227
November	_ ,	R 459	R 31	R 2,131	R 677	R 154	R 25	(s)	R 31	36	R 246	9	R 3,063
December		510	42	<sup>R</sup> 2,370	751	<sup>R</sup> 180	27	(s)	<sup>R</sup> 35	37	<sup>R</sup> 278	7	<sup>R</sup> 3,407
Total	R 20,810	<sup>R</sup> 7,012	R <b>657</b>	R 28,479	R <b>8,414</b>	R <b>2,439</b>	R 308	6	R 342	R <b>423</b>	R 3,517	R 107	<sup>R</sup> 40,517
2008 January		542	45	2,455	738 679	219	25	(s)	37	36	318	11	3,522
February		443	37	2,196	678 675	198	23	(s)	32	33	286	10	3,170
March April		474 470	32 33	2,155 2,036	675 598	224 217	26 25	1	41 45	36 33	327 321	7 9	3,165 2,963
May		485	34	2,036	676	278	26	1	45	32	382	8	3,212
June		685	53	2,521	733	304	26	1	43	35	410	9	3,673
July		806	43	2,800	775	256	27	1	32	36	352	15	3,942
August	1,902	781	39	2,722	757	204	27	1	26	36	294	15	3,787
September		616	42	2,368	699	163	26	1	24	33	247	10	3,324
October		559	32	2,193	655	162	26	1	41	32	262	6	3,115
November		473 6 225	33	2,121	662 7.645	168	25	(s)	44	34 <b>377</b>	272	4 105	3,059
11-Month Total	•	6,335	422	25,714	7,645	2,393	282	8	409	377	3,469	105	36,933
2007 11-Month Total 2006 11-Month Total		6,501 5,950	615 603	26,108 25,226	7,663 7,478	2,258 2,628	281 279	6 5	307 239	387 377	3,239 3,528	100 55	37,110 36,287

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

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

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

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

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.

## **Energy Consumption by Sector**

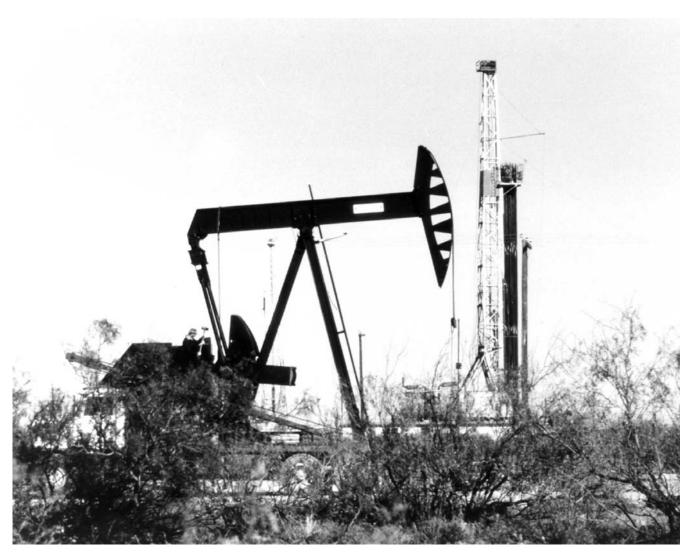
**Note 1. Energy Consumption Data and Surveys.** Most of the data in this section of the *Monthly Energy Review (MER)* are developed from a group of energy-related surveys, typically called "supply surveys," conducted by the Energy Information Administration (EIA). Supply surveys are directed to suppliers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

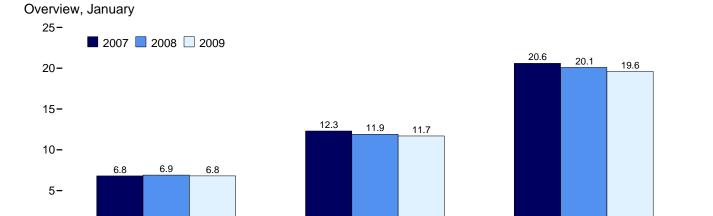
Note 2. Electrical System Energy Losses. Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector (see Table 2.6) and the total energy content of electricity retail sales (see Tables 7.6 and A6). Most of these losses occur at steam-electric 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

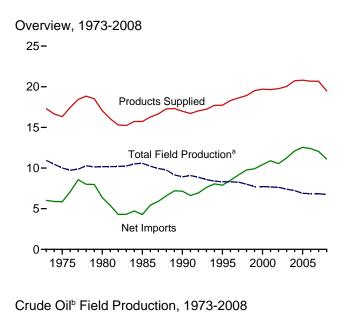


Oil pumping unit and drilling rig, Texas. Source: U.S. Department of Energy.

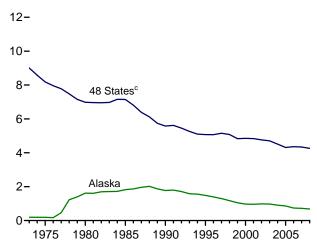
**Petroleum Overview** Figure 3.1 (Million Barrels per Day)



Net Imports

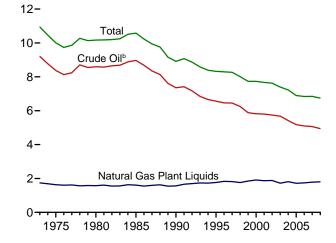


Total Field Production<sup>a</sup>



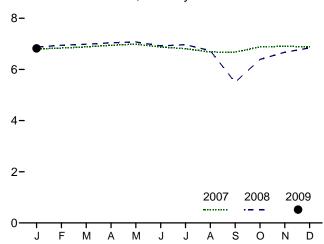
<sup>&</sup>lt;sup>a</sup>Crude oil, including lease condensate, and natural gas plant liquids field production.

### Total Field Production, 1973-2008



**Products Supplied** 

### 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	eld Produc	tion <sup>a</sup>				Trade				
		Crude Oil	)									Petroleum
	48 States <sup>c</sup>	Alaska	Total	NGPL <sup>d,e</sup>	Total	Processing Gain <sup>f</sup>	Imports <sup>g</sup>	Exportse	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		191	8,375	1,633	10,007	460	6,056	209	5,846	32	41	16,322
1980 Average		1,617	8,597	1,573	10,170	597	6,909	544	6,365	140	64	17,056
1985 Average	7,146	1,825	8,971	1,609	10,581	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		1,484	6,560	1,762	8,322	774	8,835	949	7,886	-246	496	17,725
1996 Average		1,393	6,465	1,830	8,295	837	9,478	981	8,498	-151	528	18,309
1997 Average		1,296	6,452	1,817	8,269	850	10,162	1,003	9,158	143	487	18,620
1998 Average		1,175	6,252	1,759 1.850	8,011	886 886	10,708	945 940	9,764	239	495 567	18,917
1999 Average		1,050 970	5,881 5,822		7,731	948	10,852	1,040	9,912	-422 -69	532	19,519
2000 Average		963	5,822	1,911 1.868	7,733 7,670	903	11,459 11.871	971	10,419 10.900	325	501	19,701 19.649
2001 Average 2002 Average		984	5,746	1,880	7,676 7,626	903 957	11,530	984	10,546	-105	527	19,761
2003 Average		974	5.681	1,719	7,400	974	12,264	1,027	11,238	-105 56	478	20.034
2004 Average		908	5,419	1.809	7,228	1.051	13.145	1,048	12.097	209	564	20,731
2005 Average	4,314	864	5,178	1,717	6,895	989	13,714	1,165	12,549	145	513	20,802
2006 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		800	5,128	1,737	6,866	944	13,438	1,398	12,039	311	663	20,201
May		801	5,161	1,755	6,916	979	14,315	1,350	12,965	743	340	20,457
June		781	5,160	1,756	6,915	968	14,253	1,334	12,918	174	353	20,982
July		681	5,102	1,759	6,861	1,000	13,984	1,387	12,596	457	740	20,740
August		621	5,059	1,732	6,792	1,077	14,697	1,255	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		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 Average		785 <b>741</b>	5,166 <b>5,102</b>	1,736 <b>1,739</b>	6,903 <b>6,841</b>	1,048 <b>994</b>	12,721 <b>13,707</b>	1,164 <b>1,317</b>	11,556 <b>12,390</b>	-825 <b>60</b>	463 <b>522</b>	20,795 <b>20,687</b>
2007 January	4,348	775	5,123	1,677	6,800	1,035	13,706	1,446	12,260	146	618	20,567
February		756	5,125	1,710	6,835	961	12,173	1,350	10,823	-2,065	625	21,309
March		750	5,106	1,776	6,882	944	13,956	1,274	12,682	367	396	20,536
April		748	5,189	1,755	6,944	948	13,842	1,360	12,482	540	701	20,536
May	,	768	5,197	1,793	6,990	939	14,204	1,441	12,764	966	894	20,620
June		717	5,096	1,780	6,877	1,007	13,553	1,331	12,222	195	813	20,723
July		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	4,274	743	5,017	1,886	6,902	1,011	13,188	1,767	11,421	-596	604	20,535
December Average	4,318 <b>4,342</b>	738 <b>722</b>	5,056 <b>5,064</b>	1,828 <b>1,783</b>	6,885 <b>6,847</b>	1,093 <b>996</b>	12,869 <b>13,468</b>	1,542 <b>1,433</b>	11,327 <b>12,036</b>	-788 <b>-148</b>	627 <b>653</b>	20,719 <b>20,680</b>
2008 January	_	E 711	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	1,763	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	10,331	-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 5,166	1,908	E 7,074	1,011	12,862	1,806	11,056	264	851	19,729
June		E 655	E 5,100	1,810	E 6,919	982	13,367	2,165	11,202	406	856	19,553
July		E 640	E 5,110	1,856	E 6,966	984	13,064	2,069	10,995	434	902	19,412
August		E 544	E 4,895	1,839	E 6,734	1,013	13,060	2,068	10,992	368	895	19,267
September	E 3,279	E 681	E 3,960	1,537	E 5,497	841	11,512	1,338	10,174	-169	1,115	17,796
October	E 3.929	E 716	E 4,645	1,745	E 6.389	979	13,217	1,669	11,548	220	947	19,643
November	RE 4.210	<sup>RE</sup> 728	RE 4,938	R 1,734	RE 6,673	R 983	R 12,853	R 1.730	R 11,123	R 706	R 929	R 19,001
December	E 4.276	E 713	E 4,989	E 1,851	E 6,840	<sup>E</sup> 965	E 12,830	E 1,395	E 11,435	E 60	_E 813	E 19,993
Average		RE <b>684</b>	RE <b>4,944</b>	RE 1,802	RE 6,746	RE <b>970</b>	RE <b>12,892</b>	RE 1,792	RE 11,100	RE <b>201</b>	RE <b>870</b>	RE <b>19</b> ,486
2009 January		E 685	E 5.075	E 1.746	E 6,821	E 952	E 13,177	E 1.510	E 11,667	E 924	E 1.049	E 19,565

<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.

distillate fuel oil stocks in the Northeast Heating Oil Reserve. See Table 3.4. Also see Note 4, "Petroleum New Stock Basis," at end of section.

J An adjustment for crude oil, finished motor gasoline, motor gasoline blending

Monthly, Appendix B, Note C.
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

wen 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 and 2009: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system and Monthly Energy Review data system calculations Review data system calculations.

Includes lease condensate.

United States excluding Alaska and Hawaii.

Natural gas plant liquids.
See Note 6, "Petroleum Data Discrepancies," at end of section.

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

Includes Strategic Petroleum Reserve imports. See Table 3.3b

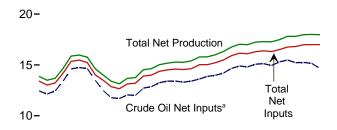
h Net imports equal imports minus exports.

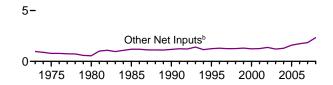
A negative value indicates a decrease in stocks and a positive value indicates an increase. The current month stock change estimate is based on the change from the previous month's estimate, rather than the stocks values shown in Table 3.4. Includes crude oil stocks in the Strategic Petroleum Reserve, but excludes

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)

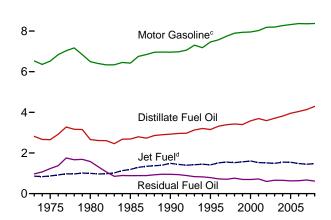
Net Inputs and Net Production, 1973-2008



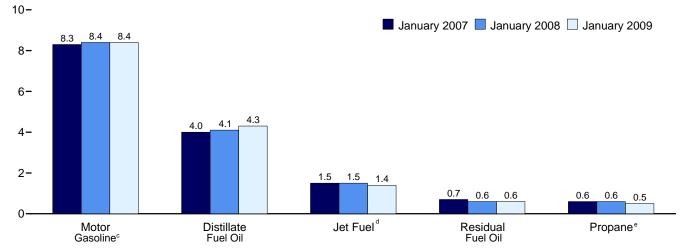


Net Production, Selected Products, 1973-2008

10-

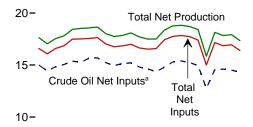


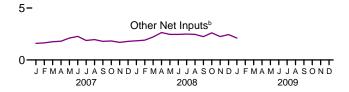
### Net Production, Selected Products



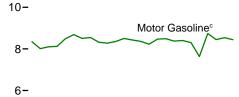
<sup>&</sup>lt;sup>a</sup>Includes lease condensate.

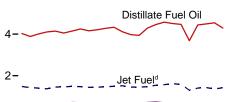
Net Inputs and Net Production, Monthly

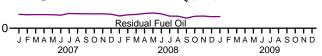




Net Production, Selected Products, Monthly







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

Source: Table 3.2.

<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.

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

Table 3.2 Refinery and Blender Net Inputs and Net Production

	Refine	ery and Ble	nder Net I	nputs <sup>a</sup>			Refinery	and Blen	der Net Pro	ductionb		
							LPG	<b>3</b> c				
	Crude Oil <sup>d</sup>	NGPLe	Other Liquids <sup>f</sup>	Total	Distillate Fuel Oil	Jet Fuel <sup>g</sup>	Propane <sup>h</sup>	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	12,442	710	72	13,225	2,653	871	234	311	6,518	1,235	2,097	13,685
1980 Average	13,481	462	81	14,025	2,661	999	269	330	6,492	1,580	2,559	14,622
1985 Average	12,002	509	681	13,192	2,686	1,189	295	391	6,419	882	2,183	13,750
1990 Average	13,409	467	713	14,589	2,925	1,488	404	499	6,959	950	2,452	15,272
1995 Average	13,973	471	775	15,220	3,155	1,416	503	654	7,459	788	2,522	15,994
1996 Average	14,195	450	843	15,487	3,316	1,515	520	662	7,565	726	2,541	16,324
1997 Average	14,662	416	832	15,909	3,392	1,554	565	691	7,743	708	2,671	16,759
1998 Average	14,889	403	853	16,144	3,424	1,526	550	674	7,892	762	2,753	17,030
1999 Average	14,804	372	927	16,103	3,399	1,565	569	684	7,934	698	2,709	16,989
2000 Average	15,067	380	849	16,295	3,580	1,606	583	705	7,951	696	2,705	17,243
2001 Average	15,128	429	825	16,382	3,695	1,530	556	667	8,022	721	2,651	17,285
2002 Average	14,947	429	941	16,316	3,592	1,514	572	671	8,183	601	2,712	17,273
2003 Average	15,304	419	791	16,513	3,707	1,488	570	658	8,194	660	2,780	17,487
2004 Average	15,475	422	866	16,762	3,814	1,547	584	645	8,265	655	2,887	17,814
2005 Average	15,220	441	1,149	16,811	3,954	1,546	540	573	8,318	628	2,782	17,800
2006 January	14,805	553	952	16,310	3,840	1,515	528	393	8,189	670	2,703	17,311
February	14,581	508	1,047	16,136	3,941	1,438	510	487	7,969	635	2,694	17,164
March	14,582	448	935	15,965	3,736	1,461	485	587	7,765	644	2,680	16,872
April	14,928	442	1,151	16,521	3,833	1,447	537	779	8,032	643	2,731	17,465
May	15,516	471	1,523	17,510	4,105	1,435	567	856	8,613	580	2,900	18,488
June	15,843	466	1,683	17,992	4,107	1,493	543	814	8,957	645	2,944	18,960
July	15,702	423	1,475	17,599	4,065	1,540	549	829	8,624	658	2,883	18,599
August	15,792	447	1,519	17,758	4,234	1,485	574	860	8,610	652	2,993	18,835
September	15,739	498	1,285	17,521	4,300	1,511	560	622	8,465	619	3,030	18,548
October	15,008	548	1,187	16,743	4,090	1,490	531	511	8,210	597	2,836	17,735
November	15,009	573	1,122	16,703	4,070	1,422	549	393	8,335	624	2,818	17,662
December Average	15,354 <b>15,242</b>	637 <b>501</b>	969 <b>1,238</b>	16,959 <b>16,981</b>	4,159 <b>4,040</b>	1,529 <b>1,481</b>	581 <b>543</b>	387 <b>627</b>	8,567 <b>8,364</b>	656 <b>635</b>	2,710 <b>2,827</b>	18,007 <b>17,975</b>
2007 January	14,992	557	1 020	16 500	4.027	1,480	575	468	8,348	667	2 622	17,622
2007 January	14,435	473	1,039	16,588	4,027	1,400	534		8,012	650	2,632	
February	14,433	463	1,170 1,291	16,078 16,594	3,883 4,009	1,421	563	502 692	8,101	656	2,571 2,678	17,039 17,538
March	15,045	444	1,362	16,851	4,102	1,403	562	824	8,122	658	2,725	17,800
April May	15,380	462	1,641	17,484	4,142	1,451	576	882	8,491	647	2,723	18,423
June	15,248	457	1,810	17,404	4,050	1,451	568	871	8,686	628	2,828	18,522
July	15,671	465	1,410	17,547	4,145	1,484	562	835	8,504	708	2,893	18,569
August	15,685	449	1,508	17,642	4,244	1,470	542	810	8,547	698	2,883	18,652
September	15,226	496	1,295	17,017	4,158	1,436	560	624	8,320	698	2,771	18,008
October	14,933	562	1,263	16,757	4,208	1,446	539	499	8,276	689	2,622	17,740
November	15,151	630	1,057	16,838	4,278	1,463	568	393	8,353	694	2,668	17,850
December	15,202	600	1,189	16,991	4,326	1,489	595	443	8,501	676	2,649	18,084
Average	15,156	505	1,337	16,999	4,133	1,448	562	655	8,358	673	2,728	17,994
2008 January	14,799	540	1,304	16,644	4,110	1,514	567	460	8,427	591	2,598	17,700
February	14,625	506	1,398	16,529	3,973	1,447	535	504	8,364	645	2,560	17,493
March	14,361	466	1,749	16,576	3,940	1,451	526	674	8,230	664	2,548	17,506
April	14,799	453	2,185	17,437	4,287	1,467	521	809	8,471	710	2,623	18,367
May	15,291	448	2,012	17,751	4,459	1,536	546	874	8,492	734	2,666	18,761
June	15,384	437	2,018	17,839	4,572	1,567	544	867	8,375	695	2,745	18,821
July	15,236	439	2,047	17,722	4,509	1,612	534	847	8,405	584	2,751	18,707
August		413	2,045	17,405	4,466	1,584	526	814	8,301	579	2,674	18,418
September		407	1,838	15,004	3,681	1,297	419	511	7,631	485	2,239	15,845
October	14.551	568	2,034	17,153	4,437	1.401	503	460	8,739	575	2,519	18,132
November	R 14,605	<sup>R</sup> 576	R 1,674	R 16,855	R 4,490	R 1,425	<sup>R</sup> 515	<sup>R</sup> 369	R 8,449	R 588	R 2,516	R 17,837
December	E 14,509	F 608	E 1,834	F 16,951	E 4,544	E 1,361	E 508	F 414	E 8,540	E 555	E 2,503	E 17,916
Average	RE <b>14,659</b>	RE <b>489</b>	RE 1,846	RE 16,994	RE 4,291	RE 1,472	RE <b>521</b>	RE <b>634</b>	RE <b>8,370</b>	RE <b>617</b>	RE 2,579	RE 17,964
2009 January	_	F 583	E 1,519	F 16,400	E 4,288	E 1,417	E 538	F 405	E 8,442	E 558	E 2,242	E 17,352

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

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

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 and 2009: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system, Short-Term Integrated Forecasting System, and Monthly Energy Review data system calculations.

<sup>&</sup>lt;sup>b</sup> See "Refinery and Blender Net Production," in Glossary.

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

d Includes lease condensate.

e Natural gas plant liquids (liquefied petroleum gases and pentanes plus).

f Unfinished oils (net), other hydrocarbons, and hydrogen. Beginning in 1981, also includes aviation and motor gasoline blending components (net). Beginning in 1993, also includes oxygenates (net).

g 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."

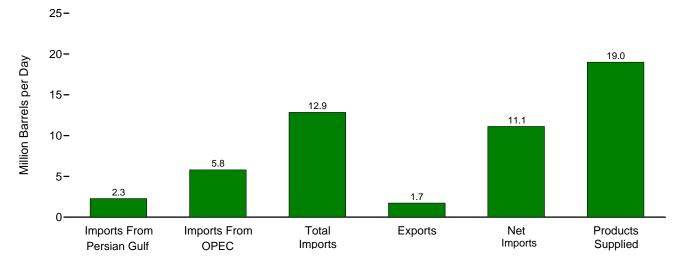
h Includes propylene.

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

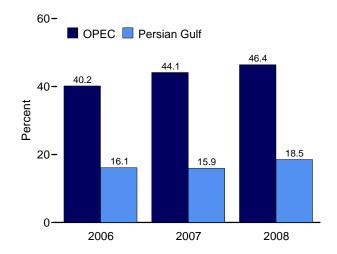
Overview, November 2008



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

80-60 **OPEC** 44.4% (2007)47.8% \_(1973) Persian Gulf 16.1% (2007)20 13.6% (1973)1975 1980 1985 1990 1995 2000 2005

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

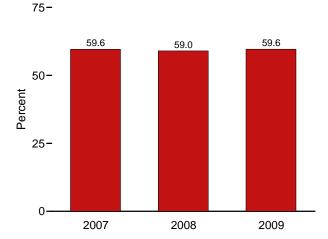


Net Imports as Share of Products Supplied, 1973-2008



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

Net Imports as Share of Products Supplied, January



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

Table 3.3a Petroleum Trade: Overview

									nare 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	ay				Pe	rcent		
1973 Average	848	2,993	6,256	231	6,025	17,308	4.9	17.3	36.1	34.8	13.6	47.8
1975 Average		3,601	6,056	209	5,846	16,322	7.1	22.1	37.1	35.8	19.2	59.5
1980 Average		4,300	6,909	544	6,365	17,056	8.9	25.2	40.5	37.3	22.0	62.2
1985 Average		1,830	5,067	781	4,286	15,726	2.0	11.6	32.2	27.3	6.1	36.1
1990 Average		4,296	8,018	857	7,161	16,988	11.6	25.3	47.2	42.2	24.5	53.6
1995 Average		4,002	8,835	949	7,886	17,725	8.9	22.6 23.0	49.8 51.8	44.5 46.4	17.8 16.9	45.3 44.4
1996 Average 1997 Average		4,211 4,569	9,478 10,162	981 1,003	8,498 9,158	18,309 18,620	8.8 9.4	23.0 24.5	54.6	46.4 49.2	17.3	44.4 45.0
1998 Average		4,905	10,708	945	9,764	18,917	11.3	25.9	56.6	51.6	19.9	45.8
1999 Average		4,953	10,852	940	9,912	19,519	12.6	25.4	55.6	50.8	22.7	45.6
2000 Average		5,203	11,459	1,040	10,419	19,701	12.6	26.4	58.2	52.9	21.7	45.4
2001 Average		5,528	11,871	971	10,900	19,649	14.1	28.1	60.4	55.5	23.3	46.6
2002 Average		4,605	11,530	984	10,546	19,761	11.5	23.3	58.3	53.4	19.7	39.9
2003 Average	2,501	5,162	12,264	1,027	11,238	20,034	12.5	25.8	61.2	56.1	20.4	42.1
2004 Average		5,701	13,145	1,048	12,097	20,731	12.0	27.5	63.4	58.4	19.0	43.4
2005 Average	2,334	5,587	13,714	1,165	12,549	20,802	11.2	26.9	65.9	60.3	17.0	40.7
2006 January		5,596	13,796	1,059	12,737	20,436	9.8	27.4	67.5	62.3	14.5	40.6
February March		5,502 5,088	13,565 12,904	1,276 1,170	12,289 11,734	20,577 20,608	10.0 9.5	26.7 24.7	65.9 62.6	59.7 56.9	15.2 15.2	40.6 39.4
April		5,488	13,438	1,170	12,039	20,000	11.7	27.2	66.5	59.6	17.6	40.8
May		5,819	14,315	1,350	12,965	20,457	11.7	28.4	70.0	63.4	16.7	40.7
June		5,691	14,253	1,334	12,918	20,982	11.2	27.1	67.9	61.6	16.5	39.9
July		5,509	13,984	1,387	12,596	20,740	10.0	26.6	67.4	60.7	14.9	39.4
August		5,729	14,697	1,255	13,442	21,434	10.8	26.7	68.6	62.7	15.7	39.0
September		5,842	14,491	1,554	12,937	20,559	12.1	28.4	70.5	62.9	17.1	40.3
October		5,538	13,317	1,506	11,810	20,769	10.3	26.7	64.1	56.9	16.0	41.6
November		5,181	13,005	1,353	11,651	20,669	11.3	25.1	62.9	56.4	18.0	39.8
December Average		5,221 <b>5,517</b>	12,721 <b>13,707</b>	1,164 <b>1,317</b>	11,556 <b>12,390</b>	20,795 <b>20,687</b>	10.0 <b>10.7</b>	25.1 <b>26.7</b>	61.2 <b>66.3</b>	55.6 <b>59.9</b>	16.3 <b>16.1</b>	41.0 <b>40.2</b>
_	•		10,707	1,017	•	•	10.7				10.1	
<b>2007</b> January		6,074	13,706	1,446	12,260	20,567	11.1	29.5	66.6	59.6	16.6	44.3
February		5,278	12,173	1,350	10,823	21,309	7.7	24.8	57.1	50.8	13.5	43.4
March		6,302	13,956	1,274	12,682	20,536	10.1	30.7	68.0	61.8	14.8	45.2
April		5,950	13,842	1,360	12,482	20,536 20,620	10.7	29.0	67.4	60.8	15.8 15.1	43.0 43.5
May June		6,181 6,121	14,204 13,553	1,441 1,331	12,764 12,222	20,620	10.4 11.4	30.0 29.5	68.9 65.4	61.9 59.0	17.5	43.5 45.2
July		5,759	13,754	1,506	12,222	20,723	10.1	27.8	66.3	59.0	15.3	41.9
August	,	6,115	13,634	1,483	12,151	21,025	10.3	29.1	64.8	57.8	15.9	44.8
September		6,231	13,646	1,361	12,285	20,415	11.4	30.5	66.8	60.2	17.1	45.7
October		5,619	12,981	1,325	11,655	20,476	10.2	27.4	63.4	56.9	16.1	43.3
November	. 2,281	5,961	13,188	1,767	11,421	20,535	11.1	29.0	64.2	55.6	17.3	45.2
December		6,111	12,869	1,542	11,327	20,719	10.9	29.5	62.1	54.7	17.5	47.5
Average	2,163	5,980	13,468	1,433	12,036	20,680	10.5	28.9	65.1	58.2	16.1	44.4
2008 January		6,413	13,493	1,623	11,869	20,114	11.5	31.9	67.1	59.0	17.1	47.5
February		5,850	12,604	2,072	10,531	19,782	13.5	29.6	63.7	53.2	21.2	46.4
March		5,934	12,550	1,823	10,728	19,732	12.8	30.1	63.6	54.4	20.1	47.3
April		6,262	13,252	1,754	11,498	19,768	11.7	31.7	67.0	58.2	17.5	47.3
May		5,926 6,084	12,862 13,367	1,806 2,165	11,056	19,729 19,553	12.4	30.0	65.2 68.4	56.0 57.3	19.0	46.1 45.5
June July		6,084 6,121	13,367 13,064	2,165 2,069	11,202 10,995	19,553 19,412	12.2 12.8	31.1 31.5	68.4 67.3	57.3 56.6	17.9 19.1	45.5 46.9
August		6,390	13,064	2,069	10,995	19,412	12.0	33.2	67.8	57.1	18.7	48.9
September		5,128	11,512	1,338	10,332	17,796	11.8	28.8	64.7	57.1	18.2	44.5
October		5,888	13,217	1,669	11,548	19,643	11.7	30.0	67.3	58.8	17.4	44.5
November		R 5,799	R 12,853	R 1,730	R 11,123	R 19,001	R 12.0	R 30.5	R 67.6	R 58.5	R 17.8	R 45.1
December	. ŃA	NA	E 12,830	E 1,395	E 11,435	E 19,993	NA	NA	E 64.2	E 57.2	NA	NA
Average		NA	RE <b>12,892</b>	RE 1,792	RE 11,100	RE <b>19,486</b>	NA	NA	RE <b>66.2</b>	RE <b>57.0</b>	NA	NA
2009 January	. NA	NA	E 13,177	E 1,510	E 11,667	E 19,565	NA	NA	E 67.3	E 59.6	NA	NA

<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.

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

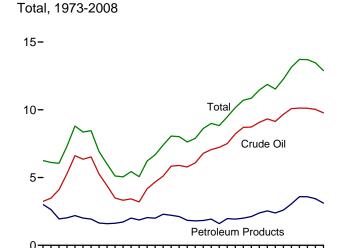
Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see

http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2007: EIA, Petroleum Supply Annual, annual reports. • 2008 and 2009: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system and Monthly Energy Review data system calculations.

See Table 3.3c for notes on which countries are included in the data. R=Revised. E=Estimate. NA=Not available.

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



1990

1995

2000 2005

## OPEC and Non-OPEC, 1973-2007

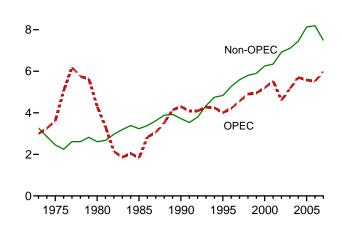
1985

1980

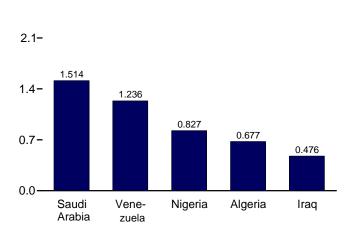
1975

10-

2.8-

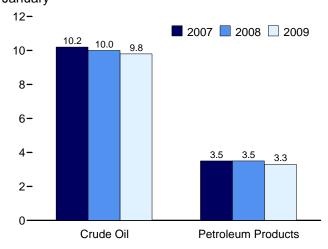


From Selected OPEC Countries, November 2008

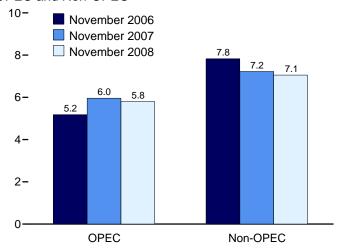


Notes: • OPEC=Organization of the Petroleum Exporting Countries. • Because vertical scales differ, graphs should not be compared.

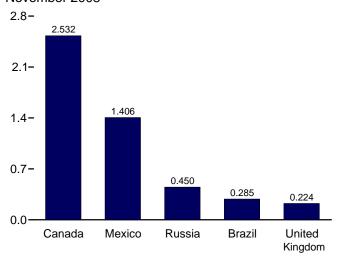
# Crude Oil and Petroleum Products, January



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



From Selected Non-OPEC Countries, November 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

					Impo	orts						Exports	
	Cruc	de Oila	Distillate	Jet	LPG	b	Motor	Residual			Crude	Petroleum	
	SPR <sup>c,d</sup>	Total	Fuel Oil	Fuele	Propane <sup>h</sup>	Total	Gasoline <sup>f</sup>	Fuel Oil	Other <sup>g</sup>	Total	Oila	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	0	7,230	193	106	102	146	265	187	708	8,835	95	855	949
1996 Average	0	7,508	230	111	119	166	336	248	879	9,478	110	871	981
1997 Average		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		9,328	344	148	145	206	454	295	1,095	11,871	20	951	971
2002 Average		9,140	267	107	145	183	498	249	1,085	11,530	9	975	984
2003 Average		9,665 10,088	333 325	109 127	168 209	225 263	518 496	327 426	1,087 1,419	12,264 13,145	12 27	1,014 1,021	1,027 1.048
2004 Average 2005 Average		10,000	329	190	233	328	603	530	1,609	13,714	32	1,133	1,165
		•							•			•	,
2006 January		9,766	552	180	206	287	606 631	553	1,852	13,796	27	1,032	1,059
February		9,983	388	123	206	285		458	1,697	13,565	15	1,261	1,276
March		9,750 9,859	292 297	118 218	181 243	233 366	554 510	359 283	1,598 1,904	12,904 13,438	29 26	1,140 1,372	1,170 1,398
April May		10,303	437	230	2 <del>4</del> 3 174	309	510	308	2,216	14,315	27	1,372	1,350
June		10,303	297	190	241	372	407	348	1,927	14,253	33	1,323	1,334
July	-	10,712	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		10,710	438	234	281	447	376	322	1,964	14,491	21	1,533	1,554
October	ŏ	10,106	307	171	267	382	405	321	1,625	13,317	37	1,469	1,506
November	0	9,888	288	101	215	279	388	292	1,769	13,005	24	1,329	1,353
December		9,555	355	197	224	285	324	290	1,713	12,721	27	1,137	1,164
Average	8	10,118	365	186	228	332	475	350	1,881	13,707	25	1,292	1,317
<b>2007</b> January		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	274 273	227 215	146	227 273	581 441	360 360	2,207 1,976	14,204	36 52	1,405 1,279	1,441 1,331
June		10,015 9.939	335	263	151 135	273	434	412	2,150	13,553 13,754	27	1,279	1,506
July		10,316	354	203	164	221	404	344	1,765	13,734	42	1,441	1,483
August September		10,310	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		10.004	245	180	200	238	303	397	1,821	13,188	20	1,747	1,767
December		9,835	241	136	188	240	351	342	1,724	12,869	20	1,522	1,542
Average		10,031	304	217	182	247	413	372	1,885	13,468	27	1,405	1,433
2008 January	0	10,000	307	159	253	317	412	435	1,863	13,493	12	1,612	1,623
February	0	9,606	248	101	205	278	354	308	1,708	12,604	20	2,052	2,072
March	35	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		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	0	10,284	109	76	185	300	205	332	1,753	13,060	40	2,028	2,068
September		8,407	195 166	88	186	258	253	288	2,025	11,512	39	1,299	1,338
October November		10,111 R 9,923	166 <sup>R</sup> 203	98 <sup>R</sup> 47	178 <sup>R</sup> 196	224 R 248	239 <sup>R</sup> 115	354 <sup>R</sup> 285	2,024 R 2,031	13,217 <sup>R</sup> 12,853	43 R 31	1,627 <sup>R</sup> 1,700	1,669 R 1,730
December		E 9,646	E 200	E 62	E 236	NA	E 174	E 402	NA	E 12,830	E 28	E 1,367	E 1,395
Average		RE <b>9,776</b>	RE <b>206</b>	RE <b>101</b>	RE <b>183</b>	NA NA	RE <b>306</b>	RE <b>349</b>	NA NA	RE <b>12,892</b>	E 27	RE <b>1,764</b>	RE <b>1,792</b>
2009 January	NA	E 9,844	E 249	E 53	E 235	NA	E 223	E 483	NA	E 13,177	E 28	E 1,482	E 1,510

a Includes lease condensate.

naphtha-type jet fuel.

h Includes propylene.
R=Revised. NA=Not available. --=Not applicable. E=Estimate.

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 and 2009: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system and Monthly Energy Review data system calculations.

b Liquefied petroleum gases.

c "SPR" is the Strategic Petroleum Reserve, which began in October 1977. Through 2003, includes crude oil imports by SPR only; beginning in 2004, includes crude oil imports by SPR, and crude oil imports into SPR by others.

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

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

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

<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

Table 3.3c Petroleum Trade: Imports From OPEC Countries

	Algeria	Angola <sup>a</sup>	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	0	800	1,339	1,025	199	4,296
	234	(a)	(b)	0	218	0	627	1,344	1,480	98	4,002
1995 Average	254 256	(a)	(b)	1	236	0		,			,
1996 Average		(a)	(b)				617	1,363	1,676	62	4,211
1997 Average	285	(a)	(b)	89	253	0	698	1,407	1,773	64	4,569
1998 Average	290	(")	(b)	336	301	0	696	1,491	1,719	73	4,905
1999 Average	259	(a)	( )	725	248	0	657	1,478	1,493	93	4,953
2000 Average	225	(a)	(b)	620	272	0	896	1,572	1,546	72	5,203
2001 Average	278	(a)	(p)	795	250	0	885	1,662	1,553	105	5,528
2002 Average	264	(a)	(b)	459	228	0	621	1,552	1,398	83	4,605
2003 Average	382	(a)	(b)	481	220	0	867	1,774	1,376	61	5,162
2004 Average	452	(a)	(b)	656	250	20	1,140	1,558	1,554	70	5,701
2005 Average	478	(a)	( b )	531	243	56	1,166	1,537	1,529	47	5,587
2006 January	713	(a)	( b )	532	78	70	1,227	1,369	1,566	41	5,596
February	452	(a)	( <sup>b</sup> )	446	160	70	1,348	1,451	1,553	22	5,502
March	429	(a j	(b)	476	118	42	1,116	1,364	1,532	10	5,088
April	543	į́aj́	(b)	531	225	69	1,098	1,595	1,400	28	5,488
May	675	ìaί	ζbí	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	1,033	1,313	1,469	46	5,509
	803	(a)	(b)	620		111	1,075	1,513	1,439	52	5,729
August		(a)	(b)		155		,	,			,
September	796	(a)	(b)	655	227	73	1,078	1,564	1,386	63	5,842
October	817	\ /	(b)	505	239	107	1,088	1,382	1,356	42	5,538
November	462	(a)	( )	573	259	110	970	1,507	1,281	20	5,181
December	662	(a)	( b )	419	169	67	1,068	1,491	1,274	71	5,221
Average	657	(a)	(p)	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	( b )	314	150	105	1,109	1,163	1,360	58	5,278
March	727	708	( b )	523	305	150	1,347	1,244	1,287	11	6,302
April	782	514	( b )	562	135	82	948	1,488	1,412	28	5,950
May	744	692	(b)	341	168	69	964	1,614	1,522	67	6,181
June	709	514	(b)	573	263	172	968	1,534	1,364	24	6,121
July	747	404	(b)	460	202	187	906	1,436	1,399	18	5,759
August	827	412	ζbí	520	139	129	1,224	1,499	1,320	43	6,115
September	702	591	b\	603	170	74	1,181	1,560	1,315	35	6,231
October	410	342	) b (	490	157	134	1,241	1,411	1,388	46	5,619
November	447	435	(b)	508	154	103	1,306	1,620	1,381	7	5,961
December	600	439	(b)	378	158	141	1,271	1,686	1,387	50	6,111
Average	<b>670</b>	<b>508</b>	(b)	484	181	117	1,134	1,485	1,361	<b>39</b>	<b>5,980</b>
_	636	579	260	5.12	239	105	1 101	1 503	1 200	70	6.412
2008 January	636	578		543		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
September	657	416	233	543	115	59	591	1,431	1,051	32	5,128
October	555	539	200	577	240	132	979	1,487	1,162	16	5,888
November	677	450	229	476	292	79	827	1,514	1,236	20	5,799
11-Month Average	553	508	217	636	210	108	994	1,538	1,194	26	5,984
2007 11-Month Average	677	514	(b)	494	183	115	1,121	1,466	1,358	38	5,968
2006 11-Month Average	657	( <sup>a</sup> )	(b)	566	186	89	1,118	1,461	1,433	35	5,544

<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.

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

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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.

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

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

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,

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
1997 Average	5	1,563	271	1,385	25	309	13	226	300	1,495	5,593
1998 Average	26	1,598	354	1,353	31	236	24	250	293	1,640	5,803
		1,539					89	365		•	,
1999 Average	26 51	1,807	468 342	1,324 1,373	27 30	304 343	72	366	280 291	1,478	5,899 6.257
2000 Average	82	,						324		1,581	6,257
2001 Average		1,828	296	1,440	43	341	90		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	2,176	133	1,644	116	181	366	195	342	2,404	7,779
November	182	2,637	46	1,591	152	165	223	265	337	2,225	7,823
December	162	2,461	74	1,366	98	178	369	199	334	2,259	7,500
Average	193	2,353	155	1,705	174	196	369	272	328	2,446	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
March	234	2,357	121	1,750	160	164	455	292	349	1,773	7,655
April	224	2,498	90	1,572	87	203	556	373	322	1,967	7,892
May	203	2,500	122	1,614	150	234	499	390	287	2,025	8,024
June	161	2,410	164	1,529	171	193	285	345	218	1,956	7,432
July	200	2,386	231	1,611	130	137	534	369	372	2,026	7,995
August	280	2,527	181	1,474	127	112	416	174	320	1,910	7,520
September	232	2,520	186	1,454	136	105	389	185	384	1,824	7,415
October	197	2,429	175	1,417	176	110	452	290	353	1,764	7,362
November	82	2,404	219	1,581	58	100	470	210	414	1,689	7,227
December	178	2,372	130	1,322	157	110	306	238	387	1,559	6,759
Average	200	2,455	155	1,532	128	142	414	277	346	1,839	7,489
2008 January	225	2,586	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
	314	2,340	278 179	1,216	264	122	764	286	314		7,283
June July	272	2,359	179		264 148	94		286 187	294	1,426	6,943
				1,290			556 400			1,520	
August	208	2,199	257	1,400	143	84	490	222	298	1,370	6,669
September	271	2,367	149	1,003	196	74	437	265	345	1,277	6,384
October	354	2,587	200	1,433	176	70	394	386	267	1,462	7,329
November 11-Month Average	285 <b>261</b>	2,532 <b>2,446</b>	176 <b>200</b>	1,406 <b>1,306</b>	137 <b>164</b>	114 <b>104</b>	450 <b>470</b>	224 <b>239</b>	338 <b>323</b>	1,394 <b>1,401</b>	7,054 <b>6,913</b>
_				-						·	
2007 11-Month Average 2006 11-Month Average	202 195	2,462 2,343	157 162	1,552 1,737	126 181	145 198	424 369	281 279	342 327	1,865 2,464	7,556 8,254

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

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

coverage is the 50 States and the District of Columbia.

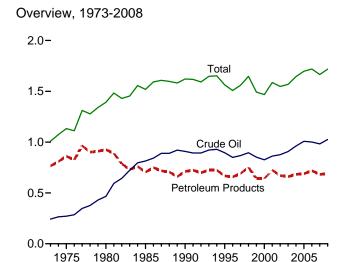
Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

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

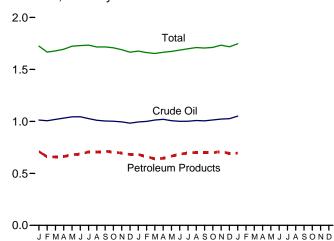
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • 1981-2007: EIA, *Petroleum Supply Annual,* annual reports. • 2008: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

**Petroleum Stocks** Figure 3.4

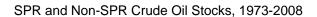
(Billion Barrels, Except as Noted)



### Overview, Monthly



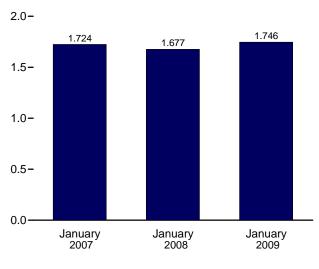
Total Stocks (Crude Oil and Petroleum Products)

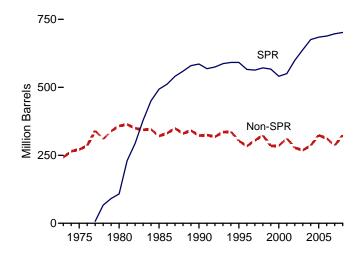


2007

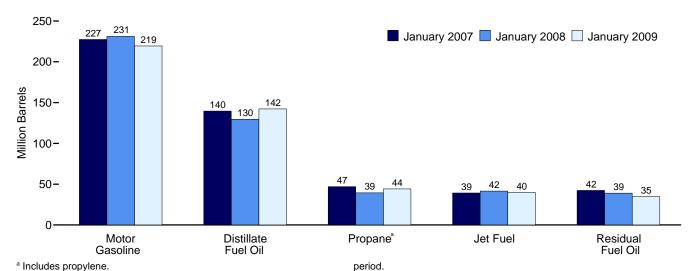
2008

2009





### Selected Products



Notes: • SPR= Strategic Petroleum Reserve. • Because vertical scales differ, graphs should not be compared. • Stocks are at end of

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

**Table 3.4 Petroleum Stocks** 

(Million Barrels)

		Crude Oila		Diatiliata	1-4	LPC	<b>3</b> b	Metan	Desident		
	SPR <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>
973 Year		242	242	196	29	65	99	209	53	179	1,008
975 Year		271	271	209	30	82	125	235	74	188	1,133
980 Year	108	358	466	205	42	65	120	261	92	205	1,392
985 Year	493	321	814	144	40	39	74	223	50	174	1,519
990 Year	586	323	908	132	52	49	98	220	49	162	1,621
995 Year	592	303	895	130	40	43	93	202	37	165	1,563
996 Year	566	284	850	127	40	43	86	195	46	164	1,507
997 Year	563	305	868	138	44	44	89	210	40	169	1,560
998 Year	571	324	895	156	45	65	115	216	45	176	1,647
999 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
	550	312	862	145	42	66	121	210	41	166	1,586
001 Year											
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
005 Year	685	324	1,008	136	42	57	109	208	37	157	1,698
2006 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
2007 January	689	325	1,013	140	39	47	91	227	42	171	1,724
February	689	318	1,006	124	39	30	70	215	36	176	1,666
March	689	331	1,019	120	40	27	70	202	40	186	1,678
April	689	342	1,031	121	40	30	77	197	38	189	1,694
May	690	353	1,044	125	41	37	91	203	37	183	1,724
June	690	354	1,044	124	41	44	103	206	36	176	1,730
July	690	337	1,027	130	42	50	112	205	40	177	1,733
	690	321	1,027	135	41	55	122	194	36	177	1,733
August	693	311	1,004	134	43	58	126	200	37	173	1,717
September											
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	302	1,009	132	41	54	128	195	39	167	1,710
September	702	303	1,006	127	38	59	138	189	39	168	1,705
October	702	312	1,014	127	39	59	133	195	40	164	1,712
November	702	321	R 1,023	<sup>R</sup> 136	R 38	61	<sup>R</sup> 127	R 203	R 39	<sup>R</sup> 168	R 1,733
December	E 702	E 324	E 1,026	E 138	E 37	<sup>E</sup> 56	RF 112	E 211	E 34	RE <b>160</b>	E 1,718

<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.

For all available data beginning in 1973, see Web Pages: 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 and 2009: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system, Short-Term Integrated Forecasting System, and Monthly Energy Review data system calculations.

b Liquefied petroleum gases.

<sup>&</sup>lt;sup>c</sup> "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, "Petroleum 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."

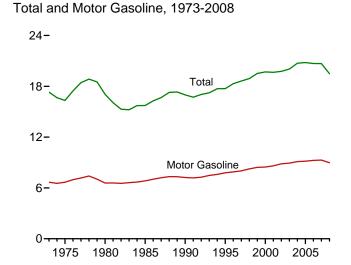
Includes propylene.

j Includes finished motor gasoline, motor gasoline blending components, and gasohol; excludes oxygenates.

