

# Monthly Energy Review

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December 2008

# Monthly Energy Review

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

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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.

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# **Monthly Energy Review**

## **December 2008**

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

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# 1

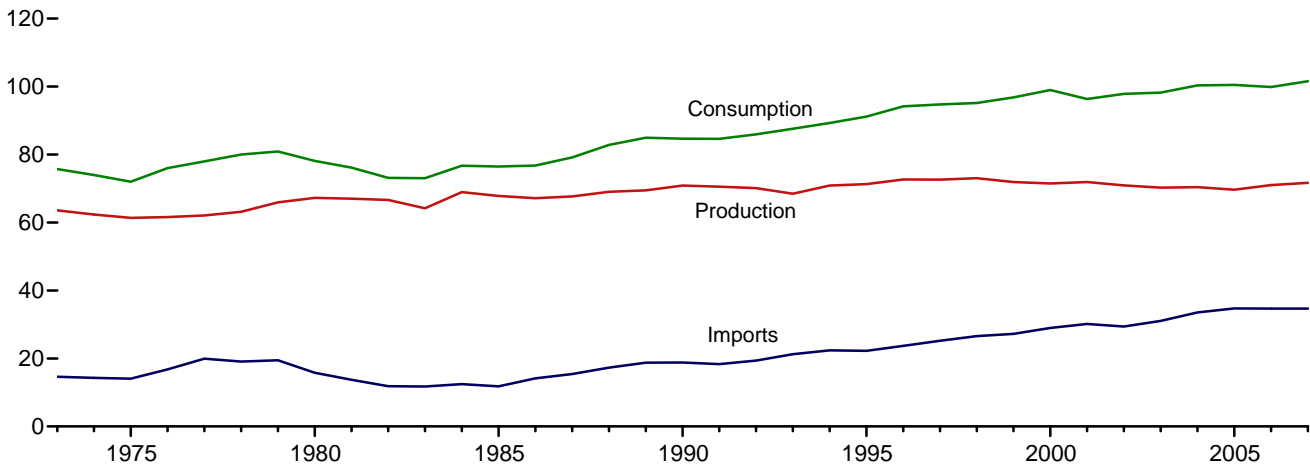
## Energy Overview



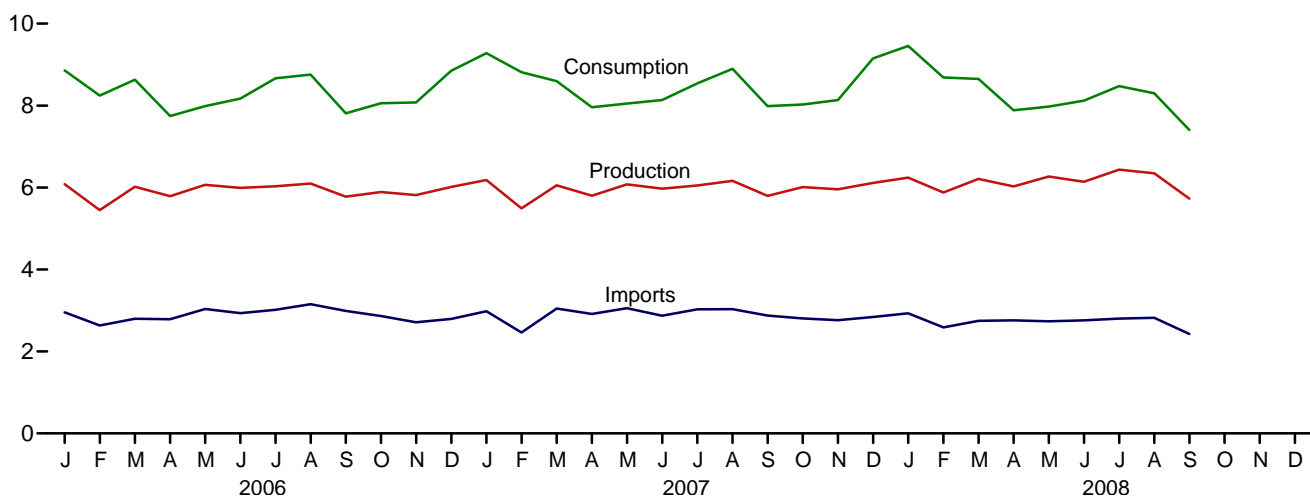
The continental United States at night from orbit. Source: National Oceanic and Atmospheric Administration satellite imagery; mosaic provided by U.S. Geological Survey.

**Figure 1.1 Primary Energy Overview**  
(Quadrillion Btu)

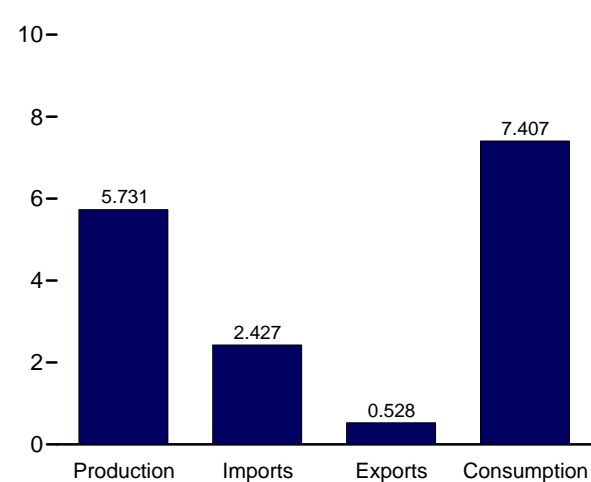
Consumption, Production, and Imports, 1973-2007



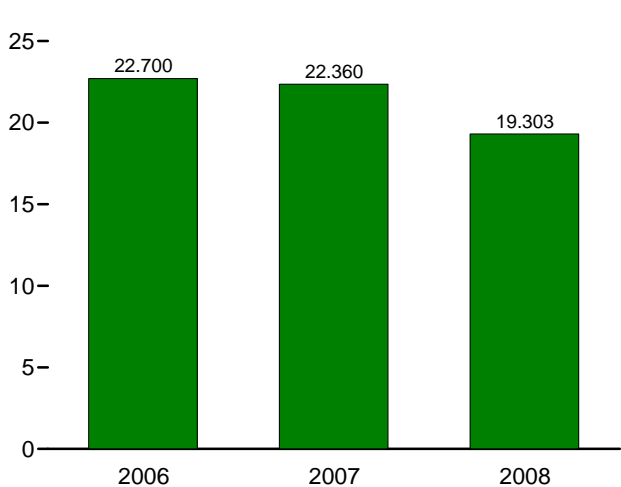
Consumption, Production, and Imports, Monthly



Overview, September 2008



Net Imports, January-September



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
<b>1973 Total</b> .....	<b>63.585</b>	<b>14.613</b>	<b>2.033</b>	<b>-0.456</b>	<b>75.708</b>
<b>1975 Total</b> .....	<b>61.357</b>	<b>14.032</b>	<b>2.323</b>	<b>-1.067</b>	<b>71.999</b>
<b>1980 Total</b> .....	<b>67.232</b>	<b>15.796</b>	<b>3.695</b>	<b>-1.212</b>	<b>78.122</b>
<b>1985 Total</b> .....	<b>67.799</b>	<b>11.781</b>	<b>4.196</b>	<b>1.107</b>	<b>76.491</b>
<b>1990 Total</b> .....	<b>70.870</b>	<b>18.817</b>	<b>4.752</b>	<b>-.283</b>	<b>84.652</b>
<b>1995 Total</b> .....	<b>71.319</b>	<b>22.260</b>	<b>4.511</b>	<b>2.104</b>	<b>91.173</b>
<b>1996 Total</b> .....	<b>72.641</b>	<b>23.702</b>	<b>4.633</b>	<b>2.466</b>	<b>94.175</b>
<b>1997 Total</b> .....	<b>72.634</b>	<b>25.215</b>	<b>4.514</b>	<b>1.430</b>	<b>94.765</b>
<b>1998 Total</b> .....	<b>73.041</b>	<b>26.581</b>	<b>4.299</b>	<b>-.139</b>	<b>95.183</b>
<b>1999 Total</b> .....	<b>71.907</b>	<b>27.252</b>	<b>3.715</b>	<b>1.373</b>	<b>96.817</b>
<b>2000 Total</b> .....	<b>71.490</b>	<b>28.973</b>	<b>4.006</b>	<b>2.518</b>	<b>98.975</b>
<b>2001 Total</b> .....	<b>71.892</b>	<b>30.157</b>	<b>3.770</b>	<b>-1.952</b>	<b>96.326</b>
<b>2002 Total</b> .....	<b>70.936</b>	<b>29.407</b>	<b>3.668</b>	<b>1.184</b>	<b>97.858</b>
<b>2003 Total</b> .....	<b>70.264</b>	<b>31.060</b>	<b>4.054</b>	<b>.938</b>	<b>98.209</b>
<b>2004 Total</b> .....	<b>70.384</b>	<b>33.543</b>	<b>4.433</b>	<b>.857</b>	<b>100.351</b>
<b>2005 Total</b> .....	<b>69.647</b>	<b>34.710</b>	<b>4.561</b>	<b>.710</b>	<b>100.506</b>
<b>2006</b> January .....	6.083	2.953	.360	.184	8.860
February .....	5.450	2.632	.339	.502	8.245
March .....	6.019	2.799	.383	.196	8.631
April .....	5.788	2.787	.383	-.447	7.745
May .....	6.068	3.037	.436	-.682	7.987
June .....	5.992	2.935	.419	-.340	8.169
July .....	6.032	3.018	.403	.021	8.667
August .....	6.099	3.152	.419	-.077	8.755
September .....	5.776	2.989	.460	-.493	7.812
October .....	5.889	2.863	.436	-.258	8.058
November .....	5.815	2.712	.435	-.014	8.078
December .....	6.015	2.795	.394	.434	8.850
<b>Total</b> .....	<b>71.025</b>	<b>34.673</b>	<b>4.868</b>	<b>-.974</b>	<b>99.856</b>
<b>2007</b> January .....	6.182	2.982	.447	.562	9.279
February .....	5.492	2.463	.349	1.209	8.814
March .....	6.054	3.046	.420	-.083	8.596
April .....	5.802	2.914	.416	-.340	7.960
May .....	6.076	<sup>R</sup> 3.056	.448	-.634	<sup>R</sup> 8.050
June .....	5.972	2.871	.423	-.285	8.135
July .....	6.051	3.030	.498	-.041	8.542
August .....	6.165	3.033	.475	.173	<sup>R</sup> 8.897
September .....	5.796	2.877	.436	-.252	7.985
October .....	6.011	2.806	.439	-.354	8.024
November .....	5.957	2.764	.559	-.029	8.134
December .....	6.111	2.841	.538	.737	9.151
<b>Total</b> .....	<b>71.668</b>	<b>34.685</b>	<b>5.448</b>	<b>.663</b>	<sup>R</sup> <b>101.568</b>
<b>2008</b> January .....	6.242	<sup>R</sup> 2.930	<sup>R</sup> .535	<sup>R</sup> .817	<sup>R</sup> 9.454
February .....	5.877	<sup>R</sup> 2.587	<sup>R</sup> .565	<sup>R</sup> .786	<sup>R</sup> 8.686
March .....	6.211	<sup>R</sup> 2.749	<sup>R</sup> .610	<sup>R</sup> .299	<sup>R</sup> 8.649
April .....	6.029	<sup>R</sup> 2.760	<sup>R</sup> .593	<sup>R</sup> -.311	<sup>R</sup> 7.885
May .....	6.270	<sup>R</sup> 2.734	.624	<sup>R</sup> -.406	<sup>R</sup> 7.974
June .....	<sup>R</sup> 6.141	<sup>R</sup> 2.760	.625	<sup>R</sup> -.157	8.119
July .....	<sup>R</sup> 6.438	2.801	.604	<sup>R</sup> -.159	<sup>R</sup> 8.475
August .....	<sup>R</sup> 6.347	<sup>R</sup> 2.822	<sup>R</sup> .582	<sup>R</sup> -.289	<sup>R</sup> 8.298
September .....	5.731	2.427	.528	-.224	7.407
<b>9-Month Total</b> .....	<b>55.287</b>	<b>24.569</b>	<b>5.266</b>	<b>.357</b>	<b>74.947</b>
<b>2007 9-Month Total</b> .....	<b>53.589</b>	<b>26.272</b>	<b>3.912</b>	<b>.309</b>	<b>76.258</b>
<b>2006 9-Month Total</b> .....	<b>53.306</b>	<b>26.303</b>	<b>3.602</b>	<b>-1.136</b>	<b>74.870</b>