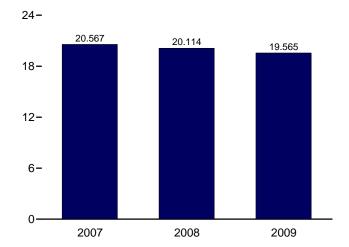
K Asphalt and road oil, aviation gasoline, aviation gasoline blending

components, kerosene, lubricants, pentanes plus, petrochemical feedstocks,

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

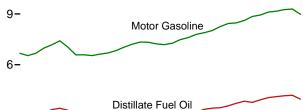


Total, January



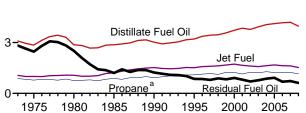
Selected Products, 1973-2008

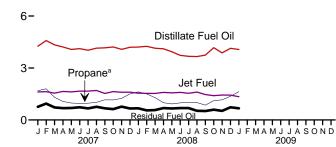




Selected Products, Monthly 12-

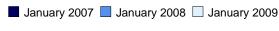


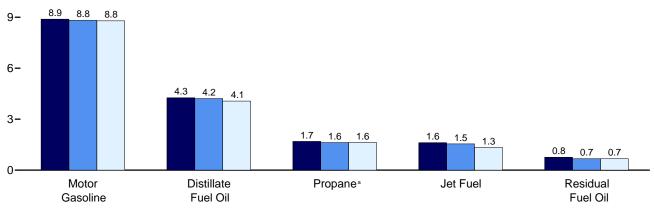




### Selected Products

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	Kero-	LP	r <b>G</b> a	Lubri-	Motor	Petro- leum	Residual		
		Road Oil	Gasoline	Fuel Oil	Fuelb	sene	Propane <sup>c</sup>	Total	cants	Gasolined	Coke	Fuel Oil	Othere	Total
1973 Ave	erage	522	45	3,092	1,059	216	872	1,449	162	6,674	261	2,822	1,005	17,308
1975 Ave	erage	419	39	2,851	1,001	159	783	1,333	137	6,675	247	2,462	1,001	16,322
1980 Ave	erage	396	35	2,866	1,068	158	754	1,469	159	6,579	237	2,508	1,581	17,056
1985 Ave	erage	425	27	2,868	1,218	114	883	1,599	145	6,831	264	1,202	1,032	15,726
1990 Ave	erage	483	24	3,021	1,522	43	917	1,556	164	7,235	339	1,229	1,373	16,988
1995 Ave	erage	486	21	3,207	1,514	54	1,096	1,899	156	7,789	365	852	1,381	17,725
	erage	484	20	3,365	1,578	62	1,136	2,012	151	7,891	379	848	1,518	18,309
	erage	505	22	3,435	1,599	66	1,170	2,038	160	8,017	377	797	1,605	18,620
1998 Ave	erage	521	19	3,461	1,622	78	1,120	1,952	168	8,253	447	887	1,508	18,917
	erage	547	21	3,572	1,673	73	1,246	2,195	169	8,431	477	830	1,532	19,519
2000 Ave	erage	525	20	3,722	1,725	67	1,235	2,231	166	8,472	406	909	1,458	19,701
2001 Ave	erage	519	19	3,847	1,655	72	1,142	2,044	153	8,610	437	811	1,481	19,649
	erage	512	18	3,776	1,614	43	1,248	2,163	151	8,848	463	700	1,474	19,761
	erage	503	16	3,927	1,578	55	1,215	2,074	140	8,935	455	772	1,579	20,034
2004 Ave	erage	537	17	4,058	1,630	64	1,276	2,132	141	9,105	524	865	1,657	20,731
2005 Ave	erage	546	19	4,118	1,679	70	1,229	2,030	141	9,159	515	920	1,605	20,802
	uary	295	9	4,159	1,605	76	1,465	2,128	119	8,839	490	934	1,783	20,436
Febi	ruary	330	16	4,308	1,582	118	1,540	2,344	199	8,911	407	816	1,546	20,577
Mar	ch	413	22	4,395	1,560	99	1,299	2,157	139	9,054	520	786	1,464	20,608
Apri	il	513	22	4,065	1,654	83	1,050	1,967	151	9,154	442	683	1,467	20,201
May	/	633	22	4,072	1,633	48	993	1,911	124	9,308	489	587	1,630	20,457
June	e	715	18	4,019	1,704	28	1,007	1,901	148	9,478	548	618	1,805	20,982
July	<i>'</i>	662	20	3,950	1,700	38	970	1,969	134	9,607	492	667	1,502	20,740
Aug	just	743	28	4,162	1,696	29	1,119	2,011	137	9,564	535	768	1,761	21,434
Sep	tember	667	18	4,141	1,608	27	1,094	1,937	119	9,236	624	538	1,644	20,559
	ober	592	19	4,315	1,605	30	1,216	1,998	164	9,267	514	612	1,654	20,769
Nov	ember	478	13	4,180	1,613	25	1,362	2,143	122	9,244	563	525	1,762	20,669
	ember	199	13	4,268	1,631	48	1,483	2,182	96	9,338	633	732	1,656	20,795
Ave	erage	521	18	4,169	1,633	54	1,215	2,052	137	9,253	522	689	1,640	20,687
<b>2007</b> Janu	uary	353	16	4,256	1,616	52	1,694	2,468	151	8,886	435	759	1,574	20,567
Febi	ruary	289	13	4,582	1,634	48	1,798	2,575	128	9,006	430	946	1,658	21,309
Mar	ch	370	14	4,334	1,551	35	1,305	2,113	152	9,178	561	723	1,506	20,536
Apri	il	455	20	4,214	1,647	27	1,070	1,998	144	9,215	437	682	1,696	20,536
May	/	507	17	4,068	1,618	14	978	1,846	157	9,434	551	690	1,717	20,620
June	e	637	22	4,114	1,663	15	958	1,924	134	9,491	480	733	1,509	20,723
July	<i>'</i>	651	17	4,026	1,664	7	969	1,912	147	9,640	420	669	1,593	20,747
Aug	just	647	21	4,146	1,703	28	1,018	1,912	139	9,582	539	761	1,548	21,025
Sep	tember	606	17	4,161	1,533	32	1,162	1,925	127	9,254	546	674	1,541	20,415
Octo	ober	595	21	4,213	1,637	28	1,157	1,984	150	9,236	437	626	1,549	20,476
	ember	458	15	4,074	1,600	46	1,243	2,109	138	9,229	464	768	1,633	20,535
Dec	ember	348	11	4,193	1,603	58	1,504	2,287	128	9,251	573	665	1,603	20,719
Ave	erage	494	17	4,196	1,622	32	1,235	2,085	142	9,286	490	723	1,593	20,680
<b>2008</b> Janu	uary	302	13	4,209	1,546	31	1,620	2,333	132	8,814	501	672	1,561	20,114
Febi	ruary	313	13	4,251	1,537	50	1,504	2,314	131	8,842	203	552	1,576	19,782
	rch	295	13	4,140	1,533	46	1,288	2,120	143	9,069	474	571	1,328	19,732
	il	360	19	4,108	1,592	25	995	1,855	144	9,117	482	684	1,382	19,768
	/	444	19	3,936	1,564	28	928	1,864	142	9,216	456	661	1,398	19,729
June	e	581	16	3,728	1,589	28	988	1,872	135	9,071	450	688	1,395	19,553
July	<i>/</i>	556	14	3,672	1,541	29	1,017	1,932	137	9,072	522	687	1,249	19,412
	just	522	20	3,657	1,611	24	1,002	1,940	157	9,090	471	526	1,247	19,267
	tember	536	16	3,740	1,467	27	856	1,418	96	8,469	358	516	1,153	17,796
Octo	ober	464	12	4,173	1,403	17	1,116	1,860	147	8,986	466	592	1,523	19,643
	ember	R 308	R 16	R 3,870	R 1,439	R 21	R 1,160	R 1,868	R 92	R 8,889	R 438	R 526	R 1,535	R 19,001
	ember	F 249	<sup>RF</sup> 13	E 4,133	E 1.432	<sup>RF</sup> 55	E 1,371	F 2,241	<sup>RF</sup> 113	E 9,033	F 499	E 734	<sup>RE</sup> 1.491	E 19,993
Ave	erage	RE <b>411</b>	E 15	RE 3,968	RE 1,521	RE <b>32</b>	RE 1,153	RE 1,969	RE <b>131</b>	RE <b>8,974</b>	RE <b>445</b>	RE 618	RE 1,403	RE <b>19,486</b>
2009 Janu	uary	F 216	F 11	E 4,066	E 1.340	F 73	E 1,631	F 2,316	F 118	E 8.789	F 420	E 672	E 1.543	E 19,565

a Liquified petroleum gases.

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. • 1976-1980: Energy Information

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 and 2009: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system, Short-Term Integrated Forecasting System, and Monthly Energy Review data system calculations.

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."

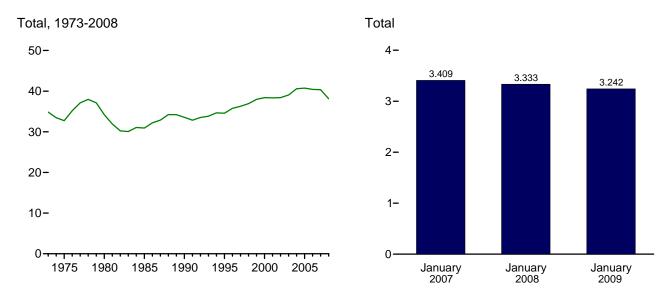
C Includes propylene.

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

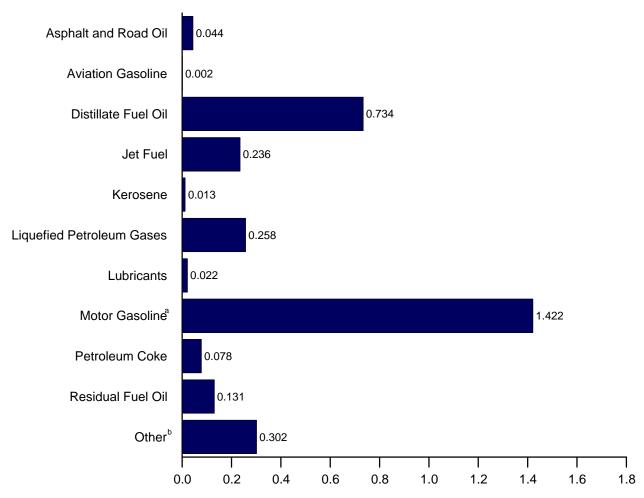
into motor gasoline.

<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, January 2009



<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	Aviotion	Distillata	lot	Kora	LP	<b>G</b> a	Lubri	Motor	Petro-	Pacidus!		
	and Road Oil	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Kero- sene	Propanec	Total	Lubri- cants	Motor Gasoline <sup>d</sup>	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		50	6,098	2,497	236	1,236	2,103	322	13,098	582	2,759	2,149	30,922
1990 Total	1,170	45	6,422	3,129	88	1,284	2,059	362	13,872	745	2,820	2,840	33,553
1995 Total	1,178	40	6,818	3,132	112	1,534	2,512	346	14,825	802	1,955	2,834	34,553
1996 Total		37	7,175	3,274	128	1,594	2,660	335	15,064	837	1,952	3,119	35,757
1997 Total	1,224	40	7,304	3,308	136	1,638	2,690	354	15,254	829	1,828	3,298	36,266
1998 Total	1,263	35	7,359	3,357	162	1,568	2,575	371	15,701	982	2,036	3,093	36,934
1999 Total		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		35	8,179	3,426	150	1,598	2,697	338	16,373	961	1,861	3,056	38,333
2002 Total		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		31	8,652	3,383	133	1,791	2,824	313	17,379	1,156	1,990	3,429	40,594
2005 Total	1,323	35	8,755	3,475	144	1,721	2,682	312	17,444	1,133	2,111	3,320	40,735
<b>2006</b> 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		3	794	274	17	154	241	26	1,465	97	153	264	3,420
April		3	710	281	14	121	213	27	1,433	80	129	251	3,244
May	130	3	735	287	8	118	214	23	1,506	91	114	282	3,395
June		3	702	290	5	116	206	27	1,484	99	116	296	3,369
July	136	3	713	299	7	115	220	25	1,554	92	130	263	3,442
August	153	4	752	298	5	133	225	26	1,547	100	150	298	3,557
September		3	724	274	5	126	209	22	1,446	113	101	273	3,302
October		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		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
<b>2007</b> January	73	3	769	284	9	202	275	28	1,438	81	148	302	3,409
February		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		3	736	280	5	123	215	26	1,443	79	129	287	3,294
May		3	735	284	2	116	205	30	1,526	103	135	290	3,417
June	127	3	719	283	3	110	207	24	1,486	87	138	246	3,324
July	134	3	727	293	1	115	213	28	1,560	78	130	272	3,438
August		3	749	299	5	121	213	26	1,550	101	148	257	3,484
September	121	3	727	261	5	134	207	23	1,449	99	127	253	3,274
October		3	761	288	5	138	221	28	1,494	82	122	267	3,393
November		2	712	272	8	143	227	25	1,445	84	145	282	3,293
December Total	72 <b>1,197</b>	2 <b>32</b>	757 <b>8,921</b>	282 <b>3,358</b>	10 <b>67</b>	179 <b>1,729</b>	255 <b>2,733</b>	24 <b>313</b>	1,497 <b>17,689</b>	107 <b>1,077</b>	130 <b>1,659</b>	299 <b>3,308</b>	3,434 <b>40,353</b>
2008 January	62	2	760	272	5	193	260	25	1,426	93	131	297	3,333
February		2	718	253	8	167	241	23	1,338	35	101	287	3,067
March		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		3	711	275	5	110	208	27	1,421	85	129	245	3,170
June	116	2	651	270	5	114	202	25	1,491	81	130	234	3,136
July	114	2	663	270	5	121	215	26	1,420	97	134	234	3,130
August	107	3	660	283	4	119	216	29	1,471	88	103	228	3,193
September	107	2	654	250	5	98	153	17	1,326	65	97	179	2,854
October	95	2	754	247	3	133	207	28	1,454	87	115	264	3,255
November	<sup>R</sup> 61	2	R 676	R 245	R 4	R 134	R 201	R 17	R 1,392	R 79	R 99	R 271	R 3,047
December	F 51	F 2	E 746	E 252	RF 10	E 163	F 249	F 21	E 1,461	F 93	E 143	RE 284	E 3,313
Total	RE <b>998</b>	E 28	RE <b>8,459</b>	RE <b>3,157</b>	RE <b>66</b>	RE <b>1,619</b>	RE <b>2,587</b>		RE <b>17,142</b>	RE <b>980</b>	RE <b>1,422</b>	RE <b>2,997</b>	RE <b>38,127</b>
			•				•		-		•		•
<b>2009</b> January	F 44	F <sub>2</sub>	E 734	E 236	<sup>F</sup> 13	E 194	<sup>F</sup> 258	F 22	E 1,422	F 78	E 131	E 302	E 3,242

a Liquefied petroleum gases.

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.

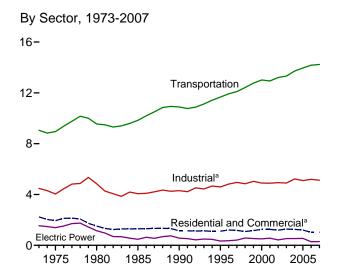
<sup>&</sup>lt;sup>b</sup> Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other."

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

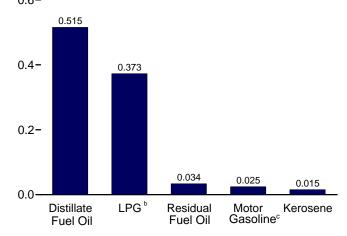
<sup>&</sup>lt;sup>d</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended into motor gasoline.

<sup>&</sup>lt;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

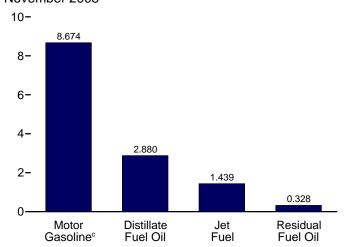
Figure 3.7 Petroleum Consumption by Sector (Million Barrels per Day)



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



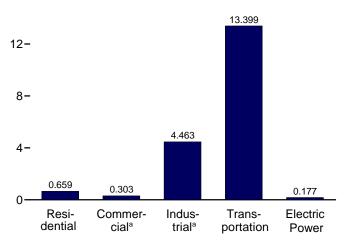
Transportation Sector, Selected Products, November 2008



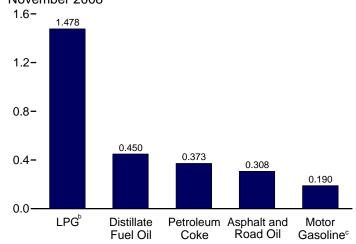
<sup>a</sup> Includes combined-heat-and-power plants and a small number of electricity-only plants.

By Sector, November 2008

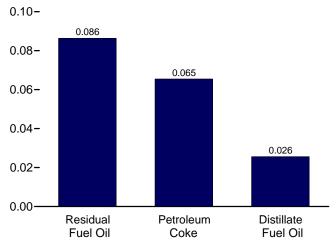
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Industrial Sector<sup>a</sup>, Selected Products, November 2008



Electric Power Sector, November 2008



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				Com	mercial Sec	tor <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	NA	99	506
1990 Average	460	31	276	767	252	6	49	58	0	100	465
1995 Average	426	36	306	767	225	11	54	10	(s)	62	361
1996 Average	434	43	358	835 805	227	10	63	14	(s)	60	373
1997 Average	411	45 52	349 329	744	209 202	12 15	62	22 20	(s)	48 37	353
1998 Average	363 389	52 54	329 404	744 847	202	13	58 71	20 15	(s)	37 32	332
1999 Average	424	46	404 427	897	230	14	71 75	23	(s)	40	338 383
2000 Average	424 427	46 46	406	879	239	15	73 72	23 20	(s) (s)	30	376
2001 Average2002 Average	404	29	412	845	209	8	73	24	(s) (s)	35	348
	404 425	34	426	885	226	9	75 75	32	(s) (s)	48	391
2003 Average 2004 Average	433	41	401	875	221	10	73 71	25	(s)	53	380
2005 Average	402	40	391	833	210	10	69	24	(s)	50	365
2000 Average	402	70	331	000			05		(3)	50	303
2006 January	461	45	361	867	260	10	64	24	(s)	45	403
February	535	71	397	1,003	301	16	70	25	(s)	52	465
March	433	59	366	857	244	13	65	25	(s)	42	389
April	309	50	333	692	174	11	59	25	0	30	300
May	284	28	324	637	160	7	57	26	0	28	277
June	265	17	322	604	149	4	57	26	0	26	262
July	246	23	334	602	138	5	59	27	(s)	24	253
August	254	17	341	612	143	4	60	26	(s)	25	259
September	272	16	328	617	153	4	58	26	(s)	27	268
October	276	18	339	633	156	4	60	26	(s)	27	273
November	309	15	363	688	174	3	64	26	(s)	30	298
December Average	388 <b>335</b>	28 <b>32</b>	370 <b>348</b>	787 <b>715</b>	219 <b>189</b>	7 <b>7</b>	65 <b>61</b>	26 <b>26</b>	(s) <b>(s)</b>	38 <b>33</b>	355 <b>316</b>
_	404	04	440	070	007	7	7.4	0.5	. ,	40	205
2007 January	421	31	418	870	237	7	74 77	25 25	(s)	43	385
February	510	28	437	975	287	6	77	25 25	(s)	52	448
March	447	21	358	826	252	5	63	25	(s)	46	391
April	261 191	16	339	615 512	147 108	4 2	60 55	25 26	(s) 0	27 19	262 210
May		8 9	313 326		125	2	58	26 26	0	23	234
June	222	4		557 545		1	56 57		0	23 22	
July	217 244	4 17	324 324	545 584	122 137	4	57 57	27 26	-	25 25	229 250
August	260	17	326	605	146	4	57 58	26	(s)	26 26	260
September October	297	17	336	650	167	4	59	26	(s) (s)	30	286
November	404	27	358	789	228	6	63	26		41	364
December	597	35	388	1,020	337	8	68	26	(s)	61	500
	338	19	353	711	191	4	<b>62</b>	26 <b>26</b>	(s) <b>(s)</b>	34	318
Average	330	13	333	, , , ,	131	-	02	20	(3)	34	310
2008 January	569	18	395	983	321	4	70	24	(s)	58	477
February	579	30	392	1,001	326	7	69	24	(s)	59	486
March	426	27	359	813	240	6	63	25	(s)	43	378
April	330	15	314	660	186	3	55	25	(s)	34	304
May	235	17	316	568	132	4	56	25	°Ó	24	241
June	257	17	317	591	145	4	56	25	0	26	256
July	244	17	327	589	137	4	58	25	0	25	249
August	219	15	329	563	123	3	58	25	0	22	232
September	239	16	240	496	135	4	42	23	(s)	24	229
October	<sup>R</sup> 264	10	315	<sup>R</sup> 590	<sup>R</sup> 149	2	56	25	(s)	R 27	R 259
November	330	13	317	659	186	3	56	25	(s)	34	303
11-Month Average	335	18	329	682	189	4	58	25	(s)	34	310
2007 11-Month Average	314	18	350	682	177	4	62	26	(s)	32	301
2006 11-Month Average	330	32	346	708	186	7	61	26	(s)	32	312

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

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

Sources: See end of section.

into motor gasoline.

data beginning in 1973.

Table 3.7b Petroleum Consumption: Industrial Sector

	Industrial Sector <sup>a</sup>												
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>b</sup>	Petroleum Coke	Residual Fuel Oil	<b>Other</b> <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	1,001	4,038			
1980 Average	396	621	87	1,172	82	82	234	586	1,581	4,842			
1985 Average	425	526	21	1,285	75	114	261	326	1,032	4,065			
1990 Average	483	541	-6	1,215	84	97	325	179	1,373	4,304			
1995 Average	486	532	7	1,527	80	105	328	147	1,381	4,594			
1996 Average	484	557	9	1,580	78	105	343	146	1,518	4,819			
1997 Average	505	566	9	1,617	82	111	331	127	1,605	4,953			
1998 Average	521	570	11	1,553	86	105	390	100	1,508	4,844			
1999 Average	547	558	6	1,709	87	80	426	90	1,532	5,035			
2000 Average	525	563	8	1,720	86	79	361	105	1,458	4,903			
2001 Average	519	611	11	1,557	79	155	390	89	1,481	4,892			
2002 Average	512	566	7	1,668	78	163	383	83	1,474	4,934			
2003 Average	503	534	12	1,561	72	171	375	96	1,579	4,903			
2004 Average	537	570	14	1,647	73	195	423	108	1,657	5,223			
2005 Average	546	594	19	1,549	72	187	404	123	1,605	5,100			
2006 January	295	693	20	1,684	61	189	380	149	1,783	5,252			
February	330	639	31	1,854	102	190	298	131	1,546	5,122			
March	413	729	26	1,706	71	193	427	131	1,464	5,161			
April	513	548	22	1,556	78	196	345	109	1,467	4,833			
May	633	531	13	1,512	64	199	401	93	1,630	5,076			
June	715	451	8	1,503	76	202	446	85	1,805	5,292			
July	662	400	10	1,558	69	205	383	86	1,502	4,875			
August	743	506	8	1,591	70	204	432	91	1,761	5,407			
September	667	586	7	1,532	61	197	529	82	1,644	5,305			
October	592	694	8	1,580	84	198	421	90	1,654	5,321			
November	478	668	7	1,695	63	197	478	83	1,762	5,432			
December	199	682	13	1,726	49	199	548	122	1,656	5,195			
Average	521	594	14	1,623	71	198	425	104	1,640	5,189			
2007 January	353	769	14	1,952	78	190	345	R 124	1,574	R 5,398			
February	289	780	13	2,037	66	192	R 351	R 142	1,658	R 5,528			
March	370	R 653	9	1,672	78	196	R 489	R 120	1,506	5,093			
April		R 668	7	1,581	74	197	R 364	R 111	1,696	<sup>R</sup> 5,153			
May	507	R 600	4	1,460	81	202	R 475	109	1,717	5,154			
June	637	<sup>R</sup> 530	4	1,522	69	203	R 389	R 108	1,509	R 4,971			
July	651	R 461	2	1,513	76	206	R 342	94	1,593	R 4,938			
August	647	R 487	8	1,512	72	205	R 457	R 101	1,548	R 5,036			
September	606	<sup>R</sup> 589	8	1,523	66	198	R 467	R 97	1,541	R 5,094			
October	595	594	7	1,570	77	197	R 369	90	1,549	R 5,048			
November	458	R 499	12	1,669	71	197	R 397	R 124	1,633	R 5,060			
December	348	R 422	15	1,809	66	198	493	R 102	1,603	R 5,056			
Average	494	R 586	9	1,649	73	198	R 412	<sup>R</sup> 110	1,593	<sup>R</sup> 5,125			
2008 January	302	595	8	1,845	68	188	423	101	1,561	5,091			
February		594	13	1,830	67	189	125	82	1,576	4,790			
March	295	564	12	1,677	74	194	410	88	1,328	4,642			
April		540	7	1,467	74	195	415	103	1,382	4,544			
May	444	482	7	1,475	73	197	394	100	1,398	4,571			
June	581	259	7	1,481	69	194	372	96	1,395	4,455			
July	556	225	8	1,528	71	194	455	102	1,249	4,387			
August		232	7	1,535	81	194	400	78	1,247	4,295			
September		357	7	1,121	49	181	290	72 R 00	1,153	3,766			
October		R 609	5	1,472	75	192	394	R 90	1,523	R 4,823			
November 11-Month Average	308 <b>426</b>	450 <b>446</b>	6 <b>8</b>	1,478 <b>1,537</b>	47 <b>68</b>	190 <b>192</b>	373 <b>370</b>	78 <b>90</b>	1,535 <b>1,395</b>	4,463 <b>4,531</b>			
2007 11-Month Average		602	8	1,634	73	198	404	111	1,593	5,131			
2006 11-Month Average		586	14	1,614	73 72	197	413	103	1,638	5,189			

a Industrial sector fuel use, including that at industrial combined-heat-and-power

Notes: • Data are estimates. • For total petroleum consumption by all sectors, Notes: • Data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section.

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

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

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

Source: See end of section

Sources: See end of section.

<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 a secondary supply) reclassified as a secondary supply reclassified as a secondary supply reclassified as a secondary supply reclassified as secondary supply). 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

	Transportation Sector								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	2	1,069	1,151
1985 Average	27	1,491	1,218	21	71	6,667	342	9,838	40	3	435	478
1990 Average	24	1,722	1,522	16	80	7,080	443	10,888	45	14	507	566
1995 Average	21	1,973	1,514	13	76	7,674	397	11,668	51	37	247	334
1996 Average	20	2,096	1,578	11	73	7,772	370	11,921	51	36	273	360
1997 Average	22	2,198	1,599	10	78	7,883	310	12,099	52	46	311	410
1998 Average	19	2,263	1,622	13	81	8,128	294	12,420	64	56	456	576
1999 Average	21	2,352	1,673	10	82	8,336	290	12,765	66	51	418	535
2000 Average	20	2,422	1,725	8	81	8,370	386	13,012	82	45	378	505
2001 Average	19	2,489	1,655	10	74	8,435	255	12,938	80	47	437	564
2002 Average	18	2,536	1,614	10	73	8,662	295	13,208	60	80	287	427
2003 Average	16	2,665	1,578	12	68	8,733	249	13,321	76	79	379	534
2004 Average	17	2,783	1,630	14	69	8,885	321	13,718	52	101	382	535
2005 Average	19	2,858	1,679	20	68	8,948	365	13,957	54	111	382	547
<b>2006</b> January	9	2,712	1,605	20	58	8,626	565	13,594	34	110	175	319
February	16	2,799	1,582	22	96	8,696	484	13,697	33	108	149	291
March	22	2,965	1,560	21	67	8,836	523	13,994	24	93	91	208
April	22	3,001	1,654	19	73	8,933	426	14,128	33	98	117	248
May	22	3,065	1,633	18	60	9,083	356	14,237	32	88	111	230
June	18	3,116	1,704	18	72	9,250	328	14,506	38	102	178	317
July	20	3,119	1,700	19	65	9,375	333	14,630	46	109	225	379
August	28	3,207	1,696	19	66	9,333	357	14,706	53	102	296	450
September	18	3,103	1,608	19	58	9,013	296	14,114	27	95	133	255
October	19	3,158	1,605	19	80	9,043	351	14,274	31	94	144	268
November	13	2,996	1,613	20	59	9,021	268	13,992	32	85	143	260
December Average	13 <b>18</b>	2,945 <b>3,017</b>	1,631 <b>1,633</b>	21 <b>20</b>	47 <b>67</b>	9,113 <b>9,029</b>	451 <b>395</b>	14,219 <b>14,178</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	8,671	R 411	R 13,596	45	90	182	317
February	13	R 2,916	1,634	25	62	8,789	R 413	R 13,851	R 89	R 79	R 339	R 507
March	14	R 2,941	1,551	20	74	8,956	R 391	R 13,947	R 40	R 72	167	R 279
April	20	3,107	1,647	19	70	8,993	R 380	R 14,236	R 32	<sup>R</sup> 73	165	R 269
May	17	R 3,138	1,618	18	76	9,207	<sup>R</sup> 420	R 14,493	R 32	<sup>R</sup> 77	143	252
June	22	<sup>R</sup> 3,197	1,663	18	65	9,262	<sup>R</sup> 418	R 14,645	R 40	<sup>R</sup> 91	<sup>R</sup> 184	<sup>R</sup> 316
July	17	<sup>R</sup> 3,188	1,664	18	72	9,407	<sup>R</sup> 374	<sup>R</sup> 14,740	R 38	<sup>R</sup> 78	<sup>R</sup> 179	<sup>R</sup> 295
August	21	<sup>R</sup> 3,224	1,703	18	68	9,351	<sup>R</sup> 390	<sup>R</sup> 14,775	<sup>R</sup> 54	<sup>R</sup> 81	<sup>R</sup> 244	R 380
September	17	<sup>R</sup> 3,133	1,533	18	62	9,031	<sup>R</sup> 390	<sup>R</sup> 14,184	R 32	<sup>R</sup> 78	<sup>R</sup> 161	<sup>R</sup> 271
October	21	3,120	1,637	19	73	9,013	R 359	R 14,242	_ 36	<sup>R</sup> 68	<sup>R</sup> 147	R 250
November	15	2,912	1,600	20	67	9,007	R 531	R 14,152	R 31	R 66	R 72	R 169
December	11	R 2,800	1,603	22	62	9,028	396	R 13,921	R 38	80	R 105	R 223
Average	17	R 3,039	1,622	20	69	9,062	406	14,234	R 42	R 78	R 173	R <b>293</b>
<b>2008</b> January	13	2,671	1,546	22	64	8,601	408	13,326	53	78	106	237
February	13	2,711	1,537	22	64	8,629	322	13,298	41	77	89	207
March	13	2,883	1,533	20	70	8,850	362	13,731	27	63	78	168
April	19	3,023	1,592	18	70	8,897	459	14,079	28	66	88	182
May	19	3,060	1,564	18	69	8,993	446	14,170	27	62	91	180
June	16	3,019	1,589	18	66	8,852	407	13,966	49	79	159	286
July	14	3,033	1,541	18	67	8,853	436	13,961	33	67	125	225
August	20	3,057	1,611	19	76	8,871	321	13,974	27	71	105	203
September	16	2,981 R 2 430	1,467	14	47 71	8,265	289 R 400	13,078 R 12,902	28	68	131	227
October	12	R 3,130	1,403	18	71 45	8,769	R 400	R 13,803	22	72 65	75	169
November 11-Month Average	16 <b>16</b>	2,880 <b>2,951</b>	1,439 <b>1,529</b>	18 <b>19</b>	45 <b>64</b>	8,674 <b>8,752</b>	328 <b>380</b>	13,399 <b>13,711</b>	26 <b>33</b>	65 <b>70</b>	86 <b>103</b>	177 <b>206</b>
2007 11-Month Average	18	3,061	1,624	20	69	9,065	407	14,263	42	78	179	299
2006 11-Month Average	19	3,024	1,633	20	68	9,022	389	14,174	35	98	160	294

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

b Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in

amount of fuel oil no. 4.

R=Revised.

Notes: • Transportation sector data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-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.

Sources: See end of section.

<sup>2005,</sup> includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Industrial Sector, Other" on Table 3.7b.

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

into motor gasoline.

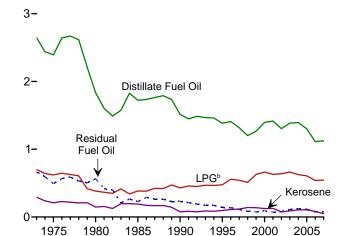
<sup>d</sup> Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small

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

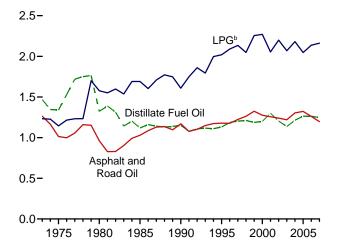
Web Page: See http://www.eia.doe.gov/emeu/mer/petro.html for all available data beginning in 1973.

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



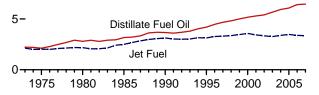
Residential and Commercial Sectors<sup>a</sup>, 1973-2007

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



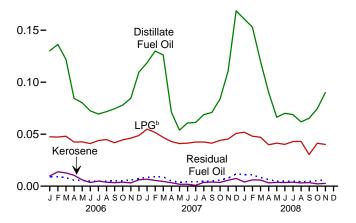
Transportation Sector, 1973-2007





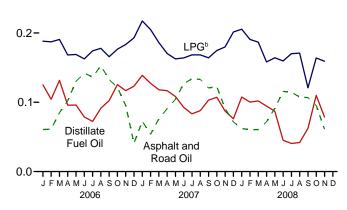
<sup>&</sup>lt;sup>a</sup> Includes combined-heat-and-power plants and a small number of electricity-only plants.

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

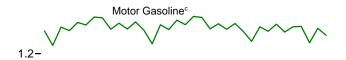


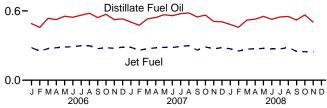
Industrial Sector<sup>a</sup>, Monthly

0.3-



Transportation Sector, Monthly 1.8-





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 1993, includes ethanol blended into motor gasoline.

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

		Resident	ial Sector				Con	nmercial Sec	Commercial Sector <sup>a</sup>								
	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						
4070 T-4-1	0.000	007	505	0.005	644	0.5	405	07	NI A	005	4 505						
1973 Total	2,003	227	595	2,825	644	65	105	87	NA	665	1,565						
1975 Total	1,807	161	528	2,495	587	49	93	89	NA	492	1,310						
1980 Total	1,316	107	325	1,748	518	41	57	107	NA	565	1,287						
1985 Total	1,092	159	327	1,578	631	33	58	96	NA	228	1,045						
1990 Total	978	64	365	1,407	536	12	64	111	0	230	953						
1995 Total	905	74	404	1,383	479	22	71	18	(s)	141	732						
1996 Total	926	89	473	1,488	483	21	84	27	(s)	137	751						
1997 Total	874	93	461	1,428	444	25	81	43	(s)	111	704						
1998 Total	772	108	434	1,314	429	31	77	39	(s)	85	661						
1999 Total	828	111	534	1,473	438	27	94	28	(s)	73	661						
2000 Total	905	95	564	1,563	491	30	99	45	(s)	92	756						
2001 Total	908	95	535	1,539	508	31	94	37	(s)	70	742						
2002 Total	860	60	543	1,463	444	16	96	45	(s)	80	681						
2003 Total	905	70	564	1,539	481	19	100	60	(s)	111	771						
2004 Total	924	85	531	1,539	470	20	94	49	(s)	122	756						
2005 Total	854	84	517	1,455	447	22	91	46	(s)	116	722						
				1,100					(-)								
2006 January	83	8	40	132	47	2	7	4	(s)	9	69						
February	87	11	40	139	49	3	7	4	(s)	9	72						
March	78	10	41	129	44	2	7	4	(s)	8	66						
April	54	8	36	99	30	2	6	4	° Ó	6	48						
May	51	5	36	93	29	1	6	4	0	5	46						
June	46	3	35	84	26	1	6	4	0	5	42						
July	44	4	37	86	25	1	7	4	(s)	5	41						
August	46	3	38	87	26	1	7	4	(s)	5	42						
September	48	3	36	86	27	1	6	4	(s)	5	43						
October	50	3	38	91	28	1	7	4	(s)	5	45						
November	54	3	39	96	30	1	7	4	(s)	6	48						
December	70	5	41	116	40	1	7	4		7	60						
Total	712	66	458	1,236	401	15	8 <sup>1</sup>	49	(s) <b>(s)</b>	75	<b>621</b>						
				,					(-)								
<b>2007</b> January	76	5	47	128	43	1	8	4	(s)	8	65						
February	83	5	44	132	47	1	8	4	(s)	9	68						
March	81	4	40	124	46	1	7	4	(s)	9	66						
April	46	3	36	85	26	1	6	4	(s)	5	42						
May	34	1	35	71	19	(s)	6	4	0	4	34						
June	39	1	35	75	22	(s)	6	4	0	4	37						
July	39	1	36	76	22	(s)	6	4	0	4	37						
August	44	3	36	83	25	1	6	4	(s)	5	41						
September	45	3	35	84	26	1	6	4	(s)	5	42						
October	54	3	37	94	30	1	7	4	(s)	6	48						
November	71	5	39	114	40	1	7	4	(s)	8	59						
December	108	6	43	157	61	1	8	4	(s)	12	86						
	719	40	463	1,222	405	9	82	49		79	624						
Total	719	40	463	1,222	405	9	02	49	(s)	19	024						
2008 January	103	3	44	150	58	1	8	4	(s)	11	82						
February	98	5	41	144	55	1	7	4	(s)	11	78						
March	77	5	40	122	43	1	7	4	(s)	8	64						
April	58	3	34	94	33	1	6	4	(s)	6	49						
May	42	3	35	81	24	i	6	4	(0)	5	40						
	45	3	34	82	25	1	6	4	0	5	41						
June	45 44	3	36	84	25	1	6	4	0	5	41						
July						•		-									
August	40	3	37	79 70	22	1	6	4	0	4	38						
September	42 R 42	3	26	70 R 05	24	1	5	4	(s)	, 5 R =	37						
October	R 48	2	35	R 85	R 27	(s)	6	4	(s)	R <sub>5</sub>	R 43						
November	58	2	34	94	32	(s)	6	4	(s)	6	49						
11-Month Total	653	34	396	1,083	368	8	70	43	(s)	72	561						
2007 11-Month Total	611	34	420	1,065	345	8	74	45	(s)	67	539						
2006 11-Month Total	642	61	416	1,120	362	14	73	45	(s)	68	562						

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

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.

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

Table 3.8b Heat Content of Petroleum Consumption: Industrial Sector

(Trillion Btu)

	Industrial Sector <sup>a</sup>											
	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		1,339	119	1,144	149	223	540	1,509	2,107	8,146		
1980 Total		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		1,150	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		1,187	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		1,211	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		1,204	14	2,200	172	309	842	190	3,041	9,213		
2003 Total		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		1,264	39	2,047	160	356	889	281	3,320	9,680		
2006 January	61	125	4	188	11	31	71	29	319	839		
February	61	104	5	187	17	28	50	23	263	740		
March	85	132	5	191	13	31	80	25	264	826		
April		96	4	168	14	31	62	21	251	749		
May	130	96	2	169	12	32	75	18	282	817		
June		79	1	163	14	32	81	16	296	823		
July	136	72	2	174	13	33	72	17	263	781		
August	153	91	1	178	13	33	81	18	298	866		
September	133	102	1	166	11	31	96	16	273	828		
October	122	125	1	177	16	32	79	18	287	856		
November	95	117	1	183	11	31	86	16	311	852		
December	41	123	2	193	9	32	102	24	309	836		
Total		1,263	30	2,136	156	376	934	239	3,416	9,811		
2007 January	73	139	2	217	15	31	64	24	302	R 867		
February	54	127	2	205	11	28	59	<sup>R</sup> 25	284	<sup>R</sup> 795		
March	76	118	2	186	15	32	<sup>R</sup> 91	23	270	812		
April	91	117	1	170	13	31	66	21	287	797		
May	104	108	1	163	15	33	89	21	290	<sup>R</sup> 823		
June	127	R 93	1	164	13	32	<sup>R</sup> 70	20	246	765		
July	134	83	(s)	168	14	33	64	18	272	<sup>R</sup> 788		
August	133	<sup>R</sup> 88	1	168	13	33	<sup>R</sup> 85	R 20	257	<sup>R</sup> 799		
September	121	103	1	164	12	31	<sup>R</sup> 84	18	253	787		
October	122	107	1	175	15	32	69	18	267	806		
November	91	87	2	180	13	31	72	R 23	282	<sup>R</sup> 781		
December	72	76	3	201	12	32	92	20	299	808		
Total	1,197	<sup>R</sup> 1,246	18	2,162	161	378	<sup>R</sup> <b>906</b>	R <b>252</b>	3,308	<sup>R</sup> 9,628		
2008 January	62	107	1	205	13	30	79	20	297	815		
February	60	100	2	191	12	29	22	15	287	718		
March	61	102	2	187	14	31	77	17	252	743		
April		94	1	158	13	30	75	19	233	697		
May	91	87	1	164	14	32	74	20	245	728		
June	116	45	1	160	13	30	67	18	234	684		
July		41	1	170	13	31	85	20	221	697		
August		42	1	171	15	31	75	15	228	686		
September		_ 62	1	121	9	28	52	14	179	573		
October		R 110	1	164	14	31	74	17	264	<sup>R</sup> 770		
November		79	1	159	9	30	67	15	271	691		
11-Month Total	947	870	15	1,849	139	335	746	189	2,713	7,802		
2007 11-Month Total 2006 11-Month Total		1,170 1,140	15 27	1,960 1,943	149 147	346 344	814 832	232 215	3,009 3,107	8,821 8,975		

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

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

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.

into motor gasoline.

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

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

				Transportat	ion Secto	r			E	Electric Po	wer Sectora	
	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	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	39	5,001	3,462	13	182	15,855	665	25,218	140	112	959	1,211
2000 Total	36	5,165	3,580	11	179	15,960	888	25,820	175	99	871	1,144
2001 Total	35	5,292	3,426	13	164	16,041	586	25,556	171	103	1,003	1,277
2002 Total	34	5,392	3,340	13	162	16,465	677	26,084	127	175	659	961
2003 Total	30	5,666	3,265	16	150	16,597	571	26,296	161	175	869	1,205
2004 Total	31	5,932	3,383	18	152	16,959	740	27,214	111	222	879	1,212
2005 Total	35	6,076	3,475	27	151	17,043	837	27,644	115	243	876	1,235
2006 January	1	490	282	2	11	1,395	110	2,292	6	21	34	61
February	2	457	251	2	16	1,271	85	2,084	5	18	26	50
March	3	535	274	2	13	1,429	102	2,359	4	17	18	39
April	3	524	281	2	13	1,398	80	2,303	6	18	22	46
May	3	553	287	2	11	1,469	69	2,396	6	16	22	44
June	3	545	290	2	13	1,448	62	2,362	7	18	34	59
July	3	563	299	2	12	1,517	65	2,461	8	20	44	72
August	4	579	298	2	12	1,510	70	2,475	9	19	58	86
September	3	542	274	2	11	1,411	56	2,298	5	17	25	47
October	3	570	282	2	15	1,463	68	2,404	6	17	28	51
November	2	524	274	2	11	1,412	51	2,276	6	15	27	48
December	2	532	287	2	9	1,474	88	2,393	6	16	24	46
Total	33	6,414	3,379	26	147	17,197	906	28,103	74	214	361	648
2007 January	3	503	284	3	14	1,403	80	2,289	8	17	R 35	60
February	2	476	259	2	11	1,284	<sup>R</sup> 73	R 2,107	15	13	<sup>R</sup> 60	<sup>R</sup> 88
March	2	531	273	2	14	1,449	<sup>R</sup> 76	R 2,347	7	13	<sup>R</sup> 32	53
April	3	543	280	2	13	1,408	72	2,321	R 6	13	31	<sup>R</sup> 50
May	3	<sup>R</sup> 567	284	2	14	1,490	82	2,441	6	14	28	48
June	3	<sup>R</sup> 559	283	2	12	1,450	79	2,388	R7	16	35	<sup>R</sup> 58
July	3	<sup>R</sup> 576	293	2	13	1,522	73	_ 2,481	_R7	<sup>R</sup> 15	35	<sup>R</sup> 56
August	3	<sup>R</sup> 582	299	2	13	1,513	_ 76	R 2,489	<sup>R</sup> 10	15	_ 48	<sup>R</sup> 73
September	3	R 548	261	2	11	1,414	R 74	R 2,312	6	14	R 30	R 50
October	3	563	288	2	14	1,458	70	2,398	6	<sup>R</sup> 13	_ 29	_ 48
November	2	509	272	2	12	1,410	100	2,308	_ 5	12	<sup>R</sup> 14	<sup>R</sup> 31
December	2	506	282	2	12	1,461	77	2,341	R <sub>7</sub>	15	20	42
Total	32	<sup>R</sup> 6,461	3,358	26	152	17,262	R <b>931</b>	R 28,221	R 89	<sup>R</sup> 171	R <b>397</b>	R <b>657</b>
2008 January	2	482	272	2	12	1,392	79	2,242	10	15	21	45
February	2	458	253	2	11	1,306	59	2,091	7	14	16	37
March	2	521	269	2	13	1,432	71	2,310	5	12	15	32
April	3	528	271	2	13	1,393	87	2,296	5	12	17	33
May	3	553	275	2	13	1,455	87	2,387	5	12	18	34
June	2	528	270	2	12	1,386	77	2,277	9	14	30	53
July	2	548	271	2	13	1,432	85	2,352	6	13	24	43
August	3	552	283	2	14	1,435	63	2,352	5	13	21	39
September	2	521	250	1	8	1,294	54	2,131	5	12	25	42
October	2	R 565	247	2	13	1,419	78	R 2,326	4	13	15	32
November	2	503	245	2	8	1,358	62	2,180	4	12	16	33
11-Month Total	26	5,758	2,905	22	131	15,302	801	24,945	64	141	217	422
2007 11-Month Total	30	5,955	3,076	24	141	15,801	854	25,880	82	156	376	615
2006 11-Month Total	31	5,883	3,093	23	139	15,723	818	25,710	67	198	337	603

<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

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.

Sources: Tables 3.7c, A1, and A3.

<sup>2005,</sup> includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Industrial Sector Other" on Table 3.8b.

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

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

### **Petroleum**

**Note 1. Petroleum 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. Petroleum New Stock Basis.** In January 1975, 1979, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, affecting subsequent stocks reported and stock change calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

Crude Oil: 1982—645 (Total) and 351 (Non-SPR).

Distillate Fuel Oil: 1974—224; 1980—205; and 1982—186.

Jet Fuel (Total): 1974—30; 1980—42; and 1982—39.

Liquefied Petroleum Gases: 1974—113; 1978—136; 1980—128; and 1982—102.

Propane and Propylene: 1978—86; 1980—69; and 1982—57.

Motor Gasoline (Total): 1974—225; 1980—263; 1982—244.

Residual Fuel Oil: 1974—75; 1980—91; and 1982—69. Total Petroleum: 1974—1,121; 1980—1,425; and 1982—1,461.

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

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

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

**Note 5. Stocks of Alaskan Crude Oil.** Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock change calculations. Using the expanded

coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Non-SPR).

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

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

### Tables 3.7a-3.7c Sources

Petroleum consumption data in these tables are derived from data for "petroleum products supplied" from the following sources:

1973–1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual."

1976–1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual."

1981–2007: 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:

**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.

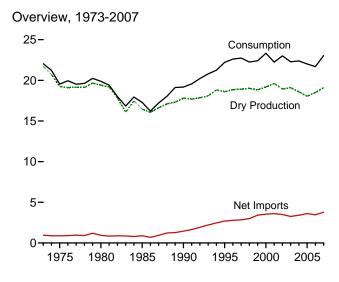
Other Petroleum Products—Consumption of all remaining petroleum products is assigned to the industrial sector. Other petroleum products include pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative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

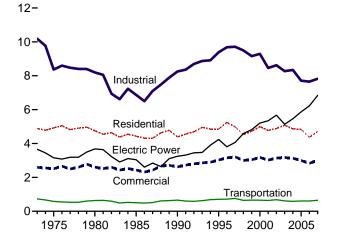


Natural gas pipeline, El Paso County, Texas. Source: U.S. Department of Energy.

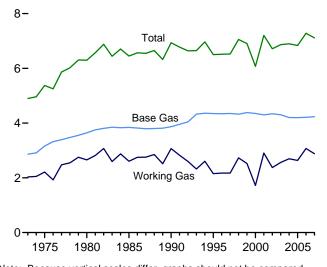
Figure 4.1 Natural Gas (Trillion Cubic Feet)



# Consumption by Sector, 1973-2007

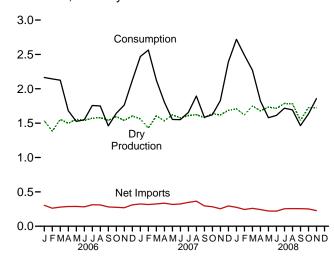


Underground Storage, End of Year, 1973-2007

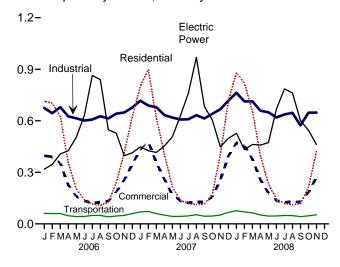


Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/natgas.html. Sources: Tables 4.1, 4.3, and 4.4.

# Overview, Monthly



# Consumption by Sector, Monthly



Underground Storage, End of Month 9-

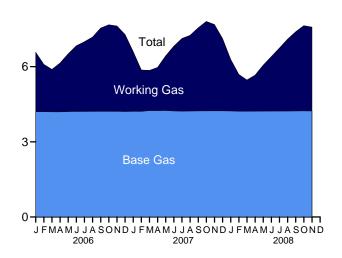


Table 4.1 Natural Gas Overview

(Billion Cubic Feet)

	Gross	Marketed			Supple- mental		Trade		Net Storage		
	With- drawals <sup>a</sup>	Production (Wet) <sup>b</sup>	Extraction Loss <sup>c</sup>	Dry Gas Production <sup>d</sup>	Gaseous Fuels <sup>e</sup>	Imports	Exports	Net Imports	With- drawals <sup>f</sup>	Balancing Item <sup>9</sup>	Consump- tion <sup>h</sup>
1973 Total	24,067	22,648	917	21,731	NA	1,033	77	956	-442	-196	22,049
1975 Total	21,104	120,109	872	19,236	NA	953	73	880	-344	-235	19,538
1980 Total	21,870 19,607	20,180 17,270	777 816	19,403 16,454	155 126	985 950	49 55	936 894	23 235	-640 -428	19,877 17,281
1985 Total 1990 Total	21,523	18,594	784	17,810	123	1,532	86	1,447	-513	307	<sup>17,261</sup> <sup>1</sup> 9,174
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 February	<sup>R</sup> 1,975 <sup>R</sup> 1,794	<sup>R</sup> 1,611 <sup>R</sup> 1,451	<sup>R</sup> 75 68	<sup>R</sup> 1,536 <sup>R</sup> 1,383	6 6	360 321	56 59	305 262	271 495	<sup>R</sup> 48 <sup>R</sup> -3	<sup>R</sup> 2,164 <sup>R</sup> 2,143
March	R 1,994	R 1,631	76	R 1,555	6	348	69	279	206	R 79	R 2,125
April	R 1,909	R 1,571	R 73	R 1,497	5	332	45	287	-260	R 151	R 1,680
May	R 1,957	R 1,632	R 76	R 1,556	4	351	63	288	-374	<sup>R</sup> 52	R 1,525
June	R 1,939	R 1.614	75	R 1,539	6	348	66	282	-317	R 40	R 1,550
July	<sup>R</sup> 1,975	R 1,650	77	<sup>R</sup> 1,573	5	371	59	312	-166	R 33	R 1,758
August	1,989	1,656	77	R 1,579	6	365	55	310	-194	R 50	R 1,751
September	R 1,946	<sup>R</sup> 1,617	<sup>R</sup> 76	R 1,542	5	334	53	281	-364	R -4	<sup>R</sup> 1,461
October	R 2,026	R 1,675	78	R 1,597	6	334	59	275	-135	R -100	R 1,643
November	R 1,974	R 1,615	75 P.70	R 1,540	6	339	70 70	269	51	R -102	R 1,764
December Total	R 2,056 R <b>23,535</b>	<sup>R</sup> 1,685 <sup>R</sup> <b>19,410</b>	<sup>R</sup> 79 <b>906</b>	<sup>R</sup> 1,606 <sup>R</sup> <b>18,504</b>	6 <b>66</b>	383 <b>4,186</b>	72 <b>724</b>	311 <b>3,462</b>	351 <b>-436</b>	<sup>R</sup> -154 <sup>R</sup> <b>89</b>	<sup>R</sup> 2,121 <sup>R</sup> <b>21,685</b>
<b>2007</b> January	R 2,034	R 1,637	<sup>R</sup> 76	<sup>R</sup> 1,561	6	393	69	324	<sup>R</sup> 698	R -120	R 2,470
February	R 1.870	R 1.498	R 70	1.429	R 5	373	57	316	R 748	R 65	R 2.564
March	R 2,084	R 1,684	R 78	R 1,606	6	402	77	325	<sup>R</sup> 56	R 133	R 2,125
April	R 1,984	R 1,609	R 75	<sup>R</sup> 1,534	5	387	51	336	R -125	<sup>R</sup> 56	R 1,806
May	R 2,053	R 1,700	<sup>R</sup> 79	R 1,621	4	380	62	318	<sup>R</sup> -470	81	R 1,554
June	R 2,017	<sup>R</sup> 1,654	R 77	R 1,577	5	381	57	324	R -399	R 44	<sup>R</sup> 1,552
July	R 2,050	R 1,690	R 79	R 1,611	5	419	71	348	R -322	R 14	R 1,656
August	R 2,074	R 1,701	R 79	R 1,622	5	427	62	365	R -133	R 35	R 1,894
September	R 2,034	R 1,659	R 77	R 1,582	5	361	65	296	R -306	R 8	R 1,585
October	R 2,118	<sup>R</sup> 1,720 <sup>R</sup> 1.697	<sup>R</sup> 80 <sup>R</sup> 79	<sup>R</sup> 1,640 <sup>R</sup> 1.619	<sup>R</sup> 5 <sup>R</sup> 6	347	64	284	<sup>R</sup> -263 <sup>R</sup> 127	<sup>R</sup> -44 -177	R 1,622
November December	2,094 R 2,179	R 1,697	R 82	R 1.688	4	341 397	86 101	254 295	R 582	-177 R -178	1,828 R 2,392
Total	R 24,591	R 20,019	R 930	R 19,089	R <b>63</b>	4,608	822	3,785	R 193	R -83	R 23,047
2008 January	2,196	E 1,783	75	E 1,709	E <sub>2</sub>	386	111	275	824	R -89	R 2,720
February	2,077	E 1,693	72	E 1,621	E 4	346	102	244	593	R 26	R 2.488
March	2,243	E 1,828	78	E 1,750	E 5	364	104	260	219	<sup>R</sup> 35	R 2,270
April	2,133	E 1,756	76	E 1,679	<sup>E</sup> 5	321	78	243	-190	<sup>R</sup> 86	<sup>R</sup> 1,823
May	2,188	E 1,814	80	E 1,734	E 4	295	73	222	-402	R 21	R 1,579
June	2,145	E 1,788	73	E 1,715	E 5	285	65	220	-339	R 13	R 1,613
July	2,218	E 1,864	77	E 1,787	E 4	R 320	R 65	R 254	-342	R 14 R 1	R 1,718
August	2,187	E 1,859	77 62	E 1,781	E 5 E 5	R 326	R 70	R 257	-350		R 1,694
September October	1,966 R 2,202	E 1,601 RE 1,801	62 <sup>R</sup> 74	E 1,540 RE 1,727	E 5	313 <sup>R</sup> 320	57 69	255 <sup>R</sup> 252	-300 -242	<sup>R</sup> -36 <sup>R</sup> -106	<sup>R</sup> 1,464 <sup>R</sup> 1,634
November	2,202	E 1,797	71	E 1,727	E 5	E 310	E 83	E 227	-242 57	-159	1,857
11-Month Total	23,761	E 19,584	814	E 18,769	E 49	E 3,587	E <b>878</b>	E 2,709	<b>-473</b>	-19 <b>5</b>	<b>20,860</b>
2007 11-Month Total 2006 11-Month Total	22,411 21,479	18,249 17,725	848 827	17,401 16,897	59 60	4,211 3,803	721 652	3,490 3,151	-389 -788	95 243	20,655 19,563

<sup>&</sup>lt;sup>a</sup> Gas withdrawn from natural gas and crude oil wells; excludes lease

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

<sup>c</sup> See Note 2, "Natural Gas Extraction Loss," at end of section.

d Marketed production (wet) minus extraction loss.