<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

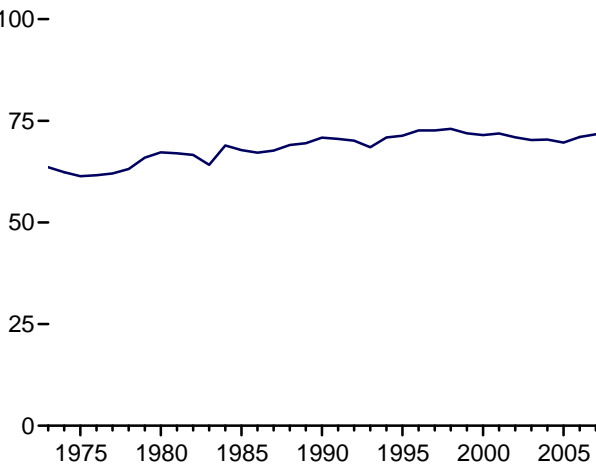
due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

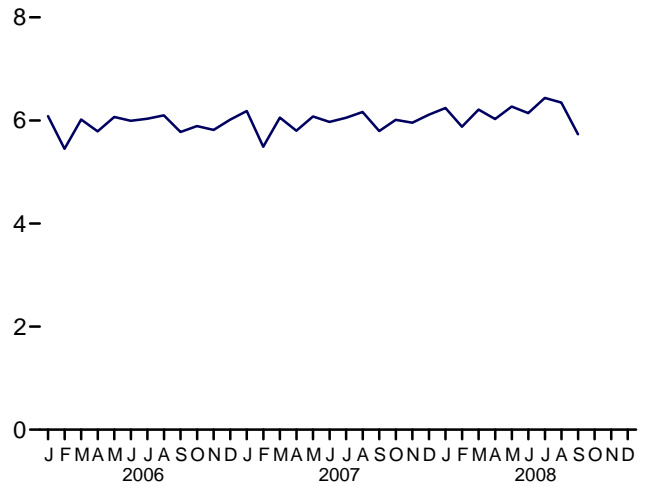
Sources: • **Production:** Table 1.2. • **Imports:** Table 1.4a. • **Exports:** Table 1.4b. • **Consumption:** Table 1.3.