<sup>&</sup>lt;sup>e</sup> See Note 3, "Supplemental Gaseous Fuels," at end of section.

f Net withdrawals from underground storage. For 1980-2007, also includes net withdrawals of liquefied natural gas in above-ground tanks. See Note 4, "Natural Gas Storage," at end of section.

<sup>&</sup>lt;sup>9</sup> See Note 5, "Natural Gas Balancing Item," at end of section. Since 1980, excludes transit shipments that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).

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

May include unknown quantities of nonhydrocarbon gases.

For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector" on Table 4.3. See Note 7, "Natural Gas Consumption, 1989-1992," at end of section. R=Revised. E=Estimate. NA=Not available.

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, January 2009, Table 1.

Table 4.2 Natural Gas Trade by Country

(Billion Cubic Feet)

					Impo	orts						Exp	orts	
	Almorios	Canadah	Fan m 42	Mayiaah	Nimorios	0	Ontors	Trinidad and	Oth ora c	Total	Canadah	lamana	Mayiaah	Total
	Algeria	Canada <sup>b</sup>	Egypta	Mexicob	Nigeriaa	Oman <sup>a</sup>	Qatara	Tobagoa	Other <sup>a,c</sup>	Total	Canadab	Japana	Mexico <sup>b</sup>	Tota
072 Total	3	4 000	^	•	0	0	•	•	^	4 022	4.5	40	4.4	-
973 Total 975 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	7
980 Total	86	797	0	102	0	0	0	0	0	985	1	45	4	4
	24	926	0	0	0	0	0	0	0	950	(s)	53	2	5
985 Total990 Total	84	1,448	0	0	0	0	0	0	0		(s) 17	53	16	8
	18	,	0	7	0	0	0	0	0	1,532	28	65	61	15
995 Total		2,816	0	14	0	0	0	0	5	2,841	52	68	34	
996 Total	35	2,883			-	-	-			2,937	1			15
997 Total	66	2,899 3,052	0	17 15	0	0	0	0 0	12	2,994	56 40	62 66	38 53	15 15
998 Total	69								17	3,152				
999 Total	76	3,368	0	55	0	0	20	51	17	3,586	39	64	61	16
000 Total	47	3,544	0	12	13	10	46	99	11	3,782	73	66	106	24
001 Total	65	3,729	0	10	38	12	23	.98	2	3,977	167	66	141	37
002 Total	27	3,785	0	2	8	3	35	151	5	4,015	189	63	263	51
003 Total	53	3,437	0	0	50	9	14	378	3	3,944	271	66	343	6
004 Total	120	3,607	0	0	12	9	12	462	36	4,259	395	62	397	8
005 Total	97	3,700	73	9	8	2	3	439	9	4,341	358	65	305	72
006 January	3	320	3	1	3	0	0	30	0	360	32	6	18	:
February	3	282	5	(s)	3	0	0	28	0	321	33	6	20	;
March	3	314	0	ì í	0	0	0	30	0	348	37	6	26	
April	3	273	14	(s)	6	0	0	36	0	332	16	6	24	
May	0	283	20	(s)	3	Ō	Ō	44	0	351	21	6	36	
June	3	286	14	0	6	0	0	39	0	348	23	6	37	
July	3	313	15	0	6	0	0	33	0	371	17	6	37	
	0	313	9	0	6	0	0	37	0	365	17	6	32	
August September	0	290	9	3	6	0	0	25	0	334	23	4	26	
											1	-		
October	0	296	3	1	9	0	0	25	0	334	30	3	25	:
November	0	290	17	1	6	0	0	25	0	339	45	5	20	
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 72
		•			_							_		
<b>007</b> January	3	336	9	4	5	0	0	37	0	393	41	5	24	(
February	0	321	6	8	6	0	0	33	0	373	34	5	17	
March	9	309	15	6	9	0	0	54	0	402	53	5	19	
April	24	279	14	9	9	0	0	51	0	387	32	4	15	
May	24	283	15	3	15	0	3	38	0	380	35	4	24	
June	12	291	15	4	20	0	6	30	3	381	28	3	26	
July	0	315	12	5	12	0	3	62	9	419	38	4	29	
August	3	335	12	4	15	0	6	46	6	427	28	4	30	
September	3	318	12	2	3	0	0	24	0	361	33	4	28	
October	Ō	314	3	2	Ō	Ö	Ō	29	Ö	347	31	2	29	d
November	0	311	3	3	0	0	0	24	Ō	341	58	3	26	
December	Ö	372	0	4	0	Ö	0	21	Ő	397	72	4	25	1
Total	77	3,783	115	54	95	Ŏ	18	448	18	4,608	482	47	292	d <b>8</b>
<b>08</b> January	0	356	3	1	0	0	0	25	0	296	60	3	40	1
08 January			0	-						386	68			1
February	0	322		0	0	0	0	21	3	346	62	3	37	
March	0	339	0	1	0	0	0	21	3	364	69	4	31	1
April	0	289	3	(s)	3	0	0	26	0	321	46	4	28	
May	0	259	3	4	0	0	0	25	3	295	43	5	25	
June	0	250	6	3	3	0	3	21	0	285	30	5	30	ь
July	0	R 285	6	4	0	0	0	25	0	R 320	R 31	5	R 30	R
August	0	<sup>R</sup> 287	3	4	3	0	0	24	5	R 326	R 29	6	35	R
September	0	274	9	7	3	0	0	20	0	313	27	4	27	
October	0	R 287	3	R 6	0	0	0	24	0	R 320	R 36	4	R 28	
November	0	E 282	9	E 6	0	0	0	14	0	E 310	E 50	4	E 28	Е
11-Month Total	0	E 3,230	46	<sup>E</sup> 36	12	0	3	245	14	E 3,587	<sup>E</sup> 492	46	E 340	E 8
07 11-Month Total	77	3,411	115	50	95	0	18	427	18	4,211	411	42	266	7
06 11-Month Total	17	3,262	108	9	54	Ŏ	0	353	0	3,803	294	56	301	6

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

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

Notes: • See Note 8, "Natural Gas Imports and Exports," at end of section. •

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

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

Sources: • 1973-1987: 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, January 2009, Table 4; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

b By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981 and exported to Mexico beginning in 1998. See Note 8, "Natural Gas Imports and Exports," at end of section.

 $<sup>^{\</sup>rm c}$  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.

Table 4.3 Natural Gas Consumption by Sector

(Billion Cubic Feet)

	End-Use Sectors											
					Industrial			Tr	ansportatio	n		
	Resi-	Com-	Lease and		Other Industr	rial		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 1985 Total 1990 Total 1995 Total 1996 Total 1997 Total 1997 Total	4,879 4,924 4,752 4,433 4,391 4,850 5,241 4,984 4,520	2,597 2,508 2,611 2,432 2,623 3,031 3,158 3,215 2,999	1,496 1,396 1,026 966 1,236 1,220 1,250 1,203 1,173	(h) (h) (h) (h) 1,055 1,258 1,289 1,282	8,689 6,968 7,172 5,901 5,963 6,906 7,146 7,229 6,965	8,689 6,968 7,172 5,901 <sup>1</sup> 7,018 8,164 8,435 8,511 8,320	10,185 8,365 8,198 6,867 8,255 9,384 9,685 9,714 9,493	728 583 635 504 660 700 711 751 635	NA NA NA (s) 5 6 8	728 583 635 504 660 705 718 760 645	3,660 3,158 3,682 3,044 13,245 4,237 3,807 4,065 4,588	22,049 19,538 19,877 17,281 19,174 22,207 22,610 22,737 22,246
1999 Total 2000 Total 2001 Total 2002 Total 2002 Total 2003 Total 2004 Total 2005 Total	4,726 4,996 4,771 4,889 5,079 4,869 4,827	3,045 3,182 3,023 3,144 3,179 3,129 2,999	1,079 1,151 1,119 1,113 1,122 1,098 1,112	1,401 1,386 1,310 1,240 1,144 1,191 1,084	6,678 6,757 6,035 6,267 6,007 6,052 5,514	8,079 8,142 7,344 7,507 7,150 7,243 6,597	9,158 9,293 8,463 8,620 8,273 8,341 7,709	645 642 625 667 591 566 584	12 13 15 15 18 21 23	657 655 640 682 610 587 607	4,830 5,206 5,342 5,672 5,135 5,464 5,869	22,405 23,333 22,239 23,007 22,277 22,389 22,011
February February March April May June July August September October November December Total	714 702 626 355 204 141 116 108 125 240 413 624 <b>4,368</b>	397 390 353 226 R 160 134 122 R 126 133 188 256 347 R 2,832	R 96 R 87 R 97 R 93 R 95 R 94 R 96 R 97 R 95 R 98 R 100 R 1,142	91 83 91 84 92 94 103 104 91 97 89 95 <b>1,115</b>	R 488 R 475 R 492 R 449 R 427 R 413 R 408 R 426 R 428 R 446 R 4482 R 5,398	R 579 R 558 R 5583 R 533 R 519 R 507 R 511 R 530 R 519 R 543 R 553 R 578	R 674 R 644 R 679 R 626 R 614 R 601 R 608 R 627 R 613 R 641 R 648 R 677	59 R 58 58 45 41 41 47 47 39 44 47 58 58	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	61 60 60 47 43 43 49 49 41 46 R 49 60 R <b>608</b>	318 346 407 426 504 630 864 840 548 528 397 414 <b>6,222</b>	R 2,164 R 2,143 R 2,143 R 2,125 R 1,680 R 1,525 R 1,550 R 1,751 R 1,461 R 1,643 R 2,121 R 21,685
Page 2007 January February March April May June July August September October November December Total	R 802 R 899 R 616 408 216 137 118 112 R 116 R 174 404 R 715 R 4,717	R 432 R 478 R 355 R 261 R 169 135 R 123 127 128 158 R 257 R 395 R 3,017	R 99 R 91 R 101 R 97 R 101 R 99 100 R 101 R 99 R 103 R 102 R 106 R 1,199	R 96 R 79 R 81 R 80 R 84 R 85 R 90 R 101 R 89 R 89 R 85 R 90	R 523 R 518 R 496 R 497 R 434 R 424 R 418 R 431 R 425 R 448 A80 R 521 R <b>5,574</b>	R 619 R 598 R 577 F 537 518 R 509 R 508 R 531 R 514 R 538 R 565 R 611	R 717 R 688 R 679 R 633 R 619 R 607 R 609 R 633 R 614 R 641 R 667 R 717	R 68 R 70 R 58 R 41 R 41 R 41 R 51 R 42 R 43 49 65 R <b>623</b>	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	R 70 R 72 R 60 51 44 R 43 R 46 R 53 R 44 R 45 51 67	R 448 R 425 R 416 R 453 R 507 R 628 R 761 R 969 R 683 R 604 R 448 R 498	R 2,470 R 2,564 R 2,125 R 1,806 R 1,552 R 1,656 R 1,894 R 1,585 R 1,622 1,828 R 2,392 R 23,047
Petron January February March April May June July August September October November 11-Month Total	882 R 819 R 655 398 R 232 145 119 111 117 213 422 <b>4,113</b>	471 454 377 256 179 134 R 127 126 129 183 272 <b>2,708</b>	RE 107 RE 101 RE 109 RE 105 RE 109 RE 107 RE 112 RE 111 RE 96 RE 108 E 108 E 1,173	93 83 86 79 84 88 89 92 72 85 80 <b>929</b>	R 563 R 529 R 518 R 474 R 457 R 425 R 436 R 443 R 406 R 454 461 <b>5,166</b>	R 656 R 611 R 604 R 554 R 541 R 512 R 525 R 535 R 478 R 539 540 <b>6,095</b>	R 763 R 713 R 713 R 659 R 649 R 619 R 637 R 646 R 573 R 647 648 <b>7,268</b>	RE 74 E 67 E 49 RE 43 RE 44 E 46 E 46 RE 40 E 44 E 50 E 564	3 2 3 2 3 2 3 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2	E 76 RE 70 E 64 E 52 E 45 E 46 E 49 E 48 E 42 RE 47 E 53 E <b>592</b>	528 432 462 459 473 669 786 762 602 545 462 <b>6,179</b>	R 2,720 R 2,488 R 2,270 R 1,823 R 1,579 R 1,613 R 1,718 R 1,694 R 1,464 R 1,634 1,857 <b>20,860</b>
2007 11-Month Total 2006 11-Month Total	4,002 3,745	2,623 2,485	1,092 1,042	960 1,019	5,054 4,915	6,014 5,934	7,106 6,977	558 527	23 22	581 548	6,344 5,808	20,655 19,563

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

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

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.

Gata 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), January 2009, Table 2.

Industrial CHP: Table 7.4c. • Vehicle Fuel: 1990 and 1991—EIA, NGA 2000, (November 2001), Table 95. 1992-1998—"Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2002" (February 2004), Table 10, Plats for (November 2001), Table 95. **1992-1998—**"Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by multiplying by the motor gasoline conversion factor (see Table A3) and dividing by the natural gas end-use sectors conversion factor (see Table A4). **1999-2002**—EIA, *NGA*, annual reports. **2003 forward**—EIA, *NGM*, January 2009, Table 2. • Electric Power Sector: Table 7.4b.

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

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

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

f The cleating power sector comprises electricity only and

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 1988, data are for electric utilities only. Beginning in 1989, data are

Infough 1986, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

Included in "Non-CHP."

For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector."

See Note 7, "Natural Gas Consumption, 1989-1992," at end of section.

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

Table 4.4 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	U	Natural Gas in nderground Storag End of Period	je,	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
980 Total	3,642	2,655	6,297	-99	-3.6	1,910	1,896	14
985 Total	3,842	2,607	6,448	-270	-9.4	2,359	2,128	231
990 Total	3,868	3,068	6,936	555	22.1	1,934	2,433	-499
995 Total	4,349	2,153	6,503	-453	-17.4	2,974	2,566	408
996 Total	4,341	2,173	6,513	19	.9	2,911	2,906	6
997 Total	4,350	2,175	6,525	2	.1	2,824	2,800	24
998 Total	4,326	2,730	7,056	554	25.5	2,379	2,905	-526
000 Total						•		
999 Total	4,383	2,523	6,906	-207	-7.6	2,772	2,598	174
000 Total	4,352	1,719	6,071	-806	-31.9	3,498	2,684	814
001 Total	4,301	2,904	7,204	1,185	68.9	2,309	3,464	-1,156
002 Total	4,340	2,375	6,715	-528	-18.2	3,138	2,670	468
003 Total	4,303	2,563	6,866	187	7.9	3,099	3,292	-193
004 Total	4,201	2,696	6,897	133	5.2	3,037	3,150	-113
005 Total	4,200	2,635	6,835	-61	-2.3	3,057	3,002	55
		,	•				•	
<b>006</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
September	4,215	3,323	7,539	391	13.4	37	395	-358
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>007</b> January	R 4,216	R 2,383	<sup>R</sup> 6,599	<sup>R</sup> 12	R .5	740	<sup>R</sup> 57	R 683
	R 4,216	R 1,652	R 5,867	R -235	.5 R -12.4			R 732
February						782 P. 272	51	
March	R 4,247	1,603	<sup>R</sup> 5,850	-89	R -5.3	R 270	R 219	R 50
April	4,246	<sup>R</sup> 1,723	<sup>R</sup> 5,969	<sup>R</sup> -223	<sup>R</sup> -11.4	154	<sup>R</sup> 273	-120
May	<sup>R</sup> 4,250	<sup>R</sup> 2,181	<sup>R</sup> 6,432	<sup>R</sup> -129	<sup>R</sup> -5.6	<sup>R</sup> 38	498	<sup>R</sup> -460
June	R 4,231	R 2,583	<sup>R</sup> 6,814	<sup>R</sup> -34	<sup>R</sup> -1.3	R 47	437	-389
July	R 4,227	R 2,896	7,123	<sup>R</sup> 117	R 4.2	84	397	<sup>R</sup> -314
August	R 4,229	R 3,021	R 7,250	R 52	R 1.7	R 167	294	R -127
	R 4,233	R 3,315	<sup>R</sup> 7,549	R -8	2	73	R 371	-298
September	4,∠33 R 4 222					73 R 75		
October	R 4,238	R 3,565	R 7,804	R 113	3.3		R 332	R -257
November	4,238	R 3,442	R 7,680	R 35	R 1.0	R 262	R 141	R 121
December	4,234	2,879	7,113	-191	-6.2	R 632	R 63	569
Total	4,234	2,879	7,113	-191	-6.2	<sup>R</sup> 3,325	<sup>R</sup> 3,133	<sup>R</sup> 192
008 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
	4,223	,	5,466 5,659	-336 -284	-22.2 -16.5	106	295	-190
April		1,436						
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	-342
August	4,228	2,867	7,094	-151	-5.0	91	442	-350
September	4,231	3,163	7,394	-153	-4.6	98	398	-300
October	4,235	3,399	7,634	-168	-4.7	91	334	-242
November 11-Month Total	4,231 	3,346 	7,578 	-96 – –	-2.8 	251 <b>2,753</b>	194 <b>3,225</b>	57 <b>-473</b>
007 11-Month Total 006 11-Month Total		<del></del>		<del></del>	<del></del>	2,693 2,050	3,069 2,825	-377 -775
ooo ii-woiilli loldi						2,000	2,020	-113

<sup>&</sup>lt;sup>a</sup> For total underground storage capacity at the end of each calendar year, see

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, January 2009, Table 6. • All Other Data: 1973 and 1974—American Gas Association (AGA), Gas Facts, 1972 Data, Table 57, Gas Facts, 1973 Data, Table 57, and Gas Facts, 1974 Data, Table 40. 1975 and 1976—Federal Energy Administration (FEA), Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report." 1977 and 1978—EIA, Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report." 1979-1995—EIA, Form EIA-191, "Underground Gas Storage Report," and FERC, Form FERC-8, "Underground Gas Storage Report." 1996-2005—EIA, NGM, monthly issues. 2006 forward—EIA, NGM, January 2009,

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

b For 1980-2007, data differ from those shown on Table 4.1, which includes

liquefied natural gas storage for that period.

<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, "Natural Gas 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

# **Natural Gas**

#### Note 1. Natural Gas 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. Natural Gas Extraction Loss.** Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

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

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

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

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

Annual data beginning with 1980 are from the EIA, NGA.

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

Although the total amount of supplemental gaseous fuels consumed is known for 1980 forward, EIA estimates the amount consumed by each energy-use sector. 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. Natural Gas Storage.** Natural gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. The difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

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

<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	<b>2007</b> 8,402

Monthly underground storage data are collected from the Federal Energy Regulatory Commission (FERC) Form FERC-8 (interstate data) and EIA Form EIA-191 (intrastate

data). Beginning in January 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the FERC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA *NGA*.

The final monthly and annual storage and withdrawal data for 1980–2006 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

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

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

**Note 6. Natural Gas Consumption.** Consumption includes use for lease and plant fuel, pipelines and distribution, vehicle

fuel, and electric power plants, as well as deliveries to residential, commercial, and other industrial customers.

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

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

Note 8. Natural Gas Imports and Exports. The United States imports natural gas via pipeline from Canada and Mexico and imports liquefied natural gas (LNG) via tanker from Algeria, Australia, Brunei, Egypt, Equatorial Guinea, Indonesia, Malaysia, Nigeria, Norway, Oman, Qatar, Trinidad and Tobago, and the United Arab Emirates. In addition, very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico and exports LNG via tanker to Japan. Also, small amounts of LNG have gone to Mexico since 1998.

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

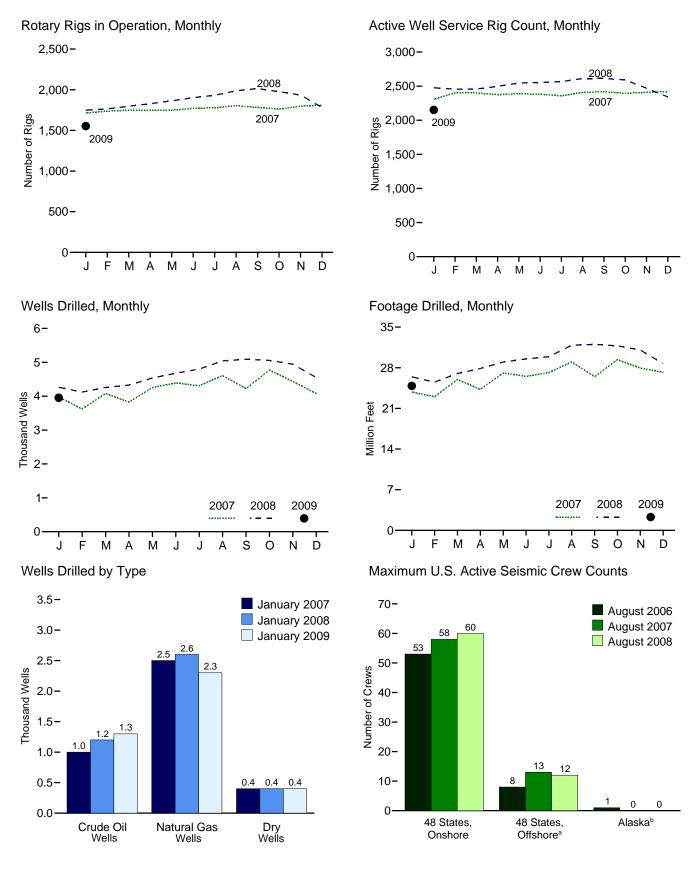
Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA *NGM*. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas.* 

# **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)

		Rotary Rigs in Operation <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					
980 Average	2,678	231	NA NA	NA NA	2,909	4,089					
985 Average	1,774	206	NA 500	NA 101	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					
001 Average	1.003	153	217	939	1.156	2,267					
	717	113	137	691	830	1.830					
002 Average	924	108	157	872	1,032	1,967					
003 Average											
004 Average	1,095	97	165	1,025	1,192	2,064					
005 Average	1,287	94	194	1,184	1,381	2,222					
<b>006</b> 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					
	1,587	94	298	1,379	1.681	2,342					
July					,	2,404					
August	1,639	99	316	1,417	1,738						
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					
007 January	1,630	84	270	1,440	1,714	2,307					
February	1,651	85	266	1,466	1,736	2,401					
March	1.667	81	282	1,461	1,749	2,401					
April	1.675	75	285	1.461	1.750	2.375					
	1,671	77	282	1,464	1,748	2,387					
May											
June	1,692	79	283	1,483	1,771	2,381					
July	1,698	79 70	285	1,486	1,777	2,358					
August	1,731	73	306	1,492	1,804	2,408					
September	1,718	65	302	1,475	1,783	2,418					
October	1,713	49	321	1,435	1,762	2,395					
November	1,737	61	341	1,451	1,798	2,408					
December	1,749	62	338	1,468	1,811	2,420					
Average	1,695	72	297	1,466	1,768	2,388					
008 January	1,690	60	321	1,421	1,749	2,476					
February	1,709	56	331	1,426	1,765	2,455					
March	1,737	60	343	1,444	1,797	2,457					
April	1.765	64	358	1.461	1.829	2,498					
May	1,794	68	375	1,478	1,863	2,546					
June	1.834	67	383	1.510	1,902	2,554					
		67	380			2,554					
July	1,865			1,543	1,932	,					
August	1,920	67	397	1,581	1,987	2,611					
September	1,942	72	417	1,585	2,014	2,612					
October	1,903	73	422	1,542	1,976	2,591					
November	1,872	63	426	1,498	1,935	2,469					
December	1,716	66	391	1,380	1,782	2,342					
Average	1,814	65	379	1,491	1,879	2,515					
	,			,	,	_,					

<sup>&</sup>lt;sup>a</sup> Rotary rigs in operation are reported weekly. Monthly data are averages of 4or 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 rejuded to the peacest whole number.

and working every day of the month.

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.

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

NA=Not available.

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

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

Sources: • Rotary Rigs in Operation: By Site–Baker Hughes, Inc., Houston, Texas, Rotary Rigs Running–by State. By Type–Baker Hughes, Inc., Houston, Texas, weekly phone recording. • Active Well Service Rig Count: Cameron International Corporation, Houston, Texas.

Table 5.2 Crude Oil and Natural Gas Exploratory and Development Wells

1973 Total   982   1,067   5,952   7,661   9,555   5,866   6,679   4,066   19,759   10,167   6,932   10,167   13,020   27,420   138,22   1975 Total   982   1,248   7,129   9,359   13,182   15,362   11,704   59,248   32,959   17,461   20,768   71,205   316,34   19,005   10,105   1							Wells	Drilled						
Procedure   Proc			Explo	ratory			Develo	pment			То	tal		Total
Peter   Pete				Dry	Total			Dry	Total			Dry	Total	Footage Drilled
1975 Total 992 1,248 7,129 9,359 15,966 6,879 6,517 29,352 15,948 8,127 13,646 38,721 180,45 1980 Total 1,777 2,099 9,081 12,957 31,182 13,526 11,704 58,248 32,926 32,281 14,324 21,211 70,796 314,40 1985 Total 1,680 1,200 8,954 11,834 33,581 13,124 12,257 58,962 33,281 14,324 21,211 70,796 314,40 1985 Total 770 657 7,025 32,000 11,835 11,814 12,257 58,962 33,281 14,324 21,211 70,796 314,40 1995 Total 750 657 61,955 30,200 81,955 11,955 31,200 11,955 11,							Num	nber						Thousand Feet
1980 Total 1,777														138,223
1985 Total 1,680 1,200 8,954 11,834 33,581 13,124 12,257 58,962 35,261 14,324 21,211 70,796 314,401 1990 Total 778 812 3,648 5,238 11,696 10,296 4,599 2,6561 13,434 11,088 2,217 31,799 155,25 1995 Total 570 557 2,023 3,150 7,345 7,412 2,794 17,524 7,915 7,969 4,779 20,077 116,595 104 1995 Total 491 561 2,108 3,160 10,553 10,074 3,740 25,167 11,044 11,435 5,848 28,217 31,799 197 Total 491 561 1,597 1,741 1														180,494
1999 Total 578 812 3,648 5,238 11,696 10,296 4,569 26,561 12,474 11,108 8,217 31,799 15,526 1995 Total 570 557 0,557 0,557 0,557 0,507 3,507 7,412 2,764 17,521 7,915 7,969 4,787 2,067 116,59 1995 Total 489 576 1,955 3,020 8,109 10,555 1,000 7,000 10,000														
1995 Total														
1996 Total														
1997 Total	1996 Total													
1988 Total 327 566 1,585 2,478 7,229 10,944 3,160 21,333 7,556 11,510 4,745 23,811 137,04 1989 Total 598 Total 598 565 1,155 1,157 1,1514 4,538 11,334 2,345 11,330 7,556 1,757 1,751 1,75	1997 Total													161,215
1999 Total	1998 Total													137,048
2001 Total	1999 Total	196	565	1,157	1,918		11,334	2,360		4,734			20,150	102,594
2001 Total	2000 Total													143,947
2004 Total 348 991 1,285 2,625 7,677 19,596 2,613 29,886 8,026 20,587 3,888 22,511 176,552 2004 Total 386 1,631 1,331 3,370 8,390 22,075 2,644 33,009 8,676 23,728 3,375 36,379 202,81 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 23,721 2005 3 anuary 65 176 95 336 952 2,267 307 3,526 1,017 2,443 402 3,862 21,91 1,42 3,551 1,44 3,40 3,40 3,40 3,40 3,40 3,40 3,40 3	2001 Total													179,624
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         20,287           2005 Total         515         2,087         1,431         4,033         9,886         25,693         3,081         38,640         10,311         27,780         4,512         2,673         237,21           2006 January         65         1,76         95         336         952         2,267         307         3,526         1,017         2,443         402         3,862         21,91           February         51         192         1112         355         852         2,192         268         3,313         903         2,384         331         3,668         20,55           May         61         211         138         434         1,108         2,409         271         3,681         1,079         2,620         409         4,103           July         30         30         30         3,013         1,142         2,788         475         4,447         2,246           July         30         30         40         1,106         2,532	2002 Total													
2005 January         65         2,087         1,431         4,033         9,866         25,693         3,081         38,600         10,381         27,780         4,512         42,673         237,21           2005 January         65         176         95         336         952         2,192         269         3,331         903         23,384         381         3,668         20,55           March         42         209         96         347         955         2,456         306         3,717         997         2,665         402         4,064         23,068         21,19           May         61         211         138         410         1,018         2,409         271         3,698         1,079         2,665         402         4,064         23,09         3,141         94         2,332         301         3,738         1,142         2,555         435         4,132         2,261         30         4,108         2,864         317         4,251         1,414         2,555         435         4,132         2,282         4,00         2,864         317         4,251         1,414         2,555         435         4,132         2,263         3,00         3,738														
February   51   192   112   355   852   2,192   269   3,313   903   2,384   381   3,688   20,555														237,214
March														21,910
April 44 167 128 339 950 2.212 299 3.461 994 2.379 427 3.800 21.78 May 61 211 138 410 1,018 2.409 271 3.698 1,079 2.620 409 4108 23.36 June 78 217 139 434 1,106 2.571 336 4,013 1,184 2.788 475 4,447 25.10 July 37 223 134 394 1,105 2.332 301 3.738 1,184 2.788 475 4,447 25.10 July 37 223 134 394 1,105 2.332 301 3.738 1,184 2.785 435 4,132 22.63 September 57 226 139 422 1,049 2.553 289 3.891 1,106 2.779 428 4,313 248 6 Cotober 61 250 129 440 1,090 2.674 336 4,100 1,151 2.924 465 4,540 2.600 November 60 285 119 440 1,090 2.674 336 4,100 1,151 2.924 465 4,540 2.600 November 60 285 119 464 1,079 2.466 338 3.883 1,139 2.751 457 4,347 25.20 2.000 2														20,559
May         61         211         138         410         1,018         2,409         2,178         2,478         475         4,408         2,349           Juln         78         217         139         434         1,106         2,571         336         4,013         1,184         2,788         475         4,412         2,515           July         37         223         134         394         1,105         2,332         301         3,738         1,142         2,555         435         4,132         2,283           September         57         226         139         422         1,049         2,555         289         3,891         1,106         2,779         428         4,313         2,466           Cotober         60         285         119         464         1,079         2,466         338         3,883         1,139         2,751         457         4,847         2,525           December         35         251         156         442         1,039         2,314         227         3,862         1,036         2,527         417         3,474         2,525           Total         653         2,684         1,527         4,86														23,649
June 78 217 139 434 1,106 2,571 336 4,013 1,184 2,788 475 4,447 25,10 July 37 223 134 394 1,105 2,332 301 3,738 1,142 2,555 435 4,132 22,88 August 62 277 142 481 1,080 2,854 317 4,251 1,142 3,131 459 4,732 26,33	April													
July 37 223 134 394 1,105 2,332 301 3,738 1,142 2,555 435 4,132 22,88 August 62 277 142 481 1,080 2,854 317 4,251 1,142 2,555 435 4,132 22,88 August 62 277 142 481 1,080 2,854 317 4,251 1,142 2,555 443 459 4,732 26,30 September 57 226 139 422 1,049 2,553 289 3,891 1,106 2,779 428 4,313 24,66 Corboer 61 250 129 440 1,090 2,674 336 4,100 1,151 2,924 465 4,540 26,00 November 60 285 119 464 1,079 2,466 338 3,883 1,139 2,751 457 4,347 25,42 December 35 2,51 156 442 1,039 2,314 273 3,626 1,074 2,565 429 4,068 23,50 Total 653 2,684 1,527 4,864 12,275 29,300 3,642 45,217 12,928 31,984 5,169 50,081 285,600 Total 653 2,684 1,527 4,864 12,275 29,300 3,642 45,217 12,928 31,984 5,169 50,081 285,600 Total 663 31 117 496 990 2,298 294 3,552 1,036 2,527 417 3,980 23,82 April 60 298 128 486 947 2,143 250 3,340 1,007 2,441 378 3,826 24,27 May 58 331 155 542 1,034 2,370 309 3,713 1,092 2,701 462 4,255 27,03 June 84 290 118 492 1,071 2,555 274 310 3,007 2,441 378 3,826 24,27 May 58 333 355 13 3551 1,023 2,424 311 3,758 1,106 2,759 444 4,209 27,16 August 66 322 123 511 1,051 2,688 359 4,098 1,117 3,010 482 4,009 27,00 September 80 302 141 523 958 2,462 280 3,700 1,038 2,764 4421 4,223 26,44 Cotober 79 367 159 605 1,032 2,523 291 3,846 1,055 2,845 392 4,099 27,00 November 63 333 157 493 1,043 2,275 288 3,586 1,106 2,758 395 4,079 27,20 December 63 303 127 493 1,043 2,275 288 3,586 1,106 2,758 395 4,079 27,20 April 74 225 142 463 1,24 463 1,24 2,370 32,390 1,384 1,109 2,364 442 4,23 26,44 Cotober 79 367 159 605 1,032 2,523 291 3,846 1,055 2,861 480 4,436 27,59 December 63 303 127 493 1,043 2,275 288 3,586 1,106 2,758 395 4,079 27,20 April 74 225 142 463 1,276 2,311 310 3,897 1,350 2,526 452 4,328 27,85 May 106 233 145 464 1,370 2,252 230 3,389 4,169 1,211 3,065 498 4,774 2,938 December 63 303 127 493 1,043 2,275 288 3,586 1,106 2,578 395 4,079 2,20 2,20 3,20 4,22 2,20 3,20 4,22 2,20 3,20 4,22 2,20 3,20 4,22 2,23 3,24 2,24 3,24 3,24 3,24 3,24														
August 62 277 142 481 1,080 2,854 317 4,251 1,142 3,131 459 4,732 26,30 September 57 226 139 422 1,049 2,553 289 3,881 1,106 2,779 428 4,313 24,66 October 61 250 129 440 1,090 2,674 336 4,100 1,151 2,924 465 4,540 26,00 November 60 285 119 464 1,079 2,466 338 3,833 1,139 2,751 4457 4,347 25,42 December 35 2,684 1,527 4,864 12,275 29,300 3,642 45,217 12,928 31,984 5,169 50,081 285,60 Total 653 2,684 1,527 4,864 12,275 29,300 3,642 45,217 12,928 31,984 5,169 50,081 285,60 2007 January 59 274 122 455 977 2,253 295 3,525 1,036 2,527 417 3,980 23,82 February 62 242 100 404 893 2,077 247 3,217 955 2,319 347 3,621 22,98 March 66 313 117 496 990 2,298 294 3,582 1,056 2,611 411 4,078 25,96 April 60 298 128 486 947 2,143 250 3,340 1,007 2,441 378 3,826 24,27 May 58 331 153 542 1,034 2,370 309 3,713 1,092 2,701 462 4,255 27,08 July 83 335 133 551 1,023 2,244 311 3,758 1,106 2,759 444 4,309 27,16 August 66 322 123 511 1,051 2,248 359 4,098 1,117 3,010 482 4,659 29,00 September 80 302 141 523 958 2,462 280 3,700 1,038 2,764 421 4,223 26,44 October 79 367 159 605 1,032 2,425 291 3,846 1,095 2,861 440 4,203 2,716 August 66 3303 127 493 1,043 2,275 268 3,596 1,106 2,578 395 4,079 27,20 April 82 39 1,043 2,275 288 3,591 1,066 2,671 400 442 4,223 26,44 October 79 367 159 605 1,032 2,253 291 3,846 1,095 2,861 440 4,233 2,764 421 4,223 26,44 October 79 367 159 605 1,132 2,688 359 4,098 1,117 3,010 482 4,690 29,000 September 63 303 127 493 1,043 2,275 268 3,596 1,106 2,578 395 4,079 27,20 April 82 39 1,043 2,275 288 3,591 3,681 1,106 2,579 395 4,079 27,20 April 74 2,15 142 431 1,276 2,311 310 3,897 1,255 2,861 498 4,774 2,388 4,774														
September   57   226   139   422   1,049   2,553   289   3,891   1,106   2,779   428   4,313   24,66														
October         61         250         129         440         1,090         2,674         336         4,100         1,151         2,924         465         4,540         26,000           November         60         285         119         464         1,079         2,466         338         3,883         1,139         2,751         457         4,347         25,42           December         35         2,51         156         442         1,039         2,314         273         3,626         1,074         2,565         429         4,068         23,50           Total         653         2,684         1,527         4,864         12,275         29,300         3,642         45,217         12,928         31,964         5,169         50,081         28,527           Total         66         313         117         496         990         2,298         294         3,582         1,056         2,611         411         4,078         25,382           March         66         313         117         496         990         2,298         294         3,582         1,056         2,611         411         4,078         2,523           March         66														24,665
November		61	250	129	440			336				465		26,002
Total 653 2,684 1,527 4,864 12,275 29,300 3,642 45,217 12,928 31,984 5,169 50,081 285,60  2007 January 59 274 122 455 977 2,253 295 3,525 1,036 2,527 417 3,980 23,82 February 62 242 100 404 893 2,077 247 3,217 955 2,319 347 3,621 22,98 March 66 313 117 496 990 2,298 294 3,582 1,056 2,611 411 4,078 25,98 April 60 298 128 486 947 2,143 250 3,340 1,007 2,441 378 3,826 24,27 May 58 331 153 542 1,034 2,370 309 3,713 1,092 2,701 462 4,255 27,03 June 84 290 118 492 1,071 2,555 274 3,900 1,155 2,845 392 4,392 26,52 July 83 335 133 551 1,023 2,424 311 3,758 1,106 2,759 444 4,309 27,16 August 66 322 123 511 1,051 2,688 359 4,098 1,117 3,010 482 4,609 29,00 September 80 302 141 523 958 2,462 280 3,700 1,038 2,764 421 4,223 26,44 October 79 367 159 605 1,132 2,698 339 4,169 1,211 3,065 498 4,774 29,38 November 63 338 189 590 1,032 2,523 291 3,846 1,095 2,861 480 4,436 27,52 Total 823 3,715 1,610 6,148 12,151 28,766 3,517 44,434 12,974 32,481 5,127 50,562 317,81  2008 January 85 299 145 529 1,140 2,320 275 3,735 1,225 2,619 420 4,264 26,43 February 85 293 100 478 1,172 2,197 274 3,643 1,257 2,490 374 4,121 2,556 March 78 267 137 482 1,173 2,293 310 3,776 1,251 2,560 447 4,258 27,02 April 74 215 142 431 1,276 2,311 310 3,897 1,255 2,619 420 4,264 26,43 April 74 215 142 431 1,276 2,311 310 3,897 1,255 2,619 420 4,264 26,43 April 74 215 142 431 1,276 2,311 310 3,897 1,255 2,619 420 4,264 26,43 April 74 215 142 431 1,276 2,311 310 3,897 1,255 2,619 420 4,555 28,83 June 66 253 145 464 1,370 2,522 322 324 1,414 3,436 2,775 467 4,678 29,50 May 106 233 124 463 1,324 2,443 305 4,072 1,430 2,676 429 4,555 28,89 June 66 253 145 464 1,370 2,522 322 324 1,414 1,436 2,775 467 4,678 29,50 May 106 233 124 463 1,324 2,443 305 4,072 1,430 2,676 429 4,555 28,89 June 66 253 145 464 1,370 2,522 322 324 1,314 1,443 2,891 466 4,800 29,91 August 84 265 157 506 1,415 2,775 347 4,537 1,699 3,040 504 5,043 31,87 September 99 256 156 511 1,507 2,722 350 4,579 1,606 2,978 506 5,090 350,62	November	60	285	119	464	1,079	2,466	338	3,883	1,139	2,751	457	4,347	25,427
2007 January	December  Total													23,509 <b>285,609</b>
February 62 242 100 404 893 2,077 247 3,217 955 2,319 347 3,621 22,98 March 66 313 117 496 990 2,298 294 3,582 1,056 2,611 411 4,078 25,98 April 60 298 128 486 947 2,143 250 3,340 1,007 2,441 378 3,826 24,27 May 58 331 153 542 1,034 2,370 309 3,713 1,092 2,701 462 4,255 27,08 July 83 335 133 5542 1,023 2,424 311 3,758 1,106 2,759 444 4,309 27,16 August 66 322 123 511 1,051 2,688 359 4,098 1,117 3,010 482 4,609 29,00 September 80 302 141 523 958 2,462 280 3,700 1,038 2,764 421 4,223 26,44 October 79 367 159 605 1,132 2,698 339 4,169 1,211 3,065 498 4,774 293.8 November 63 338 189 590 1,032 2,523 291 3,846 1,095 2,861 480 4,436 27,55 December 63 303 127 493 1,043 2,275 268 3,586 1,106 2,578 395 4,079 27,20 Total 823 3,715 1,610 6,148 12,151 28,766 3,517 44,434 12,974 32,481 5,127 50,582 317,81 March 78 267 137 482 1,173 2,293 310 3,776 1,251 2,560 447 4,258 27,02 April 78 267 137 482 1,173 2,293 310 3,776 1,251 2,560 447 4,258 27,02 April 78 267 137 482 1,173 2,293 310 3,776 1,251 2,560 447 4,258 27,02 April 78 267 137 482 1,173 2,293 310 3,776 1,251 2,560 447 4,258 27,02 April 78 267 137 482 1,173 2,293 310 3,776 1,251 2,560 447 4,258 27,02 April 78 267 137 482 1,173 2,293 310 3,776 1,251 2,560 447 4,258 27,02 April 78 267 137 482 1,173 2,293 310 3,776 1,251 2,560 447 4,258 27,02 April 78 267 137 482 1,173 2,293 310 3,776 1,251 2,560 447 4,258 27,02 April 79 27 27 27 27 27 27 27 27 27 27 27 27 27		59	274	122	455	977	2.253	295	3.525	1.036	2.527	417	3.980	23,821
March         66         313         117         496         990         2,298         294         3,582         1,056         2,611         411         4,078         25,98           April         60         298         128         486         947         2,143         250         3,340         1,007         2,441         378         3,262         24,27           May         58         331         153         542         1,034         2,370         309         3,713         1,092         2,701         462         4,255         27,08           Jule         84         290         118         492         1,071         2,555         274         3,900         1,155         2,845         392         4,932         26,52           July         83         335         133         551         1,021         2,688         359         4,098         1,117         3,010         482         4,699         29,00           September         80         302         141         523         958         2,462         280         3,700         1,038         2,764         421         4223         26,44           October         79         367	February		242											22,989
May         58         331         153         542         1,034         2,370         309         3,713         1,092         2,701         462         4,255         27,08           June         84         290         118         492         1,071         2,555         274         3,900         1,155         2,845         392         4,392         26,52           July         83         335         133         551         1,023         2,424         311         3,758         1,106         2,759         444         4,309         27,16           August         66         322         123         511         1,051         2,688         359         4,098         1,117         3,010         482         4,609         29,00           September         80         302         141         523         958         2,462         280         3,701         1,03         4,264         4,223         26,44           October         79         367         159         605         1,132         2,698         339         4,169         1,211         3,065         498         4,774         29,38           November         63         303         127	March			117		990	2,298			1,056	2,611	411		25,965
June         84         290         118         492         1,071         2,555         274         3,900         1,155         2,845         392         4,392         26,525           July         83         335         133         551         1,023         2,424         311         3,758         1,106         2,759         444         4,309         27,16           August         66         322         123         511         1,051         2,688         359         4,098         1,117         3,010         482         4,609         29,00           September         80         302         141         523         958         2,462         280         3,700         1,038         2,764         421         4,223         26,44           October         79         367         159         605         1,132         2,698         339         4,169         1,211         3,065         498         4,774         29,38           November         63         338         189         590         1,032         2,252         291         3,866         1,095         2,861         480         4,072         272           Total         82         393 <td></td> <td>24,272</td>														24,272
July         83         335         133         551         1,023         2,424         311         3,758         1,106         2,759         444         4,309         27,16           August         66         322         123         511         1,051         2,688         359         4,098         1,117         3,010         482         4,609         29,00           September         80         302         141         523         958         2,462         280         3,700         1,038         2,764         421         4,223         26,04           October         79         367         159         605         1,132         2,698         339         4,169         1,211         3,065         498         4,774         29,38           November         63         338         189         590         1,032         2,275         288         3,586         1,106         2,578         395         4,079         27,95           December         63         303         127         493         1,043         2,275         288         3,586         1,106         2,578         395         4,079         27,20           Total         820         1														27,085
August         66         322         123         511         1,051         2,688         359         4,098         1,117         3,010         482         4,609         29,00           September         80         302         141         523         958         2,462         280         3,700         1,038         2,764         421         4,223         26,44           October         79         367         159         605         1,132         2,698         339         4,169         1,211         3,065         498         4,774         29,38           November         63         338         189         590         1,032         2,523         291         3,846         1,095         2,861         480         4,436         27,95           December         63         303         127         493         1,043         2,275         268         3,586         1,095         2,861         480         4,436         27,95           December         82         39,715         1,610         6,148         12,151         28,766         3,517         44,434         12,974         32,481         5,127         50,582         317,81           2008         J														
September         80         302         141         523         958         2,462         280         3,700         1,038         2,764         421         4,223         26,44           October         79         367         159         605         1,132         2,698         339         4,169         1,211         3,065         498         4,774         29,38           November         63         338         189         590         1,032         2,523         291         3,846         1,095         2,861         480         4,436         27,98           December         63         303         127         493         1,043         2,275         268         3,586         1,106         2,578         395         4,079         27,20           Total         823         3,715         1,610         6,148         12,151         28,766         3,517         44,434         12,974         32,481         5,127         50,582         317,81           2008         January         85         299         145         529         1,140         2,320         275         3,735         1,225         2,619         420         4,264         26,43           Feb														
October         79         367         159         605         1,132         2,698         339         4,169         1,211         3,065         498         4,774         29,38           November         63         338         189         590         1,032         2,523         291         3,846         1,095         2,861         480         4,436         27,95           December         63         303         127         493         1,043         2,275         268         3,586         1,106         2,578         395         4,079         27,95           Total         823         3,715         1,610         6,148         12,151         28,766         3,517         44,434         12,974         32,481         5,127         50,582         317,81           2008 January         85         299         145         529         1,140         2,320         275         3,735         1,225         2,619         420         4,264         26,43           February         85         293         100         478         1,172         2,197         274         3,643         1,257         2,490         374         4,121         25,51           March	September													26,449
November         63         338         189         590         1,032         2,523         291         3,846         1,095         2,861         480         4,436         27,95           December         63         303         127         493         1,043         2,275         268         3,586         1,106         2,578         395         4,079         27,20           Total         823         3,715         1,610         6,148         12,151         28,766         3,517         44,434         12,974         32,481         5,127         50,582         317,81           2008 January         85         299         145         529         1,140         2,320         275         3,735         1,225         2,619         420         4,264         26,43           February         85         293         100         478         1,172         2,197         274         3,643         1,257         2,490         374         4,121         25,63           March         78         267         137         482         1,173         2,293         310         3,776         1,251         2,560         447         4,258         27,02           April <t< td=""><td>October</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>29.383</td></t<>	October													29.383
Total         823         3,715         1,610         6,148         12,151         28,766         3,517         44,434         12,974         32,481         5,127         50,582         317,81           2008 January         85         299         145         529         1,140         2,320         275         3,735         1,225         2,619         420         4,264         26,43           February         85         293         100         478         1,172         2,197         274         3,643         1,257         2,490         374         4,121         25,51           March         78         267         137         482         1,173         2,293         310         3,776         1,251         2,560         447         4,258         27,02           April         74         215         142         431         1,276         2,311         310         3,897         1,350         2,526         452         4,328         27,85           May         106         233         124         463         1,324         2,443         305         4,072         1,430         2,676         429         4,535         28,98           June         66 <td>November</td> <td>63</td> <td>338</td> <td>189</td> <td>590</td> <td></td> <td>2,523</td> <td>291</td> <td></td> <td></td> <td>2,861</td> <td>480</td> <td>4,436</td> <td>27,955</td>	November	63	338	189	590		2,523	291			2,861	480	4,436	27,955
2008 January         85         299         145         529         1,140         2,320         275         3,735         1,225         2,619         420         4,264         26,43           February         85         293         100         478         1,172         2,197         274         3,643         1,257         2,490         374         4,121         25,51           March         78         267         137         482         1,173         2,293         310         3,776         1,251         2,560         447         4,258         27,02           April         74         215         142         431         1,276         2,311         310         3,897         1,350         2,526         452         4,328         27,02           April         106         233         124         463         1,324         2,443         305         4,072         1,430         2,676         429         4,535         28,98           June         66         253         145         464         1,370         2,522         322         4,214         1,436         2,775         467         4,678         29,50           July         82         261	December		303	127	493		2,275	268			2,578			27,205
February         85         293         100         478         1,172         2,197         274         3,643         1,257         2,490         374         4,121         25,51           March         78         267         137         482         1,173         2,293         310         3,776         1,251         2,560         447         4,258         27,02           April         74         215         142         431         1,276         2,311         310         3,897         1,350         2,526         452         4,328         27,85           May         106         233         124         463         1,324         2,443         305         4,072         1,430         2,676         429         4,535         28,98           June         66         253         145         464         1,370         2,522         322         4,214         1,436         2,775         467         4,678         29,50           July         82         261         143         486         1,361         2,630         323         4,314         1,443         2,891         466         4,800         29,91           August         84         265	Total	823	3,715	1,610	6,148	12,151	28,766	3,517	44,434	12,974	32,481	5,127	50,582	317,818
March         78         267         137         482         1,173         2,293         310         3,776         1,251         2,560         447         4,258         27,02           April         74         215         142         431         1,276         2,311         310         3,897         1,350         2,526         452         4,328         27,02           May         106         233         124         463         1,324         2,443         305         4,072         1,430         2,676         429         4,535         28,89           June         66         253         145         464         1,370         2,522         322         4,214         1,436         2,775         467         4,678         29,50           July         82         261         143         486         1,361         2,630         323         4,314         1,436         2,775         467         4,678         29,50           July         82         261         143         486         1,361         2,630         323         4,314         1,443         2,891         466         4,800         29,91           August         84         265														26,434
April         74         215         142         431         1,276         2,311         310         3,897         1,350         2,526         452         4,328         27,85           May         106         233         124         463         1,324         2,443         305         4,072         1,430         2,676         429         4,535         28,98           June         66         253         145         464         1,370         2,522         322         4,214         1,436         2,775         467         4,678         29,50           July         82         261         143         486         1,361         2,630         323         4,314         1,443         2,891         466         4,800         29,91           August         84         265         157         506         1,415         2,775         347         4,537         1,499         3,040         504         5,043         31,87           September         99         256         156         511         1,507         2,722         350         4,579         1,606         2,978         506         5,043         31,87           October         101         251 <td></td> <td>25,512</td>														25,512
May         106         233         124         463         1,324         2,443         305         4,072         1,430         2,676         429         4,535         28,98           June         66         253         145         464         1,361         2,623         322         4,214         1,436         2,775         467         4,678         29,50           July         82         261         143         486         1,361         2,630         323         4,314         1,443         2,891         466         4,800         29,91           August         84         265         157         506         1,415         2,775         347         4,537         1,499         3,040         504         5,043         31,87           September         99         256         156         511         1,507         2,722         350         4,579         1,606         2,978         506         5,090         32,01           October         101         251         154         506         1,520         2,686         344         4,550         1,621         2,937         498         5,056         31,76           November         93         241<														27,858
June       66       253       145       464       1,370       2,522       322       4,214       1,436       2,775       467       4,678       29,50         July       82       261       143       486       1,361       2,630       323       4,314       1,443       2,891       466       4,800       29,91         August       84       265       157       506       1,415       2,775       347       4,537       1,499       3,040       504       5,043       31,878         September       99       256       156       511       1,507       2,722       350       4,579       1,606       2,978       506       5,090       32,01         October       101       251       154       506       1,520       2,686       344       4,550       1,621       2,937       498       5,056       31,76         November       93       241       152       486       1,543       2,574       341       4,458       1,636       2,815       493       4,944       31,05         December       85       228       139       452       1,426       2,366       308       4,100       1,511       2,5														28,988
July       82       261       143       486       1,361       2,630       323       4,314       1,443       2,891       466       4,800       29,91         August       84       265       157       506       1,415       2,775       347       4,537       1,499       3,040       504       5,043       31,87         September       99       256       156       511       1,507       2,722       350       4,579       1,606       2,978       506       5,090       32,01         October       101       251       154       506       1,520       2,686       344       4,550       1,621       2,937       498       5,056       31,76         November       93       241       152       486       1,543       2,574       341       4,458       1,636       2,815       493       4,944       31,05         December       85       228       139       452       1,426       2,366       308       4,100       1,511       2,594       447       4,552       28,69         Total       1,038       3,062       1,694       5,794       16,227       29,839       3,809       49,875       17,265 <td></td> <td>29,506</td>														29,506
August       84       265       157       506       1,415       2,775       347       4,537       1,499       3,040       504       5,043       31,87         September       99       256       156       511       1,507       2,722       350       4,579       1,606       2,978       506       5,090       32,01         October       101       251       154       506       1,520       2,686       344       4,550       1,621       2,937       498       5,056       31,76         November       93       241       152       486       1,543       2,574       341       4,458       1,636       2,815       493       4,944       31,05         December       85       228       139       452       1,426       2,366       308       4,100       1,511       2,594       447       4,552       28,69         Total       1,038       3,062       1,694       5,794       16,227       29,839       3,809       49,875       17,265       32,901       5,503       55,669       350,62						1,361								29,912
October       101       251       154       506       1,520       2,686       344       4,550       1,621       2,937       498       5,056       31,76         November       93       241       152       486       1,543       2,574       341       4,458       1,636       2,815       493       4,944       31,05         December       85       228       139       452       1,426       2,366       308       4,100       1,511       2,594       447       4,552       28,69         Total       1,038       3,062       1,694       5,794       16,227       29,839       3,809       49,875       17,265       32,901       5,503       55,669       350,62	August													31,870
November       93       241       152       486       1,543       2,574       341       4,458       1,636       2,815       493       4,944       31,05         December       85       228       139       452       1,426       2,366       308       4,100       1,511       2,594       447       4,552       28,69         Total       1,038       3,062       1,694       5,794       16,227       29,839       3,809       49,875       17,265       32,901       5,503       55,669       350,62														32,012
December	October													31,768
Total														
<b>2009</b> January		•	ŕ	•	·	,	,	,	·	,	,	,	,	24,873
			_	_	_	_					_			

Notes: • Prior to 1990, these well counts include only the original drilling of a hole intended to discover or further develop already discovered crude oil or natural gas resources. Other drilling activities, such as drilling an old well deeper, drilling of laterals from the original well, drilling of service and injection wells, and drilling for resources other than crude oil or natural gas are excluded. After 1990, a new well is defined as the first hole in the ground whether it is lateral or not. Due to the methodology used to estimate ultimate well counts from the available partially reported data, the counts shown on this page are frequently revised. See Note,

"Crude Oil and Natural Gas Exploratory and Development Wells," at end of section.

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

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

Sources: • 1973-1989: 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.

Table 5.3 Maximum U.S. Active Seismic Crew Counts

(Number of Crews)

	48 States, Onshore				48 States,	Offshorea		Alaska <sup>b</sup>					
	ļ	Dimensions	C		D	imensions	С		D	imensions	c		
	2	3	4	Totald	2	3	4	Total <sup>d</sup>	2	3	4	Totald	Total
<b>000</b> August	4	40	1	45	7	7	0	15	0	1	0	1	61
<b>:001</b> August	8	32	1	41	7 7	8	0	15	0	0	0	0	56
002 August	7	26	0	33	8	7	0	15	1	1	0	2	50
003 August	8	22	0	30	7	4	0	11	1	1	0	2	43
004 January	8	25	0	33	5	5	0	10	0	0	0	0	43
February	8	27	Ŏ	33 35 35	5 5 5	5	ő	10	ŏ	ŏ	Ŏ	ŏ	45
March	8	27	Ö	35	5	5	Ö	10	Ö	Ö	Ö	Ö	45
April	9	27	0	36	5	4	Ō	9	Ō	0	0	Ō	45
May	9	26	0	35	5	4	0	9	0	0	0	0	44
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
September	8	32	0	40	4	2	0	6	0	2	0	2	48
October	8	34	0	42	2	2	0	4	0	2	0	2	48
November	9	33	0	42	1	4	0	5	0	2	0	2	49
December	9	32	0	41	3	4	0	7	0	2	0	2	50
<b>005</b> January	8	33	0	41	5	4	0	9	0	2	0	2	52
February	8	34	Ö	42	5	4	Ö	9	ŏ	2	Ö	2	53
March	6	33	Ŏ	39	6	6	ŏ	12	ŏ	ō	ŏ	ō	51
April	8	30	Ŏ	38	6	6	ŏ	12	ŏ	ŏ	ŏ	Ŏ	50
May	8	34	Ö	42	7	6	Ö	13	Ö	Ö	Ö	Ö	55
June	9	35	Ö	44	7	5	Ö	12	Ö	ī	Ö	Ĭ	57
July	8	34	Ö	42	6	5	Ö	11	Ö	1	Ö	1	54
August	8	35	Ö	43	6	5	Ö	11	Ö	1	Ö	1	55
September	7	37	0	44	6	5	Ō	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
006 January	5	38	0	43	6	5	0	11	0	1	0	1	55
February	5	39	Ŏ	44	6	6	ŏ	12	ŏ	i	ŏ	1	57
March	4	42	Ŏ	46	6	6	ŏ	12	ŏ	1	ŏ	1	59
April	4	42	Ö	46		6	Ö	11	Ö	1	Ö	1	58
May	4	42	0	46	5 5 7	6	0	11	0	1	0	1	58
June	9	35	0	44	7	5	Ō	12	Ō	1	0	1	57
July	5	51	0	56	4	5	0	9	0	1	0	1	66
August	4	49	0	53	3	5	0	8	0	1	0	1	62
September	4	51	0	55	2	5	Ō	7	0	1	0	1	63
October	5	51	0	56	2	5	0	7	0	1	0	1	64
November	5	51	0	56	2 2 3	5	0	8	0	1	0	1	65
December	5	50	0	55	3	5	0	8	0	1	0	1	64
<b>007</b> <u>January</u>	3	51	0	54	3	5	0	8	0	1	0	1	63
February	3	51	0	54	3	5	0	8	0	i	Ö	1	63
March	4	55	0	59	3	5	0	8	0	i	0	1	68
April	4	55	0	59	4	6	1	11	0	i	0	i	71
May	3	55 55	0	58	4	6	1	11	0	1	0	i	70
June	3	55	0	58	3	6	1	10	Ö	i	0	i	69
July	2	57	0	59	3	6	1	10	0	Ö	0	Ö	69
August	2	56	0	58	4	8	1	13	0	0	0	0	71
September	3	58	0	61	3	8	1	12	ő	Õ	Ö	ő	73
October	4	60	Ö	65	3	8	i	12	ŏ	ő	Ö	ŏ	77
November	4	60	Ŏ	65	3	10	1	14	ŏ	ŏ	ŏ	Ŏ	79
December	5	54	Ŏ	60	4	10	i	15	Ö	Ŏ	Ŏ	Ŏ	75
008 <u>J</u> anuary	6	55	0	61	4	10	1	15	0	0	0	0	76
February	6	55 55	0	61	4	11	1	16	0	0	0	0	77
March	6	54	Ö	60	3	11	1	15	Ö	ő	Ö	Ö	75
April	4	53	Ö	57	3	11	1	15	Ö	ő	Ö	Ö	72
May	4	54	Ö	58	3	11	1	15	Ö	ő	Ö	Ö	73
June	2	56	Ö	58	3	11	1	15	Ö	ő	Ö	0	73
	2	58	0	60	3	8	1	12	0	0	0	0	72 73 73 72 72
July													

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

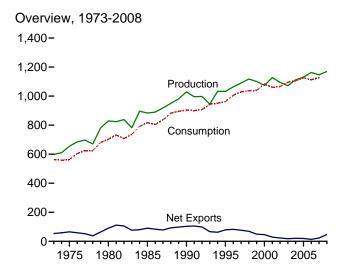
completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported well completions proved to be an inaccurate indicator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

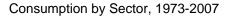
# Coal

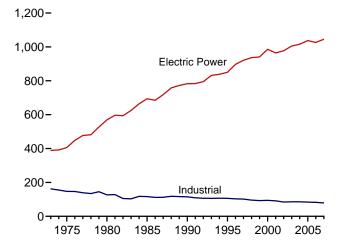


Coal yard, Curtis Bay, Maryland. Source: U.S. Department of Energy.

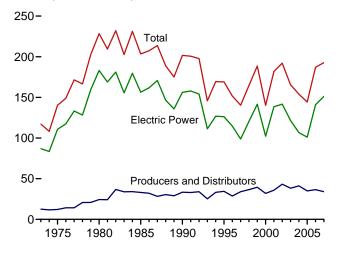
Figure 6.1 Coal (Million Short Tons)



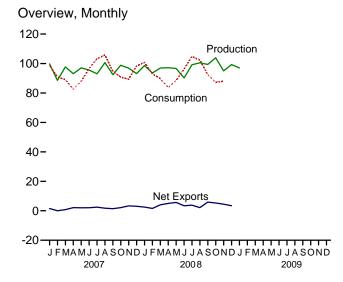




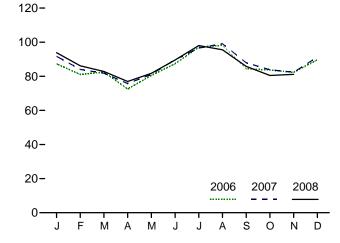
#### Stocks, End of Year, 1973-2007



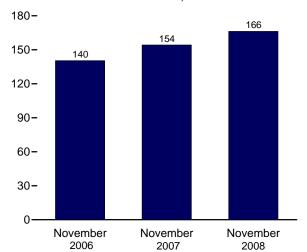
Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/coal.html. Sources: Tables 6.1, 6.2, and 6.3.



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>	Suppliedb	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
		9,052	16,875	39,601	-22,726	10,215	4,040	1,066,355
2002 Total	1,094,283 1.071.753	10.016	25.044	43.014	-22,726 -17,970	-26.659	-4,403	1,066,355
2003 Total	1,071,753		25,044 27,280		-20.718		-4,403 6.887	
2004 Total		11,299		47,998		-11,462		1,107,255
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
February	89,033	1,113	2,715	2,656	60	1,938	37	88,231
March	101,490	1,223	3,211	3,817	-606	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	R -5,583	R 6,042	R 98,738
February	88,580	1,096	2,656	2,685	-28	R -4,877	<sup>R</sup> 3,555	R 90,970
March	97,677	1,191	3,285	4,086	-801	<sup>R</sup> 7,109	<sup>R</sup> 1,938	R 89,019
April	93,084	1,087	2,687	4,841	-2,154	R 7,902	R 1,575	R 82,540
May	97,038	1,049	2,691	4,747	-2,056	R 4,435	R 3,585	R 88,010
June	95,566	1,247	3,027	5.114	-2.087	R -600	R -1,230	R 96,556
July	93,003	1,255	3,373	5,812	-2,438	R -9,987	R -1,476	R 103,282
August	100,627	1,315	3,716	5,471	-1.756	R -5.938	R 338	R 105,787
September	92,404	1,203	3,470	4,914	-1,445	R 1,129	R -3,563	<sup>R</sup> 94,596
October	98.825	1,254	2.896	5.019	-2.123	R 8.357	R -1,221	R 90,821
November	96,910	1,189	2,889	6,245	-3,355	R 5,100	R 334	R 89,310
December	93.138	1.263	2.812	5.861	-3.050	R -1,237	R -5,781	R 98,369
Total	1,146,635	14,087	36,347	59,163	-22,816	R 5,812	R <b>4,096</b>	R 1,127,998
2008 January	98.619	1,340	2,381	4,915	-2,535	R -8.200	R 4.877	100,746
February	93.555	1,208	2,619	4,205	-1.586	-3.392	3.609	92.961
March	96,933	1,085	2,640	6,682	-4.041	4,948	-713	89,742
	97,149	1,121	2,985	7,979	-4,994	6,677	2,940	83,660
April	97,149 96.585	1,121	2,985 2.702	7,979 8.394	-4,994 -5.692	6,677 4.725	2,9 <del>4</del> 0 -1.143	88.501
May	90,199	1,324	3,295	6,695	-3,401	-4,725 -4,859	-1,143 -3,247	96,228
June	90,199	1,324	3,295 2.569	6,695	-3,401 -3.835	-4,659 -12.674	-3,247 4,526	104.738
July								
August	100,458	1,287	3,144	5,264	-2,120	-2,476	-262	102,363
September	99,381	1,308	2,772	8,653	-5,881	5,362	-2,951 R 504	92,397
October	103,886	F 1,258	2,921	8,233	-5,312	R 11,964	R 504	R 87,363
November	94,991	RF 1,258	2,988	7,460	-4,472 R 0.444	R 7,595	R -3,722	R 87,904
December Total	99,271 <b>1,170,188</b>	NA <b>NA</b>	<sup>R</sup> 3,192 <sup>R</sup> <b>34,208</b>	<sup>R</sup> 6,636 <sup>R</sup> <b>81,519</b>	<sup>R</sup> -3,444 <sup>R</sup> <b>-47,311</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>
	-,,		,=	,• .•	,•		••••	

<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

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

<sup>c</sup> Net imports equal imports minus exports. Minus sign indicates exports are

greater than imports.

<sup>d</sup> A negative value indicates a decrease in stocks; a positive value indicates an

e "Losses and Unaccounted for" is calculated as the sum of production, imports,

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

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

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

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

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

Sources: See end of section.

Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

-					End-l	Jse Sectors	s					
			Commerci	ial			Industrial					
	Desi				Caka	0	ther Industria	al			Electric	
	Resi- dential	СНРа	<b>O</b> ther <sup>b</sup>	Total	Coke Plants	CHPC	Non-CHP <sup>d</sup>	Total	Total	Trans- portation	Power Sector <sup>e,f</sup>	Total
1973 Total	4,113 2.823	(g)	7,004	7,004	94,101	(h)	68,038	68,038	162,139 147,244	116 24	389,212	562,584 562,640
1975 Total 1980 Total	1,355	(9)	6,587 5,097	6,587 5,097	83,598 66,657	(h)	63,646 60,347	63,646 60,347	127,004	(h) 24	405,962 569,274	702,730
1985 Total	1,711	(9)	6,068	6,068	41,056	(h)	75,372	75,372	116,429	(h)	693,841	818,049
1990 Total	1,345	1,191	4,189	5,379	38,877	27,781	48,549	76,330	115,207	( h )	782,567	904,498
1995 Total	755	1,419	3,633	5,052	33,011	29,363	43,693	73,055	106,067	( h )	850,230	962,104
1996 Total	721	1,660	3,625	5,285	31,706	29,434	42,254	71,689	103,395	(h)	896,921	1,006,321
1997 Total	711	1,738	4,015	5,752	30,203	29,853	41,661	71,515	101,718	(h)	921,364	1,029,544
1998 Total	534 585	1,443 1,490	2,879	4,322	28,189	28,553	38,887	67,439	95,628	(")	936,619	1,037,103
1999 Total 2000 Total	585 454	1,490	2,803 2,126	4,293 3.673	28,108 28,939	27,763 28.031	36,975 37,177	64,738 65,208	92,846 94.147	( ii )	940,922 985,821	1,038,647 1,084,095
2001 Total	481	1,448	2,120	3,888	26,075	25,755	39,514	65,268	91,344	}h{	964,433	1,060,146
2002 Total	533	1,405	2,506	3,912	23,656	26,232	34,515	60,747	84,403	(h)	977,507	1,066,355
2003 Total	551	1,816	1,869	3,685	24,248	24,846	36,415	61,261	85,509	(h)	1,005,116	1,094,861
2004 Total	512	1,917	2,693	4,610	23,670	26,613	35,582	62,195	85,865	(h)	1,016,268	1,107,255
2005 Total	378	1,922	2,420	4,342	23,434	25,875	34,465	60,340	83,774	(h)	1,037,485	1,125,978
2006 January	27	186	130	316	1,879	2,217	2,866	5,083	6,961	( h )	87,317	94,621
February	25	169	118	287	1,830	2,024	3,023	5,046	6,876	(h) (h)	81,043	88,231
March	25	170	118	288	2,005	2,115	2,945	5,060	7,065	( '' ) ( h )	82,499	89,877
April	16 17	134 139	56 58	189 197	1,862 1,968	2,050 2,059	2,742 2,735	4,792 4,794	6,654 6,762	(h)	72,560 80,515	79,419 87,490
May June	18	147	61	208	1,939	2,059	2,735 2,710	4,794 4,814	6,753	( h )	87,319	94,298
July	18	163	46	208	1,933	2,202	2,671	4,872	6,806	}h {	97,113	104,145
August	18	163	46	209	1,911	2,202	2,675	4,877	6,788	ìh;	98,183	105,198
September	15	138	39	177	1,939	2,061	2,815	4,876	6,815	(h)	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 Total	30 <b>258</b>	183 <b>1,886</b>	158 <b>1,083</b>	341 <b>2,968</b>	1,733 <b>22,957</b>	2,136 <b>25,262</b>	2,949 <b>34,210</b>	5,085 <b>59,472</b>	6,818 <b>82,429</b>	(h) (h)	89,742 <b>1,026,636</b>	96,930 <b>1,112,292</b>
		R 191	R 149	,				ŕ	ŕ	(h)		
2007 January February	30 29	R 186	R 144	340 330	1,818 1,730	R 2,003 R 1,876	<sup>R</sup> 2,861 <sup>R</sup> 2,978	4,864 4,855	6,682 6,585	(h)	<sup>R</sup> 91,686 <sup>R</sup> 84,026	<sup>R</sup> 98,738 <sup>R</sup> 90,970
March	26	171	133	303	2,027	R 1,956	R 2,904	4,859	6,887	\h \	R 81,803	<sup>R</sup> 89,019
April	19	<sup>R</sup> 146	R 76	222	1,865	R 1,850	R 2.832	4,682	6,547	ìh;	R 75,751	R 82,540
May	19	R 143	R 74	217	1,950	R 1,857	R 2,827	4,684	6,634	(hí	R 81,140	R 88,010
June	18	137	R 72	210	1,921	R 1,845	R 2,862	4,707	6,629	( h )	R 89,699	R 96,556
July	19	R 151	R 63	214	1,913	R 1,868	R 2,721	4,589	6,501	( h )	R 96,548	R 103,282
August	20	R 162	R 67	229	1,883	R 1,912	R 2,657	4,569	6,452	(h) (h)	R 99,086	R 105,787
September October	18 24	<sup>R</sup> 145 <sup>R</sup> 142	<sup>R</sup> 60 <sup>R</sup> 138	206 280	1,882 1,957	R 1,765 R 1,830	R 2,803 R 2,919	4,568 4,749	6,450 6,706	( '' ) ( h )	<sup>R</sup> 87,922 <sup>R</sup> 83,810	<sup>R</sup> 94,596 <sup>R</sup> 90.821
November	29	R 169	163	333	1,810	R 1,830	R 2,919	4,749 4,746	6,706	(h)	R 82,393	R 89,310
December	31	183	177	360	1,958	R 1,945	R 2,799	4,744	6,702	λh ί	R 91,276	R 98,369
Total	282	R 1,927	R 1,317	3,244	22,715	R 22,537	R <b>34,078</b>	56,615	79,331	(h)	R 1,045,141	R 1,127,998
2008 January	29	198	136	333	1,834	1,940	2,753	4,693	6,527	( h )	93,856	100,746
February	27	185	127	312	1,792	1,938	2,715	4,654	6,445	( h )	86,176	92,961
March	27	183	126	308	1,910	1,925	2,744	4,669	6,579	( '' ) ( h )	82,828	89,742
April	19 19	160 163	54 55	214 218	1,864 1,911	1,910 2,020	2,709 2,593	4,619 4,613	6,483 6,524	( '' ) ( h )	76,945 81,739	83,660 88,501
May June	22	187	63	218	1,805	1,951	2,593 2,653	4,613	6,524 6,410	(h)	81,739 89,546	96,228
July	20	182	44	227	1,915	2,041	2,500	4,542	6,457	(h)	98,035	104,738
August	20	188	46	234	2,034	1,967	2,565	4,533	6,567	(h)	95,542	102,363
September	19	175	42	217	1 818	1,987	2 513	4 501	6.319	(h)	85,843	92,397
October	F 22	164	F 87	F 251	F 2,011	2,000	RE 2,604	RF 4,605	RF 6,616	(h)	80,475	R 87,363
November	F 31	179	F 174	<sup>+</sup> 353	1,884	1,908	E 2,594	F 4,503	<sup>F</sup> 6,387	(h)	81,134	87,904
11-Month Total	<sup>⊵</sup> 254	1,965	<sup>E</sup> 953	E 2,917	<sup>1</sup> 20,779	21,589	E 28,945	E 50,534	<sup>E</sup> 71,313	(h)	952,119	1,026,603
2007 11-Month Total 2006 11-Month Total	251 229	1,743 1,703	1,141 925	2,884 2,628	20,758 21,224	20,592 23,126	31,279 31,261	51,871 54,387	72,629 75,611	(h)	953,866 936,894	1,029,629 1,015,362

<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, "Classification of Power Plants Into Energy-Use Sectors," at end of

See Note, "Classification of Power Plants Into Energy-Use Sectors," 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, "Classification of Power Plants Into Energy-Use Sectors," 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-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

<sup>f</sup> Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.

<sup>1989,</sup> data also include consumption at independent power producers.

g Included in "Commercial Other."
 h Included in "Industrial Non-CHP."

<sup>&</sup>quot;Included in "Industrial Non-CHP."

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

Notes: • CHP monthly values are from Table 7.4c; electric power sector monthly values are from Table 7.4b; all other monthly values are estimates derived from collected quarterly and annual data. See Note 2, "Coal Consumption," at end of section. • Data values preceded by "F" are derived from the Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not complete the proposet due to independent rounding. • Geographic coverge. 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	ì			
	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 NA	1,494	4,587	6,081	6,081	102,296	140,282
2001 Year	35,900 43,357	NA NA	1,510	6,006 5,703	7,516	7,516	138,496	181,912
2002 Year 2003 Year	43,257 38,277	NA NA	1,364 905	5,792 4,718	7,156 5,623	7,156 5,623	141,714 121,567	192,127 165,468
2004 Year	38,277 41.151	NA NA	905 1.344	4,718 4,842	5,623 6,186	5,623 6.186	121,567	155,468
2005 Year	34,971	NA 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 December	35,752 <b>36,548</b>	NA <b>NA</b>	2,876 <b>2,928</b>	6,383 <b>6,506</b>	9,259 <b>9,434</b>	9,259 <b>9,434</b>	140,442 <b>140,964</b>	185,453 <b>186,946</b>
	·		,	,	ŕ	,	,	,
2007 January	35,986	NA NA	2,745	6,256	9,001	9,001	<sup>R</sup> 136,377 <sup>R</sup> 133,468	R 181,363
February	34,450 34,007	NA NA	2,561 2.444	6,006 5,756	8,568 8,200	8,568 8,200	R 141.389	<sup>R</sup> 176,486 <sup>R</sup> 183.595
March April	34,007 33.695	NA NA	2, <del>444</del> 2.417	5,756	8,200 8.145	8,200 8.145	R 149.657	R 191,498
May	33,107	NA NA	2,417	5,700	8,091	8,091	R 154,735	R 195,933
June	32,484	NA NA	2,364	5,672	8,037	8,037	R 154,733	R 195,333
July	31,967	NA	2,211	5,719	7,929	7,929	R 145.450	R 185,346
August	30,885	NA	2,091	5,765	7,856	7,856	R 140,668	R 179,409
September	30.090	NA	1,972	5,811	7,783	7.783	R 142.666	R 180.538
October	31,112	NA	1,960	5,748	7,708	7,708	R 150,075	R 188,895
November	32.069	NA	1,948	5,686	7.634	7.634	R 154,292	R 193,995
December	33,977	NA	1,936	5,624	7,560	7,560	R 151,221	R 192,758
2008 January	28,258	<sup>F</sup> 467	1,778	5,348	7,126	7,593	148,707	184,558
February	30,009	F 453	1,620	5,073	6,693	7,146	144,011	181,166
March	32,464	438	1,462	4,797	6,259	6,697	146,952	186,113
April	33,569	454	1,560	4,858	6,418	6,872	152,349	192,790
May	32,047	469	1,658	4,919	6,577	7,046	158,422	197,515
June	31,395	484	1,756	4,980	6,736	7,220	154,041	192,656
July	29,744	491	1,828	5,056	6,884	7,375	142,863	179,982
August	28,019	498	1,899	5,132	7,031	7,530	141,957	177,506
September	30,235	506	1,971	5,208	7,179	7,685	144,948	182,868
October	F 29,478	F 490	F 2,012	RF 5,299	RF 7,311	RF 7,801	157,552	R 194,832
November	F 28,206	<sup>F</sup> 475	<sup>F</sup> 2,054	<sup>F</sup> 5,394	<sup>F</sup> 7,448	<sup>F</sup> 7,923	166,298	202,427

<sup>&</sup>lt;sup>a</sup> Through 1977, data are for stocks held by the manufacturing and ansportation sectors. Beginning in 1978, data are for stocks held at transportation sectors.

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, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia 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.

transportation sectors. Beginning in 1978, data are for stocks neig at manufacturing plants only.

<sup>b</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.

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

\*\*P=Power Main Main Product and Property of the Power Producers of the Power Property of the Power Property of the Power Producers of the Power Property of the Power Producers of the Power Pro

# Coal

**Note 1. Coal 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. Coal Consumption.** Coal consumption data are reported by major end-use sector. Forecast data (designated by an "F") are derived from forecasted values shown

in the 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, and construction consumption data were included where appropriate. Starting in 2008, quarterly consumption totals for other industrial coal include data for manufacturing and mining only. Over time, surveyed coal consumption data for agriculture, forestry, fishing and construction dwindled to about 20,000 to 30,000 tons annually. Therefore, in 2008, EIA consolidated its programs by eliminating agriculture, forestry, fishing, and construction as surveyed sectors. 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. Indices for six major industry groups are used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 333; paper manufacturing, NAICS 322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324; non-metallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights.

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

**Note 3. Coal Stocks.** Coal stocks data are reported by major end-use sector. Forecast data for the most recent months (designated by an "F") are derived from forecasted values shown in the 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. Coal Forecast Values**. Data values preceded by "F" in this section are forecast values. They are derived from EIA's Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

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

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

# **Table 6.1 Sources**

#### Production

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

October 1977 forward: 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.

1998-2007: EIA, Form EIA-6A, "Coal Distribution Report," annual.

2008: EIA, Form EIA-7A, "Coal Production Report," annual, and Form EIA-8A, "Coal Stocks Report," annual; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Residential and Commercial**

1973–1976: DOI, BOM, Minerals Yearbook.

January-September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks." October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."

2008: 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**

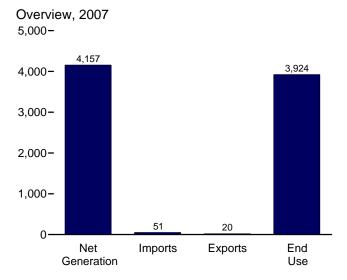
Table 7.5.

# **Electricity**



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

Figure 7.1 Electricity Overview (Billion Kilowatthours)





Net Generation, 2007

4,005

Electric

Power

Commercial

Totala

Electric Power

5,000-

4,000-

3,000-

2,000-

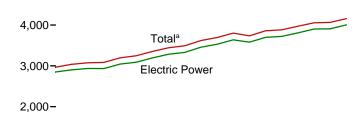
1,000-

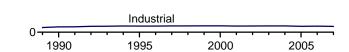
400-

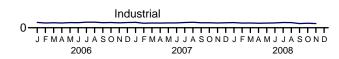
300-

200-

100-





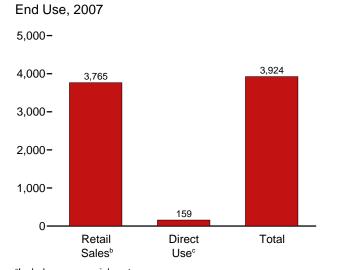


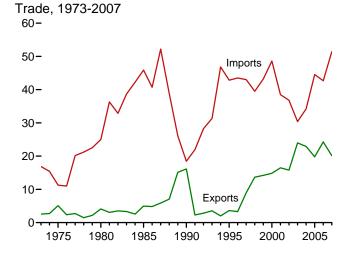
4,157

Total

143

Industrial





<sup>a</sup>Includes commercial sector. <sup>b</sup>Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

°See "Direct Use" in Glossary.

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Source: Table 7.1.

1,000-

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	Importsd	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	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 1996 Total	3,194 3,284	8 9	151 151	3,353 3,444	43 43	4 3	39 40	229 231	3,013 3,101	151 153	3,164 3,254
1997 Total	3,329	9	154	3,444	43	9	34	224	3,146	156	3,234
1998 Total	3,457	9	154	3,620	40	14	26	221	3,264	161	3,425
1999 Total	3,530	9	156	3,695	43	14	29	240	3,312	172	3,484
2000 Total	3,638	8	157	3,802	49	15	34	244	3,421	171	3,592
2001 Total	3,580	7	149	3,737	39	16	22	202	3,394	163	3,557
2002 Total	3,698	7	153	3,858	37	16	21	248	3,465	166	3,632
2003 Total	3,721	7	155	3,883	30	24	6	228	3,494	168	3,662
2004 Total	3,808	8	154	3,971	34	23	11	266	3,547	168	3,716
2005 Total	3,902	8	145	4,055	45	20	25	269	3,661	150	3,811
2006 January	315	1	13	329	4	2	1	13	305	E 13	317
February	295	1	11	307	3	2	2	17	281	E 11 E 12	292
March	306 286	1 1	12 11	319 298	4 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	E 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	R 340	1	13	R 354	3	2	2	R 26	R 315	RE 14	R 329
February	R 312	1	11	R 323	4	1	3	<sup>R</sup> 13 <sup>R</sup> 18	301 R 200	RE 12 RE 13	R 313
March	<sup>R</sup> 308 <sup>R</sup> 291	1 1	R 11	<sup>R</sup> 320 <sup>R</sup> 303	4 4	2 1	2 3	* 18 <sup>R</sup> 18	R 292 R 275	RE 12	<sup>R</sup> 304 <sup>R</sup> 288
April May	318	1	11 12	R 330	5	1	3	R 28	R 293	RE 13	R 306
June	350	1	12	363	4	1	3	R 30	R 323	RE 13	R 336
July	380	i	13	R 393	<sup>R</sup> 6	2	4	R 30	R 353	RE 14	R 367
August	408	1	13	422	5	2	3	R 37	R 373	RE 15	R 388
September	R 343	1	12	355	4	2	1	<sup>R</sup> 6	R 338	RE 13	<sup>R</sup> 351
October	_ 320	1	12	333	4	2	2	<sup>R</sup> 13	R 308	RE 13	R 321
November	R 302	1	12	314	4	2	3	R 18	R 286	RE 13	R 299
December	334	1 R <b>8</b>	12	R 346	4	2	2	R 27	R 308	RE 13	R 321
Total	R <b>4,005</b>	.,8	R 143	<sup>R</sup> 4,157	51	20	31	R <b>264</b>	R 3,765	R 159	R 3,924
2008 January	350	1	12	363	5	2	3	R 25	327	RE 14	R 341
February	314	1	11	326	5	2	3	R 10	307	RE 13	R 319
March	313	1	11 11	325	5 4	3 1	2	<sup>R</sup> 18 <sup>R</sup> 15	296 279	RE 13 RE 12	R 308 R 291
April	292 314	1	11 11	303 326	4 5	1 3	3 2	* 15 R 24	279	RE 12	R 304
May June	361	1	12	326 374	5 6	3	3	R 34	329	RE 13	R 342
July	389	1	13	402	6	2	4	R 30	363	RE 14	R 377
August	374	i	12	387	6	1	4	R 23	355	<sup>RE</sup> 14	R 369
September	326	1	10	337	5	2	3	R 3	325	RE 11	R 337
October	307	1	11	319	4	2	2	<sup>R</sup> 15	293	RE 12	<sup>R</sup> 305
November	300	1	10	311	_3	2	1	21	280	E 11	291
11-Month Total	3,639	8	125	3,772	54	23	31	219	3,445	E 139	3,584
2007 11-Month Total 2006 11-Month Total	3,672 3,585	8 8	131 136	3,810 3,728	47 39	18 23	29 16	237 240	3,457 3,370	E 146 E 134	3,603 3,504

<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

kilowatthours.

Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent

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

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

<sup>c</sup> Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. Through 1988, data are for industrial hydroelectric power only.

<sup>d</sup> 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.

f Data collection frame differences and nonsampling error.

<sup>&</sup>lt;sup>g</sup> Electricity retail sales to ultimate customers by electric utilities and, beginning in 1996, other energy service providers.

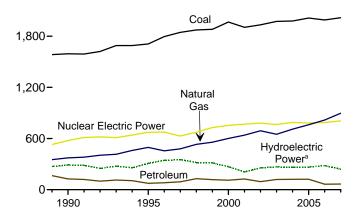
h Use of electricity that is 1) self-generated, 2) produced by either the same

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.

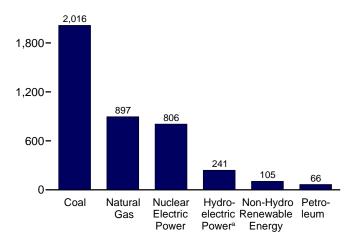
R=Revised. E=Estimate. NA=Not available. (s)=Less than 0.5 billion

Figure 7.2 Electricity Net Generation (Billion Kilowatthours)

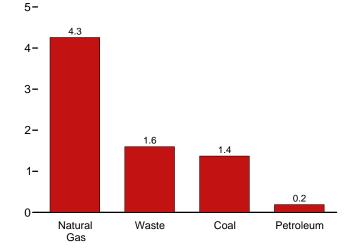
Total (All Sectors), Major Sources, 1989-2007 2,400-



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



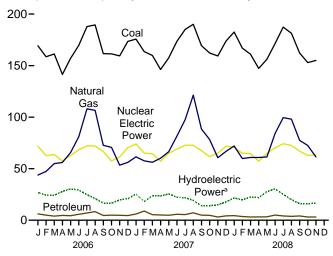
Commercial Sector, Major Sources, 2007



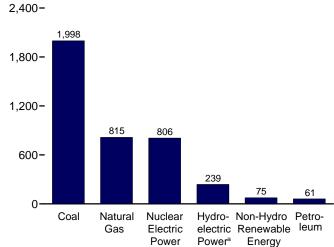
<sup>a</sup>Conventional and pumped storage hydroelectric power.

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

Total (All Sectors), Major Sources, Monthly

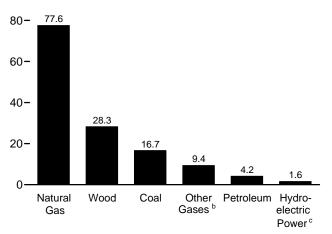


Electric Power Sector, Major Sources, 2007



Industrial Sector, Major Sources, 2007

100-



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						
	0	Petro-	Natural	Other	Nuclear Electric	Hydro- electric Pumped	Conventional Hydroelectric		mass	Geo-	Solar/-	\A/:I	Tatali
	Coala	leum <sup>b</sup>	Gas <sup>c</sup>	Gasesd	Power	Storagee	Power	Wood <sup>†</sup>	Waste <sup>9</sup>	thermal	<b>PV</b> <sup>h</sup>	Wind	Total
1973 Total	847,651	314,343	340,858	NA	83,479	( <sup>j</sup> )	275,431	130	198	1,966	NA	NA	1,864,057
975 Total	852,786	289,095	299,778	NA	172,505	(i)	303,153	18	174	3,246	NA	NA	1,920,755
980 Total	,	245,994	346,240	NA	251,116	(i)	279,182	275	158	5,073	NA	NA	2,289,600
1985 Total		100,202	291,946	NA	383,691	(i)	284,311	743	640	9,325	11	6	2,473,002
1990 Total k	1,594,011	126,621	372,765	10,383	576,862	-3,508	292,866	32,522	13,260	15,434	367	2,789	3,037,988
995 Total		74,554	496,058	13,870	673,402	-2,725	310,833	36,521	20,405	13,378	497	3,164	3,353,487
996 Total		81,411	455,056	14,356	674,729	-3,088	347,162	36,800	20,911	14,329	521	3,234	3,444,188
997 Total		92,555	479,399	13,351	628,644	-4,040	356,453	36,948	21,709	14,726	511	3,288	3,492,172
998 Total		128,800	531,257	13,492	673,702	-4,467	323,336	36,338	22,448	14,774	502	3,026	3,620,295
999 Total		118,061 111,221	556,396 601,038	14,126 13,955	728,254 753,893	-6,097 -5,539	319,536 275,573	37,041 37,595	22,572 23,131	14,827 14,093	495 493	4,488 5,593	3,694,810
2000 Total 2001 Total		124,880	639,129	9,039	768,826	-8,823	216,961	35,200	14,548	13,741	543	6,737	3,802,105 3,736,644
002 Total		94,567	691,006	11,463	780,064	-8,743	264,329	38,665	15,044	14,491	555	10,354	3,858,452
2003 Total	1.973.737	119,406	649,908	15,600	763,733	-8,535	275,806	37,529	15,812	14,424	534	11,187	3,883,185
004 Total	R 1 978 301	R 121,145	R 710,100	R 15,252	788,528	-8,488	268,417	R 38,117	R 15,421	14,811	575	14,144	3,970,555
2005 Total	R 2,012,873	R 122,225	R 760,960	R 13,464	781,986	-6,558	270,321	R 38,856	R 15,420	14,692	550	17,811	4,055,423
006 January	R 169,236	<sup>R</sup> 6,136	R 43,807	R 1,157	71,912	-533	27,437	R 3,422	R 1,388	1,230	13	2,383	328,658
February	R 158,616	R 4,923	R 47,409	R 1,114	62,616	-447	24,762	R 3,051	R 1,270	1,111	20	1,922	307,333
March	R 161,325	R 4,013	R 54,922	R 1,234	63,721	-435	24,625	R 3,201	R 1,344	1,261	33	2,359	318,730
April	R 141,426	R 4,690	R 56,091	R 1,180	57,567	-587	28,556	R 2,980	<sup>R</sup> 1,227	1,129	52	2,472	297,858
May	R 157,010	R 4,420	R 65,586	R 1,295	62,776	-444	30,818	R 3,039	1,371	1,096	71	2,459	330,616
June	R 169,693	R 5,766	R 81,060	R 1,167	68,391	-423	29,757	R 3,134	1,328	1,199	70	2,052	364,260
July	R 187,821	R 7,002	R 108,094	R 1,267	72,186	-638	25,439	R 3,444	R 1,399	1,261	62	1,955	410,42
August	R 189,455 R 161,590	R 8,360	R 106,592	R 1,292	72,016	-695	21,728	R 3,478	R 1,389	1,289	83	1,655	407,763
September October	R 161,390	R 4,645 R 4,893	<sup>R</sup> 72,673 <sup>R</sup> 70,640	R 1,153 R 1,185	66,642 57,509	-629 -507	17,201 17,055	R 3,260 R 3,213	R 1,308 R 1,332	1,219 1,275	54 32	1,879 2,442	332,055 321,567
November	R 159,440	R 4,747	R 53.440	R 1,065	61,392	-553	20,272	R 3,182	R 1,359	1,275	16	2,442	309,159
December	R 173,509	R 4,570	R 56,128	R 1.068	70,490	-667	21,596	R 3,358	R 1,382	1,290	3	2,472	336,283
Total	R 1,990,511	R 64,166	R 816,441	R 14,177	787,219	-6,558	289,246	R 38,762	R 16,099	14,568	508	26,589	4,064,702
007 January	R 175,739	<sup>R</sup> 5,994	R 61,475	R 1,154	74,006	-572	R 26,045	R 3,536	R 1,371	R 1,296	13	R 2,452	R 353,531
February	R 163,603	R 8,884	R 57,622	<sup>R</sup> 981	65,225	-447	R 18,567	R 3,015	R 1,200	R 1,122	19	R 2,520	R 323,230
March	R 159,811	<sup>R</sup> 5,416	<sup>R</sup> 56,204	R 1,234	64,305	-458	R 24,163	R 3,106	R 1,373	R 1,204	48	R 3,047	R 320,47
April	R 146,250	<sup>R</sup> 5,080	<sup>R</sup> 60,153	<sup>R</sup> 1,163	57,301	-374	<sup>R</sup> 23,891	R 3,055	R 1,254	<sup>R</sup> 1,158	54	R 3,172	R 303,129
May	R 157,513	R 4,873	<sup>R</sup> 66,470	R 1,175	65,025	-547	R 26,047	R 3,081	R 1,349	R 1,155	84	R 2,952	R 330,203
June	R 173,513	R 5,777	R 81,511	R 1,154	68,923	-523	R 22,817	R 3,213	R 1,392	R 1,238	84	R 2,620	R 362,75
July	R 185,054	R 5,494	R 97,483	R 1,154	<sup>R</sup> 72,739	-595	R 22,478	R 3,434	R 1,443	R 1,250	86	R 2,158	R 393,226
August	R 190,135 R 169,391	<sup>R</sup> 7,187 <sup>R</sup> 4,936	R 121,338 R 88,532	R 1,132 R 1,120	72,751 R 67,579	-651 R -743	R 19,941 R 14,743	R 3,426 R 3,290	R 1,440 R 1,400	R 1,255 R 1,218	75 68	R 2,699 R 2,867	R 421,797 R 355,394
September October	R 162,234	R 4,747	R 78,358	R 1,120	61,690	R -743	R 14,743	R 3,246	R 1,400	R 1,216	R 49	R 3,377	R 332,61
November	R 159,382	R 3,136	R 60,637	R 1,031	R 64,899	R -662	R 15,682	R 3,273	R 1,425	R 1,211	R 24	R 3.095	R 314.103
December	R 173.830	R 4,215	R 66,808	R 1,022	71,983	R -565	R 18,342	R 3,339	R 1,452	R 1,266	R 5	R 3,490	R 346,290
Total	R 2,016,456	R 65,739	R <b>896,590</b>	R 13,453		R -6,896	R 247,510		R 16,525	R 14,637	R 612	R <b>34,450</b>	R 4,156,745
<b>008</b> January	182,579	4,449	72,090	1,249	70,686	-754	22,358	3,337	1,371	1,187	15	3,737	363,268
February	167,000	3,627	59,902	1,126	64,936	-375	20,234	3,075	1,220	1,075	33	3,275	325,90
March	161,102	3,111	60,904	1,611	64,683	-522	22,907	3,165	1,374	1,218	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	187,377	4,132	99,535	1,437	74,266	-799	25,873	3,349	1,434	1,281	105	3,236	402,139
August	181,313	3,726	98,034	1,440	72,573	-648	20,651	3,390	1,425	1,267	99	2,599	386,760
September	162,207	4,114	77,490	791	67,003	-513	16,530	3,167	1,303	1,225	86 56	2,391	336,584
October November	152,925 155,002	3,164 3,172	72,515 61,461	771 686	62,793 63,408	-497 -492	16,436 17,081	3,001 3,157	1,291 1,296	1,242 1,206	56 26	4,164 4,408	318,613 311,146
11-Month Total	1,824,137	40,990	808,226	13,253	<b>732,692</b>	-5,6 <b>57</b>	<b>243,220</b>	34, <b>760</b>	15,112	13,414	<b>798</b>	4,408 <b>41,199</b>	3,771,908
2007 11-Month Total	1,842,626	61,524	829,782	12,431	734,442	-6,331	229,168	35,675	15,072	13,371	606	30,960	3,810,454
2006 11-Month Total	1,817,002	59,596	760,313	13,108	716,729	-5,891	267,650	35,404	14,716	13,278	505	24,117	

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

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.

synfuel.

b Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other

petroleum, and waste oil.

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

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.

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

tire-derived fuels).

h 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).

J Included in "Conventional Hydroelectric Power."