**Figure 1.2 Primary Energy Production**  
(Quadrillion Btu)

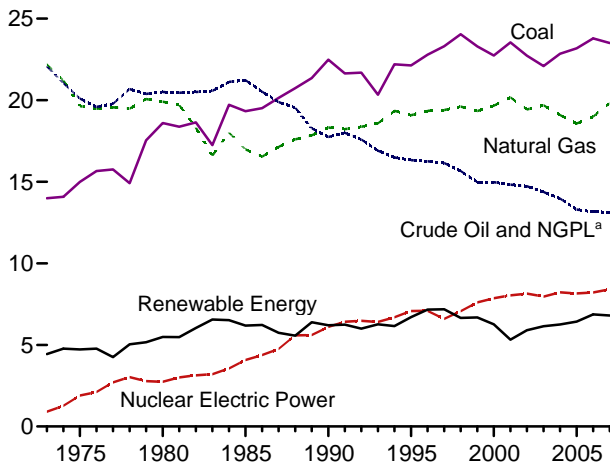
Total, 1973-2007



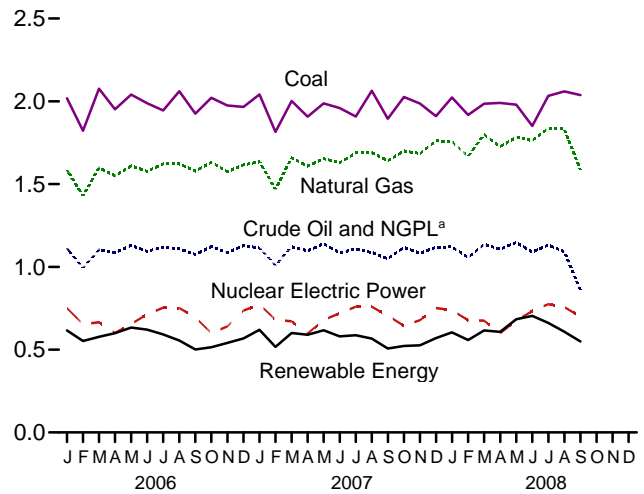
Total, Monthly



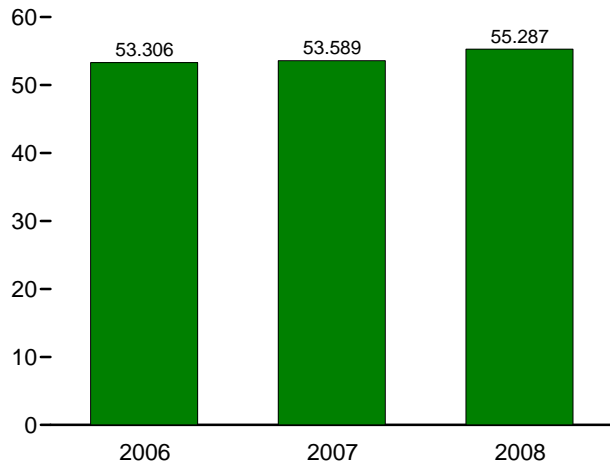
By Source, 1973-2007



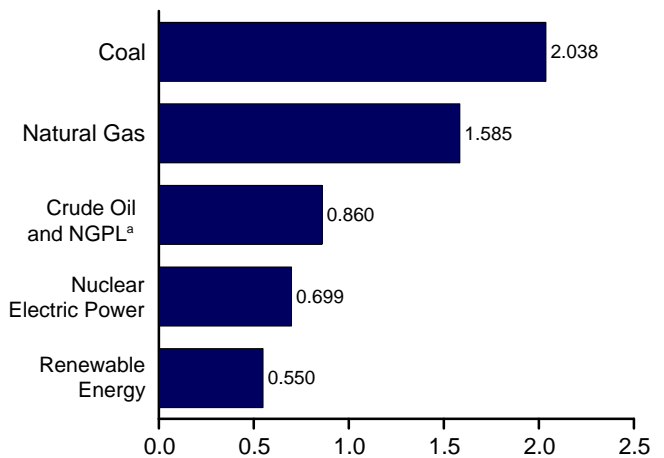
By Source, Monthly



Total, January-September



By Source, September 2008



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

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>  
Source: Table 1.2.

**Table 1.2 Primary Energy Production by Source**  
(Quadrillion Btu)

	Fossil Fuels					Nuclear Electric Power	Renewable Energy <sup>a</sup>						Total
	Coal <sup>b</sup>	Natural Gas (Dry)	Crude Oil <sup>c</sup>	NGPL <sup>d</sup>	Total		Hydroelectric Power <sup>e</sup>	Geo-thermal	Solar/PV	Wind	Bio-mass	Total	
1973 Total .....	13.992	22.187	19.493	2.569	58.241	0.910	2.861	0.043	NA	NA	1.529	4.433	63.585
1975 Total .....	14.989	19.640	17.729	2.374	54.733	1.900	3.155	.070	NA	NA	1.499	4.723	61.357
1980 Total .....	18.598	19.908	18.249	2.254	59.008	2.739	2.900	.110	NA	NA	2.475	5.485	67.232
1985 Total .....	19.325	16.980	18.992	2.241	57.539	4.076	2.970	.198	(s)	(s)	3.016	6.185	67.799
1990 Total .....	22.488	18.326	15.571	2.175	58.560	6.104	3.046	.336	.060	.029	2.735	6.206	70.870
1995 Total .....	22.130	19.082	13.887	2.442	57.540	7.075	3.205	.294	.070	.033	3.102	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	1.586	.918	.194	4.716	.750	.272	.029	.006	.024	.286	.617	6.083
February .....	1.822	1.428	.819	.175	4.244	.653	.246	.026	.005	.019	.256	.552	5.450
March .....	2.076	1.597	.907	.196	4.776	.665	.244	.030	.006	.023	.274	.578	6.019
April .....	1.952	1.550	.892	.193	4.587	.601	.283	.027	.006	.025	.259	.600	5.788
May .....	2.040	1.609	.928	.202	4.779	.655	.306	.026	.006	.024	.270	.633	6.068
June .....	1.988	1.577	.898	.196	4.658	.714	.295	.028	.006	.020	.271	.621	5.992
July .....	1.945	1.622	.917	.202	4.687	.753	.252	.030	.006	.019	.284	.592	6.032
August .....	2.061	1.622	.910	.199	4.792	.751	.216	.030	.007	.016	.287	.555	6.099
September .....	1.926	1.579	.876	.198	4.579	.695	.171	.029	.006	.019	.277	.501	5.776
October .....	2.021	1.632	.918	.204	4.775	.600	.169	.030	.006	.024	.285	.514	5.889
November .....	1.975	1.574	.888	.197	4.635	.641	.201	.028	.006	.025	.280	.540	5.815
December .....	1.966	1.616	.929	.200	4.711	.735	.214	.030	.006	.025	.293	.568	6.015
<b>Total .....</b>	<b>23.790</b>	<b>18.993</b>	<b>10.801</b>	<b>2.356</b>	<b>55.940</b>	<b>8.214</b>	<b>2.869</b>	<b>.343</b>	<b>.072</b>	<b>.264</b>	<b>3.324</b>	<b>6.872</b>	<b>71.025</b>
2007 January .....	2.042	E 1.634	E .921	.192	4.789	.772	.262	.031	.006	.024	.296	.620	6.182
February .....	1.816	E 1.469	E .832	.177	4.294	.681	.185	.028	.006	.025	.272	.517	5.492
March .....	2.002	E 1.659	E .918	.204	4.782	.671	.241	.029	.007	.030	.293	.600	6.054
April .....	1.907	E 1.609	E .903	.195	4.614	.598	.237	.028	.007	.032	.287	.590	5.802
May .....	1.987	E 1.654	E .934	.206	4.781	.678	.257	.028	.007	.028	.296	.617	6.076
June .....	1.960	E 1.628	E .887	.198	4.673	.719	.227	.030	.007	.024	.293	.581	5.972
July .....	1.908	E 1.689	E .903	.205	4.705	.759	.224	.030	.007	.019	.307	.588	6.051
August .....	2.063	E 1.689	E .883	.203	4.839	.759	.198	.030	.007	.024	.307	.567	6.165
September .....	1.895	E 1.640	E .850	.199	4.584	.705	.145	.029	.007	.026	.299	.507	5.796
October .....	2.026	E 1.700	E .907	.211	4.844	.644	.147	.030	.007	.030	.308	.523	6.011
November .....	1.986	E 1.684	E .873	.209	4.753	.678	.156	.029	.006	.027	.308	.527	5.957
December .....	1.910	E 1.761	E .909	.210	4.790	.751	.183	.030	.006	.028	.321	.570	6.111
<b>Total .....</b>	<b>23.501</b>	<b>E 19.817</b>	<b>E 10.721</b>	<b>2.409</b>	<b>56.448</b>	<b>8.415</b>	<b>2.463</b>	<b>.353</b>	<b>.080</b>	<b>.319</b>	<b>3.589</b>	<b>6.805</b>	<b>71.668</b>
2008 January .....	2.023	E 1.757	E .916	.205	4.900	.738	.222	.028	.006	.037	.311	.605	6.242
February .....	1.918	E 1.667	E .860	.196	4.642	.678	.201	.026	.006	.032	.293	.558	5.877
March .....	1.985	E 1.799	E .924	.212	4.921	.675	.227	.029	.007	.041	.312	.616	6.211
April .....	1.990	E 1.727	E .898	.209	4.824	.598	.219	.029	.007	.045	.308	.607	6.029
May .....	1.980	E 1.783	E .929	.219	4.910	.676	.280	.030	.007	.044	.323	.684	6.270
June .....	R 1.851	E 1.763	E .889	.201	R 4.704	.733	.306	.030	.007	.043	.318	.704	R 6.141
July .....	R 2.033	E 1.837	E .919	.213	R 5.001	.775	.257	.030	.007	.032	.335	.662	R 6.438
August .....	R 2.060	RE 1.831	E .880	.211	R 4.982	.757	.205	.030	.007	.026	.340	.608	R 6.347
September .....	2.038	E 1.585	E .689	.171	4.483	.699	.164	.029	.007	.024	.326	.550	5.731
<b>9-Month Total ...</b>	<b>17.879</b>	<b>E 15.748</b>	<b>E 7.904</b>	<b>1.836</b>	<b>43.366</b>	<b>6.328</b>	<b>2.080</b>	<b>.261</b>	<b>.063</b>	<b>.324</b>	<b>2.865</b>	<b>5.593</b>	<b>55.287</b>
2007 9-Month Total ...	17.579	E 14.672	E 8.032	1.778	42.061	6.342	1.976	.263	.061	.233	2.652	5.186	53.589
2006 9-Month Total ...	17.827	14.171	8.066	1.755	41.819	6.238	2.285	.254	.055	.190	2.465	5.249	53.306

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

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

<sup>c</sup> Includes lease condensate.

<sup>d</sup> Natural gas plant liquids.

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

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

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

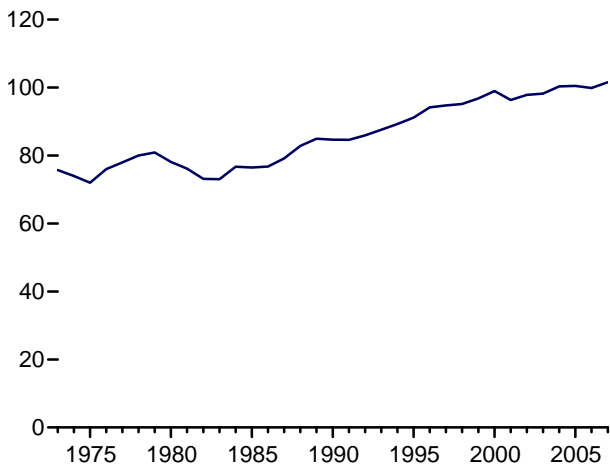
sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