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				Renewable Energy						
	Coal <sup>a</sup>	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Nuclear Electric Power	Hydro- electric Pumped Storage <sup>e</sup>	Conven- tional Hydro- electric Power	Bior Wood <sup>f</sup>	waste <sup>g</sup>	Geo- thermal	Solar/- PV <sup>h</sup>	Wind	Total <sup>i</sup>
1973 Total 1975 Total 1980 Total 1985 Total 1990 Total <sup>k</sup> 1995 Total 1996 Total 1997 Total	1,402,128 1,572,109 1,686,056 1,771,973 1,820,762	314,343 289,095 245,994 100,202 118,864 68,146 74,783 86,479	340,858 299,778 346,240 291,946 309,486 419,179 378,757 399,596	NA NA NA NA 621 1,927 1,341 1,533	83,479 172,505 251,116 383,691 576,862 673,402 674,729 628,644	(j) (j) (j) -3,508 -2,725 -3,088 -4,040	272,083 300,047 276,021 281,149 289,753 305,410 341,159 350,648	130 18 275 743 7,032 7,597 8,386 8,680	198 174 158 640 11,500 17,986 17,816 18,483	1,966 3,246 5,073 9,325 15,434 13,378 14,329 14,726	NA NA NA 11 367 497 521 511	NA NA NA 6 2,789 3,164 3,234 3,288	1,860,710 1,917,649 2,286,439 2,469,841 2,901,322 3,194,230 3,284,141 3,329,375
1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total	1,858,618 1,943,111 1,882,826 1,910,613 1,952,714 R 1,957,188	122,211 111,539 105,192 119,149 89,733 113,697 R 114,678 R 116,482	449,293 472,996 517,978 554,940 607,683 667,303 R 627,172 R 683,829	2,315 1,607 2,028 586 1,970 2,647 R 3,568 R 3,777	673,702 728,254 753,893 768,826 780,064 763,733 788,528 781,986	-4,467 -6,097 -5,539 -8,823 -8,743 -8,535 -8,488 -6,558	317,867 314,663 271,338 213,749 260,491 271,512 265,064 267,040	8,608 8,961 8,916 8,294 9,009 9,528 R 9,736 R 10,570	19,233 19,493 20,307 12,944 13,145 13,808 R 13,062 R 13,031	14,774 14,827 14,093 13,741 14,491 14,424 14,811 14,692	502 495 493 543 555 534 575 550	3,026 4,488 5,593 6,737 10,354 11,187 14,144 17,811	3,457,416 3,529,982 3,637,529 3,580,053 3,698,458 3,721,159 3,808,360 3,902,192
Petron July August September October November December Total	R 159,674 R 157,817 R 171,810	R 5,690 R 4,525 R 3,623 R 4,349 R 4,075 R 5,428 R 6,648 R 7,970 R 4,596 R 4,394 R 4,122 R 59,708	R 36,949 R 41,294 R 453 R 50,050 R 58,635 R 74,184 R 98,905 R 65,916 R 63,532 R 49,080 R 734,417	R 343 R 302 R 349 R 344 R 414 R 375 R 378 R 412 R 335 R 331 R 331 R 340 R <b>4,254</b>	71,912 62,616 63,721 57,567 62,776 68,391 72,186 72,016 66,642 57,509 61,392 70,490 <b>787,219</b>	-533 -447 -435 -587 -444 -423 -638 -695 -629 -507 -553 -667 <b>-6,558</b>	27,067 24,469 24,402 28,361 30,628 29,571 25,216 21,546 16,976 19,903 21,320 286,254	925 862 899 R 685 R 759 841 919 976 R 871 R 850 852 902	R 1,193 R 1,094 R 1,187 R 1,053 1,171 1,155 R 1,216 R 1,210 R 1,134 1,150 1,173 1,191 R 13,927	1,230 1,111 1,261 1,129 1,096 1,199 1,261 1,275 1,275 1,207 1,290	13 20 33 52 71 70 62 83 54 32 16 3 <b>508</b>	2,383 1,922 2,359 2,472 2,459 2,052 1,955 1,655 1,879 2,442 2,540 2,472 <b>26,589</b>	315,254 295,333 306,041 285,788 317,522 351,360 396,263 393,589 319,181 308,218 296,571 322,957 3,908,077
Petron January	R 174,253 R 162,199 R 158,273 R 144,799 R 155,991 R 171,994 R 183,483 R 188,516 R 167,888 R 160,696 R 172,361 R 1,998,390	R 5,574 R 8,427 R 4,988 R 4,673 R 4,475 R 5,417 R 5,142 R 6,815 R 4,650 R 4,446 R 2,835 R 3,864	R 53,809 R 51,626 R 50,026 R 54,126 R 59,991 R 74,888 R 74,888 R 1,511 R 71,321 R 74,031 R 59,872 R 814,752	R 375 R 312 R 345 R 315 R 316 R 331 R 339 R 341 R 322 R 379 R 332 R 337	74,006 65,225 64,305 57,301 65,025 68,923 R 72,739 72,751 R 67,579 61,690 R 64,899 71,983 R <b>806,425</b>	-572 -447 -458 -374 -547 -523 -595 -651 R -743 R -760 R -662 R -565 R <b>-6,896</b>	R 25,853 R 18,420 R 23,969 R 23,694 R 25,867 R 22,690 R 22,387 R 19,865 R 14,696 R 14,696 R 14,696 R 18,180 R 245,843	R 1,145 R 845 R 839 R 727 R 793 888 R 939 R 962 R 906 R 868 R 882 R 918	R 1,184 R 1,037 R 1,182 R 1,081 R 1,165 R 1,209 R 1,248 R 1,253 R 1,220 R 1,228 R 1,226 R 1,226 R 1,248	R 1,296 R 1,122 R 1,204 R 1,158 R 1,155 R 1,238 R 1,250 R 1,250 R 1,211 R 1,266 R 1,266 R 1,266	13 19 48 54 84 86 75 68 R 49 R 24 R 5	R 2,452 R 2,520 R 3,047 R 2,952 R 2,620 R 2,158 R 2,699 R 2,867 R 3,377 R 3,095 R 3,490	R 339,968 R 311,810 R 308,331 R 291,254 R 317,826 R 350,339 R 379,914 R 407,865 R 342,713 R 319,830 R 301,907 R 333,586 R 4,005,343
Pebruary	181,028 165,575 159,462 145,680 154,468 169,699 185,646 179,666 160,600 151,409 153,672 1,806,905	4,167 3,392 2,875 3,018 3,084 4,734 3,886 3,499 3,855 2,947 2,977 38,435	64,786 53,263 54,764 55,010 55,083 77,466 92,214 90,835 71,985 65,959 55,433 <b>736,798</b>	475 400 540 475 507 414 447 440 187 215 161 <b>4,261</b>	70,686 64,936 64,683 57,281 64,794 70,268 74,266 72,573 67,003 62,793 63,408 732,692	-754 -375 -522 -98 -587 -372 -799 -648 -513 -497 -492 <b>-5,657</b>	22,101 19,942 22,611 21,857 28,003 30,684 25,771 20,554 16,447 16,354 16,979 <b>241,304</b>	968 881 910 777 758 851 952 982 920 757 958 <b>9,714</b>	1,186 1,043 1,193 1,250 1,254 1,241 1,219 1,222 1,117 1,131 1,124 12,981	1,187 1,075 1,218 1,200 1,254 1,261 1,281 1,267 1,225 1,242 1,206 13,414	15 33 75 87 96 120 105 99 86 56 26 <b>798</b>	3,737 3,275 4,103 4,487 4,450 4,349 3,236 2,599 2,391 4,164 4,408 <b>41,199</b>	350,160 313,948 312,571 291,818 313,748 361,315 388,813 373,684 225,842 307,067 300,396 3,639,363
2007 11-Month Total 2006 11-Month Total	1,826,029 1,797,927	57,442 55,586	754,880 685,337	3,705 3,914	734,442 716,729	-6,331 -5,891	227,663 264,934	9,793 9,440	13,033 12,737	13,371 13,278	606 505	30,960 24,117	3,671,757 3,585,120

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

for electric utilities and independent power producers.

R=Revised. NA=Not available.

Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • 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 Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other

petroleum, and waste oil.

C Natural gas, plus a small amount of supplemental gaseous fuels and other manufactured and 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.
 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 three-derived fuels). tire-derived fuels).

h Solar thermal and photovoltaic energy.
i 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).

j Included in "Conventional Hydroelectric Power."

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

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

(Subset of Table 7.2a; Million Kilowatthours)

		Com	mercial Se	ectora		Industrial Sector <sup>b</sup>								
				Biomass			<b>D</b> . ( )	No.	0.1	Hydro-	Bion	nass		
	Coalc	Petro- leum <sup>d</sup>	Natural Gas <sup>e</sup>	Wastef	<b>Total</b> <sup>g</sup>	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>	Wastef	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	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	154,530	
2004 Total	R 1,340	R <b>499</b>	R 3,969	<sup>R</sup> 1,562	8,270	R 19,773	<sup>R</sup> 5,967	<sup>R</sup> 78,959	R 11,684	3,248	<sup>R</sup> 28,367	<sup>R</sup> 797	153,925	
2005 Total	<sup>R</sup> 1,353	375	<sup>R</sup> 4,249	<sup>R</sup> 1,657	8,492	R 19,466	<sup>R</sup> <b>5</b> ,368	<sup>R</sup> 72,882	<sup>R</sup> 9,687	3,195	R 28,271	R 733	144,739	
2006 January	R 118	R 27	322	R 141	684	R 1,639	R 419	R 6,536	R 814	357	R 2,495	R 55	12,720	
February	R 113	R 30	R 300	R 130	643	R 1,488	R 368	R 5,815	R 811	281	R 2,187	R 46	11,357	
March	R 101	R 31	R 336	R 113	643	R 1,635	R 360	R 6,133	R 885	210	R 2,301	R 44	12,046	
April	R 88	R 21	R 307	R 131	625	R 1,608	R 320	R 5,734	R 836	185	R 2,293	R 43	11,445	
May	R 99	R 16	R 365	R 150	713	R 1,621	329	R 6,586	R 881	182	R 2,278	<sup>R</sup> 51	12,380	
June	R 114	R 14	R 383	R 131	724	R 1,673	R 325	R 6,493	R 793	177	R 2,291	R 43	12,176	
July	R 127	R 17	R 438	R 132	783	R 1,743	R 336	R 7,187	R 889	220	R 2,523	R 50	13,375	
August	R 129	17	437	R 131	780	R 1,749	R 373	R 7,249	R 880	182	R 2,500	R 48	13,394	
September	R 102	R 12	369	R 129	682	R 1,589	R 344	R 6,388	R 818	202	R 2,388	R 44	12,193	
October	R 97	11	392	R 135	704	R 1,619	R 286	R 6,716	R 855	279	R 2,361	R 48	12,645	
November	R 110	15	R 348	R 136	682	R 1,512	R 338	R 6,142	R 734	358	R 2,328	R 50	11,906	
December Total	R 113 R <b>1,310</b>	24 R <b>235</b>	358 R <b>4,355</b>	<sup>R</sup> 140 <sup>R</sup> <b>1,599</b>	709 <b>8,371</b>	R 1,586	R 424 R <b>4,223</b>	R 6,690 R <b>77,669</b>	R 728 R <b>9,923</b>	266 <b>2,899</b>	R 2,454 R <b>28,400</b>	<sup>R</sup> 52 <sup>R</sup> <b>572</b>	12,617 <b>148,254</b>	
<b>2007</b> January	R 120	R 27	R 318	<sup>R</sup> 131	R 669	R 1.367	R 394	R 7.348	R 779	R 180	R 2.390	<sup>R</sup> 56	R 12,894	
February	R 120	R 44	R 309	R 109	R 641	R 1,283	R 412	R 5,686	R 669	R 138	R 2,169	R 53	R 10,779	
March	R 115	R 24	R 323	R 128	R 659	R 1,423	R 404	R 5,855	R 889	R 183	R 2,266	R 63	R 11,481	
April	R 100	R 16	R 319	R 127	R 639	R 1,350	R 391	R 5,708	R 848	R 185	R 2,327	R 45	R 11,236	
May	R 108	R 9	R 341	R 138	R 680	R 1,414	R 390	R 6,137	R 859	<sup>R</sup> 168	R 2,287	R 46	R 11,697	
June	R 112	R 11	R 374	R 136	R 707	R 1,407	R 349	R 6,249	R 823	R 121	R 2,325	R 47	R 11,709	
July	<sup>R</sup> 116	R 8	R 419	<sup>R</sup> 146	R 763	R 1,455	R 344	R 6,907	<sup>R</sup> 815	R 89	R 2,494	R 49	R 12,550	
August	<sup>R</sup> 127	<sup>R</sup> 13	<sup>R</sup> 434	136	<sup>R</sup> 774	R 1,492	R 358	R 7,510	<sup>R</sup> 791	<sup>R</sup> 76	R 2,463	<sup>R</sup> 50	R 13,157	
September	<sup>R</sup> 113	R 7	<sup>R</sup> 364	<sup>R</sup> 134	<sup>R</sup> 684	R 1,389	R 278	R 6,657	<sup>R</sup> 798	<sup>R</sup> 76	R 2,383	<sup>R</sup> 46	R 11,997	
October	<sup>R</sup> 107	R 7	R 374	<sup>R</sup> 142	R 706	R 1,431	R 294	R 6,663	<sup>R</sup> 755	<sup>R</sup> 97	R 2,376	56	R 12,080	
November	<sup>R</sup> 115	_R 6	R 335	<sup>R</sup> 139	R 667	R 1,332	R 295	R 6,270	R 699	R 123	R 2,390	<sup>R</sup> 61	R 11,528	
December	R 119	R 17	R 347	R 133	R 686	R 1,350	334	R 6,590	R 686	R 154	R 2,419	R 57	R 12,018	
Total	R 1,371	R 189	R <b>4,257</b>	<sup>R</sup> 1,599	R <b>8,273</b>	R 16,694	R <b>4,243</b>	R <b>77,580</b>	<sup>R</sup> 9,411	R 1,590	R 28,287	R 631	R 143,128	
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		12	383	146	745	1,602	234	6,938	991	97	2,395	69	12,582	
August	121	8	391	144	736	1,525	220	6,808	1,000	97	2,407	58	12,340	
September	112	8	352	133	678	1,494	251	5,153	604	82	2,245	52	10,064	
October	105	7	349	114	635	1,411	210	6,207	556	79	2,242	46	10,911	
November 11-Month Total	102 <b>1,406</b>	10 <b>96</b>	327 <b>3,939</b>	125 <b>1,488</b>	626 <b>7,696</b>	1,227 <b>15,826</b>	185 <b>2,460</b>	5,701 <b>67,490</b>	525 <b>8,992</b>	100 <b>1,850</b>	2,198 <b>25,030</b>	47 <b>643</b>	10,124 <b>124,850</b>	
2007 11-Month Total	1,253	173	3,911	1,466	7,588	15,344	3,909	70,991	8,726	1,436	25,868	574	131,110	
2007 11-Month Total	1,253	211	3,997	1,466	7,566 7,661	17,878	3,799	70,991	9,195	2,633	25,666 25,946	574 520	135,637	

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

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

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

Web Page: See http://www.eia.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>&</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.

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

g Includes a small amount of conventional hydroelectric power, other gases, wood, and other, which are not separately displayed.

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

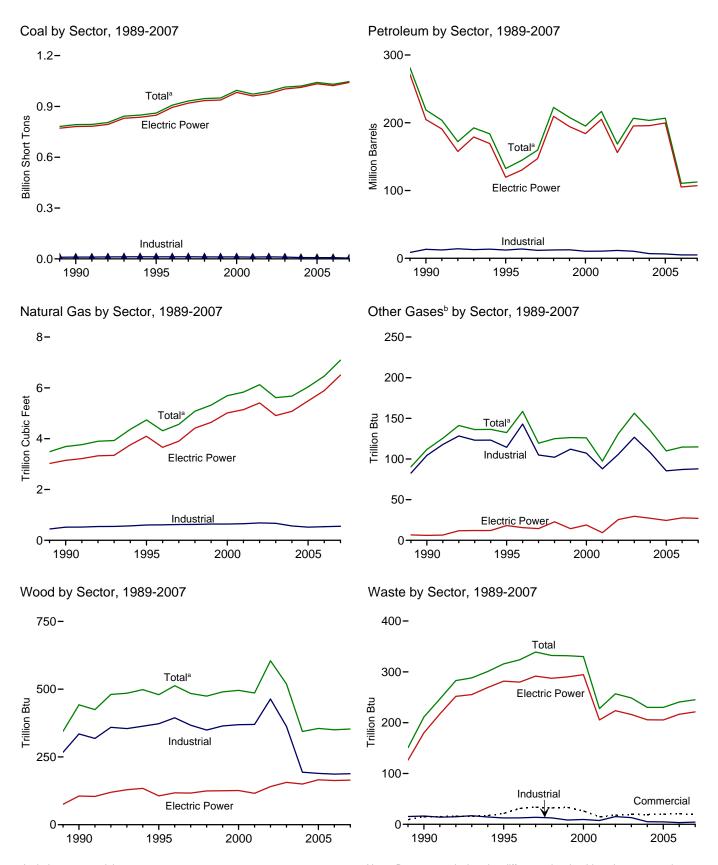
Conventional hydroelectric power.

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).

R=Revised. NA=Not available.

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							Bion	Biomass	
	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>9</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Tł	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	.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 1990 Total <sup>k</sup>	693,841 792,457	14,635 18,143	<u>158,779</u> 190,849	NA 437	231 1,914	<u>174,571</u> 218,997	3,044 3,692	NA 112	<u>8</u> 442	<u>7</u> 211	NA 36
1995 Total	860,594	19,615	95,507	680	3,355	132,578	4,738	133	480	316	4:
1996 Total	907,209	20,252	106,055	1,712	3,322	144,626	4,312	159	513	324	3
1997 Total	931,949	20,309	118,741	237	4,086	159,715	4,565	119	484	339	30
1998 Total	946,295	25,062	172,728	549	4,860	222,640	5,081	125	475	332	3
1999 Total	949,802	25,951	158,187	974	4,552	207,871	5,322	126	490	332	4
2000 Total	994,933	31,675	143,381	1,450	3,744	195,228	5,691	126	496	330	40
2001 Total 2002 Total	972,691 987,583	31,150 23,286	165,312 109,235	855 1,894	3,871 6,836	216,672 168,597	5,832 6,126	97 131	486 605	228 257	160 191
2003 Total		29,672	142,518	2,947	6,303	206,653	5,616	156	519	249	193
2004 Total	R 1 020 523	R 20,163	R 142,088	R 2,856	R 7.677	R 203,494	R 5.675	R 135	R 344	R 230	R 183
2005 Total	R 1,041,448	R 20,651	R 141,518	R 2,968	R 8,330	R 206,785	R 6,036	R 110	R 355	R 230	R 173
2006 January	R 87,623	R 1,089	R 5,602	R 184	R 709	R 10,420	R 337	R 9	R 31	R 21	14
February	R 81,312	R 982	R 4,320	<sup>R</sup> 144	<sup>R</sup> 628	R 8,586	<sup>R</sup> 365	R 9	R 28	<sup>R</sup> 19	R 13
March	R 82,816	R 804	R 2,931	<sup>R</sup> 188	R 596	R 6,902	R 426	R 10	R 29	R 20	R 1
April	R 72,931	R 1,028	R 3,651	R 144	R 605	R 7,845	R 442	R 10	R 25	R 18	R 14
May	R 80,865	R 1,031	R 3,495	R 206	R 569	R 7,579	R 526	R 11 R 9	<sup>R</sup> 27 <sup>R</sup> 28	R 20	R 1
June	R 87,668 R 97,472	<sup>R</sup> 1,172 <sup>R</sup> 1,481	<sup>R</sup> 5,405 <sup>R</sup> 7,007	<sup>R</sup> 193 <sup>R</sup> 224	<sup>R</sup> 634 <sup>R</sup> 693	R 9,939 R 12,178	<sup>R</sup> 650 <sup>R</sup> 885	R 10	R 31	<sup>R</sup> 20 <sup>R</sup> 21	14 15
July August	R 98.555	R 1.669	R 9,219	R 286	R 661	R 14,480	R 862	R 11	R 31	R 21	15
September	R 84,668	R 832	R 4,061	R 187	R 594	R 8,049	R 568	R 9	R 30	R 20	14
October	R 84,086	R 984	R 4,519	R 137	<sup>R</sup> 596	R 8,619	R 550	R 10	R 29	R 20	R 15
November	R 82,548	_ R 996	R 4,382	R 124	<sup>R</sup> 529	<sup>R</sup> 8,146	<sup>R</sup> 416	R 8	R 29	R 20	R 14
December	R 90,011	R 1,107	R 3,881	R 157	R 549	R 7,892	R 435	R 9	R 31	R 21	14
Total	R 1,030,556	R 13,174	R 58,473	<sup>R</sup> 2,174	<sup>R</sup> <b>7,363</b>	R 110,634	<sup>R</sup> 6,462	R 115	R 350	R 241	R 172
2007 January	R 91,776	R 1,445	R 5,770	R 207	<sup>R</sup> 585	R 10,349	R 476	R <sub>10</sub>	R 33	R 20	_ 14
February	R 84,100	R 2,502	R 9,671	R 412	R 470	R 14,934	R 442	R 8	R 28	R 18	R 13
March	<sup>R</sup> 81,932 <sup>R</sup> 75,918	R 1,262 973	<sup>R</sup> 5,333 <sup>R</sup> 5.028	<sup>R</sup> 299 <sup>R</sup> 255	<sup>R</sup> 475 <sup>R</sup> 466	R 9,270 R 8.584	<sup>R</sup> 433 <sup>R</sup> 471	<sup>R</sup> 10 <sup>R</sup> 10	<sup>R</sup> 29 <sup>R</sup> 27	<sup>R</sup> 20 <sup>R</sup> 19	14 13
April	R 81,309	R 1,036	R 4,462	R 261	R 506	R 8,288	R 528	R 10	R 28	R 20	14
May June	R 89,846	R 1,243	R 5,561	R 219	R 579	R 9,916	R 648	R 10	R 29	R 21	14
July	R 96,727	R 1,202	R 5,559	R 201	R 519	R 9,556	R 782	R 10	R 31	R 21	14
August	R 99,245	R 1,720	R 7,585	R 268	R 540	R 12,271	R 992	R 10	R 30	R 21	R 1
September	R 88,089	R 985	R 4,830	R 206	R 493	R 8,484	<sup>R</sup> 705	<sup>R</sup> 10	<sup>R</sup> 30	<sup>R</sup> 21	_ 14
October	R 83,995	R 1,147	R 4,555	R 211	R 446	R 8,143	R 626	R <sub>10</sub>	R 29	21	R 14
November	R 82,495	R 955	R 2,172	R 175	R 431	R 5,456	R 469	Rg	R 29	R 21	13
December Total		R 1,213 R <b>15,683</b>	R 3,307 R <b>63,833</b>	<sup>R</sup> 204 <sup>R</sup> <b>2,917</b>	<sup>R</sup> 528 <sup>R</sup> <b>6,036</b>	R 7,362 R <b>112,615</b>	<sup>R</sup> 517 R <b>7,089</b>	R 9 R <b>115</b>	<sup>R</sup> 31 R <b>353</b>	R 22 R <b>245</b>	R 15 R <b>168</b>
2008 January		1,697	3,376	297	500	7,868	556	14	41	19	13
February		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	9,062	689	11	38	21	14
July	98,434	1,083	3,985	162	435	7,404	813	12	37	21	14
August September	95,936 86,173	875 927	3,348 3,928	151 197	461 426	6,681 7,183	789 623	13 9	39 36	21 20	14 12
October	80,843	700	3,928 2,400	132	426 464	5,553	573	9	36	19	12
November		790 790	2,682	154	407	5,661	485	8	37	19	12
11-Month Total	955,801	11,340	35,357	2,105	4,869	73,146	6,454	125	420	221	142
2007 11-Month Total 2006 11-Month Total	955,432 940,545	14,470 12,067	60,526 54,591	2,713 2,017	5,509 6,813	105,252 102,742	6,572 6,026	106 106	323 319	223 220	153 158

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

NA=Not available. (s)=Less train 0.5 trillion blu.

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

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

h Wood and wood-derived fuels.

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

<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).

k Through 1988, data are for closeric within the second states and the second seco

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

					Biomass						
	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	Tł	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	.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
985	693,841 781,301	14,635 16,394	<u>158,779</u> 183,285	NA 25	231 1,008	<u>174,571</u> 204,745	3,044 3,147	NA 6	<u>8</u> 106	<u>7</u> 180	NA (s)
1995 Total	847.854	18,066	88,895	441	2,452	119.663	4,094	18	106	282	(3)
1996 Total	894,400	18,472	98,795	567	2,467	130,168	3,660	16	117	280	
1997 Total	919,009	18,646	112,423	130	3,201	147,202	3,903	14	117	292	
1998 Total	934,126	23,166	165,875	411	3,999	209,447	4,416	23	125	287	:
1999 Total	937,888	23,875	151,921	514	3,607	194,345	4,644	14	125	290	
2000 Total	982,713	29,722	138,047	403	3,155	183,946	5,014	19 9	126	294	400
2001 Total 2002 Total	961,523 975,251	29,056 21,810	159,150 104,577	374 1,243	3,308 5,705	205,119 156,154	5,142 5,408	25	116 141	205 224	109 137
2003 Total		27,441	137,361	1,937	5,703 5,719	195,336	4,909	30	156	216	136
2004 Total	R 1 012 /50	R 18.793	R 138,831	R 2.511	R 7,135	R 195,809	R 5.075	R 27	R 150	R 206	R 13
2005 Total	R 1,033,567	R 19,450	R 138,337	R 2,591	R <b>7,877</b>	R 199,760	R 5,485	R <b>24</b>	R 166	R 205	R 116
2006 January	R 86,975	R 1,039	R 5,350	R 160	R 668	R 9,889	R 290	R 2	R 15	R 18	10
February	R 80,730	R 923	R 4,102	R 123	<sup>R</sup> 590	R 8,099	R 322	R 2	R 14	R 17	9
March	R 82,175	R 732	R 2,729	R 168	R 558	R 6,417	R 380	R <sub>2</sub>	R 14	R 18	10
April	R 72,287	R 979	R 3,486	R 125	R 568	R 7,432	R 400	R <sub>2</sub>	R 10	R 16	RQ
May	<sup>R</sup> 80,213 <sup>R</sup> 86,997	R 985	<sup>R</sup> 3,342 <sup>R</sup> 5,265	<sup>R</sup> 162 <sup>R</sup> 150	<sup>R</sup> 532 <sup>R</sup> 593	<sup>R</sup> 7,151 <sup>R</sup> 9,508	<sup>R</sup> 477 <sup>R</sup> 602	R 3 R 2	<sup>R</sup> 12 <sup>R</sup> 13	<sup>R</sup> 18 <sup>R</sup> 18	10 10
June July	R 96.767	1,128 <sup>R</sup> 1,426	R 6,864	R 178	R 654	R 11,738	R 832	R 2	R 14	R 19	11
August	R 97.842	R 1,620	R 9,070	R 211	R 622	R 14,009	R 808	R 3	R 15	R 19	R 10
September	R 84,028	R 799	R 3,906	R 138	R 555	<sup>R</sup> 7,619	R 522	R 2	R 14	R 18	10
October	R 83,427	R 947	R 4,382	<sup>R</sup> 118	<sup>R</sup> 564	R 8,269	R 500	R 2	14	<sup>R</sup> 18	Rg
November	<sup>R</sup> 81,951	R 946	R 4,203	R 109	R 493	R 7,722	<sup>R</sup> 371	R 2	<sup>R</sup> 13	<sup>R</sup> 18	R ζ
December Total	R 89,410 R <b>1,022,802</b>	R 1,054 R <b>12,578</b>	<sup>R</sup> 3,648 <sup>R</sup> <b>56,347</b>	R 141 R <b>1,783</b>	<sup>R</sup> 508 <sup>R</sup> <b>6,905</b>	<sup>R</sup> 7,381 <sup>R</sup> <b>105,235</b>	R 386 R <b>5,891</b>	R 2 R <b>28</b>	<sup>R</sup> 14 <sup>R</sup> <b>163</b>	R 18 R <b>216</b>	10 R <b>117</b>
				,	,	•	•				
2007 January	R 91,344	R 1,391	R 5,545	<sup>R</sup> 189 <sup>R</sup> 398	R 546	R 9,853	R 421	R <sub>2</sub>	R 18 R 13	<sup>R</sup> 18 <sup>R</sup> 16	R 10
February	<sup>R</sup> 83,698 <sup>R</sup> 81.459	R 2,431 R 1,212	<sup>R</sup> 9,420 <sup>R</sup> 5.111	R 271	<sup>R</sup> 431 <sup>R</sup> 435	<sup>R</sup> 14,405 <sup>R</sup> 8,769	<sup>R</sup> 399 <sup>R</sup> 389	R 2 R 2	<sup>N</sup> 13	<sup>R</sup> 18	10
March April	R 75.471	R 934	R 4,847	R 185	R 424	R 8.087	R 427	R 2	12	R 17	Rç
May	R 80.840	R 993	R 4,329	R 179	R 461	R 7.804	R 481	R 2	R 12	R 18	R 10
June	R 89,381	R 1,203	R 5,444	<sup>R</sup> 170	R 532	R 9,475	R 600	R 2	14	R 19	R 10
July	R 96,243	R 1,170	R 5,450	<sup>R</sup> 158	R 473	R 9,142	R 729	R 2	14	<sup>R</sup> 19	R 10
August	R 98,751	R 1,678	<sup>R</sup> 7,475	R 218	R 493	R 11,835	R 935	R 2	R 14	R 19	R 10
September	R 87,625	R 950	R 4,737	R 189	R 453	R 8,138	R 654	R <sub>2</sub>	14	R 19	10
October	<sup>R</sup> 83,515 <sup>R</sup> 82,082	<sup>R</sup> 1,099 <sup>R</sup> 919	<sup>R</sup> 4,460 <sup>R</sup> 2,078	<sup>R</sup> 191 <sup>R</sup> 161	<sup>R</sup> 407 <sup>R</sup> 385	<sup>R</sup> 7,783 <sup>R</sup> 5,081	<sup>R</sup> 576 <sup>R</sup> 422	R 2 R 2	13 <sup>R</sup> 14	<sup>R</sup> 19 <sup>R</sup> 19	R 10
November December	R 90.937	R 1,155	R 3,175	R 189	R 485	R 6,942	R 468	R 2	R 14	R 20	R 10
Total	R 1,041,346	R 15,135	R <b>62,072</b>	R 2,496	R <b>5,523</b>	R 107,316	R <b>6,502</b>	R <b>27</b>	R 165	R 221	R 117
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	Ş
March	82,438	823	2,332	175	380	5,228	437	4	15	18	11
April	76,580	834	2,599	136	383	5,485	436	3	12	18	10
May	81,365	827	2,818	139	374	5,654	449	4	12	19	10
June	89,173	1,451	4,757	213	461 407	8,727	640	3	13	19	10
July August	97,664 95,218	1,024 830	3,878 3,263	146 133	407 432	7,080 6,387	758 734	3 3	14 14	19 19	10 10
September	85,472	843	3,203	158	399	6,826	580	2	13	18	(
October	80,093	681	2,323	107	432	5,272	521	3	11	17	Ç
November	80,789	762	2,580	135	381	5,383	437	2	14	17	Ç
11-Month Total	948,156	10,887	34,099	1,804	4,560	69,590	5,900	32	147	197	108
2007 11-Month Total 2006 11-Month Total	950,409 933,392	13,980 11,524	58,898 52,699	2,307 1,642	5,038 6,398	100,374 97,854	6,034 5,505	25 25	150 149	202 198	106 107

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

tire-derived fuels)

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

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

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

h Wood and wood-derived fuels.

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

<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).

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

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

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

		Commerci	al Sectora				Indu	strial Sector	b		
				Biomass					Bion	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	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	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	802	41	32	11,728	12,392	625	102	349	13	35
1999 Total	481	931	39	33	11,432	12,595	639	112	364	.8	39
2000 Total	514	823	37	26	11,706	10,459	640	107	369	1 <u>0</u>	45
2001 Total	532	1,023	36	15	10,636	10,530	654	88	370	7	44
2002 Total	477	834	33	18	11,855	11,608	685	106	464	15	43
2003 Total 2004 Total	582 R 377	894 R <b>766</b>	38 R 33	19 R 19	10,440 R 7.687	10,424 <sup>R</sup> 6,919	668 R <b>566</b>	127 R 108	362 R 194	13 R 5	46 R 41
2005 Total	R 377	R 585	R 34	R 20	R 7,504	R 6,440	R 518	R 85	R 189	R <b>5</b>	R 46
2006 January	R 32	R 36	R 3	2	R 616	<sup>R</sup> 495	R 44	R <b>7</b>	<sup>R</sup> 16	R (s)	R 4
February	R 30	R 39	R 2	2	R 552	R 448	R 40	R <b>7</b>	R 14	R (s)	Rg
March	R 27	R 41	R 3	2	R 614	R 444	R 43	R 8	<sup>R</sup> 15	R (s)	R 4
April	<sup>R</sup> 24	R 29	R 2	2	R 620	<sup>R</sup> 384	R 40	<sup>R</sup> 7	<sup>R</sup> 15	R (s)	R 4
May	<sup>R</sup> 26	R 24	R 3	2	R 626	R 403	<sup>R</sup> 46	<sup>R</sup> 8	<sup>R</sup> 15	R (s)	R 4
June	<sup>R</sup> 30	R 23	R 3	2	R 642	R 407	R 45	<sup>R</sup> 7	<sup>R</sup> 15	R (s)	R 3
July	R 33	R 27	<sup>R</sup> 3	2	R 672	R 412	<sup>R</sup> 50	R 8	<sup>R</sup> 16	R (s)	R 4
August	R 33	R 26	R 3	2	R 680	R 445	R 50	R 8	<sup>R</sup> 16	R (s)	R 4
September	R 27	R 19	R 3	2	R 613	R 411	R 44	R 7	R 16	R (s)	R4
October	R 26	R 17	R 3	2	R 634	R 334	R 46	R7	R 16	_ (3)	R <sub>4</sub>
November	<sup>R</sup> 29 <sup>R</sup> 31	<sup>R</sup> 22 <sup>R</sup> 31	R 3 R 3	2	R 568	<sup>R</sup> 401 <sup>R</sup> 479	<sup>R</sup> 43 <sup>R</sup> 46	<sup>R</sup> 6 <sup>R</sup> 7	<sup>R</sup> 16 <sup>R</sup> 16	_ (3)	R 4 R 4
December Total	R <b>347</b>	R <b>333</b>	R <b>35</b>	2 R <b>21</b>	<sup>R</sup> 571 <sup>R</sup> <b>7,408</b>	R <b>5,066</b>	R <b>536</b>	R <b>87</b>	R 187	<sup>R</sup> (s)	R 45
2007 January	R 32	R 38	R 3	2	R 400	R 458	R 53	R 7	<sup>R</sup> 16	R (s)	3
February	R 32	<sup>R</sup> 51	R 2	<sup>R</sup> 1	R 371	R 477	R 41	<sup>R</sup> 6	<sup>R</sup> 14	R (s)	R 3
March	<sup>R</sup> 31	R 34	R 3	2	R 442	<sup>R</sup> 467	R 42	R 8	<sup>R</sup> 15	R (s)	R 4
April	<sup>R</sup> 27	R 22	<sup>R</sup> 3	2	R 420	<sup>R</sup> 475	<sup>R</sup> 41	R 8	<sup>R</sup> 15	R (s)	R 3
May	R 28	<sup>R</sup> 15	R 3	2	R 441	R 469	R 44	R 8	<sup>R</sup> 15	R (s)	R 3
June	R 29	R 16	R 3	2	R 436	R 425	R 45	R 8	<sup>R</sup> 15	R (s)	R4
July	R 30	R 12	R 3	2	R 454	R 402	R 49	R 8	R 16	_ (3)	R 3
August	R 33	R 20	R3	2	R 462	R 417	R 54	R 7	R 16	_ (3)	R 4
September	<sup>R</sup> 30 <sup>R</sup> 28	<sup>R</sup> 11 <sup>R</sup> 10	R 3 R 3	2 2	R 433 R 452	<sup>R</sup> 335 <sup>R</sup> 349	<sup>R</sup> 48 <sup>R</sup> 47	R 7 R 7	<sup>R</sup> 16 <sup>R</sup> 16	_ (0)	3 R 4
October November	R 30	R 9	* 3 R 3	2	R 383	R 366	R 44	R 7	R 16	R (s) R (s)	4
December	R 31	R 20	R 3	2	R 395	R 400	R 47	R <b>7</b>	R 16		R 4
Total	R 361	R <b>258</b>	R 34	R 19	R 5,089	R 5,041	R <b>554</b>	R 88	R 188	R (s) R <b>4</b>	R 41
2008 January	53	22	4	2	612	388	53	11	26	(s)	2
February	50	17	3	2	480	393	49	10	31	ìí	2
March	41	12	4	2	664	310	43	11	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	8	25	1	2
July	37	18	3	2	734	306	52	9	23	(s)	3
August	35	12 12	3	2	683	282 345	52 30	9	24	(s)	2
September October	33 29	12 10	3 3	2 2	669 721	345 272	39 49	7 7	23 23	(s)	2
November	30	10	3	2	564	272 265	49 45	6	23	(s) (s)	2
11-Month Total	<b>430</b>	154	34	20	7,215	3,402	519	93	<b>272</b>	5	24
2007 11-Month Total 2006 11-Month Total	330 316	238 302	31 32	18 19	4,693 6,837	4,640 4,586	507 490	81 81	172 170	4 3	37 41

<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.

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.

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.

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.

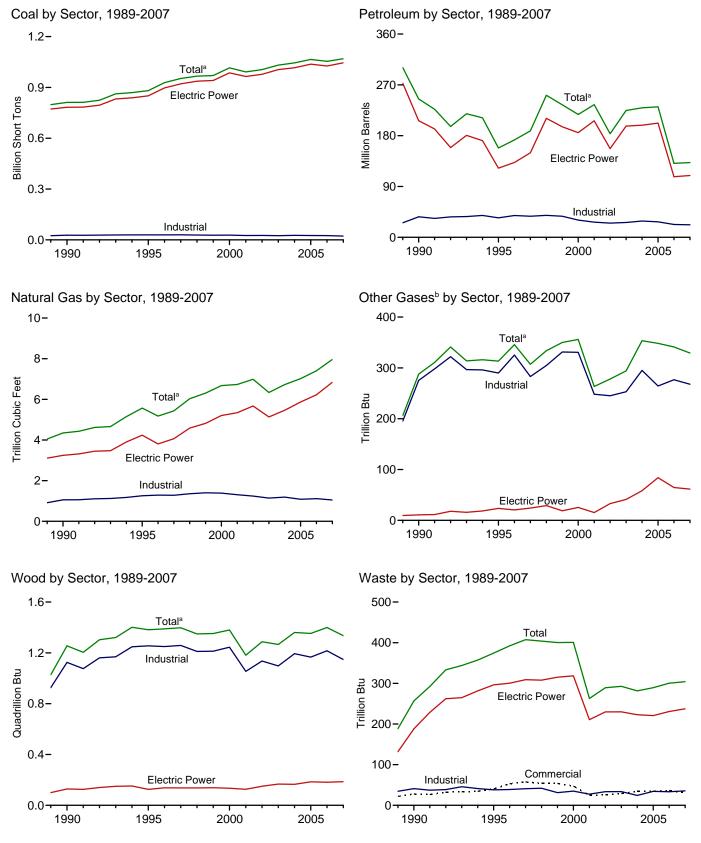
Municipal solid waste from biogenic sources, landfill gas, sludge waste, Through 2000, also includes agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

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

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.

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

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.

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	
	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 <sup>g</sup>	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Tł	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 1985 Total	569,274 693,841	29,051 14,635	391,163 158,779	NA NA	179 231	421,110 174,571	3,682 3,044	NA NA	3 8	2 7	NA NA
1990 Total k		20,194	209,314	1,332	2,832	244,998	4,346	288	1,256	257	86
1995 Total	881,012	21,697	112,168	1,322	4,590	158,140	5,572	313	1,382	374	97
1996 Total	928,015	22,444	124,607	2,468	4,596	172,499	5,178	346	1,389	392	91
1997 Total	952,955	22,893	134,623	526	6,095	188,517	5,433	307	1,397	407	103
1998 Total	966,615	30,006	189,267	1,230	6,196	251,486	6,030	334	1,349	404	95
1999 Total	970,175	30,616	172,319	1,812	5,989	234,694	6,305	350	1,352	400	101
2000 Total 2001 Total	1,015,398 991,635	34,572 33,724	156,673 177,137	2,904 1,418	4,669 4,532	217,494 234,940	6,677 6,731	356 263	1,380 1,182	401 263	109 229
2001 Total	1,005,144	24,749	118,637	3,257	7,353	183,409	6,986	278	1,182	289	252
2002 Total	1,031,778	31,825	152,859	4,576	7,067	224,593	6,337	294	1,266	293	262
2004 Total	1,044,798	23,520	157,478	4,764	8,721	229,364	6,727	R 353	1,360	R 282	R 254
2005 Total	1,065,281	24,446	156,915	4,270	9,113	231,193	<sup>R</sup> 7,021	348	1,353	289	R 237
2006 January	89,720	1,233	6,950	317	819	12,597	415	28	128	27	R 20
February	83,236	1,141	5,469	249	731	10,516	434	27	111	24	R 18
March April	84,783 74,743	992 1,147	4,009 4,533	318 224	703 708	8,835 9,444	503 515	30 29	116 109	25 23	<sup>R</sup> 21 <sup>R</sup> 20
May	82,713	1,148	4,324	308	668	9,121	602	31	112	26	R 21
June	89,570	1,273	6,146	286	740	11.403	R 729	28	113	24	R 21
July	99,478	1,589	7,784	328	803	13,715	973	30	121	26	<sup>R</sup> 21
August	100,548	1,785	10,004	430	762	16,030	951	31	120	26	<sup>R</sup> 21
September	86,525	919	4,877	280	697	9,563	645	28	116	24	R 20
October	85,934	1,069	5,317	193	690	10,030	631	29	118	25	R 21
November	84,472	1,113	5,356	208	630	9,828	491	26	115	26	<sup>R</sup> 20 <sup>R</sup> 21
December Total	92,060 <b>1,053,783</b>	1,245 <b>14,655</b>	5,077 <b>69,846</b>	254 <b>3,396</b>	670 <b>8,622</b>	9,924 <b>131,005</b>	515 R <b>7,404</b>	25 <b>341</b>	121 <b>1,399</b>	26 <b>300</b>	R <b>247</b>
2007 January	R 93,880	<sup>R</sup> 1,580	R 7,045	R 334	R 686	R 12,390	<sup>R</sup> 550	30	<sup>R</sup> 118	R 27	<sup>R</sup> 21
February	R 86,088	R 2,727	R 11,358	R 517	<sup>R</sup> 571	R 17,455	R 510	R 25	R 105	R 24	R 18
March	R 83,929	R 1,385	R 6,575	R 404	R 577	R 11,250	R 502	R 28	R 111	R 28	R 20
April	<sup>R</sup> 77,747 <sup>R</sup> 83,140	<sup>R</sup> 1,088 <sup>R</sup> 1,198	<sup>R</sup> 6,066 <sup>R</sup> 5,254	<sup>R</sup> 394 <sup>R</sup> 424	<sup>R</sup> 564 <sup>R</sup> 607	<sup>R</sup> 10,371 <sup>R</sup> 9,911	<sup>R</sup> 538 <sup>R</sup> 596	<sup>R</sup> 28 <sup>R</sup> 28	<sup>R</sup> 112 <sup>R</sup> 110	<sup>R</sup> 23 <sup>R</sup> 25	<sup>R</sup> 20 20
May June	R 91,682	R 1,334	R 6,330	R 322	R 686	R 11,416	R 719	R 27	R 108	R 24	R 20
July	R 98,568	R 1,272	<sup>R</sup> 6,194	R 304	R 636	R 10,953	R 857	R 27	R 114	R 25	R 20
August	R 101,160	R 1,814	R 8,347	R 391	R 666	R 13,881	R 1,077	R 28	<sup>R</sup> 111	R 25	R 21
September	R 89,833	R 1,049	<sup>R</sup> 5,443	R 279	_ 604	R 9,789	<sup>R</sup> 779	R 27	<sup>R</sup> 108	R 24	<sup>R</sup> 19
October	R 85,782	R 1,244	R 5,162	R 306	<sup>R</sup> 541	R 9,416	R 700	R 28	R 111	R 26	R 20
November	<sup>R</sup> 84,392 <sup>R</sup> 93,404	R 1,041	R 2,765	<sup>R</sup> 257 <sup>R</sup> 304	R 529	R 6,706	<sup>R</sup> 539 <sup>R</sup> 594	R 25	R 111	<sup>R</sup> 26 <sup>R</sup> 26	R 19
December Total	D	R 1,308 R <b>17,042</b>	<sup>R</sup> 4,078 <sup>R</sup> <b>74,616</b>	R <b>4,237</b>	<sup>R</sup> 632 R <b>7,299</b>	R 8,852 R <b>132,389</b>	R <b>7,962</b>	R 27 R <b>329</b>	R 118 R <b>1,336</b>	R <b>304</b>	<sup>R</sup> 21 <sup>R</sup> <b>239</b>
2008 January	95,994	1,765	3,953	401	599	9,116	626	30	107	24	15
February	88,299	1,274	3,140	312	561	7,530	520	28	100	24	14
March	84,936	913	2,957	321	532	6,853	554	34	97	25	16
April	79,014	911	3,033	234	507	6,713	543	28	99	25	16
May	83,923 91,684	907 1,551	3,222 5,280	229 311	498 586	6,847 10.072	562 761	29 26	101 103	25 26	15 16
June July	100,259	1,143	5,260 4,411	236	525	8,413	880	26 29	103	26 26	16
August	97,698	940	3,728	217	522	7,493	860	28	107	26	16
September	88,004	981	4,401	279	490	8,113	678	22	103	24	15
October	82,639	777	2,677	195	560	6,449	636	22	104	23	14
November	83,221	862	3,016	198	480	6,476	_ 546	18	101	24	.14
11-Month Total	975,673	12,024	39,817	2,934	5,860	84,075	7,166	294	1,131	272	166
2007 11-Month Total 2006 11-Month Total	976,201 961,723	15,734 13,410	70,538 64,769	3,932 3,142	6,667 7,952	123,538 121,081	7,368 6,889	302 316	1,218 1,278	278 274	218 226

<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>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

<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.

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

<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).

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

				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	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 1990 Total <sup>k</sup>	693,841 782,567	14,635 16,567	158,779 184,915	NA 26	231 1,008	<u>174,571</u> 206,550	3,044 3,245	<u>NA</u> 11	<u>8</u> 129	<u>7</u> 188	<u>NA</u> (s)
1995 Total	850,230	18,553	90,023	499	2,674	122,447	4,237	24	125	296	(3)
1996 Total	896,921	18,780	99,951	653	2,642	132,593	3,807	20	138	300	2
1997 Total	921,364	18,989	113,669	152	3,372	149,668	4,065	24	137	309	1
1998 Total	936,619	23,300	166,528	431	4,102	210,769	4,588	29	137	308	2
1999 Total 2000 Total	940,922 985,821	24,058 30,016	152,493 138,513	544 454	3,735 3,275	195,769 185,358	4,820 5,206	19 25	138 134	315 318	1
2001 Total	964,433	29,274	159,504	377	3,427	206,291	5,342	15	126	211	113
2002 Total	977,507	21,876	104,773	1,267	5,816	156,996	5,672	33	150	230	143
2003 Total	1,005,116	27,632	138,279	2,026	5,799	196,932	5,135	_ 41	167	230	140
2004 Total	1,016,268	19,107	139,816	2,713	7,372	198,498	5,464	R 58	165	223	138
2005 Total	1,037,485	19,675	139,409	2,685	8,083	202,184	5,869	84	185	221	123
2006 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	984	3,522	132	585	7,565	426	5	12	17	10
May June	80,515 87,319	990 1,131	3,427 5,342	168 154	545 610	7,308 9,676	504 630	6 5	13 15	19 19	10 11
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 Total	89,742 <b>1,026,636</b>	1,060 <b>12,646</b>	3,741 <b>57,345</b>	146 <b>1,870</b>	525 <b>7,101</b>	7,573 <b>107,365</b>	414 <b>6,222</b>	5 <b>65</b>	16 <b>182</b>	20 <b>231</b>	11 <b>125</b>
	R 04 000	R 4 400	R = 000	R 400	R 550	R 40 005	R 440	0	<sup>R</sup> 19	R 20	44
2007 January	<sup>R</sup> 91,686 <sup>R</sup> 84,026	<sup>R</sup> 1,408 <sup>R</sup> 2,499	<sup>R</sup> 5,633 <sup>R</sup> 9,495	<sup>R</sup> 199 <sup>R</sup> 426	<sup>R</sup> 559 <sup>R</sup> 442	R 10,035 R 14,630	<sup>R</sup> 448 <sup>R</sup> 425	6 5	R 15	* 20 R 17	11 R 9
February March	R 81,803	R 1,235	<sup>R</sup> 5,164	R 277	R 448	R 8,914	R 416	5	15	R 20	R 10
April	R 75,751	R 962	R 4,936	R 190	R 437	R 8,274	R 453	5	15	R 18	10
May	<sup>R</sup> 81,140	R 1,000	R 4,425	<sup>R</sup> 187	<sup>R</sup> 474	<sup>R</sup> 7,984	<sup>R</sup> 507	5	14	_ 20	<sup>R</sup> 10
June	R 89,699	R 1,211	<sup>R</sup> 5,531	<sup>R</sup> 175	<sup>R</sup> 547	R 9,652	R 628	<sup>R</sup> 5	15	R 20	R 10
July	R 96,548	R 1,176	R 5,534	R 161	R 486	R 9,303	R 761	R 5	R 16	21	11
August	R 99,086 R 87,922	<sup>R</sup> 1,684 <sup>R</sup> 955	<sup>R</sup> 7,570 <sup>R</sup> 4,822	<sup>R</sup> 230 <sup>R</sup> 194	<sup>R</sup> 505 <sup>R</sup> 471	R 12,009 R 8,325	<sup>R</sup> 969 <sup>R</sup> 683	<sup>R</sup> 5	16 15	21 20	11 10
September October		R 1.105	R 4,554	R 196	R 421	R 7,960	R 604	6	R 15	R 20	R 10
November	R 82,393	R 928	R 2,163	R 166	R 398	R 5,246	R 448	5	15	21	10
December	R 91,276	<sup>R</sup> 1,164	R 3,259	R 192	R 496	R 7,098	R 498	6	16	<sup>R</sup> 21	R 11
Total	R 1,045,141	R <b>15,327</b>	R <b>63,086</b>	R <b>2,594</b>	R <b>5,685</b>	R 109,431	R <b>6,841</b>	R <b>61</b>	R 186	R 237	R <b>124</b>
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		832	2,425	201	392	5,417	462	8	16	20	11
April	76,945	837	2,635	154 155	398 385	5,616 5,733	459 473	7 7	14 13	19 20	10 10
May June	81,739 89,546	832 1,461	2,819 4,758	155 229	385 472	5,732 8,807	473 669	6	15	20 20	10
July	98,035	1,027	3,879	160	416	7,146	786	6	16	20	11
August	95,542	835	3,263	148	437	6,432	762	6	16	20	11
September	85,843	847	3,937	178	407	7,000	602	4	15	18	10
October	80,475	685	2,324	120	445	5,353	545	5	13	18	10
November 11-Month Total	81,134 <b>952,119</b>	769 <b>10,973</b>	2,592 <b>34,482</b>	148 <b>1,988</b>	393 <b>4,678</b>	5,473 <b>70,831</b>	462 <b>6,179</b>	3 <b>66</b>	15 <b>166</b>	19 <b>211</b>	10 <b>115</b>
	•	•	•	-		-	-				
2007 11-Month Total 2006 11-Month Total	953,866 936,894	14,163 11,587	59,827 53,604	2,402 1,723	5,188 6,575	102,333 99,792	6,344 5,808	56 59	170 166	217 211	113 114

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

Wood and wood-derived fuels.

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

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

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

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

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

Sources: See end of section.

synfuel.

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

c Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small

amount of fuel oil no. 4.

d Jet fuel, kerosene, other petroleum liquids, and waste oil.
e Petroleum coke is converted from short tons to barrels by multiplying by 5.

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

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

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

j Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste

from non-biogenic sources, and tire-derived fuels).