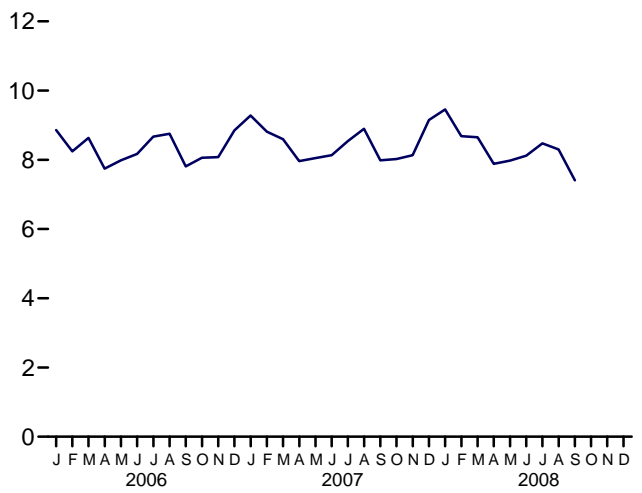
Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas (Dry):** Tables 4.1 and A4. • **Crude Oil and Natural Gas Plant Liquids:** Tables 3.1 and A2. • **Nuclear Electric Power:** Tables 7.2a and A6 ("Nuclear Plants" heat rate). • **Renewable Energy:** Table 10.1.

**Figure 1.3 Primary Energy Consumption**  
(Quadrillion Btu)

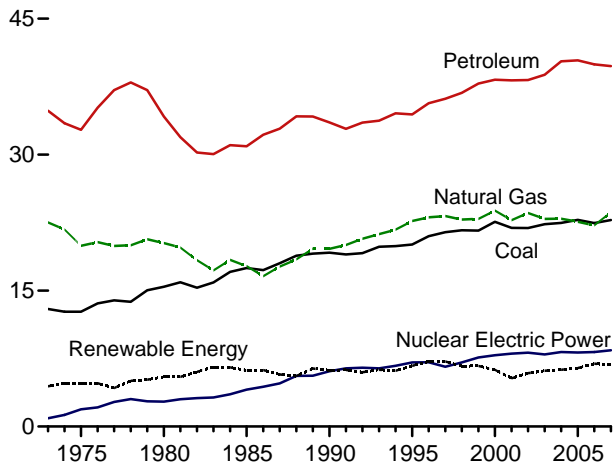
Total, 1973-2007



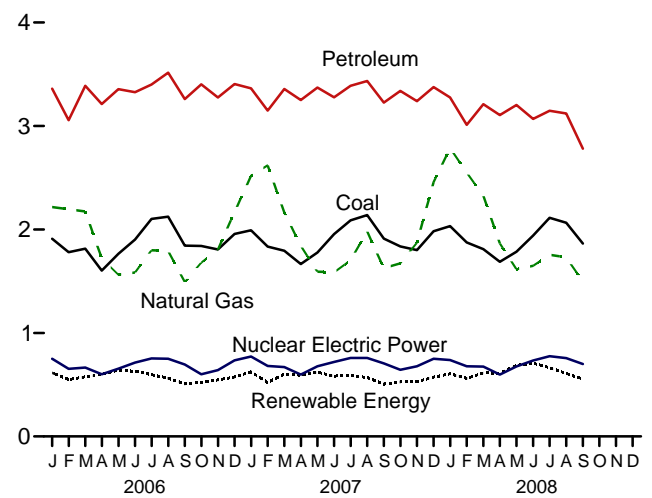
Total, Monthly



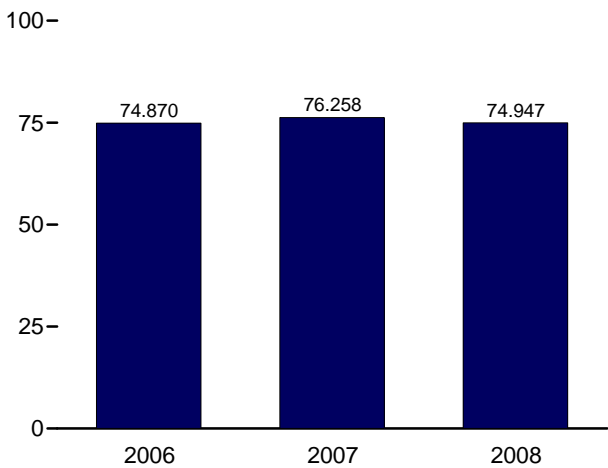
By Source<sup>a</sup>, 1973-2007



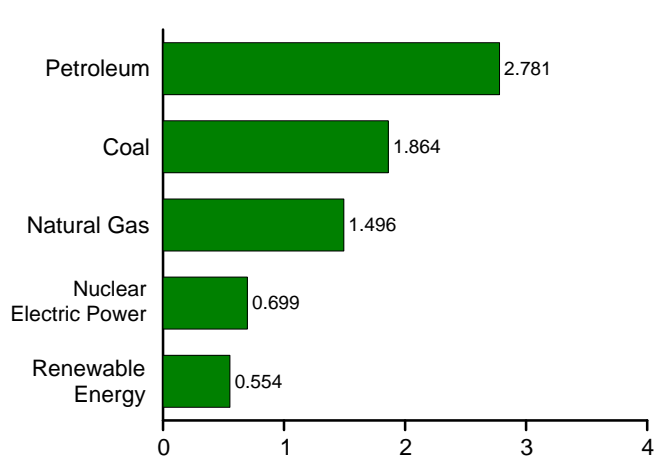
By Source<sup>a</sup>, Monthly



Total, January-September



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



<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.

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



**Table 1.3 Primary Energy Consumption by Source**  
(Quadrillion Btu)

	Fossil Fuels				Nuclear Electric Power	Renewable Energy <sup>a</sup>						Total <sup>f</sup>
	Coal	Natural Gas <sup>b</sup>	Petroleum <sup>c</sup>	Total <sup>d</sup>		Hydro-electric Power <sup>e</sup>	Geo-thermal	Solar/PV	Wind	Bio-mass	Total	
<b>1973 Total</b> .....	12.971	22.512	34.840	70.316	0.910	2.861	0.043	NA	NA	1.529	4.433	75.708
<b>1975 Total</b> .....	12.663	19.948	32.731	65.355	1.900	3.155	.070	NA	NA	1.499	4.723	71.999
<b>1980 Total</b> .....	15.423	20.235	34.202	69.826	2.739	2.900	.110	NA	NA	2.475	5.485	78.122
<b>1985 Total</b> .....	17.478	17.703	30.922	66.091	4.076	2.970	.198	(s)	(s)	3.016	6.185	76.491
<b>1990 Total</b> .....	19.173	19.603	33.553	72.333	6.104	3.046	.336	.060	.029	2.735	6.206	84.652
<b>1995 Total</b> .....	20.089	22.671	34.437	77.258	7.075	3.205	.294	.070	.033	3.104	6.705	91.173
<b>1996 Total</b> .....	21.002	23.085	35.673	79.783	7.087	3.590	.316	.071	.033	3.159	7.168	94.175
<b>1997 Total</b> .....	21.445	23.223	36.160	80.874	6.597	3.640	.325	.070	.034	3.108	7.178	94.765
<b>1998 Total</b> .....	21.656	22.830	36.817	81.370	7.068	3.297	.328	.070	.031	2.931	6.657	95.183
<b>1999 Total</b> .....	21.623	22.909	37.838	82.428	7.610	3.268	.331	.069	.046	2.967	6.681	96.817
<b>2000 Total</b> .....	22.580	23.824	38.264	84.733	7.862	2.811	.317	.066	.057	3.013	6.264	98.975
<b>2001 Total</b> .....	21.914	22.773	38.186	82.903	8.033	2.242	.311	.065	.070	2.627	5.316	96.326
<b>2002 Total</b> .....	21.904	23.558	38.227	83.750	8.143	2.689	.328	.064	.105	2.706	5.893	97.858
<b>2003 Total</b> .....	22.321	22.897	38.809	84.078	7.959	2.825	.331	.064	.115	2.817	6.150	98.209
<b>2004 Total</b> .....	22.466	22.931	40.294	85.830	8.222	2.690	.341	.065	.142	3.023	6.261	100.351
<b>2005 Total</b> .....	22.797	22.583	40.393	85.817	8.160	2.703	.343	.066	.178	3.154	6.444	100.506
<b>2006 January</b> .....	1.910	2.217	3.361	7.489	.750	.272	.029	.006	.024	.285	.615	8.860
February .....	1.781	2.195	3.056	7.036	.653	.246	.026	.005	.019	.254	.550	8.245
March .....	1.814	2.175	3.388	7.384	.665	.244	.030	.006	.023	.273	.576	8.631
April .....	1.603	1.720	3.212	6.538	.601	.283	.027	.006	.025	.261	.602	7.745
May .....	1.766	1.562	3.356	6.687	.655	.306	.026	.006	.024	.277	.640	7.987
June .....	1.903	1.585	3.326	6.820	.714	.295	.028	.006	.020	.281	.630	8.169
July .....	2.102	1.799	3.401	7.306	.753	.252	.030	.006	.019	.290	.598	8.667
August .....	2.123	1.791	3.515	7.432	.751	.216	.030	.007	.016	.293	.561	8.755
September .....	1.843	1.493	3.260	6.609	.695	.171	.029	.006	.019	.283	.507	7.812
October .....	1.840	1.680	3.402	6.935	.600	.169	.030	.006	.024	.292	.521	8.058
November .....	1.807	1.805	3.276	6.888	.641	.201	.028	.006	.025	.287	.547	8.078
December .....	1.956	2.169	3.405	7.533	.735	.214	.030	.006	.025	.299	.574	8.850
<b>Total</b> .....	22.447	22.191	39.958	84.657	8.214	2.869	.343	.072	.264	3.374	6.922	99.856
<b>2007 January</b> .....	1.992	2.518	3.363	7.877	.772	.262	.031	.006	.024	.301	.624	9.279
February .....	1.834	2.621	3.148	7.604	.681	.185	.028	.006	.025	.275	.520	8.814
March .....	1.794	2.165	3.358	7.316	.671	.241	.029	.007	.030	.297	.604	8.596
April .....	1.666	1.843	3.250	6.761	.598	.237	.028	.007	.032	.289	.592	7.960
May .....	1.777	1.591	3.371	6.742	.678	.257	.028	.007	.028	.298	.618	8.050
June .....	1.954	1.585	3.277	6.822	.719	.227	.030	.007	.024	.296	.583	8.135
July .....	2.089	1.703	3.389	7.179	.759	.224	.030	.007	.019	.310	.590	8.542
August .....	2.139	1.981	3.435	7.558	.759	.198	.030	.007	.024	.309	.569	8.897
September .....	1.912	1.627	3.226	6.769	.705	.145	.029	.007	.026	.299	.507	7.985
October .....	1.836	1.672	3.339	6.847	.644	.147	.030	.007	.030	.312	.526	8.024
November .....	1.800	1.874	3.240	6.919	.678	.156	.029	.006	.027	.311	.529	8.134
December .....	1.983	2.457	3.377	7.820	.751	.183	.030	.006	.028	.324	.573	9.151
<b>Total</b> .....	22.776	23.637	39.773	86.212	8.415	2.463	.353	.080	.319	3.620	6.835	101.568
<b>2008 January</b> .....	2.032	R 2.787	3.276	R 8.099	.738	.222	.028	.006	.037	.312	.606	R 9.454
February .....	1.875	R 2.549	3.011	R 7.437	.678	.201	.026	.006	.032	.295	.561	R 8.686
March .....	1.810	R 2.325	3.211	R 7.353	.675	.227	.029	.007	.041	.310	.614	R 8.649
April .....	R 1.687	1.865	3.106	R 6.666	.598	.219	.029	.007	.045	.313	.612	R 7.885
May .....	R 1.785	1.615	3.203	R 6.605	.676	.280	.030	.007	.044	.324	.685	R 7.974
June .....	R 1.941	1.649	3.069	R 6.668	.733	.306	.030	.007	.043	.323	.708	R 8.119
July .....	R 2.112	R 1.756	3.148	R 7.022	.775	.257	.030	.007	.032	.337	.663	R 8.475
August .....	R 2.065	R 1.731	3.121	R 6.917	.757	.205	.030	.007	.026	.341	.609	R 8.298
September .....	1.864	1.496	2.781	6.143	.699	.164	.029	.007	.024	.331	.554	7.407
<b>9-Month Total</b> .....	17.171	17.772	27.927	62.911	6.328	2.080	.261	.063	.324	2.885	5.612	74.947
<b>2007 9-Month Total</b> .....	17.157	17.634	29.818	64.625	6.342	1.976	.263	.061	.233	2.673	5.207	76.258
<b>2006 9-Month Total</b> .....	16.843	16.538	29.875	63.301	6.238	2.285	.254	.055	.190	2.496	5.279	74.870