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

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

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

			Commerc	ial Sectora				Indu	strial Sector	b		
					Biomass					Bion	nass	
		Coalc	Petroleumd	Natural Gas <sup>e</sup>	Wastef	Coalc	Petroleumd	Natural Gas <sup>e</sup>	Other 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	n Btu	
1989	Total	1,125	1,967	30	22	24,867	25,685	914	195	926	35	85
	Total	1,191	2,056	46	28	27,781	36,392	1,055	275	1,125	41	86
	Total	1,419	1,245	78	40	29,363	34,448	1,258	290	1,255	38	95
	Total	1,660	1,246	82	53	29,434	38,661	1,289	325	1,249	39	89
	Total Total	1,738 1,443	1,584 1,807	87 87	58 54	29,853 28,553	37,265 38,910	1,282 1,355	283 305	1,259 1,211	41 42	102 93
	Total	1,443	1,613	84	54	27,763	37,312	1,401	331	1,211	31	99
	Total	1,547	1,615	85	47	28.031	30,520	1,386	331	1,244	35	108
	Total	1,448	1,832	79	25	25,755	26,817	1,310	248	1,054	27	101
	Total	1,405	1,250	74	26	26,232	25,163	1,240	245	1,136	34	92
	Total	1,816	1,449	58	29	24,846	26,212	1,144	253	1,097	34	103
2004	Total	1,917	2,009	72	34	26,613	28,857	1,191	R 295	1,193	24	R <b>94</b>
2005	Total	1,922	1,630	R 68	34	25,875	27,380	1,084	264	1,166	34	R <b>94</b>
	January	186	121	5	3	2,217	2,411	91	23	112	3	R 8
	February	169	137	5	3	2,024	2,098	83	22	96	3	R 7 R 9
	March	170	126	5	3	2,115	2,070	91	25	100	3	R 8
	April	134	77 51	5 5	3	2,050 2.059	1,802 1,762	84 92	24 24	97 98	3	**8 Rg
	May	139 147	51 51	R 6	3	2,059	1,762	92 94	23	98	2	R 8
	June July	163	55	7	3	2,104	1,717	103	25 25	105	3	Rg
	August	163	58	7	3	2,202	1,717	103	25	103	3	Rg
	September	138	49	6	3	2,061	1,722	91	23	100	3	R 8
	October	136	44	6	3	2,074	1,545	97	24	103	3	Rg
	November		64	5	3	2,020	1,863	89	21	100	3	R 9
	December	183	102	6	3	2,136	2,249	95	20	105	3	R 9
	Total	1,886	935	R 68	36	25,262	22,706	1,115	277	1,216	33	<sup>R</sup> 102
2007	January	R 191	R 113	6	3	R 2,003	R 2,242	R 96	24	R 99	R 5	R g
	February	R 186	R 198	<sup>R</sup> 5	R 2	R 1,876	R 2,627	R 79	R 20 R 23	R 90	R 5 R 5	R 8 R 8
	March	171 <sup>R</sup> 146	R 103 R 58		3	R 1,956 R 1,850	R 2,233 R 2.039	<sup>R</sup> 81 <sup>R</sup> 80	R 23	<sup>R</sup> 95 <sup>R</sup> 96	R 3	R 8
	April May	R 143	R 26	5 5	3	R 1,850	R 1.901	R 84	R 23	R 96	R 2	
	June	137	R 37	R 6	3	R 1,845	R 1.726	R 85	R 22	R 93	R 2	R 8
	July	<sup>R</sup> 151	R 23	R 7	3	R 1,868	R 1,627	R 90	R 22	R 98	R 2	R 8
	August	R 162	R 41	R <b>7</b>	3	R 1,912	R 1.832	R 101	R 23	R 95	R <sub>2</sub>	Rq
	September	R 145	R 28	R 6	3	R 1,765	R 1.436	R 89	23	R 92	R 2	R 8
	October	R 142	R 25	R 6	3	R 1,830	R 1,431	R 89	R 22	R 96	3	R 9
	November	<sup>R</sup> 169	R 24	6	3	R 1,830	R 1,435	<sup>R</sup> 85	R 20	<sup>R</sup> 95	3	R g
	December	_ 183	_R 75	_ <sup>R</sup> 6	_ 3	R 1,945	R 1,679	R 90	R 22	_ <sup>R</sup> 102	_ 3	_R 8
•	Total	R 1,927	R <b>752</b>	R <b>70</b>	R 31	R 22,537	R <b>22,207</b>	R 1,050	R <b>268</b>	R 1,148	R <b>36</b>	R <b>98</b>
	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	6	3	1,925	1,396	86	26	81	3	3
	April	160	26	5	3	1,910	1,071	79	21	85	3	4
	May	163 187	21 41	5 5	3	2,020 1.951	1,094 1,225	84 88	21 20	88 88	2	3
	June	187	41	5	3	2,041	1,225	88 89	20	92	3	3
•	July August	188	26	5	3	1,967	1,035	92	23	91	3	3
	September	175	26	5	3	1,987	1,033	72	18	88	3	3
	October	164	32	5	3	2,000	1,064	85	17	90	2	3
	November	179	37	5	3	1,908	966	80	15	86	2	2
	11-Month Total	1,965	407	57	32	21,589	12,837	929	228	964	29	34
	11-Month Total	1,743	677	64	28	20,592	20,528	960	246	1,046	33	89
2006	11-Month Total	1,703	833	62	33	23,126	20,457	1,019	256	1,111	30	93

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

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

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

R=Revised

Notes: • Data are for fuels consumed to produce electricity 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.

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

plants.

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

synfuel.

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

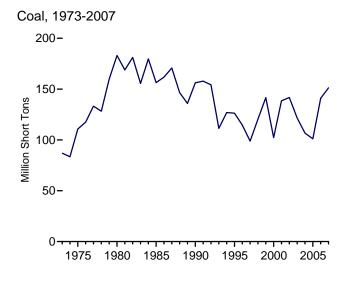
Municipal solid waste from biogenic sources, landfill gas, sludge waste, Through 2000, also includes agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

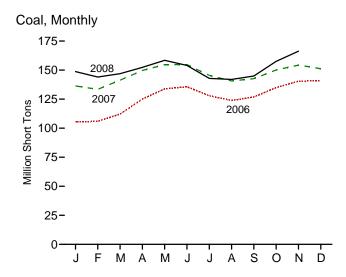
<sup>&</sup>lt;sup>g</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

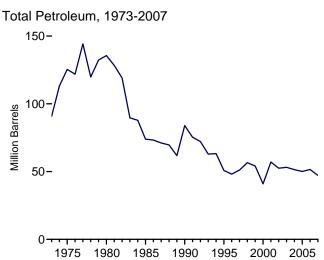
Wood and wood-derived fuels.

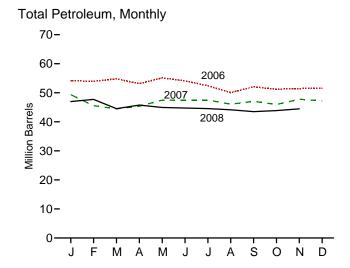
Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous

Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector

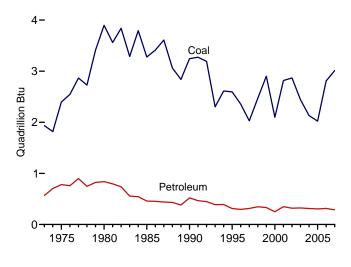




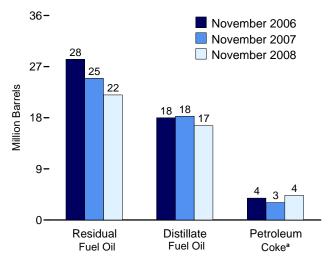




Coal and Petroleum Stocks, 1973-2007



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 Barrels
973 Year	86,967	10,095	79,121	NA	312	90,776
1975 Year		16,432	108,825	NA 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
1995 Year		•	,			•
996 Year		15,216	32,473	NA	91	48,146
1997 Year		15,456	33,336	NA	469	51,138
1998 Year		16,343	37,451	NA NA	559	56,591
l999 Year <sup>f</sup>		17,995	34,256	NA	372	54,109
2000 Year	102,296	15,127	24,748	NA	211	40,932
2001 Year		20,486	34,594	NA	390	57,031
2002 Year	141,714	17,413	25,723	800	1,711	52,490
2003 Year		19,153	25,820	779	1,484	53,170
2004 Year		19.275	26.596	879	937	51,434
2005 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
July		18,044	30,198	1,081	615	52,401
August		18,093	27,979	1,082	580	50,056
September	126,872	18,024	29,456	1,343	647	52,059
October	134,941	17,852	28,367	1,330	736	51,228
November	140,442	17,987	28,292	1,336	771	51,472
December	140,964	18,013	28,823	1,380	674	51,583
007 January	R 136,377	R 17,306	R 27,138	R 1,406	<sup>R</sup> 699	R 49,346
February		R 17,036	R 23,516	R 1,379	R 723	R 45,546
March		R 16.876	R 23.089	<sup>R</sup> 1,336	<sup>R</sup> 636	R 44,480
April	R 149,657	R 16,789	R 23,918	R 1,338	R 669	R 45,389
May	_ ′	R 16,782	R 26,022	R 1,379	<sup>R</sup> 660	R 47,481
June		R 17,109	R 26,240	R 1,384	R 543	R 47.445
July	D .	R 17,264	R 25,650	R 1,433	R 631	R 47,504
		R 17,276	R 24,513	R 1.488	R 562	R 46,087
August	_ ′					
September		R 17,590	R 25,272	R 1,484	R 543	R 47,059
October		R 17,920	R 23,809	R 1,521	545	R 45,973
November		R 18,261	R 24,941	<sup>R</sup> 1,515	R 612	R 47,777
December	R 151,221	R 18,395	<sup>R</sup> 24,136	R 1,902	<sup>R</sup> 554	<sup>R</sup> 47,203
008 January		18,927	23,674	1,422	590	46,973
February		19,593	23,926	1,459	551	47,730
March	146,952	16,851	22,893	1,412	676	44,537
April	152,349	16,355	24,238	1,449	744	45,761
May	- /	16,229	23,336	1,446	787	44,945
June	,	15,663	23,866	1,449	755	44,754
July	,	15,955	23,068	1,445	818	44.558
August	,	15.851	22,917	1,445	786	44.145
September	,	15,949	22,325	1,436	760	43,509
					760 760	
October		16,211	22,365	1,506		43,881
November	166,298	16,604	22,017	1,514	867	44,469

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

R=Revised. NA=Not available.

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

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

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

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

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

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

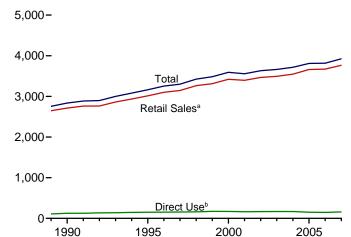
<sup>d</sup> Jet fuel and kerosene. Through 2003, data also include a small amount of

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

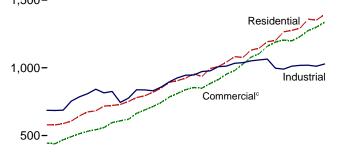
f Through 1998, data are for electric utilities only. Beginning in 1999, data are for electric utilities and independent power producers.

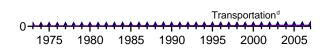
Figure 7.6 Electricity End Use (Billion Kilowatthours)

Electricity End Use Overview, 1989-2007

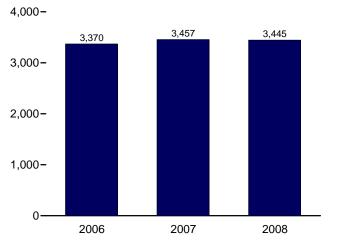


Retail Sales<sup>a</sup> by Sector, 1973-2007 1,500-



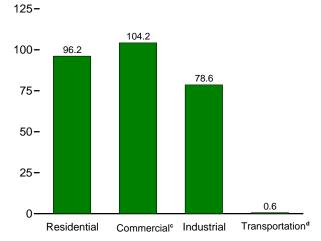


### Retail Sales<sup>a</sup> Total, January-November

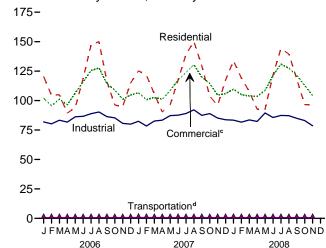


<sup>&</sup>lt;sup>a</sup>Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

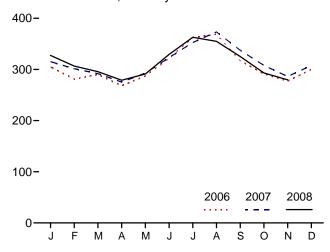
#### Retail Sales<sup>a</sup> by Sector, November 2008



#### 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 Salesa					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) <sup>h</sup>	Other (Old) <sup>i</sup>
1973 Total	579,231	E 444.505	686,085	<sup>E</sup> 3.087	1,712,909	NA 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	68,22
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
	924,019	838,263	945,522	4,751	2,712,555	124,529	2,837,084	751,027	91,98
990 Total	1.042.501	953.117	1.012.693	4,751		150.677		862.685	95.40
995 Total					3,013,287		3,163,963		
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	4,962	3,264,231	160,866	3,425,097	979,401	103,51
999 Total	1,144,923	1,103,821	1,058,217	5,126	3,312,087	171,629	3,483,716	1,001,996	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	105,55
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		
006 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		
						E 12,263			
June	118,815	115,785	86,630	609	321,840		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	R 125,286	R 106,667	R 82,384	<sup>R</sup> 766	R 315,104	<sup>RE</sup> 14,266	R 329,370		
February	<sup>R</sup> 121,464	<sup>R</sup> 100,756	<sup>R</sup> 78,392	<sup>R</sup> 719	<sup>R</sup> 301,331	RE 12,012	<sup>R</sup> 313,344		
March	<sup>R</sup> 105,695	R 102,640	R 82,582	<sup>R</sup> 743	R 291,660	RE 12,770	R 304,431		
April	R 90,282	R 101,051	R 83,361	<sup>R</sup> 646	R 275,341	RE 12,491	R 287,831		
May	R 96,389	R 108,559	R 87,241	<sup>R</sup> 611	R 292.800	RE 13,019	R 305,819		
June	R 117,418	R 117,352	R 87,572	R 665	R 323,007	RE 13,060	R 336,067		
July	R 139.027	R 123,923	R 89.017	R 675	R 352.642	RE 14,003	R 366.645		
August	R 150,101	R 130,475	R 92.115	R 673	R 373,365	RE 14,654	R 388.019		
September	R 129,512	R 119,898	R 87,428	R 687	R 337,525	RE 13,339	R 350,864		
October	R 103,754	R 114.481	R 88,896	R 652	R 307,783	RE 13,449	R 321.231		
	R 05 005		00,090 R of 440	R 673		RE 13,449			
November	R 95,905	R 104,603	R 85,118	<sup>1</sup> 673 <sup>R</sup> 663	R 286,299		R 299,127	1	
December Total	R 117,408 R <b>1,392,241</b>	R 105,909 R <b>1,336,315</b>	R 83,725 R <b>1,027,832</b>	R <b>8,173</b>	R 307,704 R <b>3,764,561</b>	RE 13,363 R <b>159,254</b>	R 321,067 R <b>3,923,814</b>		
						,			
008 January	133,623	109,646	83,368	693	327,330	RE 13,788	R 341,118		
February	119,138	105,045	81,678	668	306,528	RE 12,579	R 319,107		
March	107,602	103,826	83,585	634	295,647	RE 12,764	R 308,411		
April	92,513	103,506	82,281	614	278,913	RE 12,240	<sup>R</sup> 291,153		
May	92,559	108,472	89,497	596	291,124	RE 12,569	R 303,693		
June	121,758	121,321	85,618	622	329,319	RE 12,956	R 342,275		
July	144,003	130,907	87,370	644	362,925	RE 14,017	R 376,942		
August	139.511	127,484	87,189	640	354,824	RE 13.755	R 368,579		
September	118.343	121,521	84.899	625	325,388	RE 11.299	R 336.687		
October	96,607	112,892	83,007	628	293,134	RE 12,144	R 305,279		
November	96,153	104,245	78,610	616	279,623	E 11,308	290.931		
11-Month Total	1,261,810	1, <b>248,865</b>	927,102	6,978	3,444,755	E 139,419	3,584,175		
007 11-Month Total	1,274,833	1,230,407	944.107	7,509	3,456,856	E 145,891	3,602,747		
						E 134,425			
006 11-Month Total	1,236,638	1,195,071	931,360	6,730	3,369,800	- 134,425	3,504,225		

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

<sup>&</sup>lt;sup>a</sup> Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

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

<sup>c</sup> Industrial sector. Through 2002, excludes agriculture and irrigation; beginning in 2003, includes agriculture and irrigation.

<sup>d</sup> Transportation sector, including sales to railroads and railways.

<sup>e</sup> The sum of "Residential," "Commercial," "Industrial," and "Transportation."

<sup>f</sup> 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.

<sup>g</sup> The sum of "Total Retail Sales" and "Direct Use."

h "Commercial (Old)" is a discontinued series-data are for the commercial sector, excluding public street and highway lighting, interdepartmental sales, and

other sales to public authorities.

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

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

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

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

Web Page: See http://www.eia.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*, February 2009, Table 5.1.

#### Retail Sales, Commercial

1973–2002: Estimated by EIA as the sum of "Commercial (Old)" and the non-transportation portion of "Other (Old)." See estimation methodology at

http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_elec.pdf. 2003 forward: EIA, *Electric Power Monthly*, February 2009, Table 5.1.

#### **Retail Sales, Transportation**

1973–2002: Estimated by EIA as the transportation portion of "Other (Old)." See estimation methodology at http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_elec.pdf. 2003 forward: EIA, *Electric Power Monthly*, February 2009, Table 5.1.

#### **Direct Use, Annual**

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

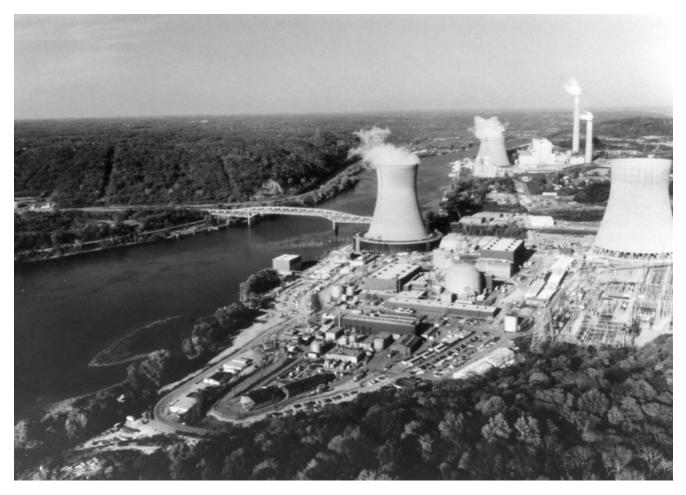
1995–2007: EIA, *Electric Power Annual* 2007, January 2009, Table 7.2.

#### **Direct Use, Monthly**

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

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

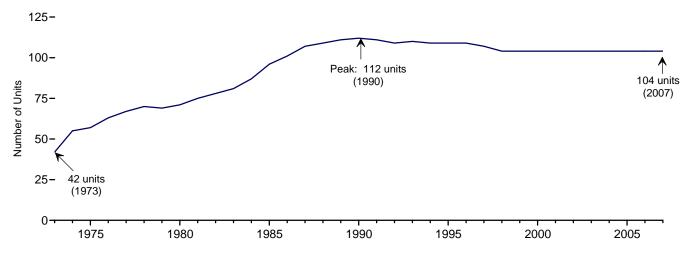
# **Nuclear Energy**



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

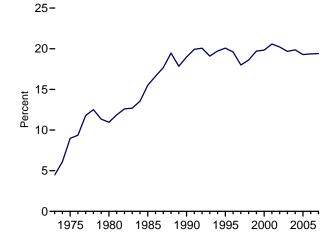
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Total

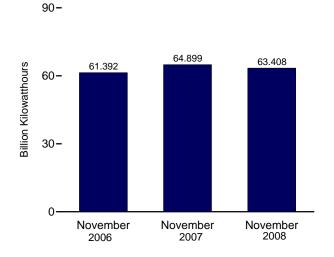
1
Nuclear Electric Power

1975 1980 1985 1990 1995 2000 2005

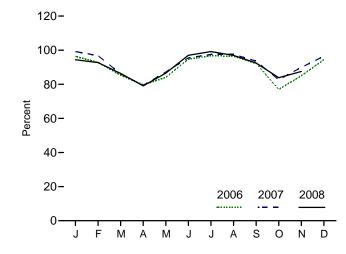
Nuclear Share of Electricity Net Generation, 1973-2007



**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
	Number	Million Kilowatts	Million Kilowatthours	Per	cent
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
85 Total	96	79.397	383,691	15.5	58.0
90 Total	112	99.624	576,862	19.0	66.0
95 Total	109	99.515	673,402	20.1	77.4
96 Total	109	100.784	674,729	19.6	76.2
97 Total	107	99.716	628,644	18.0	71.1
98 Total	104	97.070	673,702	18.6	78.2
	104	97.411	728,254	19.7	85.3
99 Total					
00 Total	104	97.860	753,893	19.8	88.1
01 Total	104	98.159	768,826	20.6	89.4
02 Total	104	98.657	780,064	20.2	90.3
03 Total	104	99.209	763,733	19.7	87.9
04 Total	104	99.628	788,528	19.9	90.1
05 Total	104	99.988	781,986	19.3	89.3
<b>06</b> 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
October	104	100.334	57.509	17.9	77.0
November	104	100.334	61,392	19.9	85.0
	104				
Total	104	100.334 <b>100.334</b>	70,490 <b>787,219</b>	21.0 <b>19.4</b>	94.4 <b>89.6</b>
<b>07</b> January	104	<sup>R</sup> 100.266	74,006	R 20.9	R 99.2
February	104	R 100.266	65.225	R 20.2	R 96.8
		R 100.266		R 20.1	R 86.2
March	104		64,305		
April	104	R 100.266	57,301	<sup>R</sup> 18.9	R 79.4
May	104	<sup>R</sup> 100.266	65,025	19.7	<sup>R</sup> 87.2
June	104	R 100.266	68,923	19.0	<sup>R</sup> 95.5
July	104	R 100.266	R 72,739	18.5	<sup>R</sup> 97.5
August	104	R 100.266	72.751	17.2	R 97.5
September	104	R 100.266	R 67,579	19.0	R 93.6
October	104	R 100.266	61,690	18.5	R 82.7
		R 100.266	01,090 R 64 000		R 89.9
November	104		R 64,899	20.7	
December	104	<sup>R</sup> 100.266	71,983	20.8	R 96.5
Total	104	<sup>R</sup> 100.266	<sup>R</sup> 806,425	19.4	<sup>R</sup> 91.8
<b>08</b> January	104	R 100.266	70,686	19.5	R 94.8
February	104	R 100.266	64,936	19.9	<sup>R</sup> 93.1
March	104	R 100.266	64,683	19.9	R 86.7
April	104	R 100.266	57,281	18.9	<sup>R</sup> 79.3
May	104	R 100.266	64,794	19.9	R 86.9
June	104	R 100.266	70,268	18.8	R 97.3
	104	R 100.266	74,266	18.5	R 99.6
July					
August	104	R 100.266	72,573	18.8	R 97.3
September	104	R 100.266	67,003	19.9	R 92.8
October	104	R 100.266	62,793	19.7	R 84.2
November	104	100.266	63,408	20.4	87.8
11-Month Total	104	100.266	732,692	19.4	90.9
07 11-Month Total	104	100.266	734,442	19.3	91.4
	10-				

<sup>&</sup>lt;sup>a</sup> Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at end of period. See Note 1, "Operable Nuclear Reactors," at end of section. For additional information on nuclear generating units, see Annual Energy Review 2007, June 2008, Table 9.1, http://www.eia.doe.gov/emeu/aer/nuclear.html.

<sup>b</sup> At end of period.

<sup>c</sup> For the definition of "Net Summer Capacity," see Note 2, "Nuclear Capacity," at end of section.

<sup>d</sup> For an explanation of the method of calculating the capacity factor, see Note

<sup>2, &</sup>quot;Nuclear Capacity," at end of section.
R=Revised.
Notes: • For a discussion of nuclear reactor unit coverage, see Note 1,
"Operable Nuclear Reactors," at end of section. • Nuclear electricity net
generation totals may not equal sum of components due to independent rounding.
• Geographic coverage is the 50 States and the District of Columbia.
Web Page: See http://www.eia.doe.gov/emeu/mer/nuclear.html for all available
data beginning in 1973.

Sources: See end of section.

### **Nuclear Energy**

- **Note 1. Operable Nuclear Reactors.** A reactor is generally defined as operable while it possessed a full-power license from the Nuclear Regulatory Commission or its predecessor the Atomic Energy Commission, or equivalent permission to operate, at the end of the year or month shown. The definition is liberal in that it does not exclude units retaining full-power licenses during long, non-routine shutdowns that for a time rendered them unable to generate electricity. Examples are:
- (a) In 1985 the five then-active Tennessee Valley Authority (TVA) units (Browns Ferry 1, 2, and 3, and Sequoyah 1 and 2) were shut down under a regulatory forced outage. All five units were idle for several years, restarting in 2007, 1991, 1995, 1988, and 1988, respectively and were counted as operable during the shutdowns.
- (b) Shippingport was shut down from 1974 through 1976 for conversion to a light-water breeder reactor, but is counted as operable from 1957 until its retirement in 1982.
- (c) Calvert Cliffs 2 was shut down in 1989 and 1990 for replacement of pressurizer heater sleeves but is counted as operable during those years.

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

- **Note 2. Nuclear Capacity.** Nuclear generating units may have more than one type of net capacity rating, including the following:
- (a) Net Summer Capacity—The steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power, as demonstrated by test at the

time of summer peak demand. Auxiliary power of a typical nuclear power plant is about 5 percent of gross generation.

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

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

#### **Table 8.1 Sources**

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

1973-1982: Compiled from various sources, primarily 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.

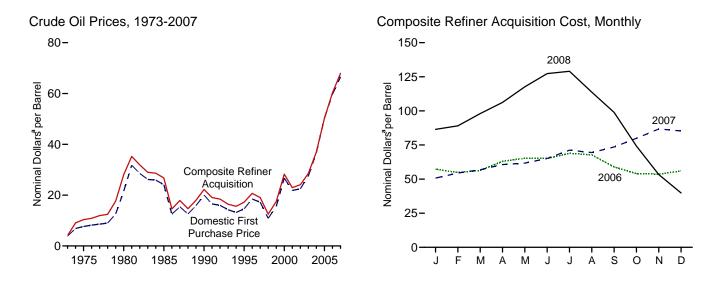
#### **Capacity Factor**

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

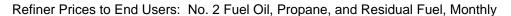
# **Energy Prices**

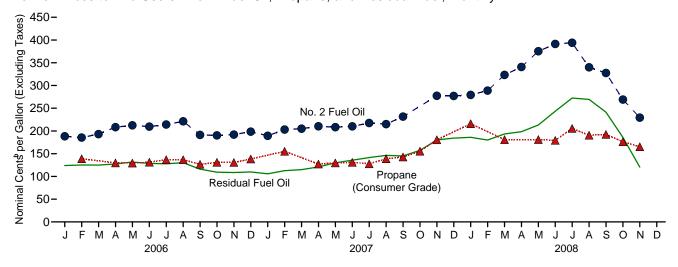


Figure 9.1 Petroleum Prices



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 ASONDJFMA M A M S ONDJF M A M J A F J 2006 2007 2008





<sup>a</sup>See "Nominal Dollars" in Glossary. <sup>b</sup>See "Nominal Price" in Glossary. Web Page: http://www.eia.doe.gov/emeu/mer/prices.html. Sources: Tables 9.1, 9.5, and 9.7.

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

**Table 9.1 Crude Oil Price Summary** 

(Nominal Dollars<sup>a</sup> per Barrel)

				R	efiner Acquisition Co	st <sup>b</sup>
	Domestic First Purchase Price <sup>c</sup>	F.O.B. Cost of Imports <sup>d</sup>	Landed Cost of Imports <sup>e</sup>	Domestic	Imported	Composite
973 Average	3.89	<sup>f</sup> 5.21	<sup>f</sup> 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
	21.59	32.37	33.67	24.23	33.89	28.07
980 Average						
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
005 Average	50.28	47.60	49.29	52.94	48.86	50.24
oo Average	30.20	47.00	43.23	32.34	40.00	30.24
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
	55.03	52.82	54.53	57.81	54.97	55.98
December Average	<b>59.69</b>	52.62 <b>57.03</b>	54.53 <b>59.11</b>	62.62	54.97 <b>59.02</b>	<b>60.24</b>
	40.00	40.44	50.50	50.40	40.57	50.77
007 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
008 January	87.06	83.43	86.61	89.57	84.82	86.48
	89.41	87.81	90.67	92.25	87.41	89.07
February	98.41 98.44	96.42	100.03	92.25 99.87	97.03	89.07 98.01
March						
April	106.64	104.20	108.47	108.46	104.94	106.21
May	118.55	115.02	119.55	119.75	116.55	117.64
June	127.47	123.62	125.93	129.45	126.22	127.32
July	128.08	122.12	124.30	131.47	127.77	129.03
August	112.83	108.10	109.64	118.32	111.21	113.71
September	98.50	<sup>R</sup> 91.65	<sup>R</sup> 92.31	103.73	96.38	98.91
October	73.22	R 63.29	R 66.20	81.03	70.84	74.22
November	R 53.70	R 44.73	R 48.16	<sup>R</sup> 61.74	R 49.10	R 53.32
December	NA	NA	NA	E 44.30	E 35.43	E 39.82

<sup>&</sup>lt;sup>a</sup> See "Nominal Dollars" in Glossary.

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.

data beginning in 1973.

Sources: See end of section.

a See "Nominal Dollars" in Glossary.
 b See Note 4, "Crude Oil Refinery Acquisition Costs," at end of section.
 c See Note 1, "Crude Oil Domestic First Purchase Prices," at end of section.
 d See Note 2, "Crude Oil F.O.B. Costs," at end of section.
 e See Note 3, "Crude Oil Landed Costs," at end of section.
 f Based on October, November, and December data only.

Based on October, November, and December data only.

Annual averages are the averages of the monthly prices, weighted by volume.
 Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions.
 Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

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

(Nominal Dollars<sup>a</sup> per Barrel)

			Se	elected Count	ries					
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>b</sup>	Total OPEC <sup>c</sup>	Total Non-OPEC <sup>c</sup>
1973 Average <sup>d</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	20.23	20.75	19.26	22.46	20.36	23.43	19.55	18.54	20.40	20.32
1995 Average	16.58	16.73	15.64	17.40	W	16.94	13.86	W	15.36	16.02
1996 Average	20.71	21.33	19.14	21.27	19.28	19.43	17.73	19.22	18.94	19.65
1997 Average	18.81	18.85	16.72	19.43	15.16	18.59	15.33	15.24	16.26	17.51
1998 Average	12.11	12.56	10.49	12.97	8.87	12.52	9.31	9.09	10.20	11.21
1999 Average	17.46	17.20	15.89	17.32	17.65	19.14	14.33	17.15	15.90	16.84
2000 Average	27.90	29.04	25.39	28.70	24.62	27.21	24.45	24.72	25.56	26.77
2001 Average	23.25	24.25	18.89	24.85	18.98	23.30	18.01	18.89	19.73	21.04
2002 Average	24.09	24.64	21.60	25.38	23.92	24.50	20.13	23.38	22.18	22.93
2003 Average	28.22	28.89	24.83	29.40	25.03	28.76	23.81	25.17	25.36	26.21
2004 Average	37.26	37.73	31.55	38.71	34.08	37.30	31.78	33.08	33.95	33.58
2005 Average	52.48	51.89	43.00	55.95	47.96	54.48	46.39	47.21	49.60	45.79
2006 January	59.28	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	60.07	54.10	50.16	64.05	W	63.13	56.29	55.84	58.34	51.87
April	W	62.26	57.12	71.85	W	W	62.93	61.12	65.06	59.75
May	66.95	66.17	55.62	70.83	65.35	68.98	61.70	63.45	65.31	60.81
June	67.10	63.43	55.07	69.96	65.87	69.34	60.87	63.99	64.69	59.04
July	70.81	69.24	60.24	75.63	W	W	64.60	61.76	67.61	64.23
August	68.94	65.45	59.97	72.67	54.21	=	60.48	56.14	62.58	62.76
September	56.89	55.49	52.01	62.74	53.27	W	52.02	52.13	55.87	53.58
October	54.00	52.38	47.64	58.62	52.19	W	48.97	50.62	52.73	48.86
November	57.67	56.16	48.13	61.20	48.43	W	48.54	49.57	53.07	50.26
December	58.28	53.99	50.09	62.24	52.76	W	49.13	51.89	54.26	51.68
Average	62.23	59.77	52.91	65.69	56.09	66.03	55.80	56.02	59.18	55.35
2007 January	52.04	48.98	43.27	56.03	W	53.57	44.79	50.06	50.92	45.31
February	55.18	57.10	47.47	58.32	W	_	49.80	52.43	53.84	49.98
March	60.34	58.44	50.21	64.88	W	62.04	52.01	56.22	57.79	52.91
April	65.45	58.26	54.36	69.72	W	W	56.48	58.82	62.32	56.42
May	65.85	62.06	55.60	71.40	W	W	57.47	63.71	63.77	57.78
June	69.63	67.21	59.91	75.55	W	W	61.01	65.45	67.05	61.12
July	74.18	70.77	64.61	79.08	W	76.35	66.02	70.75	72.04	66.48
August	68.38	70.46	61.80	74.08	W	W	63.79	70.97	68.86	64.18
September	75.62	70.66	65.95	80.10	W	W	68.99	77.63	75.30	68.38
October	80.20	79.10	72.04	88.88	W	W	74.87	85.03	82.10	73.38
November	90.85	W	79.13	94.71	86.74	W	83.61	84.11	87.15	80.07
December	88.27	90.11	80.49	96.18	81.45	W	80.57	81.14	86.61	77.78
Average	67.80	67.93	61.35	76.64	W	69.96	64.10	69.93	69.58	62.69
2008 January	88.77	80.54	80.10	93.26	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	-	107.89	121.13	118.23	111.30
June	130.72	125.58	116.15	140.01	125.58	W	119.60	124.37	126.49	120.48
July	127.19	122.27	123.19	134.58	110.61	W	123.18	110.34	121.93	122.37
August	107.58	108.36	108.45	117.21	107.54	W	110.20	105.06	108.99	107.17
September	92.42	95.87	92.26	95.68	82.23	W	92.76	82.02	91.11	R 92.25
October	R 62.08	61.83	<sup>R</sup> 64.40	<sup>R</sup> 67.28	<sup>R</sup> 67.00	W	<sup>R</sup> 60.35	<sup>R</sup> 62.21	R 62.89	<sup>R</sup> 63.70
November	W	39.65	42.46	53.29	W	_	41.41	45.64	45.00	44.46

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See "F.O.B." in Glossary, and Note 2, "Crude Oil F.O.B. Costs," at end of section. • Values for the current two months 2, Crude Oil F.O.B. Costs, at end of section. • Values for the current two months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

 <sup>&</sup>lt;sup>a</sup> See "Nominal Dollars" in Glossary.
 <sup>b</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

the Neutral Zone (between Kuwait and Saudi Arabia).

<sup>c</sup> 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 repioined 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>d</sup> Based on October, November, and December data only.

R=Revised = =No data reported W=Value withheld to avoid disclosure of

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<sup>a</sup> per Barrel)

				Selected (	Countries						
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>b</sup>	Total OPEC <sup>c</sup>	Total Non-OPEC°
1973 Average <sup>d</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
	18.37	17.54	18.09	16.12	17.63	17.48	18.26	15.58	17.37	16.94	17.51
1999 Average	29.57	26.69	29.68	26.03	30.04	26.58	29.26	26.05	26.77	27.29	27.80
2000 Average	25.13	20.09	25.88	19.37	26.55	20.58	25.32	19.81	20.73	21.52	22.17
2001 Average											
2002 Average	25.43	22.98 26.76	25.28	22.09	26.45	24.77 27.50	26.35	21.93	24.13	23.83	23.97
2003 Average	30.14		30.55	25.48	31.07		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
2007 January	53.12	46.86	52.22	44.32	58.55	51.21	56.59	47.20	50.65	52.81	47.56
February	57.78	50.25	59.08	48.45	61.16	54.94	59.30	51.97	54.18	56.06	51.69
March	61.91	52.58	59.37	51.07	66.47	58.22	65.96	54.34	57.49	59.60	54.71
April	67.78	54.60	61.77	55.16	71.15	61.53	65.92	58.67	60.98	63.73	57.43
May	67.51	56.46	63.70	56.40	72.99	66.15	W	60.17	65.02	66.38	58.91
June	72.40	57.54	67.87	60.68	77.15	69.53	W	63.24	68.18	69.58	61.65
July	76.73	62.66	73.15	65.46	80.84	72.37	77.73	67.95	71.29	73.63	66.95
August	70.28	64.10	72.72	62.52	76.67	74.11	W	65.64	72.79	71.73	65.76
September	77.76	66.76	77.32	66.55	81.96	80.60	79.48	70.64	78.56	77.37	69.42
October	81.92	67.36	79.74	72.68	90.13	84.73	81.77	76.74	84.29	83.58	73.62
November	92.56	76.60	80.74	79.70	95.54	86.92	W	85.23	86.17	88.53	80.39
December	90.96	69.62	94.68	81.53	97.88	83.72	94.58	82.55	84.00	88.30	79.02
Average	71.27	60.38	70.91	62.31	78.01	70.78	72.47	66.13	69.83	71.14	63.96
2008 January	93.21	77.83	85.22	81.28	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
	106.19	93.33	102.88	88.54	101.23	108.26	W	93.59	105.39	103.94	94.65
March	117.34	103.08	102.88	95.31	118.07	118.50	W	100.57	115.52	112.31	103.20
April	127.06	111.83	118.42	104.42	130.93	127.77	128.95	111.77	125.36	123.28	114.83
May							126.95 W				122.78
June	133.08 129.91	119.80 122.83	127.35 126.22	117.29 124.28	142.39 137.22	125.91	W	122.65 124.91	125.61 116.43	128.45 124.27	122.78
July						116.22 104.42			103.92	124.27	124.33
August	110.00	110.63	113.17	109.61	123.02		104.13 R 88.13	111.78	R 80.80		
September	94.05 R 64.25	96.38 R 60.53	97.72 R 62.00	93.58 R 66.46	98.82 R 70.00	R 80.75		95.67 B 62.47		R 90.45	R 94.43
October	R 64.35	R 69.52	R 62.09	R 66.16	R 72.80	R 63.58	R 69.17	R 62.47	R 62.86	R 65.58	R 66.91
November	W	49.53	42.15	43.14	58.98	51.49	60.68	44.00	49.60	49.23	47.16

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

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

Sources: • October 1973-September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • October 1977-December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 22. • 2008: EIA, Petroleum Marketing Monthly, February 2009, Table 22.

 <sup>&</sup>lt;sup>a</sup> See "Nominal Dollars" in Glossary.
 <sup>b</sup> Bahrain, Iran, Iran, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

<sup>c</sup> See "Organization of the Petroleum Exporting Co

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

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

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

Notes: • See "Landed Costs" in Glossary, and Note 3, "Crude Oil Landed

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

973 Average 975 Average 980 Average 980 Average 991 Average 992 Average 993 Average 994 Average 995 Average 996 Average 997 Average 998 Average 999 Average 9900 Average 9001 Average 9002 Average 9004 Average 9005 Average 9005 Average 9006 January February March April May June July August September October November December Average 9007 January February March April May June July August September October November December Average 9007 January February March April May June July August September October November December Average 9007 January February March April May June July August September October November December Average	38.8 56.7 119.1 111.5 114.9 NA	NA NA 124.5 120.2 116.4 114.7 123.1 123.4 105.9 116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 291.7 299.9 298.5 258.9	NA NA NA 134.0 134.9 133.6 141.3 141.6 125.0 135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	NA NA 122.1 119.6 121.7 120.5 128.8 129.1 111.5 122.1 156.3 153.1 144.1 163.8 192.3 233.8  235.9 235.4 244.4 280.1 299.3 296.3 304.6
975 Average 980 Average 980 Average 995 Average 995 Average 996 Average 997 Average 998 Average 999 Average 999 Average 900 Average 900 Average 900 Average 901 Average 902 Average 904 Average 905 Average 906 January 907 February 908 March 909 Average 909 Average 9004 Average 9005 Average 9006 January 907 February 908 March 909 Average 9007 January 908 Average 909 Average 900 January 909 Average 900 Average 900 January 900 January 900 Average 900 Average 900 Average 900 Average 900 January 900 Average 900	56.7 119.1 111.5 114.9 NA	NA 124.5 120.2 116.4 114.7 123.1 123.4 105.9 116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	NA NA 134.0 134.9 133.6 141.3 141.6 125.0 135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	NA 122.1 119.6 121.7 120.5 128.8 129.1 111.5 122.1 156.3 153.1 144.1 163.8 192.3 233.8
980 Average 985 Average 990 Average 991 Average 995 Average 996 Average 997 Average 998 Average 999 Average 999 Average 990 Average 990 Average 901 Average 902 Average 903 Average 904 Average 905 Average 906 January February March April May June July August September October November December Average 907 January February March April May June July August September October November December Average 907 January February March April May June July August September October November December Average	119.1 111.5 114.9 NA	124.5 120.2 116.4 114.7 123.1 123.4 105.9 116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	NA 134.0 134.9 133.6 141.3 141.6 125.0 135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	122.1 119.6 121.7 120.5 128.8 129.1 111.5 122.1 156.3 153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
85 Average 90 Average 90 Average 995 Average 996 Average 997 Average 998 Average 999 Average 000 Average 001 Average 002 Average 003 Average 004 Average 005 Average 005 Average 006 January February March April May June July August September October November December Average 007 January February February August September October November December Average 008 Average 009 Average 000 Average 000 Average 000 Average	111.5 114.9 NA	120.2 116.4 114.7 123.1 123.4 105.9 116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	134.0 134.9 133.6 141.3 141.6 125.0 135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	119.6 121.7 120.5 128.8 129.1 111.5 122.1 156.3 153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
90 Average 95 Average 95 Average 996 Average 997 Average 998 Average 90 Average 00 Average 01 Average 02 Average 05 Average 06 January February March April May June July August September October Average 07 January February March April May June July August September October Average 07 January February March Average 08 Average 09 Average	114.9	116.4 114.7 123.1 123.4 105.9 116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	134.9 133.6 141.3 141.6 125.0 135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	121.7 120.5 128.8 129.1 111.5 122.1 156.3 153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
95 Average 96 Average 97 Average 98 Average 99 Average 99 Average 00 Average 01 Average 02 Average 05 Average 06 January February March April May June July August September December Average 07 January February March April May June July August September October Average 07 January February March Average 08 Average 09 Average 09 Average 09 Average 09 Average 09 Average	NA N	114.7 123.1 123.4 105.9 116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	133.6 141.3 141.6 125.0 135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	120.5 128.8 129.1 111.5 122.1 156.3 153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
96 Average 97 Average 98 Average 99 Average 99 Average 00 Average 01 Average 02 Average 05 Average 06 January February March April May June July August September December Average 07 January February March April May June July August September October November December Average 07 January February March April May June July August September October November December Average 07 January February March April May June July August September October November December Average	NA	123.1 123.4 105.9 116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	141.3 144.6 125.0 135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	128.8 129.1 111.5 122.1 156.3 153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3
97 Average 98 Average 99 Average 90 Average 00 Average 01 Average 02 Average 03 Average 04 Average 05 Average 06 January February March April May June July August September December Average 07 January February March April May August September October November December Average 07 January February March April May June July August September October November December Average 07 January February March April May June July August September October November December Average	NA N	123.4 105.9 116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	141.6 125.0 135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	129.1 111.5 122.1 156.3 153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
98 Average 99 Average 99 Average 00 Average 01 Average 02 Average 03 Average 05 Average 06 January February March April May June July August September October Average 07 January February March Average 08 Average 09 January February March April May June July Average 09 Average 09 Average 09 Average 09 Average 09 Average 09 Average	NA N	105.9 116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	125.0 135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	111.5 122.1 156.3 153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
99 Average 00 Average 001 Average 012 Average 023 Average 03 Average 054 Average 055 Average 06 January February March April May June July August September October Average 07 January February March April May Average 08 Average 09 Average 09 Average 09 Average 09 January February February March Average 09 January February March April May June July August September October November Doctober November December April May June July August September October November December December December December December	NA N	116.5 151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	135.7 169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	122.1 156.3 153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
100 Average	NA N	151.0 146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	169.3 165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	156.3 153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
01 Average         02 Average         03 Average         04 Average         05 Average         06 January         February         March         April         May         June         July         August         September         October         November         December         Average         107 January         February         March         April         May         June         July         August         September         October         November         December         Average	NA N	146.1 135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	165.7 155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	153.1 144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
102 Average   103 Average   104 Average   105 Average   105 Average   106 Average   107 Average   108 Average   109 Average	NA N	135.8 159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	155.6 177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	144.1 163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
103 Average 104 Average 105 Average 106 January February March April May June July August September October November December Average 107 January February March April May June July August September October November December Average 107 January February March April May June July August September October November December Average	NA N	159.1 188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	177.7 206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	163.8 192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
103 Average 104 Average 105 Average 106 January February March April May June July August September October November December Average 107 January February March April May June July August September October November December Average 107 January February March April May June July August September October November December Average	NA N	188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
104 Average	NA N	188.0 229.5 231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	206.8 249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	192.3 233.8 235.9 235.4 244.4 280.1 299.3 296.3
006 January         February         March         April         May         June         July         August         September         October         November         December         Average         1007 January         February         March         April         May         June         July         August         September         October         November         December         Average	NA N	229.5  231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	249.1 252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	233.8 235.9 235.4 244.4 280.1 299.3 296.3
Note	NA NA NA NA NA NA NA NA	231.5 231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	252.1 251.9 260.3 296.7 316.9 313.9 321.9 320.7	235.9 235.4 244.4 280.1 299.3 296.3
February March April May June July August September October Average  07 January February March April May June July August September October November December Average	NA NA NA NA NA NA NA NA	231.0 240.1 275.7 294.7 291.7 299.9 298.5 258.9	251.9 260.3 296.7 316.9 313.9 321.9 320.7	235.4 244.4 280.1 299.3 296.3
March	NA NA NA NA NA NA NA	240.1 275.7 294.7 291.7 299.9 298.5 258.9	260.3 296.7 316.9 313.9 321.9 320.7	244.4 280.1 299.3 296.3
April May June July August September October November December Average  2007 January February March April May June July August September October November December Average	NA NA NA NA NA NA NA	275.7 294.7 291.7 299.9 298.5 258.9	296.7 316.9 313.9 321.9 320.7	280.1 299.3 296.3
May June July August September October November December Average Duly May June July August September Average Average March April May June July August September October November December Average Average	NA NA NA NA NA NA	294.7 291.7 299.9 298.5 258.9	316.9 313.9 321.9 320.7	299.3 296.3
May June July August September October November December Average Duly May June July August September Average Average March April May June July August September October November December Average Average	NA NA NA NA NA NA	294.7 291.7 299.9 298.5 258.9	313.9 321.9 320.7	299.3 296.3
June July August September October November December Average  007 January February March April May June July August September October November December Average	NA NA NA NA NA	299.9 298.5 258.9	313.9 321.9 320.7	
July August September October November December Average  2007 January February March April May June July August September October November December Average	NA NA NA NA	299.9 298.5 258.9	321.9 320.7	
August September October November December Average  007 January February March April May June July August September October November December Average	NA NA NA	298.5 258.9	320.7	
September October November December Average  007 January February March April May June July August September October November December Average	NA NA	258.9		303.3
October November December Average  107 January February March April May June July August September October November December Average	NA		281.9	263.7
November December Average  107 January February March April May June July August September October November December Average				
December	N I A	227.2	249.3	231.9
Average  DOT January February March April May June July August September October November December Average	NA	224.1	245.9	228.7
February	NA	233.4	255.0	238.0
February March April May June July August September October November December Average	NA	258.9	280.5	263.5
March	NA	227.4	250.1	232.1
March	NA	228.5	250.9	233.3
April         May         June         July         August         September         October         November         December         Average	NA	259.2	281.8	263.9
May	NA	286.0	309.3	290.9
June July August September October November December Average	NA	313.0	334.8	317.6
July August September October November December Average	NA NA	305.2	328.1	310.0
August September October November December Average	NA NA	296.1	320.0	301.3
September October November December Average				
October November December Average	NA	278.2	301.8	283.3
November December Average	NA	278.9	302.1	283.9
December Average	NA	279.3	303.7	284.3
Average	NA	306.9	330.7	311.8
	NA	302.0	326.4	306.9
109 January	NA	280.1	303.3	284.9
	NA	304.7	329.1	309.6
February	NA NA	303.3	327.2	308.3
	NA NA	325.8	350.2	330.7
March	NA NA	325.6 344.1	350.2 369.0	349.1
April				
May	NA	376.4	400.3	381.3
June	NA	406.5	431.9	411.5
July	NA	409.0	435.0	414.2
August	NA	378.6	404.5	383.8
September	NA	369.8	394.0	374.9
October	NA	317.3	343.2	322.5
November	NA	215.1	243.3	220.8
December		168.9	195.1	174.2
Average			351.9	331.7
<b>009</b> January	NA <b>NA</b>	326.6		183.8

 $<sup>^{\</sup>rm a}$  See "Nominal Price" in Glossary.  $^{\rm b}$  The 1981 average (available in Web file) is based on September through December data only.

<sup>c</sup> Also includes types of motor gasoline not shown separately.

NA=Not available.

Notes: • See Note 5, "Motor Gasoline Prices," at end of section. • In September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. From September 1981 forward, gasohol is included in the average for all types, and unleaded premium is weighted

more heavily. • Geographic coverage for 1973-1977 is 56 urban areas. Geographic coverage for 1978 forward is 85 urban areas.

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

data beginning in 1973.

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

Table 9.5 Refiner Prices of Residual Fuel Oil

	Sulfur Co	al Fuel Oil ontent Less al to 1 Percent	Sulfur	Il 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	
90 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	
97 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	
001 Average	52.3	64.2	42.8	49.2	47.6	53.1	
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	
<b>006</b> 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	123.2	119.5	127.8	
,	130.9	145.1	119.2	125.5	124.6	130.3	
August	111.8	132.4	104.1	111.8	107.3	116.0	
September		120.1	98.5				
October	107.7			105.9	102.5	109.3	
November	115.9	117.6	95.9	105.3	102.5	108.7	
December	113.3	119.9	96.3	105.3	104.3	109.9	
Average	120.2	134.2	108.5	117.3	113.6	121.8	
<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	204.7	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	254.2	265.7	263.6	272.4	
August	254.6	294.5 NA	244.5	255.4	248.6	269.4	
	217.5	266.6	218.0	230.0	246.6 217.9	241.2	
September	217.5 R 157.4				R 159.2	R 185.9	
October		216.6	R 160.3	R 175.9			
November	102.6	161.2	97.1	105.5	100.0	120.6	

<sup>&</sup>lt;sup>a</sup> See "Nominal Price" in Glossary.

R=Revised. NA=Not available.

Notes: 

Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. 

Values for the current month are preliminary. 

Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6,

<sup>&</sup>quot;Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

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

data beginning in 1978.

Sources: • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 16.
• 2008: EIA, Petroleum Marketing Monthly, February 2009, Table 16.

Table 9.6 Refiner Prices of Petroleum Products for Resale

	Finished Motor Gasoline <sup>b</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
990 Average	78.6	106.3	77.3	83.9	69.7	69.4	38.6
995 Average	62.6	97.5	53.9	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
006 January	174.9	218.7	182.4	191.7	175.6	181.0	104.4
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
				203.7			
September	180.0	231.9	194.7		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
007 January	157.0	204.3	172.7	180.6	161.2	169.5	99.5
February	171.7	218.7	176.6	194.2	172.9	182.4	103.3
March	199.5	246.1	184.6	194.3	178.1	197.9	104.9
April	226.4	277.9	202.1	204.8	191.0	211.6	106.7
May	249.5	304.7	207.9	207.8	194.9	210.1	111.2
June	236.1	292.4	211.4	215.7	201.4	214.7	109.4
July	230.7	299.8	216.7	226.1	207.1	222.0	115.9
August	215.2	282.8	215.1	222.2	202.1	219.3	116.7
September	219.5	283.0	225.6	245.0	213.3	232.2	124.8
October	221.8	276.9	235.3	252.5	226.0	242.6	135.2
November	245.8	302.0	265.6	285.4	256.9	269.8	147.1
December	235.8	292.7	265.5	282.5	257.0	259.9	146.1
Average	218.2	275.8	217.1	224.9	207.2	220.3	119.4
008 January	239.5	295.5	266.3	283.2	256.6	258.1	148.3
February	243.6	297.8	267.3	284.2	260.9	273.8	143.1
March	264.0	324.9	310.5	328.0	297.6	315.9	146.0
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	394.6	397.8	398.0	380.2	387.6	183.3
August	307.9	373.7	339.3	345.6	328.7	333.9	166.5
September	300.0	370.4	327.8	336.5	300.0	316.0	156.4
October	R 214.9	R 279.0	R 256.9	R 268.1	R 240.0	R 251.6	R 124.2
November	139.3	214.0	197.4	234.0	194.7	195.6	100.8

Notes: 

Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are shown in Table 9.7; they are sales made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. 

Values for the current month are preliminary. • Prices prior to 1983 are Energy

Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

or 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, February 2009, Table 4.

a See "Nominal Price" in Glossary.
 b See Note 5, "Motor Gasoline Prices," at end of section.

R=Revised. NA=Not available.

Table 9.7 Refiner Prices of Petroleum Products to End Users

	Finished Motor Gasoline <sup>b</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
980 Average	103.5	108.4	86.8	90.2	78.8	81.8	48.2
985 Average	91.2	120.1	79.6	103.0	84.9	78.9	71.7
990 Average	88.3	112.0	76.6	92.3	73.4	72.5	74.5
995 Average	76.5	100.5	54.0	58.9	56.2	56.0	49.2
996 Average	84.7	111.6	65.1	74.0	67.3	68.1	60.5
997 Average	83.9	112.8	61.3	74.5	63.6	64.2	55.2
998 Average	67.3	97.5	45.2	50.1	48.2	49.4	40.5
999 Average	78.1	105.9	54.3	60.5	55.8	58.4	45.8
000 Average	110.6	130.6	89.9	112.3	92.7	93.5	60.3
001 Average	103.2	132.3	77.5	104.5	82.9	84.2	50.6
002 Average	94.7	128.8	72.1	99.0	73.7	76.2	41.9
003 Average	115.6	149.3	87.2	122.4	93.3	94.4	57.7
004 Average	143.5	181.9	120.7	116.0	117.3	124.3	83.9
005 Average	182.9	223.1	173.5	195.7	170.5	178.6	108.9
g							
006 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
November	178.8	235.3	179.9	241.4	192.1	192.3	130.8
December	186.8	234.9	193.5	NA	198.5	197.0	138.4
Average	212.8	268.2	199.8	224.4	198.2	209.6	135.8
<b>007</b> 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
000 January	257.3	304.5	268.6	331.3	279.2	268.8	216.0
008 January	257.3 256.9	304.5 307.0	268.6 269.4	331.3 334.6	279.2 288.8	268.8 280.5	216.0 NA
February	256.9 278.4	337.0	269.4 311.9	354.b 358.2	323.2	280.5 325.5	180.9
March	278.4 298.4	357.0 359.7	333.3	376.5	323.2 340.6	325.5 345.3	180.9 NA
April	298.4 331.6	359.7 382.7	333.3 365.9	376.5 393.4	340.6 375.4	345.3 380.8	NA 181.1
May							
June	357.9 356.7	396.5	393.3	416.2	391.4	400.3	179.3
July	356.7	395.5	400.9	438.5	393.9	402.2	205.5
August	327.8	379.2	342.6	404.8	339.9	357.7	190.6
September	320.7	383.6	326.5	402.8	327.5	332.6	192.4
October	R 253.4	R 297.5	R 260.3	R NA	R 269.0	R 278.7	R 176.3
November	161.5	223.0	198.8	308.8	229.3	214.6	165.2

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 Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

 <sup>&</sup>lt;sup>a</sup> See "Nominal Price" in Glossary.
 <sup>b</sup> See Note 5, "Motor Gasoline Prices," at end of section.
 R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

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 2.
• 2008: EIA, Petroleum Marketing Monthly, February 2009, Table 2.

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

· ·		<del>.</del>		1 1		<del>                                     </del>		T	T
	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
	99.7	102.4	107.7	107.0	106.7	108.0	111.3	105.9	102.3
1985 Average	98.9	102.4	107.7	107.0	108.6	109.8	111.5	103.9	102.5
1990 Average	78.7	77.9	85.3	84.4	87.4	86.4	95.5	88.8	82.6
1995 Average									
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
<b>2007</b> 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
•	241.7	242.5	257.1	245.8	247.2	250.5	257.1	256.6	241.7
May	241.7	239.7	253.1	246.2	247.2	251.8	263.1	253.8	241.7
June		239.2	258.9		255.1	256.2	269.1		242.8
July	247.6			256.9				258.6	
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 Average	299.9 <b>254.0</b>	301.4 <b>253.5</b>	302.4 <b>267.9</b>	311.1 <b>257.6</b>	313.5 <b>260.2</b>	305.5 <b>261.5</b>	315.5 <b>267.4</b>	326.1 <b>266.4</b>	300.9 <b>250.8</b>
_									
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	429.0	437.7	448.4	437.8	428.0	419.4	428.9	455.9	432.6
August	395.8	399.7	417.6	389.2	384.2	NA	388.9	403.2	NA
September	374.5	370.2	393.3	362.7	357.5	367.5	371.2	377.7	356.9
		D	P 0 47 5		P 000 0	D	D	D a a 4 a	Data t
October	<sup>R</sup> 320.6	<sup>R</sup> 325.9	<sup>R</sup> 347.5	<sup>R</sup> 307.0	R 300.9	R 322.2	<sup>R</sup> 329.4	R 321.0	<sup>R</sup> 310.1

<sup>&</sup>lt;sup>a</sup> See "Nominal Price" in Glossary.

R=Revised. NA=Not available.

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

<sup>&</sup>quot;Historical Petroleum Prices," at end of section.

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

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

• 2008: EIA, Petroleum Marketing Monthly, February 2009, Table 15.

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

				(	ССС		i, Exoludii	.9	,		
	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		W	244.9	215.5	223.4	222.0	238.4	236.4	236.8	235.0	228.2
Average	238.1	W	239.8	226.8	226.1	224.4	232.9	231.7	231.2	229.7	226.8
2007 January	234.6	W	240.3	211.4	212.9	209.2	221.1	218.2	221.7	219.9	216.9
February	247.7	W	246.9	214.1	223.3	221.6	227.2	228.4	222.3	224.0	224.8
March	249.6	W	251.3	226.8	229.9	231.8	247.3	242.6	236.4	239.1	241.5
April	246.6	W	251.7	224.4	229.2	236.4	258.4	255.5	246.8	254.2	251.7
May	245.6	W	256.2	223.8	228.3	230.0	247.6	246.0	239.7	249.5	251.9
June	NA	W	255.4	232.7	236.2	238.2	245.6	246.7	243.3	251.7	249.9
July	246.4	W	258.7	236.6	241.2	244.1	254.2	255.2	252.0	254.8	258.6
August	245.1	W	258.8	236.2	240.9	247.7	257.3	258.5	256.2	261.7	262.6
September	252.6	W	266.1	245.6	253.5	257.3	266.8	263.7	258.9	271.8	273.4
October	270.7	W	283.0	266.3	266.7	273.5	280.1	280.8	275.0	281.4	282.6
November	302.8	W	312.4	295.5	300.3	308.7	310.3	313.3	307.5	310.3	305.0
December	320.0	W	322.1	300.2	306.2	307.0	304.0	309.6	303.9	306.9	296.4
Average	258.4	w	266.8	240.7	247.8	249.4	258.8	255.7	252.8	257.1	258.7
2009 Januari	224 5	W	226.4	206.4	214.4	304.9	204.0	306.3	300.5	303.7	207.4
2008 January	321.5		326.1	306.4	311.1		304.6				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	354.8 362.7	W	355.1 367.1	340.6 352.7	347.8 363.7	355.2 372.8	359.1 370.8	345.2 364.5	357.4 368.5	350.7 365.3	352.8 370.8
April	390.3	W	402.7	352.7 384.8	363.7 391.5	372.8 407.4	370.8 399.7	364.5 408.7	308.5 405.0	395.2	370.8
May	390.3 423.1	W	402.7 424.5	384.8 412.5	391.5 424.9	407.4 418.4	399.7 421.7	408.7 427.4	405.0 NA	395.2 NA	399.7 417.2
June	423.1 434.5	W	424.5 441.4	412.5 412.3	424.9	415.5	421.7 417.8	427.4 426.3	401.1	398.6	417.2
July	389.8	W	441.4	376.4	385.6	379.8	373.9	426.3 379.7	NA	366.3	379.5
August	369.8 362.1	W	408.7 382.7				373.9 365.8				379.5 365.8
September October	362.1 R 314.7	W	R 329.0	355.7 <sup>R</sup> 315.4	363.6 <sup>R</sup> 310.8	367.7 R 303.1	R 308.0	368.8 R 309.8	360.0 R 303.9	359.7 312.2	R 312.3
November	268.0	W	286.5	266.7	275.2	250.7	248.4	251.5	251.4	252.0	252.8
	200.0	vv	200.0	200.1	Z1 J.Z	200.1	240.4	201.0	201.4	202.0	202.0

<sup>&</sup>lt;sup>a</sup> See "Nominal Price" in Glossary.

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

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

<sup>&</sup>quot;Historical Petroleum Prices," at end of section.

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

Sources: • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 15.
• 2008: EIA, Petroleum Marketing Monthly, February 2009, Table 15.

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

	Idaho	Washington	Oregon	Alaska	U.S. Average	
	Idano	Washington	Oregon	Alaska	Average	
78 Average	43.6	48.6	45.8	53,2	49.0	
980 Average	91.6	100.8	97.3	97.8	97.4	
85 Average	97.2	101.1	97.1	108.3	105.3	
90 Average	97.4	102.9	97.0	110.1	106.3	
95 Average	83.9	96.2	89.4	83.4	86.7	
	93.3	108.0	98.9	90.9	98.9	
96 Average	95.3 95.3			90.9 97.3	98.4	
97 Average		113.9	103.1			
98 Average	78.4	97.8	86.1	85.2	85.2	
99 Average	76.2	106.5	93.8	96.6	87.6	
00 Average	117.0	144.5	136.8	133.7	131.1	
01 Average	103.8	133.6	121.1	137.7	125.0	
02 Average	91.9	120.4	106.0	108.7	112.9	
03 Average	118.8	148.7	130.3	124.3	135.5	
04 Average	149.5	174.9	159.4	152.4	154.8	
05 Average	212.3	238.5	214.6	206.1	205.2	
<b>06</b> January	217.9	249.6	220.4	218.3	233.4	
February	222.4	253.7	218.3	223.0	231.2	
March	228.1	272.8	237.6	224.9	235.3	
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	237.9 239.1	268.1	241.1	239.5	<b>236.5</b>	
<b>07</b> January	228.4	262.7	230.9	226.0	231.1	
	224.9	262.7	224.3	220.9	239.1	
February	224.9 241.7		224.3	220.9	239.1	
March		270.0				
April	254.1	281.2	231.5	238.1	248.0	
May	NA 250.0	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>08</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	429.8	
August	384.4	412.4	383.7	422.1	386.5	
September	358.3	382.3	355.2	389.7	366.2	
October	R 312.7	R 327.9	R 300.7	NA	R 316.9	
November	R 244.2	R 284.2	R 242.5	R 260.6	R 275.9	
December	NA	NA	NA	NA	E 237.6	

<sup>&</sup>lt;sup>a</sup> See "Nominal Price" in Glossary.

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

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

<sup>&</sup>quot;Historical Petroleum Prices," at end of section.

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

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

<sup>• 2008:</sup> EIA, Petroleum Marketing Monthly, February 2009, Table 15.

Figure 9.2 Average Retail Prices of Electricity (Nominal Cents<sup>a</sup> per Kilowatthour)

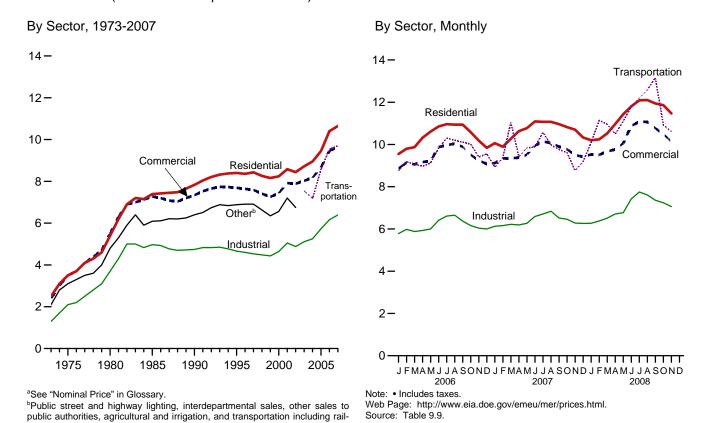


Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants (Nominal Dollars<sup>a</sup> per Million Btu, Including Taxes)

roads and railways.

Costs, 1973-2007 Costs, Monthly 12 <del>-</del> 20 -10 <del>-</del> Residual Fuel Oil 15-8-Natural Gas 6-10 Residual Fuel Oil Natural Gas 5-Coal Coal 1975 1980 1985 1990 1995 2000 2005 J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D <sup>a</sup>See "Nominal Dollars" in Glossary. Web Page: http://www.eia.doe.gov/emeu/mer/prices.html. Note: • Because vertical scales differ, graphs should not be compared. Source: Table 9.10.

#### Table 9.9 Average Retail Prices of Electricity

(Nominal Cents<sup>a</sup> per Kilowatthour, Including Taxes)

	Residential	Commercial <sup>b</sup>	Industrialc	Transportationd	Othere	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
980 Average	5.4	5.5	3.7	NA NA	4.8	4.7
985 Average	7.39	7.27	4.97	NA NA	6.09	6.44
	7.83	7.34	4.74	NA NA	6.40	6.57
990 Average						
95 Average	8.40	7.69	4.66	NA	6.88	6.89
996 Average	8.36	7.64	4.60	NA	6.91	6.86
997 Average	8.43	7.59	4.53	NA	6.91	6.85
998 Average	8.26	7.41	4.48	NA	6.63	6.74
999 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
002 Average	8.44	7.89	4.88	NA	6.75	7.20
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
	9.80	9.14	5.78	9.18		8.49
February						
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
September	10.94	9.89	6.37	10.11		9.32
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
107 January	<sup>R</sup> 10.06	<sup>R</sup> 9.12	<sup>R</sup> 6.13	R 8.92		<sup>R</sup> 8.71
007 January	R 9.89	R 9.34	R 6.16	R 9.38		8.74
February						
March	R 10.27	R 9.35	R 6.22	R 11.04		R 8.80
April	<sup>R</sup> 10.63	R 9.38	6.19	R 9.42		R 8.82
May	10.77	<sup>R</sup> 9.51	<sup>R</sup> 6.27	<sup>R</sup> 9.84		R 8.96
June	<sup>R</sup> 11.09	_R 9.95	<sup>R</sup> 6.59	_R 9.88		<sup>R</sup> 9.45
July	<sup>R</sup> 11.07	<sup>R</sup> 10.14	<sup>R</sup> 6.71	<sup>R</sup> _10.57		R 9.64
August	<sup>R</sup> 11.07	<sup>R</sup> 10.07	6.84	<sup>R</sup> 9.98		9.68
September	<sup>R</sup> 10.96	R 9.90	R 6.52	<sup>R</sup> 9.76		R 9.43
October	R 10.82	<sup>R</sup> 9.77	R 6.46	<sup>R</sup> 9.61		<sup>R</sup> 9.17
November	R 10.70	R 9.50	R 6.28	R 8.76		R 8.94
December	R 10.33	R 9.42	R 6.26	R 9.19		8.91
Average	R 10.65	R 9.65	R 6.39	R 9.70		R 9.13
008 January	10.20	9.53	6.27	10.09		8.98
	10.20	9.53 9.51	6.38	11.14		8.96
February						
March	10.52	9.67	6.51	10.96		9.09
April	10.97	9.77	6.71	10.49		9.26
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
September	11.94	10.77	7.36	13.16		10.31
October	11.86	10.49	7.24	10.91		10.02
November	11.47	10.13	7.06	10.61		9.73
11-Month Average	11.35	10.32	7.02	11.36		9.81
007 11-Month Average	10.68	9.67	6.40	9.74		9.15

and railways.

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

Notes: • Beginning in 2003, the category "Other" has been replaced by "Transportation," and the categories "Commercial" and "Industrial" have been redefined. • Prices are calculated by dividing revenue by sales. Revenue may not correspond to sales for a particular month because of energy service provider billing and accounting procedures. That lack of correspondence could result in uncharacteristic increases or decreases in the monthly prices. • Prices include State and local taxes, energy or demand charges, customer service charges, environmental surcharges, franchise fees, fuel adjustments, and other

miscellaneous charges applied to end-use customers during normal billing operations. Prices do not include deferred charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods.

• See Note 7, "Electricity Retail Prices," at end of section for plant coverage, and for information on preliminary and final values.

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

States and the District of Columbia.

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

Sources: • 1973-September 1977: Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • October 1977-February 1980: Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • March 1980-1982: FERC, Form FERC-5, "Electric Utility Company Monthly Statement." • 1983: Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." • 1984-1992: EIA, Form EIA-826, "Flectric Utility Report." • 1993 forward: EIA, Electric Power Monthly, February 2009, Table 5.3.

 <sup>&</sup>lt;sup>a</sup> See "Nominal Price" in Glossary.
 <sup>b</sup> Commercial sector. For 1973-2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.
 <sup>c</sup> Industrial sector. For 1973-2002, prices exclude agriculture and irrigation.
 <sup>d</sup> Transportation sector, including railroads and railways.
 <sup>e</sup> Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways. and railways

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

(Nominal Dollars<sup>a</sup> per Million Btu, Including Taxes)

			Petrole				
	Coal	Residual Fuel Oilb	Distillate Fuel Oilc	Petroleum Coke	Totald	Natural Gase	All Fossil Fuels
1973 Average	0.41	0.79	NA	NA	0.80	0.34	0.48
1975 Average	.81	2.01	NA	NA	2.02	.75	1.04
1980 Average	1.35	4.27	NA	NA	4.35	2.20	1.93
1985 Average	1.65	4.24	NA	NA	4.32	3.44	2.09
1990 Average	1.45	3.32	5.38	.80	3.35	2.32	1.69
1995 Average	1.32	2.59	3.99	.65	2.57	1.98	1.45
1996 Average	1.29	3.03	4.87	.78	3.03	2.64	1.52
1997 Average	1.27	2.79	4.49	.91	2.73	2.76	1.52
1998 Average	1.25	2.08	3.30	.71	2.02	2.38	1.44
1999 Average	1.22	2.44	4.03	.65	2.36	2.57	1.44
2000 Average	1.20	4.29	6.65	.58	4.18	4.30	1.74
2001 Average		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
	1.28	4.66	6.82	.72	4.33	5.39	2.28
2003 Average	1.26	4.00 4.73	8.02	.72	4.33 4.29	5.39	2.28
2004 Average	1.54	4.73 7.06			4.29 6.44	5.96 8.21	
2005 Average	1.54	7.00	11.72	1.11	0.44	0.21	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	5.44	7.04 7.17	2.86
April	1.71	6.81	14.48	1.26	4.91	7.17	2.90
•	1.70	8.01	14.46				2.94
May				1.33	6.43	6.75	
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
<b>2007</b> January	R 1.74	<sup>R</sup> 7.25	<sup>R</sup> 11.87	1.54	<sup>R</sup> 5.78	<sup>R</sup> 6.81	R 2.94
February	1.75	R 7.25	R 11.95	R 1.64	R 6.63	R 7.87	R 3.23
March	R 1.76	7.08	R 12.85	R 1.50	R 6.21	7.44	3.00
	R 1.77	<sup>R</sup> 7.91	R 14.04	R 1.53	R 6.64	7.54	R 3.18
April	R 1.77	R 8.41	R 14.65	R 1.51	R 7.16	7.54 7.73	R 3.30
May		** 6.41 R 0.00	" 14.00 R 44.70	" 1.51 R 4.57			R 3.44
June	1.77 <sup>R</sup> 1.76	R 8.90	R 14.79	<sup>R</sup> 1.57 <sup>R</sup> 1.43	R 7.75	7.60	R 3.44
July	``1.76	R 8.87	R 15.24		R 6.83	R 6.87	
August	R 1.77	R 9.21	R 15.25	R 1.54	R 8.05	R 6.62	R 3.50
September	R 1.77	R 8.98	R 15.68	R 1.55	R 7.37	R 6.12	R 3.11
October	R 1.77	R 9.88	R 16.61	R 1.37	R 7.39	R 6.78	R 3.13
November	1.78	R 11.60	R 18.86	R 1.47	R 8.48	7.11	R 3.07
December	1.82	R 11.64	R 18.65	R 1.45	R 8.14	7.68	R 3.28
Average	R <b>1.77</b>	R 8.64	R 14.85	R 1.51	R <b>7.17</b>	<sup>R</sup> 7.11	R 3.23
008 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	1.94	13.48	21.94	1.61	10.83	9.96	4.06
•	2.05	13.83	24.84	1.78	11.76	10.70	4.28
May	2.05	16.69	24.84 25.74	1.78	14.37	12.21	4.28 5.46
June	2.09	18.88	25.74 27.42	1.62	14.37	12.21	5.46 5.52
July							
August	2.18	18.34	24.84	2.42	14.14	9.11	4.51
September	2.18	15.36	23.00	2.17	12.30	7.87	3.91
October	2.18	14.55	19.44	2.14	10.36	6.76	3.46
November	2.15	9.76	15.42	2.05	7.57	6.49	3.24
11-Month Average	2.06	15.05	21.77	1.85	11.70	9.34	4.17
007 11-Month Average	1.76	8.51	14.55	1.51	7.11	7.06	3.22
006 11-Month Average	1.69	7.89	13.32	1.32	6.23	6.90	3.03

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

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

Sources: See end of section.

 $<sup>^{\</sup>rm a}$  See "Nominal Dollars" in Glossary.  $^{\rm b}$  For 1973-2001, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and

small amounts of fuel oil no. 4).

<sup>c</sup> For 1973-2001, electric utility data are for light oil (fuel oil nos. 1 and 2).

<sup>d</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>e</sup> Natural gas, plus a small amount of supplemental gaseous fuels. For 1973-2000, data also include a small amount of blast furnace gas and other gases

derived from fossil fuels.

f Weighted average of costs shown under "Coal," "Petroleum," and "Natural

Gas."

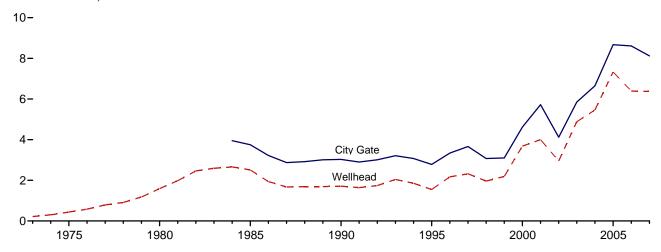
<sup>9</sup> Through 2001, data are for electric utilities only. Beginning in 2002, data also include independent power producers, and electric generating plants in the commercial and industrial sectors. See Note 8, "Costs of Fossil-Fuel Receipts at Electric Generating Plants," at end of section for plant coverage.

R=Revised. NA=Not available.

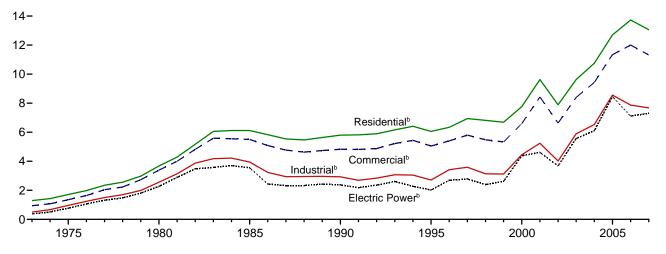
Figure 9.4 Natural Gas Prices

(Nominal Dollars<sup>a</sup> per Thousand Cubic Feet)

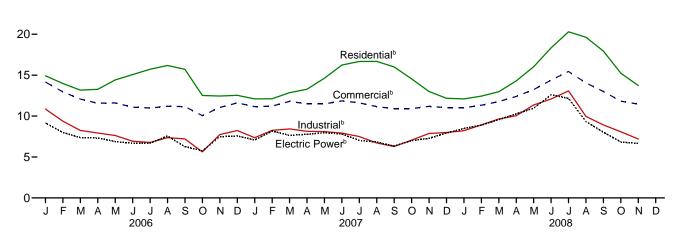
Selected Prices, 1973-2007



### Consuming Sectors, 1973-2007



#### Consuming Sectors, Monthly



<sup>&</sup>lt;sup>a</sup> See "Nominal Dollars" in Glossary.

<sup>b</sup>Includes taxes.

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

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**Table 9.11 Natural Gas Prices** 

(Nominal Dollarsa per Thousand Cubic Feet)

						Consumin	g Sectors <sup>b</sup>			
		014	Res	idential	Com	mercial <sup>c</sup>	Indi	ustriald	Electr	ic Powere
	Wellhead Price	City Gate Price	Price <sup>f</sup>	Percentage of Sector <sup>9</sup>	Price <sup>f</sup>	Percentage of Sector <sup>9</sup>	Pricef	Percentage of Sector <sup>9</sup>	Price <sup>f</sup>	Percentage of Sector <sup>9</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	2.19	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	d3.68	83.9
2003 Average	4.88	5.85	9.63	97.5	8.40	78.2	5.89	22.1	5.57	91.2
2004 Average	5.46	6.65	10.75	97.5 97.7	9.43	78.2 78.0	6.53	23.7	6.11	89.8
2005 Average	7.33	8.67	12.70	98.2	11.34	82.1	8.56	24.1	R 8.45	R 89.1
2003 Average	7.55	0.07	12.70	30.2	11.54	02.1	0.50	24.1	0.43	03.1
2006 January	R 8.01	10.80	R 14.92	NA	R 14.16	84.0	R 10.85	R 23.7	9.15	93.9
February	<sup>R</sup> 6.85	9.34	R 13.98	NA	12.95	84.2	R 9.38	R 23.8	8.00	95.5
March	R 6.43	8.81	R 13.17	NA	12.07	R 84.0	R 8.24	R 23.9	7.36	94.7
April	R 6.37	8.29	R 13.27	NA	11.57	R 80.9	R 7.93	R 23.5	7.32	94.7
May	R 6.23	7.99	R 14.41	NA	R 11.61	R 78.5	R 7.63	R 23.8	6.89	93.0
June	R 5.77	7.39	R 15.07	NA	11.09	R 75.8	R 6.92	R 23.4	6.69	93.8
July	R 5.91	7.40	R 15.72	NA	10.98	R 74.4	R 6.78	R 23.7	6.69	92.9
August	R 6.55	8.10	R 16.18	NA	11.20	R 72.5	R 7.36	R 23.7	7.56	91.9
September	6.06	7.68	R 15.71	NA	11.16	R 74.7	R 7.21	R 22.1	6.27	93.6
October	5.09	6.42	R 12.51	NA	R 10.05	R 77.3	5.62	R 22.9	5.76	92.0
November	R 6.71	8.47	R 12.45	NA	11.05	R 80.3	7.74	R 23.0	7.48	93.9
December	6.76	8.66	R 12.53	NA	11.61	82.6	8.23	23.5	7.57	93.7
Average	R <b>6.39</b>	8.61	R 13.73	98.1	R 12.00	R <b>80.8</b>	R <b>7.87</b>	R <b>23.4</b>	7.11	93.4
	P = 00	7.00	40.00		P =	Paga	P = 0=	Paga	P = 00	Paga
2007 January	R 5.83	7.89	12.09	NA	R 11.15	R 83.2	R 7.35	R 22.8	R 7.08	R 93.0
February	R 6.91	8.59	R 12.11	NA	R 11.21	R 83.9	R 8.25	R 23.0	R 8.18	R 92.3
March	R 6.78	8.81	12.86	NA	R 11.79	R 83.5	R 8.43	R 22.4	7.64	R 93.8
April	<sup>R</sup> 6.37	R 8.20	R 13.28	NA	R 11.49	<sup>R</sup> 81.2	8.14	R 22.4	R 7.77	R 94.2
May	R 6.85	R 8.37	R 14.63	NA	R 11.48	77.9	R 8.10	R 23.3	7.96	R 93.2
June	R 6.72	R 8.42	R 16.23	NA	R 11.86	<sup>R</sup> 76.2	<sup>R</sup> 7.92	R 23.9	7.80	R 93.0
July	R 6.32	<sup>R</sup> 7.98	<sup>R</sup> 16.67	NA	<sup>R</sup> 11.61	<sup>R</sup> 74.3	<sup>R</sup> 7.50	R 22.2	<sup>R</sup> 7.03	<sup>R</sup> 91.7
August	R 5.87	R 7.47	R 16.68	NA	R 11.16	R 72.5	R 6.72	R 22.3	R 6.83	R 89.0
September	R 5.42	R 6.97	R 16.00	NA	10.90	R 72.5	R 6.28	R 21.3	R 6.33	R 92.0
October	<sup>R</sup> 5.90	<sup>R</sup> 7.39	R 14.55	NA	R 10.90	<sup>R</sup> 74.7	<sup>R</sup> 7.06	R 21.4	<sup>R</sup> 7.00	<sup>R</sup> 91.8
November	R 6.58	R 8.07	R 13.00	NA	R 11.19	<sup>R</sup> 79.7	R 7.87	R 20.9	<sup>R</sup> 7.28	<sup>R</sup> 93.1
December	R 6.97	_ 8.13	_ 12.17	_ NA	_ 11.02	R 82.5	7.99	R 21.5	7.93	R 92.9
Average	<sup>R</sup> 6.37	<sup>R</sup> 8.12	R 13.06	<sup>E</sup> 97.9	R 11.32	<sup>R</sup> 80.5	<sup>R</sup> <b>7.68</b>	R 22.3	7.31	R <b>92.2</b>
2008 January	E 6.99	R 8.35	R 12.09	NA	R 11.01	R 78.9	R 8.21	20.5	8.48	99.6
February	E 7.55	R 8.86	12.44	NA	R 11.32	R 78.5	8.92	20.4	8.90	101.9
March	E 8.29	R 9.46	12.97	NA	R 11.77	78.4	R 9.64	21.3	9.56	99.7
April	E 8.94	R 9.87	R 14.29	NA	R 12.40	R 75.4	R 10.04	21.8	10.27	100.8
	E 9.81	R 10.99	16.02	NA NA	13.23	R 71.3	R 11.35	21.3	10.27	99.3
May	E 10.82	R 11.78	R 18.33	NA NA	R 14.39	R 70.5	R 12.08	R 20.8	12.60	99.3 98.3
June	E 10.62	R 12.42	R 20.29	NA NA	R 15.45	R 66.7	13.07	20.7	12.00	97.1
July	E 8.32					R 65.2				
August	E 7.27	R 10.13	19.63	NA	R 14.04		9.95	20.3 R 18.6	9.33	97.8
September		8.96	17.94	NA	R 13.00	65.3	R 8.92		8.03	99.5
October	E 6.36	7.88	15.23	NA	11.82	68.8	8.08	18.8	6.83	99.4
November	E 5.97	7.75	13.73	NA	11.46	73.8	7.20	19.4	6.66	99.1
11-Month Average	<sup>E</sup> 8.27	9.31	13.90	NA	12.09	74.5	9.76	20.4	9.59	99.1
2007 11-Month Average 2006 11-Month Average	6.32 6.36	8.12 8.60	13.19 13.93	NA NA	11.34 12.05	80.1 80.5	7.63 7.84	22.4 23.4	7.27 7.07	92.1 93.4

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, "Natural Gas Prices," at end of section. • Wellhead annual and year-to-date prices are simple averages of the monthly prices; all other annual and year-to-date prices are volume-weighted averages of the monthly prices. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eig.doc.org/geographics/instructions/

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 "Nominal Dollars" in Glossary.
b See Note 9, "Natural Gas Prices," at end of section.
c Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.
d Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.
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.
Includes taxes.

 $<sup>^{\</sup>rm g}$  The percentage of the sector's consumption in Table 4.3 for which price data are available. For details on how the percentages are derived, see Table. 9.11 Sources at end of section.

### **Energy Prices**

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

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

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

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

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

Crude oil costs and volumes reported on Form ERA-49 excluded unfinished oils but included the Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported

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

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

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

Note 6. Historical Petroleum Prices. Starting in January 1983, Form EIA-782, "Monthly Petroleum Product Sales Report," replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous series were generated for annual data 1978-1982 and for monthly data 1981 and 1982 by estimating the prices that would have been published had Form EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment was made for product and sales type matching and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale and between retail and end user. The resale category continues to include sales among resellers. However, sales to bulk consumers, such as utility, industrial, and commercial accounts previously included in the wholesale category, are now counted as made to end users. The end-user category continues to include retail sales through company-owned and operated outlets but also includes sales to the bulk consumers such as agriculture, industry, and electric utilities. Additional information may be found in "Estimated Historic Time Series for the EIA-782," a feature article by Paula Weir, printed in the December 1983 [3] *Petroleum Marketing Monthly*, published by EIA.

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

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

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

Note 8. Costs of Fossil-Fuel Receipts at Electric Generating Plants. Data for 1973–1982 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 25 megawatts or greater. From 1974–1982, peaking units were included in the data and counted towards the 25-megawatt-or-greater total. Data for 1983–1990 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 50 megawatts or greater. Data for 1991–2001 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units and combined-cycle units together totaled 50

megawatts or greater. Data for 2002 forward cover the aforementioned regulated generating plants plus unregulated generating plants (independent power producers, as well as combined-heat-and-power generating plants and electricity-only plants in the commercial and industrial sector) whose total facility fossil-fueled nameplate generating capacity is 50 or more megawatts, regardless of unit type.

Note 9. Natural Gas Prices. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all Federal, State, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on more than 3,000 consumers' bills are sometimes excluded by the reporting utilities. Deliveredto-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*, February 2009, Table 1.

#### F.O.B. and Landed Cost of Imports

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."

October–December 1977: EIA, Form FEA-F701-M-0, "Transfer Pricing Report."

1978–2007: EIA, *Petroleum Marketing Annual 2007*, Table 1.

2008: EIA, *Petroleum Marketing Monthly*, February 2009, Table 1.

#### **Refiner Acquisition Cost**

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

1974–1976: DOI, BOM, *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.

1977: January–September, FEA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report." October–December, EIA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report."

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

2008: EIA, *Petroleum Marketing Monthly*, February 2009, Table 1.

#### **Table 9.2 Sources**

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." October 1977–December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report."

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

2008: EIA, *Petroleum Marketing Monthly*, February 2009, Table 21.

#### **Table 9.10 Sources**

1973–September 1977: Federal Power Commission, Form FPC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

October 1977–December 1977: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

1978 and 1979: Energy Information Administration (EIA), Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

1980–1989: EIA, *Electric Power Monthly*, May issues. 1990–2000: EIA, *Electric Power Monthly*, March 2003, Table 26.

2001-2007: EIA, *Electric Power Monthly*, October 2008, Table 4.1; Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants"; and EIA, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

2008: EIA, *Electric Power Monthly*, February 2009, 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)*, January 2009, 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, January 2009, Table 3.

#### **Percentage of Industrial Sector**

1982–2002: EIA, *NGA*, annual reports. Calculated as the total amount of natural gas delivered to industrial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to industrial consumers. 2003 forward: EIA, *NGM*, January 2009, Table 3.

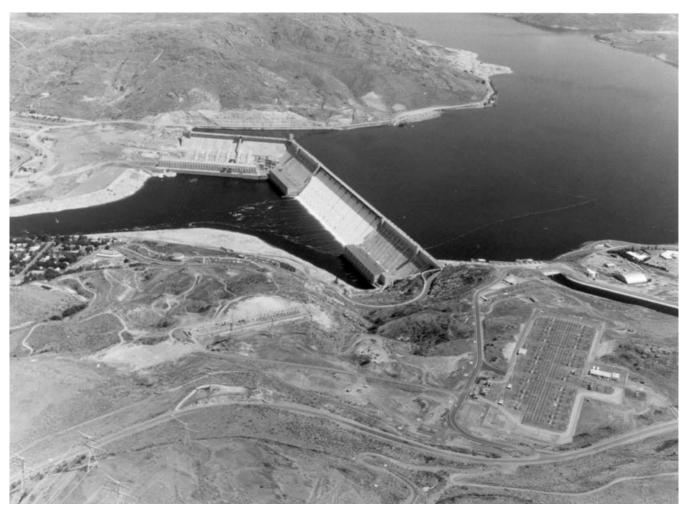
#### **Percentage of Electric Power Sector**

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

2002-2007: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants," and EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," divided by the quantity of natural gas consumed by the electric power sector (see *Monthly Energy Review*, Table 7.4b).

2008: 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).

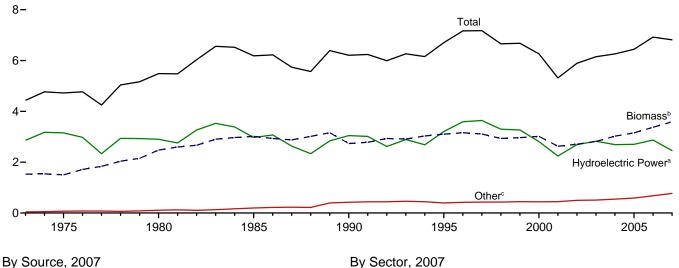
# Renewable Energy

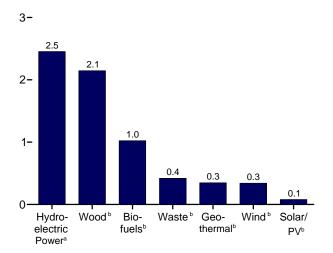


Grand Coulee Dam, Washington State. Source: U.S. Bureau of Reclamation.

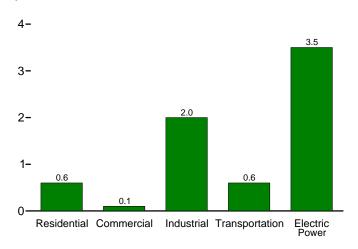
Figure 10.1 Renewable Energy Consumption (Quadrillion Btu)

Total and Major Sources, 1973-2007

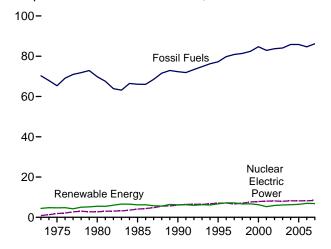




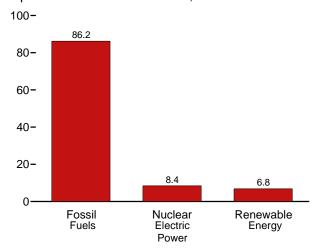
By Sector, 2007



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. °Geothermal, solar/PV, and wind.

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

Table 10.1 Renewable Energy Production and Consumption by Source

(Trillion Btu)

		Production	a					Consumpti	on			
	Bio	mass	Total	Herden					Bion	nass		Total
	Bio- fuels <sup>b</sup>	Total <sup>c</sup>	Renew- able Energy <sup>d</sup>	Hydro- electric Power <sup>e</sup>	Geo- thermal <sup>f</sup>	Solar/ PV <sup>9</sup>	Wind <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	NA NA NA	1,529 1,499 2.475	4,433 4,723 5.485	2,861 3,155 2,900	43 70 110	NA NA NA	NA NA NA	1,527 1,497 2,474	2 2 2	NA NA NA	1,529 1,499 2,475	4,433 4,723 5,485
1985 Total 1990 Total	93 111	3,016 2,735	6,185 6,206	2,970 3,046	198 336	(s) 60	(s) 29	2,687 2,216	236 408	93 111	3,016 2,735	6,185 6,206
1995 Total	200	3,102	6,703	3,205	294	70	33	2,370	531	202	3,104	6,705
1996 Total 1997 Total	143 190	3,157 3,111	7,167 7,180	3,590 3,640	316 325	71 70	33 34	2,437 2,371	577 551	145 187	3,159 3,108	7,168 7,178
1998 Total	206	2,933	6,659	3,297	328	70 70	31	2,184	542	205	2,931	6,657
1999 Total	215	2,969	6,683	3,268	331	69	46	2,214	540	213	2,967	6,681
2000 Total	238	3,010	6,262	2,811	317	66	57	2,262	511	241	3,013	6,264
2001 Total 2002 Total	260 315	2,629 2.712	5,318 5.899	2,242 2.689	311 328	65 64	70 105	2,006 1.995	364 402	258 309	2,627 2,706	5,316 5.893
2003 Total	412	2.815	6,149	2.825	331	64	115	2.002	401	414	2,817	6.150
2004 Total	501	3,011	6,248	2,690	341	65	142	2,121	389	513	3,023	6,261
2005 Total	582	3,141	6,431	2,703	343	66	178	2,156	403	595	3,154	6,444
2006 January	56	286	617	272	29	6	24	194	36	55	285	615
February	53	256	552	246	26	5	19	170	32	51	254	550
March	59 55	274 259	578 600	244 283	30 27	6 6	23 25	182 172	34 32	58 57	273 261	576 602
April May	59	270	633	306	26	6	23	177	32 35	65	277	640
June	62	271	621	295	28	6	20	176	33	71	281	630
July	63	284	592	252	30	6	19	186	35	69	290	598
August September	66 65	287 277	555 501	216 171	30 29	7 6	16 19	186 179	35 33	72 71	293 283	561 507
October	67	285	514	169	30	6	24	184	34	75	292	521
November	67	280	540	201	28	6	25	179	34	73	287	547
December	72 <b>745</b>	293	568	214	30	6 <b>72</b>	25	186	35	78 <b>70</b> 5	299	574
Total	745	3,324	6,872	2,869	343	12	264	2,172	407	795	3,374	6,922
<b>2007</b> January	73	R 298	R 618	R 258	31	6	24	R 187	37	78	R 302	R 622
February March	68 75	R 268 R 292	<sup>R</sup> 510 <sup>R</sup> 598	<sup>R</sup> 184 <sup>R</sup> 240	<sup>R</sup> 27 29	6 7	25 30	<sup>R</sup> 167 <sup>R</sup> 180	<sup>R</sup> 33 37	71 79	<sup>R</sup> 271 <sup>R</sup> 296	<sup>R</sup> 513 <sup>R</sup> 601
April	73 74	R 285	R 588	237	28	7	R 31	R 178	33	76	R 287	R 590
May	80	R 293	<sup>R</sup> 616	R 258	28	7	R 29	<sup>R</sup> 178	R 34	82	R 295	618
June	80	R 289	R 578	R 226	R 29	7	R 26	R 175	R 34	83	R 292	R 580
July August	85 88	R 303 R 303	<sup>R</sup> 584 <sup>R</sup> 564	R 223 198	30 30	7 7	<sup>R</sup> 21 <sup>R</sup> 27	<sup>R</sup> 183 <sup>R</sup> 180	<sup>R</sup> 35 <sup>R</sup> 35	88 90	<sup>R</sup> 306 <sup>R</sup> 305	<sup>R</sup> 587 <sup>R</sup> 566
September	87	R 295	R 505	R 146	29	7	R 28	R 174	R 34	87	R 295	R 506
October	92	R 307	<sup>R</sup> 524	147	30	7	R 33	R 180	<sup>R</sup> 36	96	<sup>R</sup> 311	<sup>R</sup> 528
November	93 97	R 305 R 320	527 <sup>R</sup> 573	156 R 182	29 30	6 6	<sup>R</sup> 31 <sup>R</sup> 35	<sup>R</sup> 177 <sup>R</sup> 187	<sup>R</sup> 35 <sup>R</sup> 36	95 100	<sup>R</sup> 307 <sup>R</sup> 323	529 <sup>R</sup> 576
December Total	993	R <b>3,560</b>	R <b>6,785</b>	R 2,455	R <b>349</b>	80	R <b>342</b>	R <b>2,146</b>	R <b>420</b>	1, <b>024</b>	R <b>3,590</b>	R 6,816
	101		-			6				-		
2008 January February	101 96	311 293	605 558	222 201	28 26	6 6	37 32	175 165	34 33	102 98	312 295	606 561
March	110	312	616	227	29	7	41	166	35	108	310	614
April	108	308	607	219	29	7	45	165	35	112	313	612
May June	118 113	323 318	684 704	280 306	30 30	7 7	44 43	170 170	35 35	119 118	324 323	685 708
July	123	335	662	257	30	7	32	170	36	124	337	663
August	129	340	608	205	30	7	26	176	35	130	341	609
September	123	326	550 574	164	29	7	24	169	33	128	331	554 570
October November	128 128	333 330	574 578	163 169	30 29	7 6	41 44	173 168	33 34	133 129	338 330	579 579
11-Month Total	1,277	3,528	6,745	2,412	320	76	409	1,873	378	1,302	3,553	6,770
2007 11-Month Total 2006 11-Month Total	896 673	3,240 3,030	6,213 6,303	2,273 2,655	319 313	74 66	307 239	1,960 1,985	384 372	924 717	3,267 3,075	6,240 6,348

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

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

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

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 e, "Renewable Energy Production and Consumption," at end of section.

Totals may not equal sum of components due to independent rounding. at end of section.

data beginning in 1973. Sources: Tables 10.2a-c, 10.3, and 10.4.

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

<sup>&</sup>lt;sup>c</sup> Wood and wood-derived fuels, biomass waste, fuel ethanol, and biodiesel.

<sup>&</sup>lt;sup>d</sup> Hydroelectric power, geothermal, solar/photovoltaic, wind, and biomass.

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

f Geothermal electricity net generation (converted to Btu using the geothermal

energy plants heat rate), and geothermal heat pump and direct use energy.

<sup>9</sup> 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.

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

<sup>·</sup> 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

Table 10.2a Renewable Energy Consumption: Residential and Commercial Sectors

(Trillion Btu)

		Resider	ntial Sector				Co	mmercial Se	ctor <sup>a</sup>		
			Biomass		Hydro-			Bio	mass		
	Geo- thermal <sup>b</sup>	Solar/ PV <sup>c</sup>	Woodd	Total	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 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	10
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)	1	6	3	(s)	9	10
Total	18	67	410	495	1	14	65	36	1	102	117
2007 January	2	6	39	47	(s)	1	<sup>R</sup> 6	3	(s)	R 8	10
February	2	6	35	43	(s)	1	5	R 2	(s)	R 7	9
March	2	6	39	47	(s)	1	R 6	3	(s)	R 8	10
April	2	6	38	46	(s)	1	5	3	(s)	8	9
May	2	6	39	47	(s)	1	<sup>R</sup> 6	3	(s)	<sup>R</sup> 8	10
June	2	6	38	46	(s)	1	5	3	(s)	R 8	R g
July	2	6	39	47	(s)	1	5	3	(s)	<sup>R</sup> 8	10
August	2	6	39	47	(s)	1	<sup>R</sup> 6	3	(s)	R 8	R 9
September	2	6	38	46	(s)	1	5	3	(s)	8	<sup>R</sup> 9
October	2	6	39	47	(s)	1	<sup>R</sup> 6	3	(s)	R 8	10
November	2	6	38	46	(s)	1	5	3	(s)	R 8	<sup>R</sup> 9
December	2	6	39	47	(s)	1	6	3	(s)	R 8	10
Total	22	74	460	556	1	14	65	<sup>R</sup> 31	2	R <b>98</b>	R 113
2008 January	2	6	39	47	(s)	1	5	2	(s)	8	9
February	2	6	36	44	(s)	1	5	3	(s)	8	9
March	2	6	39	47	(s)	1	5	3	(s)	8	10
April	2	6	38	46	(s)	1	5	3	(s)	9	10
May	2	6	39	47	(s)	1	5	3	(s)	9	10
June		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		6	38	46	(s)	1	5	3	(s)	8	10
October	2	6	39	47	(s)	1	5	3	(s)	8	9
November	2	6	38	46	(s)	1	5	3	(s)	9	10
11-Month Total	20	68	421	509	1	13	59	32	2	93	107
2007 11-Month Total	20	68	421	509	1	13	60	28	1	90	104
2006 11-Month Total	17	61	375	453	1	13	59	33	i	94	107

<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 tire-derived fuels).

Sources: See end of section.

Into Energy-Use Sectors," at end of Section 7.

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

of commercial sector use.

d Wood and wood-derived fuels.

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

<sup>&</sup>lt;sup>f</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes

 $<sup>^{\</sup>rm g}\,$  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	NA	1,165	NA	NA	NA	1,165	1,200	NA	NA	NA
1975 Total	32	NA	1,063	NA	NA	NA	1,063	1,096	NA	NA	NA
1980 Total	33	NA	1,600	NA	NA	NA	1,600	1,633	NA 54	NA	NA 54
1985 Total 1990 Total	33 31	NA 2	1,645 1,442	230 192	1 1	41 48	1,917 1,683	1,950 1,716	51 62	NA NA	51 62
1995 Total	55	3	1,652	195	ż	86	1,935	1,992	115	NA NA	115
1996 Total	61	3	1,683	224	1	61	1,970	2,033	82	NA	82
1997 Total	58	3	1,731	184	1	81	1,997	2,058	104	NA	104
1998 Total	55 49	3 4	1,603 1,620	180 171	1	88 92	1,873 1,883	1,931 1,936	115 120	NA NA	115 120
2000 Total	42	4	1,636	145	i	101	1,884	1,930	138	NA	138
2001 Total	33	5	1,443	129	3	110	1,684	1,721	144	1	145
2002 Total	39	5	1,396	146	3	133	1,679	1,723	171	1	172
2003 Total	43	3	1,363	142	5	174	1,684	1,731	233	2	235
2004 Total 2005 Total	33 32	4 4	1,476 1,452	132 148	6 7	210 241	1,824 1,848	1,861 1,884	292 334	4 12	296 346
2006 January	4	(s)	137	12	1	23	173	177	29	2	31
February	3	(s)	119	11	1	22	152	155	27	1	29
March	2 2	(s)	125 121	12 11	1 1	24 22	162 156	164	31 32	2 2	33 34
April May	2	(s) (s)	124	12	1	24	160	158 162	38	3	41
June	2	(s)	122	11	i	25	159	161	42	3	45
July	2	(s)	130	12	1	25	168	171	39	3	42
August	2	(s)	129	12	1	27	168	170	41	4	45
September	2	(s)	125	11	1	26	163	165	41	3	44
October November	3 4	(s) (s)	128 125	12 12	1 1	27 27	168 164	172 168	43 43	3 3	46 45
December	3	(s)	130	12	1	29	172	175	45	3	48
Total	29	4	1,515	140	10	301	1,966	2,000	451	32	483
<b>2007</b> January	R <sub>2</sub>	(s)	R 123	R 15	1	28	R 168	R 170	44	4	48
February March	<sup>R</sup> 1 2	(s)	<sup>R</sup> 112 <sup>R</sup> 120	<sup>R</sup> 14 <sup>R</sup> 15	1	26 29	153 <sup>R</sup> 165	155 167	40 44	3 4	43 48
April	2	(s) (s)	R 120	12	1	29 29	R 162	R 164	42	4	46
May	2	(s)	R 120	R 12	i	31	R 164	R 166	45	5	50
June	R 1	(s)	<sup>R</sup> 117	<sup>R</sup> 11	1	31	<sup>R</sup> 160	<sup>R</sup> 161	46	5	51
July	1	(s)	R 123	R 12	1	32	R 168	R 169	48	7	55
August	R 1	(s)	<sup>R</sup> 119 <sup>R</sup> 116	<sup>R</sup> 12 <sup>R</sup> 11	1	33 33	<sup>R</sup> 166 <sup>R</sup> 161	<sup>R</sup> 167 <sup>R</sup> 162	48	7 7	55
September October	1 1	(s) (s)	R 120	13	1	35 35	R 169	R 170	47 53	6	53 59
November	i	(s)	R 119	R 12	i	36	R 168	R 170	52	5	58
December	_ 2	(s)	126	_ 13	1	37	<sup>R</sup> 177	179	56	5	61
Total	R 16	5	<sup>R</sup> 1,435	R 152	12	381	R 1,980	R <b>2,001</b>	566	62	629
2008 January February	2 3	(s) (s)	114 107	13 13	1 1	39 37	167 158	169 161	56 54	6 6	62 60
March	3	(S) (S)	107	13	1	43	162	165	58	6	64
April	2	(s)	109	12	1	41	163	166	63	7	69
May	2	(s)	113	12	1	45	172	174	65	7	72
June	1	(s)	112	12	1	43	169	170	65	8	73
July August	1 1	(s) (s)	116 115	13 12	1 2	47 49	177 178	178 180	67 70	9 9	76 79
September	1	(5) (5)	112	12	2	49 47	178	173	70	8	79 79
October	i	(s) (s)	115	12	2	49	177	179	74	8	82
November	1	(s)	109	12	2	49	172	173	70	8	78
11-Month Total	18	4	1,227	135	16	490	1,867	1,890	714	81	795
2007 11-Month Total 2006 11-Month Total	14 26	4 4	1,309 1,385	139 128	11 9	344 272	1,803 1,794	1,821 1,824	510 406	57 29	567 435

<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.

<sup>b</sup> 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.

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

"Ine ethanol portion of motor fuels (such as £10 and £85) consumed by 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.

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.

fossil-fueled plants heat rate).

<sup>c</sup> Geothermal heat pump and direct use energy.

<sup>d</sup> Wood and wood-derived fuels.

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

tire-derived fuels).

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

g Losses and co-products from the production of fuel ethanol and biodiesel. Does not include natural gas, electricity, and other non-biomass energy used in the

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	Wastef	Total	Total
1973 Total	2,827	43	NA	NA	1	2	3	2,873
1975 Total	3,122	70	NA NA	NA NA	(s)	2	2	3,194
1980 Total	2,867	110	NA NA	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	3,149 3,528	300	5	33 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	<u>46</u>	138	315	453	4,034
2000 Total	2,768	296	5	57	134	318	453	3,579
2001 Total	2,209	289	6	70	126	211	337	2,910
2002 Total	2,650	305	6	105	150	230	380	3,445
2003 Total	2,781	303	5	115	167	230	397	3,601
2004 Total	2,656	311	6	142	165	223	388	3,503
2005 Total	2,670	309	6	178	185	221	406	3,568
2006 January	268	26	(s)	24	17	20	37	355
February	243	23	(s)	19	15	18	34	319
March	242	27	(s)	23	16	19	35	327
April	281	24	1	25	12	17	30	360
May	304	23	1	24	13	19	33	384
June	293	25	1	20	15	19	34	373
July	250	27	1	19	16	20	36	333
August	214	27	1	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	211	27	(s)	25	16	20	36	299
Total	2,839	306	5	<b>264</b>	182	231	412	3,827
2007 January	R 256	27	(s)	24	<sup>R</sup> 19	R 20	R 39	347
February	183	<sup>R</sup> 24	(s)	25	<sup>R</sup> 15	<sup>R</sup> 17	R 32	<sup>R</sup> 264
March	R 238	R 25	(s)	30	15	R 20	R 35	R 328
April	235	24	1	R 31	15	R 18	33	325
May	R 257	R 24	i	R 29	14	20	34	R 345
June	225	26	1	R 26	15	R 20	R 35	R 313
	R 222	R 26	1	R 21	R 16	21	36	R 307
July	R 197	R 26	1	R 27			R 36	R 287
August			1		16	21		
September	R 145	26	1	R 28	15	20	35	R 235
October	146	27	(s)	R 33	R 15	R 20	R 35	R 241
November	R 154	R 25	(s)	R 31	15	21	36	R 246
December	R 180	27 R 222	(s)	R 35	16	R 21	37 R 400	R 278
Total	<sup>R</sup> 2,439	<sup>R</sup> <b>308</b>	6	R 342	<sup>R</sup> 186	R 237	R <b>423</b>	<sup>R</sup> 3,517
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	256	27	1	32	16	20	36	352
August	204	27	1	26	16	20	36	294
September	163	26	1	24	15	18	33	247
October	162	26	1	41	13	18	32	262
November	168	25	(s)	44	15	19	34	272
11-Month Total	2,393	282	8	409	166	211	377	3,469
2007 11-Month Total	2,258	281	6	307	170	217	387	3,239
2006 11-Month Total	2,628	279	5	239	166	211	377	3,528

a 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.

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

<sup>d</sup> 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

<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>		Production		Net Im	ports <sup>c</sup>	Stocksd	Stock C	hange <sup>e</sup>	Co	onsumption	1
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	TBtu	Mbbl	Mbbl	TBtu	Mbbl	MMgal	TBtu
1981 Total 1985 Total 1995 Total 1995 Total 1996 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2004 Total	13 93 111 200 143 190 206 215 238 259 313 410 497 570	6 41 48 86 61 81 88 92 101 110 133 174 210	1,978 14,693 17,802 32,325 23,178 30,674 33,453 34,881 38,627 42,028 50,956 66,772 81,058 92,961	83 617 748 1,358 973 1,288 1,405 1,465 1,622 1,765 2,140 2,804 3,404 3,904	7 52 63 114 82 109 118 123 137 149 180 236 287 329	NA NA 387 313 85 66 87 116 315 306 292 3,542 3,234	NA NA NA (s) (s) (s) (s) 1 1 1 13	NA NA NA 2,186 2,065 2,925 3,406 4,024 3,400 4,298 6,200 5,978 6,002 5,563	NA NA NA -207 -121 860 481 618 -624 898 1,902 -222 24 -439	NA NA NA -1 (s) 3 2 -2 -2 3 7 -1 (s)	1,978 14,693 17,802 32,919 23,612 29,899 33,038 34,350 39,367 41,445 49,360 67,286 84,576 96,634	83 617 748 1,383 992 1,256 1,388 1,443 1,653 1,741 2,073 2,826 3,552 4,059	7 52 63 117 84 106 117 122 139 147 175 238 299 342
Pebruary	55 52 57 53 56 58 60 63 62 64 64 69 <b>712</b>	23 22 24 22 23 25 25 26 26 27 27 29 <b>301</b>	8,935 8,463 9,333 8,663 9,086 9,531 9,791 10,235 10,088 10,512 10,442 11,215 116,294	375 355 392 364 382 400 411 430 424 442 439 471 <b>4,884</b>	32 30 33 31 32 34 35 36 36 37 40 412	132 610 894 905 682 1,550 2,637 3,102 2,268 2,044 1,376 1,208 17,408	(s) 2 3 3 2 5 9 11 8 7 5 4 <b>62</b>	6,099 7,268 8,626 8,990 7,767 6,675 7,706 9,133 9,725 9,723 9,232 8,760 8,760	536 1,169 1,358 364 -1,223 -1,092 1,031 1,427 592 -2 -491 -472 3,197	2 4 5 1 -4 -4 5 2 (s) -2 -2 11	8,531 7,904 8,869 9,204 10,991 12,173 11,397 11,910 11,764 12,558 12,309 12,895 130,505	358 332 372 387 462 511 479 500 494 527 517 542 <b>5,481</b>	30 28 31 33 39 40 42 42 44 44 46 46
2007 January February March April May June July August September October November December Total	70 65 71 70 75 75 78 81 80 85 87 91	28 26 29 29 31 31 32 33 35 36 37 380	11,621 10,795 11,892 11,716 12,573 12,553 13,083 13,581 13,402 14,221 14,568 15,258 155,263	488 453 499 492 528 527 549 570 563 597 612 641 <b>6,521</b>	41 38 42 41 44 44 46 48 47 50 52 54 <b>549</b>	1,077 1,010 720 733 663 922 1,533 1,586 610 998 393 212 10,457	4 4 3 3 2 3 5 6 2 4 1 1 3 7	8,656 8,765 8,539 8,807 8,966 9,171 9,866 11,011 11,555 11,449 11,218 10,535 <b>10,535</b>	-104 109 -226 268 159 205 695 1,145 544 -106 -231 -683 1,775	(s) (s) -1 1 1 1 2 4 2 (s) -1 -2 6	12,802 11,696 12,838 12,181 13,077 13,270 13,921 14,022 13,468 15,325 15,192 16,153 <b>163,945</b>	538 491 539 512 549 557 585 589 566 644 638 678 <b>6,886</b>	45 41 45 43 46 47 49 50 48 54 54 57 <b>580</b>
2008 January	95 90 104 101 111 105 114 120 115 120 1,195	39 37 43 41 45 43 47 49 47 49	15,818 15,025 17,387 16,868 18,543 17,544 19,042 20,059 19,197 20,048 20,054 <b>199,585</b>	664 631 730 708 779 737 800 842 806 842 842 842 8,383	56 53 62 60 66 62 67 71 68 71 71 <b>706</b>	495 483 368 1,451 866 1,571 1,360 1,931 2,466 615 278 11,884	2 2 1 5 3 6 5 7 9 2 1 <b>42</b>	10,674 10,465 11,391 11,539 12,044 13,186 14,882 15,994 15,192 15,227 <b>15,227</b>	f165 -209 926 148 505 260 882 1,696 1,112 -802 35 4,718	1 -1 3 1 2 1 3 6 4 -3 (s)	16,148 15,717 16,829 18,171 18,904 18,855 19,520 20,294 20,551 21,465 20,297 <b>206,751</b>	678 660 707 763 794 792 820 852 863 902 852 8,684	57 56 60 64 67 67 69 72 73 76 72
2007 11-Month Total 2006 11-Month Total	838 644	343 272	140,005 105,079	5,880 4,413	495 372	10,245 16,200	36 57	11,218 9,232	2,458 3,669	9 13	147,792 117,610	6,207 4,940	523 416

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

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 consumption—see sources for "Consumption." 1993-2004—Calculated as fuel ethanol consumption plus fuel ethanol stock change minus fuel ethanol net imports. These data differ slightly from the original production data from 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 (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. Calculated as motor gasoline blending components adjustments (Table 1), plus 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 blenders time to (Table 27). 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.

<sup>C</sup> Fuel ethanol imports only. Data for fuel ethanol exports are not available.

<sup>d</sup> Stocks are at end of period.

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

f Derived from preliminary December 2007 stock value, not final December

<sup>2007</sup> stock value shown in column 8.

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. Biti. • Through 1990, 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

**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
2003 Total	2	(s)	338	14	2
2004 Total	4	(s)	666	28	4
2005 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) (s)	598	25	3
October	3	(S) (S)	549	23	3
November	3		520	23	3
December	3	(s)	520 590	22 25	3
Total	3 <b>32</b>	(s) <b>(s)</b>	5,963	25 <b>250</b>	3 32
10tai	32	(3)	0,300	200	<b>52</b>
2007 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
2008 January	7	(s)	1,208	51	6
February	6	(s)	1,030	43	6
March	6	(S) (S)	1,168	43 49	6
	7		1,258	53	7
April	7	(s)	1,250 1,250	53 52	7
May	8	(s)		63	8
June		(s)	1,509		
July	9	(s)	1,605	67	9
August	9	(s)	1,588	67	9
September	8	(s)	1,527	64	8
October	8	(s)	1,469	62	8
November	8	(s)	1,481	62	8
11-Month Total	82	1	15,094	634	81
2007 11-Month Total	58	1	10,637	447	57
2006 11-Month Total	29	(s)	5,373	226	29

<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.

9 Production of biofinals for use as diesel fuel substitutes or addition. Biodiesel

<sup>&</sup>lt;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.

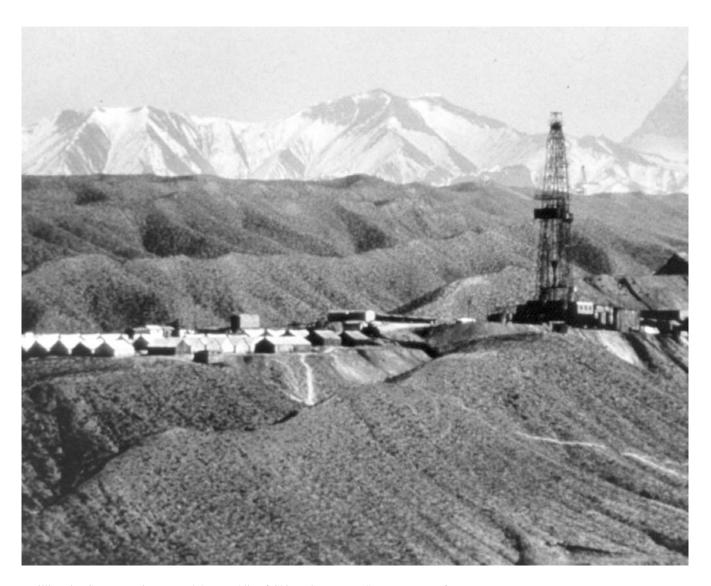
### **Transportation Sector, Fuel Ethanol**

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.

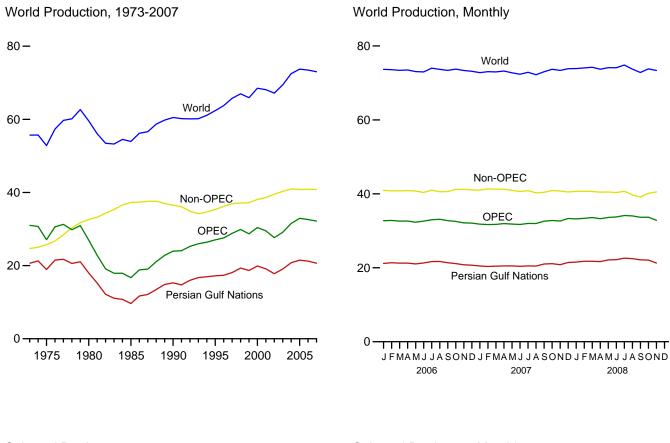
# **International Petroleum**



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

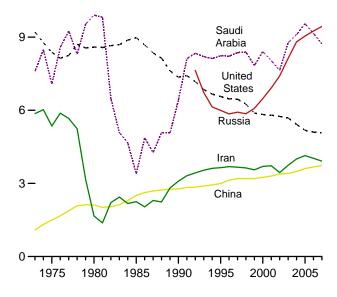
Figure 11.1a World Crude Oil Production Overview

(Million Barrels per Day)



Selected Producers, 1973-2007

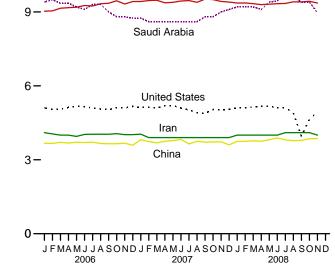
12-



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

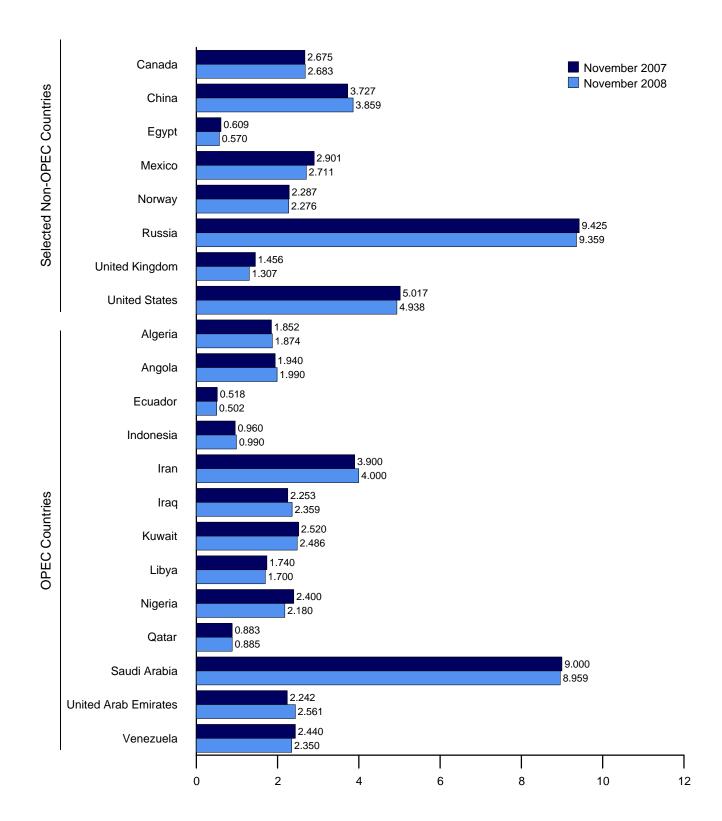
12**-**



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	Kuwaita	Libya	Nigeria	Qatar	Saudi Arabia <sup>a</sup>	United Arab Emirates	Vene- zuela	Total OPEC <sup>b</sup>
1973 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
1975 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
1980 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
1985 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
1990 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
1995 Average	1,202	646	392	1,503	3,643	560	2,057	1,390	1,993	442	8,231	2,233	2,750	27,042
1996 Average	1,242	709	396	1,547	3,686	579	2,062	1,401	2,001	510	8,218	2,278	2,938	27,566
1997 Average	1,277	714	388	1,520	3,664	1,155	2,007	1,446	2,132	550	8,362	2,316	3,280	28,812
1998 Average	1,246	735	375	1,518	3,634	2,150	2,085	1,390	2,153	696	8,389	2,345	3,167	29,885
1999 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
2000 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
2001 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
2002 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
2003 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
2004 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
2005 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
2006 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	1,015	4,035	2,203	2,550	1,700	2,430	885	9,300	2,702	2,490	33,119
September	1,835	1,438	533	1,005	4,035	2,153	2,550	1,700	2,430	885	9,000	2,702	2,490	32,756
October	1,835	1,376	519	985	4,060	2,103	2,550	1,700	2,530	885	8,800	2,702	2,490	32,535
November	1,805	1,452	511	985	4,020	2,003	2,500	1,650	2,480	845	8,800	2,602	2,490	32,143
December	1,805	1,484	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	536	1,019	4,028	1,996	2,535	1,681	2,440	850	9,152	2,636	2,511	32,610
2007 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		1,986	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
2008 January	1,866	1,992	520	929	4,000	2,153	2,550	1,740	2,230	892	9,200	2,709	2,440	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	33,374
March	1,865	2,003	508	975	4,000	2,303	2,600	1,740	2,330	920	9,200	2,710	2,430	33,584
April	1,875	2,009	510	964	4,000	2,303	2,600	1,718	2,130	934	9,100	2,710	2,420	33,274
May	1,875	2,015	499	965	4,000	2,453	2,600	1,700	2,060	938	9,400	2,710	2,410	33,625
June	1,874	2,013	495	965	4,000	2,453	2,607	1,700	2,140	942	9,450	2,710	2,400	33,750
July	1,874	2,009	498	978	4,100	2,505	2,614	1,700	2,120	947	9,700	2,710	2,390	34,146
August	1,874	1,937	R 503	978	4,100	2,456	2,622	1,700	2,216	951	9,600	2,711	2,380	R 34,028
September	1,874	1,871	<sup>R</sup> 498	978	4,100	2,328	2,629	1,745	2,210	955	9,400	2,711	2,370	33,668
October	1,874	R 1,990	497	990	4,100	2,328	2,629	1,745	2,185	925	9,400	2,661	2,360	R 33,683
November	1,874	1,990	502	990	4,000	2,359	2,486	1,700	2,180	885	8,959	2,561	2,350	32,835
11-Mo. Avg	1,872	1,984	504	972	4,037	2,359	2,594	1,721	2,173	928	9,330	2,692	2,399	33,566
2007 11-Mo. Avg	1,832	1,722	509	964	3,913	2,066	2,456	1,698	2,342	847	8,686	2,597	2,432	32,066
2006 11-Mo. Avg	,	1,406	537	1,022	4,029	1,995	2,543	1,684	2,436	852	9,190	2,639	2,512	32,660

<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. Kuwait Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. In November 2008, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 525 thousand barrels

R=Revised.

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

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

Sources: See end of section.

per day.

b See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary.

11.41 - Appartise are classified as "OPEC" or "Non-OPEC" in 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.

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

					Selected	Non-OPE	Ca Produce	rs				
	Persian Gulf Nations <sup>b</sup>	Canada	China	Egypt	Mexico	Norway	Former U.S.S.R.	Russia	United Kingdom	United States	Total Non- OPEC <sup>a</sup>	World
1973 Average	20,668	1,798	1,090	165	465	32	8,324	NA	2	9,208	24,679	55,679
1975 Average		1,430	1,490	235	705	189	9,523	NA	12	8,375	25,732	52,828
1980 Average		1,435	2,114	595	1,936	486	11,706	NA	1,622	8,597	32,598	59,558
1985 Average		1,471	2,505	887	2,745	773	11,585	NA	2,530	8,971	37,273	53,966
1990 Average	15,278	1,553	2,774	873	2,553	1,630	10,975	NA	1,820	7,355	36,537	60,492
1995 Average	17,208	1,805	2,990	920	2,618	2,766		5,995	2,489	6,560	35,343	62,385
1996 Average		1,837	3,131	922	2,855	3,091		5,850	2,568	6,465	36,186	63,752
1997 Average	18,095	1,922	3,200	856	3,023	3,142		5,920	2,518	6,452	36,932	65,744
1998 Average	19,337	1,981	3,198	834	3,070	3,011		5,854	2,616	6,252	37,081	66,966
1999 Average	18,667	1,907	3,195	852	2,906	3,019		6,079	2,684	5,881	37,226	65,922
2000 Average	19,892	1,977	3,249	768	3,012	3,222		6,479	2,275	5,822	38,087	68,495
2001 Average	19,098	2,029	3,300	720	3,127	3,226		6,917	2,282	5,801	38,602	68,101
2002 Average		2,171	3,390	715	3,177	3,131		7,408	2,292	5,746	39,520	67,162
2003 Average		2,306	3,409	713	3,371	3,042		8,132	2,093	5,681	40,299	69,434
2004 Average		2,398	3,485	673	3,383	2,954		8,805	1,845	5,419	40,989	72,493
2005 Average	21,501	2,369	3,609	658	3,334	2,698		9,043	1,649	5,178	40,799	73,737
2006 January		2,595	3,670	654	3,372	2,657		9,030	1,707	5,106	40,939	73,673
February		2,504	3,662	657	3,311	2,620		9,040	1,639	5,045	40,797	73,583
March		2,411	3,710	651	3,350	2,610		9,150	1,597	5,045	40,798	73,419
April		2,531	3,680	663	3,370	2,407		9,170	1,590	5,128	40,866	73,507
May		2,341	3,712	655	3,329	2,535		9,190	1,500	5,161	40,753	73,068
June		2,336	3,700	607	3,287	2,365		9,260	1,392	5,160	40,358	72,976
July		2,512	3,716	620	3,232	2,571		9,240	1,453	5,102	41,004	73,997
August		2,543	3,660	630	3,252	2,430		9,330	1,202	5,059	40,557	73,677
September		2,601	3,649	640	3,258	2,338		9,350	1,354	5,037	40,633	73,390
October		2,602	3,650	660	3,173	2,380		9,450	1,482	5,106	41,195	73,730
November		2,658	3,672	615	3,163	2,466		9,320	1,504	5,105	41,218	73,362
December Average		2,669 <b>2,525</b>	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>
		0.540	2.044	646	0.440	0.404		0.400	4.540	E 400	40.000	70.704
<b>2007</b> January	20,476	2,549	3,811	616	3,143	2,431		9,420	1,513	5,123	40,998	72,791
February		2,586	3,739	614	3,148	2,454		9,460	1,654	5,125	41,348	73,047
March		2,701	3,685	612 609	3,182	2,391		9,473	1,565	5,106	41,241	72,971
April		2,605 2,582	3,749 3,781	649	3,182	2,427		9,369 9,390	1,572 1,580	5,189 5,197	41,263 40,926	73,217
May		2,362	3,761	679	3,110	2,181 1.921		9,390	1,380	5.096	40,926	72,741
June		2,485	3,643	679 679	3,206 3,166	2,327		9,440	1,495	5,096	40,869	72,345 72,866
July		2,399		679	2,843				1,228	4,914		
August		2,795	3,746 3,716	679 679	2,843 3,161	2,135 2,190		9,390 9,520	1,228	4,884	40,256 40,420	72,221 73,025
September		2,657	3,722	609	2,995	2,190		9,500	1,556	5,043	40,420	73,689
October November		R 2,675	3,727	609	2,993	2,273		9,425	1,456	5,043	40,750	73,398
December		2,469	3,607	609	2,954	2,235		9,423	1,493	5,056	40,730	73,835
Average		2,616	3,729	637	3,082	2,270		9,437	1,498	5,064	40,838	73,012
2008 January	21,538	R 2.528	3.744	609	2.957	2.209		9.359	1.463	E 5.093	R 40.672	R 73.892
February		2,561	3,747	605	2,929	2,209		9,362	1,489	E 5,113	R 40,692	R 74,067
March		R 2.653	3,769	601	2,929	2,209		9,334	1,453	E 5,139	R 40,654	R 74,238
April		R 2,528	3,751	597	2,767	2,209		9,334	1,499	E 5,162	R 40,448	R 73,721
May		R 2,453	3,811	593	2,798	2,247		9,315	1,486	E 5,166	R 40,448	R 74,118
June		R 2,486	3,884	589	2,839	2,002		9,334	1,364	E 5,100	R 40,350	R 74,110
July		R 2,672	3,808	606	2,782	2,302		9,344	1,303	E 5,110	R 40,686	R 74,832
August		R 2,688	3,774	622	2,759	2,057		9,409	1,096	E 4,895	R 39,712	R 73,740
September		R 2,570	3,788	638	2,722	2,057		9,409	1,394	E 3,960	39,157	R 72,825
October		R 2,616	3,850	634	2,757	2,241		9,430	1,337	E 4,645	R 40,120	R 73,803
November		2,683	3,859	570	2,711	2,276		9,359	1,307	E 4,938	40,523	73,358
11-Mo. Avg		2,586	3,799	606	2,806	2,172		9,359	1,380	E 4,940	40,319	73,885
2007 11-Mo. Avg	20.601	2.630	3.740	640	3.094	2.273		9.441	1.498	5.065	40.870	72,936
2006 11-Mo. Avg		2,512	3,680	641	3,281	2,489		9,231	1,492	5,005	40,830	73,491

<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

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

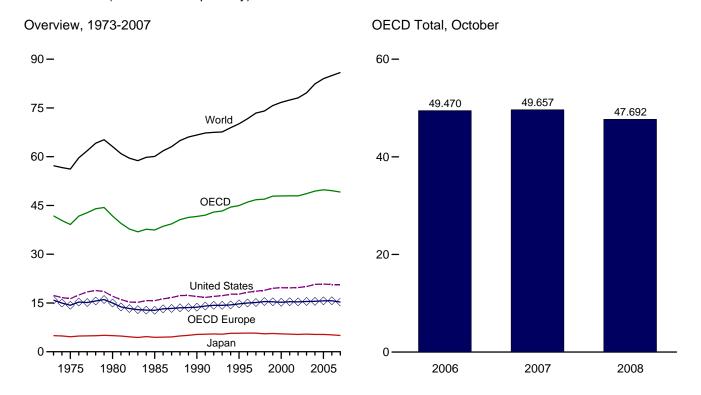
District of Columbia.

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

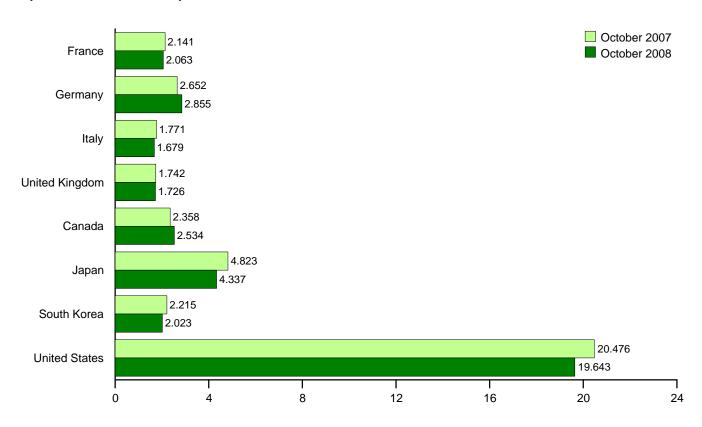
the Neutral Zone (between Kuwait and Saudi Arabia).

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

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)

1973 Average	2,601 2,252 2,256 1,753 1,826 1,920 1,949 1,969 2,040 2,029 1,999 2,052	3,324 2,957 3,082 2,651 2,682 2,882 2,922 2,917 2,923 2,838	2,068 1,855 1,934 1,705 1,868 1,942 1,920 1,934	2,341 1,911 1,725 1,617 1,776 1,816 1,852	15,879 14,314 14,995 12,772 13,730 14,718	1,729 1,779 1,873 1,526 1,737	4,949 4,621 4,960 4,436	281 311 537	17,308 16,322 17,056	1,658 1,794 2,342	41,804 39,141	57,237 56,198
1975 Average	2,252 2,256 1,753 1,826 1,920 1,949 1,969 2,040 2,029 1,999	2,957 3,082 2,651 2,682 2,882 2,922 2,917 2,923	1,855 1,934 1,705 1,868 1,942 1,920 1,934	1,911 1,725 1,617 1,776 1,816 1,852	14,314 14,995 12,772 13,730	1,779 1,873 1,526	4,621 4,960	311	16,322	1,794	39,141	56,198
1980 Average	2,256 1,753 1,826 1,920 1,949 1,969 2,040 2,029 1,999	3,082 2,651 2,682 2,882 2,922 2,917 2,923	1,934 1,705 1,868 1,942 1,920 1,934	1,725 1,617 1,776 1,816 1,852	14,995 12,772 13,730	1,873 1,526	4,960		,		,	,
1985 Average	1,753 1,826 1,920 1,949 1,969 2,040 2,029 1,999	2,651 2,682 2,882 2,922 2,917 2,923	1,705 1,868 1,942 1,920 1,934	1,617 1,776 1,816 1,852	12,772 13,730	1,526	•	331			41,763	63,114
1990 Average	1,826 1,920 1,949 1,969 2,040 2,029 1,999	2,682 2,882 2,922 2,917 2,923	1,868 1,942 1,920 1,934	1,776 1,816 1,852	13,730		4 4 3 h	552	15,726	2,469	37,481	60,085
1995 Average 1996 Average 1997 Average 1998 Average	1,920 1,949 1,969 2,040 2,029 1,999	2,882 2,922 2,917 2,923	1,942 1,920 1,934	1,816 1,852			5,316	1,048	16,988	2,804	41,623	66,689
1996 Average 1997 Average 1998 Average	1,949 1,969 2,040 2,029 1,999	2,922 2,917 2,923	1,920 1,934	1,852		1,817	5,700	2,008	17,725	3,001	44,968	70,133
1997 Average 1998 Average	1,969 2,040 2,029 1,999	2,917 2,923	1,934		14,999	1,871	5,746	2,101	18,309	2,996	46,022	71,671
1998 Average	2,040 2,029 1,999	2,923		1,810	15,140	1.959	5,711	2.255	18,620	3,091	46,776	73,427
_	2,029 1,999		1,943	1,792	15,444	1,949	5,515	1,917	18,917	3,192	46,935	74,053
	1,999		1,891	1,811	15,363	2,036	5,632	2,084	19,519	3,236	47,870	75,727
2000 Average		2,772	1,854	1,765	15,217	2,035	5,512	2,135	19,701	3,326	47,926	76,712
2001 Average		2,815	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	2,132	19,761	3,296	47,944	78,089
2002 Average	1,903	2,679	1,873	1,759	15,471	2,217	5,428	2,149	20,034	3,329	48,653	79,660
	2,007	2,665	1,794	1,785	15,522	2,310	5,426 5,318	2,175	20,034	3,329	49,435	82,408
2004 Average	1,989	2,647	1,755	1,834	15,669	2,342	5,324	2,133	20,731	3,496	49,824	84,005
2005 Average	1,909	2,047	1,755	1,034	13,009	2,342	3,324	2,191	20,002	3,490	49,024	64,005
<b>2006</b> January	2,085	2,550	1,759	1,845	15,529	2,203	5,967	2,402	20,436	3,529	50,066	NA
February	2,141	2,666	2,008	1,791	16,142	2,359	6,102	2,293	20,577	3,528	51,001	NA
March	2,104	2,676	1,938	2,020	16,375	2,319	5,676	2,205	20,608	3,659	50,843	NA
April	1,900	2,515	1,606	1,711	14,801	2,153	5,107	2,012	20,201	3,474	47,748	NA
May	1,828	2,692	1,678	1,852	15,292	2,202	4,440	2,055	20,457	3,476	47,921	NA
June	1,957	2,646	1,700	1,862	15,779	2,329	4,762	2,083	20,982	3,553	49,487	NA
July	1,966	2,627	1,721	1,799	15,420	2,340	4,986	1,914	20,740	3,416	48,816	NA
August	1,884	2,773	1,589	1,725	15,468	2,400	4,835	2,108	21,434	3,559	49,804	NA
September	2,014	2,950	1,761	1,822	16,134	2,289	4,546	2,115	20,559	3,426	49,069	NA
October	2,064	2,820	1,700	1,815	16,112	2,297	4,783	2,066	20,769	3,442	49,470	NA
November	1,933	2,806	1,777	1,838	16,033	2,385	5,261	2,369	20,669	3,576	50,293	NA
December	1,910	2,582	1,696	1,660	15,113	2,289	5,960	2,543	20,795	3,627	50,328	NA
Average	1,981	2,692	1,743	1,812	15,679	2,297	5,198	2,180	20,687	3,522	49,563	84,979
2007 January	2,046	2,293	1,641	1,739	14,932	2,310	5,259	2,397	20,567	3,467	48,933	NA
February	1,968	2,356	1,781	1,788	15,340	2,478	5,612	2,395	21,309	3,535	50,669	NA
March	1,936	2,460	1,734	1,777	15,293	2,361	5,449	2,289	20,536	3,641	49,569	NA
April	1,868	2,287	1,655	1,783	14,765	2,191	4,907	2,222	20,536	3,404	48,026	NA
May	1,800	2,377	1,727	1,679	14,800	2,350	4,435	2,078	20,620	3,596	47,880	NA
June	1,913	2,440	1,694	1,738	15,214	2,331	4,599	2,070	20,723	3,692	48,630	NA
July	1,953	2,489	1,710	1,702	15,301	2,389	4,595	2,054	20,747	3,631	48,717	NA
August	1,921	2,567	1,575	1,754	15,385	2,448	4,627	2,098	21,025	3,488	49,072	NA
September	1,942	2,588	1,675	1,731	15,582	<sup>R</sup> 2,374	4,891	2,035	20,415	3,404	R 48,700	NA
October	2,141	2,652	1,771	1,742	16,105	2,358	4,823	2,215	20,476	3,679	49,657	NA
November	2,076	2,536	1,748	1,785	15,874	2,460	5,237	2,357	20,535	3,586	50,048	NA
December	1,837	2,417	1,717	1,675	14,971	2,341	5,692	2,369	20,719	3,625	49,717	NA
Average	1,950	2,456	1,702	1,740	15,296	<sup>R</sup> 2,365	5,007	2,214	20,680	3,563	<sup>R</sup> 49,125	<sup>R</sup> <b>85,898</b>
2008 January	2.060	2,504	1,626	1,695	<sup>R</sup> 15,445	2,356	5,369	2,372	20.114	3,484	R 49.141	NA
February	1,992	2,494	1,671	1,804	R 15,417	2,431	5,883	2,348	19,782	3,566	R 49,426	NA
March	1,882	2,399	1,569	1,674	R 14,750	2,313	5,022	2,266	19,732	3,425	R 47,508	NA
April	2.005	2,500	1,621	1,821	R 15.424	2,195	4.992	2.098	19,768	3,687	R 48.165	NA NA
May	1,851	2,310	1,609	1,620	R 14,500	2,133	4,448	2,181	19,729	3,601	R 46,717	NA
June	1,897	2,430	1,588	1,708	R 14,773	2,295	4,340	1,993	19,553	3,462	R 46.415	NA
July	1,924	2,623	1,751	1,623	R 15,327	R 2,407	4,437	2,028	19,412	3,673	R 47,284	NA
August	1,855	2,691	1,731	1,576	R 14,894	R 2,291	4,174	2,028	19,267	3,505	R 46,159	NA
	1,000	2,858	1,680	1,721	R 15,953	R 2,397	4,174	2,026	17,796	3,399	R 46,139	NA NA
September	2,063	2,855	1,660	1,721	15,763	2,534	4,290	2,107	19,643	3,393	47.692	NA NA
October  10-Month Average	2,063 <b>1,952</b>	2,655 <b>2,567</b>	1,679	1,726 <b>1,696</b>	15,763 15,222	2,534 <b>2,348</b>	4,337 <b>4,724</b>	2,023 <b>2,150</b>	19,643 1 <b>9,482</b>	3,593 <b>3,519</b>	47,692 <b>47,444</b>	NA NA
_	•	,	,	•				•	•			
2007 10-Month Average 2006 10-Month Average	1,949 1.993	2,452 2.692	1,696 1.744	1,743 1,825	15,272 15,702	2,358 2,289	4,914 5,114	2,184 2,124	20,691 20,678	3,555 3,506	48,974 49,413	NA NA

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

R=Revised. NA=Not available.

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, January 16, 2009.

Germany.

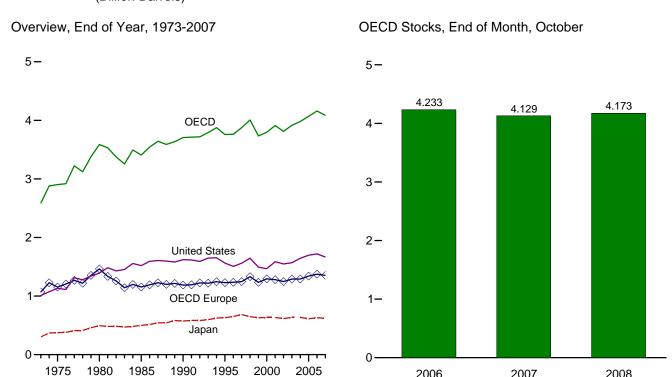
b "OECD Europe" consists of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

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

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

Figure 11.3 Petroleum Stocks in OECD Countries (Billion Barrels)



2005

2007

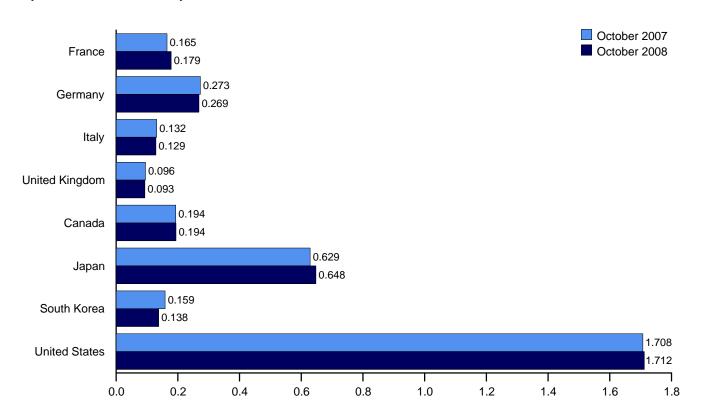
2008

2006

By Selected OECD Country, End of Month

1995

1975



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)

	<b></b>	2	ltab.	United	OECD	Compade		South	United	Other	OFORd.
	France	Germanya	Italy	Kingdom	Europeb	Canada	Japan	Korea	States	<b>OECD</b> c	<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	132	95	1,340	178	612	135	1,698	104	4,067
2000 1 car	100	200	102	33	1,040	170	012	100	1,000	104	4,001
<b>2006</b> 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	103	1,373	181	631	152	1,720	103	4,160
<b>2007</b> January	176	285	128	101	1,366	187	643	153	1,724	105	4.178
February	178	292	135	103	1.384	183	636	147	1.666	103	4.119
March	166	289	134	103	1,356	186	620	156	1,678	101	4,097
April	179	290	135	102	1,372	185	619	149	1,694	108	4,127
May	178	287	132	103	1,371	189	616	159	1,724	110	4,168
June	174	283	133	97	1,348	188	622	158	1,730	112	4,159
July	175	280	132	98	1,340	192	632	165	1,733	108	4,192
August	176	278	134	98	1,358	196	641	157	1,733	106	4,173
September	175	276	134	90	1,355	R 196	630	157	1,710	108	R 4,173
October	165	273	134	90 96	1,328	194	629	157	1,717	112	4,129
November	166	273 270	132	96 91	1,326	194	629	149	1,708	106	4,129
December	180	270 <b>275</b>	133	90	R <b>1,353</b>	195 196	621	149	1,690 1,665	106 106	R <b>4,089</b>
2000 Januari	400	004	400	05	R 4 00 4	400	004	455	1.077	400	-
2008 January	182	281	136	95	R 1,384	196	621	155	1,677	108	R 4,140
February	176	277	129	95	1,357	192	605	149	1,662	111	R 4,077
March	177	282	131	100	R 1,384	194	610	143	1,653	108	R 4,092
April	173	280	134	98	R 1,363	195	610	141	1,665	102	R 4,077
May	177	277	136	99	R 1,373	193	617	146	1,673	105	R 4,107
June	177	273	137	99	R 1,372	<sup>R</sup> 194	619	147	1,686	109	<sup>R</sup> 4,126
July	179	275	135	95	<sup>R</sup> 1,387	202	627	153	1,699	104	R 4,170
August	176	274	131	_ 96	<sup>R</sup> 1,379	<sup>R</sup> 198	643	150	1,710	<sup>R</sup> 105	<sup>R</sup> 4,185
September	177	272	130	<sup>R</sup> 95	<sup>R</sup> 1,365	<sup>R</sup> 194	646	141	1,705	<sup>R</sup> 116	<sup>R</sup> 4,168
October	179	269	129	93	1,363	194	648	138	1,712	118	4,173

<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, January 16, 2009

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>lt;sup>c</sup> "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, February 2009.

# 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, February 2009.



# **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 gasoline

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.

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

		Total Pet	roleum <sup>a</sup> C	onsumption l	y Sector		Liquefied Petroleum	Motor		Fuel		
	Resi- dential	Com- mercial <sup>b</sup>	Indus- trial <sup>b</sup>	Trans- portation <sup>b</sup>	Electric Power <sup>c,d</sup>	Total <sup>b</sup>	Gases Con- sumption <sup>e</sup>	Gasoline Con- sumption <sup>f</sup>	Fuel Ethanol	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
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
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	NA
1980	5.245	5.803	5.374	5.440	6.254	5.479	3.674	5.253	3.539	6.586	NA 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	NA
1982	5.167	5.751	5.263	5.422	6.258	5.415	3.615	5.253	3.539	6.428	NA 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	NA
1984	5.184	5.705	5.223	5.418	6.251	5.395	3.599	5.253	3.539	6.356	NA 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	NA
1986	5.169	5.694	5.283	5.425	6.257	5.418	3.640	5.253	3.539	6.310	NA 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	NA
1988	5.165	5.661	5.241	5.433	6.250	5.410	3.652	5.253	3.539	6.275	NA 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	NA
1990	5.027	5.621	5.270	5.442	6.244	5.411	3.625	5.253	3.539	6.247	NA 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	NA
1992	5.004	5.589	5.185	5.442	6.238	5.378	3.624	5.253	3.539	6.224	NA NA	NA
1993	4.975	<sup>b</sup> 5.580	<sup>b</sup> 5.196	b5.436	6.230	b5.379	3.606	5.253	3.539	6.214	NA NA	NA
1994	4.983	5.592	5.166	5.424	6.213	5.361	3.635	f <sub>5.230</sub>	3.539	6.204	NA 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	NA
1996	4.869	5.498	5.133	5.420	6.195	5.336	3.613	5.216	3.539	6.187	NA 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	NA
1998	4.837	5.446	5.155	5.413	6.210	5.349	3.614	5.212	3.539	6.172	NA 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	NA
2000	4.761	5.394	5.082	5.421	6.189	5.326	3.607	5.210	3.539	6.159	NA 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	4.738	5.389	5.180	5.431	6.143	5.353	3.605	5.218	3.539	6.125	5.359	5.433
2007	E4.710	E5.385	E5.147	E5.432	P6.150	5.346	3.591	5.219	3.539	5.987	5.359	5.433
2008	E4.710	E5.385	E5.147	E5.432	E6.150	E5.346	E3.591	E5.219	3.539	E5.986	5.359	5.433
	4.7 10	0.000	0.177	0.402	0.100	0.040	0.001	0.210	0.000	0.000	0.000	0.400

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

	Production			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	1,031	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	R 1,104	R 1,029	R 1,029	_1,028	R 1,029	_1,025	_1,009
2008	<sup>RE</sup> 1,104	<sup>RE</sup> 1,029	<sup>RE</sup> 1,029	E1,028	<sup>RE</sup> 1,029	E1,025	E1,009

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

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.

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. R=Revised. E=Estimate.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

					Coal					Coal Coke
				C	Consumption					
			Residential	Industria	l Sector	Florida				
	Production <sup>a</sup>	Waste Coal Supplied <sup>b</sup>	and 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		NA	22.261	26.782	22.436	21.642	22.506	25.000	26.562	24.800
1976		NA	22.774	26.781	22.530	21.679	22.498	25.000	26.601	24.800
1977		NA	22.919	26.787	22.322	21.508	22.265	25.000	26.548	24.800
1978		NA	22.466	26.789	22.207	21.275	22.017	25.000	26.478	24.800
1979		NA	22.242	26.788	22.452	21.364	22.100	25.000	26.548	24.800
1980		NA	22.543	26.790	22.690	21.295	21.947	25.000	26.384	24.800
1981		NA	22.474	26.794	22.585	21.085	21.713	25.000	26.160	24.800
1982		NA	22.695	26.797	22.712	21.194	21.674	25.000	26.223	24.800
1983		NA	22.775	26.798	22.691	21.133	21.576	25.000	26.291	24.800
1984		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		NA	22.947	26.798	22.198	21.084	21.462	25.000	26.292	24.800
1987		NA	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
1988		NA	23.571	26.799	22.360	20.900	21.328	25.000	26.299	24.800
1989		<sup>b</sup> 10.391	23.650	26.800	22.347	<sup>d</sup> 20.898	21.307	25.000	26.160	24.800
1990		9.303	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
1991		10.758	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
1992	21.682	10.396	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
1993	21.418	10.638	22.994	26.800	22.123	20.677	21.010	25.000	26.335	24.800
1994	21.394	11.097	23.112	26.800	22.068	20.589	20.929	25.000	26.329	24.800
1995		11.722	23.118	26.800	21.950	20.543	20.880	25.000	26.180	24.800
1996		12.147	23.011	26.800	22.105	20.547	20.870	25.000	26.174	24.800
1997		12.158	22.494	26.800	22.172	20.518	20.830	25.000	26.251	24.800
1998		12.639	21.620	27.426	23.164	20.516	20.881	25.000	26.800	24.800
1999		12.552	23.880	27.426	22.489	20.490	20.818	25.000	26.081	24.800
2000		12.360	25.020	27.426	22.433	20.511	20.828	25.000	26.117	24.800
2001		12.169	24.909	27.426	22.622	20.337	20.671	25.000	25.998	24.800
						20.238				
2002		12.165	22.962	27.426	22.562		20.541	25.000	26.062	24.800
2003		12.360	22.242	27.425	22.468	20.082	20.387	25.000	25.972	24.800
2004		12.266	22.324	27.426	22.473	19.980	20.290	25.000	26.108	24.800
2005		12.093	22.342	26.279	22.178	19.988	20.246	25.000	25.494	24.800
2006		12.080	22.066	26.271	22.050	19.931	20.181	25.000	25.453	24.800
2007 <sup>p</sup>		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

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.

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

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

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.

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.

F=Estimate

# 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  $\times$  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)
Length	1 mile (mi)	=	1.609 344ª	kilometers (km)
_	1 yard (yd)	=	0.914 4ª	meters (m)
	1 foot (ft)	=	0.304 8 <sup>a</sup>	meters (m)
	1 inch (in)	=	2.54 <sup>a</sup>	centimeters (cm)
Area	1 acre	=	0.404 69	hectares (ha)
	1 square mile (mi <sup>2</sup> )	=	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 <sup>a</sup>	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 <sup>a</sup>	degrees Celsius (°C)

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

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.

<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.

**Table B2. Metric Prefixes** 

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10 <sup>1</sup>	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	M	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 branched-chain hydrocarbon ( $C_4H_{10}$ ). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

*Isobutane*: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° 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.