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

<sup>b</sup> Natural gas only; excludes supplemental gaseous fuels. See Note 3, "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."

<sup>d</sup> Includes coal coke net imports. See Tables 1.4a and 1.4b.

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

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

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

Notes: • See "Primary Energy Consumption" in Glossary.

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

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

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

Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas:** Tables 4.1 and A4.

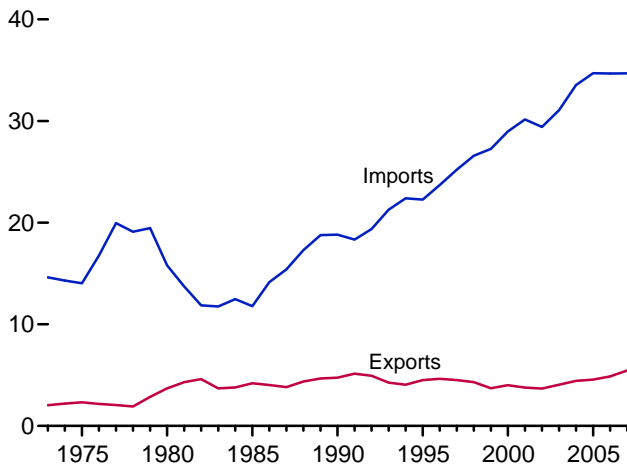
• **Petroleum:** Table 3.6. • **Nuclear Electric Power:** Tables 7.2a and A6

("Nuclear Plants" heat rate). • **Renewable Energy:** Table 10.1. • **Net Imports of**

**Coal Coke and Electricity:** Tables 1.4a and 1.4b.

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

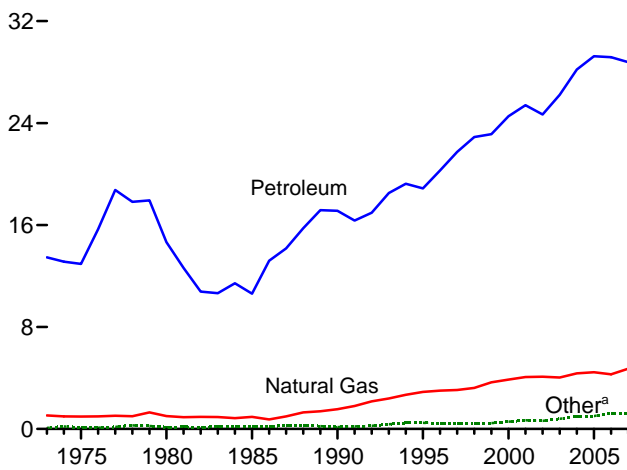
Total Imports and Exports, 1973-2007



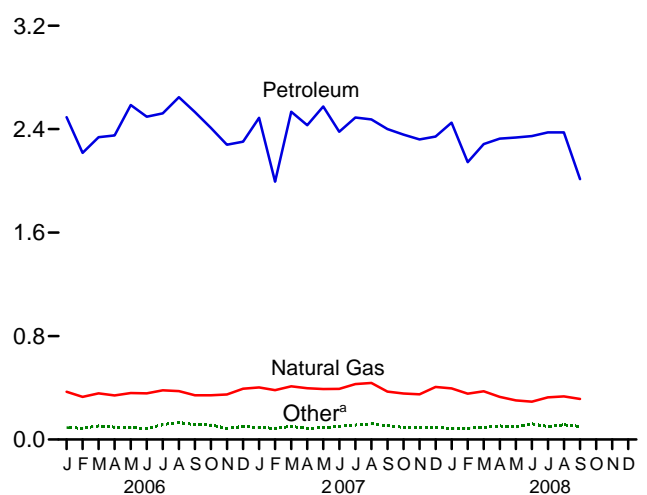
Total Imports and Exports, Monthly



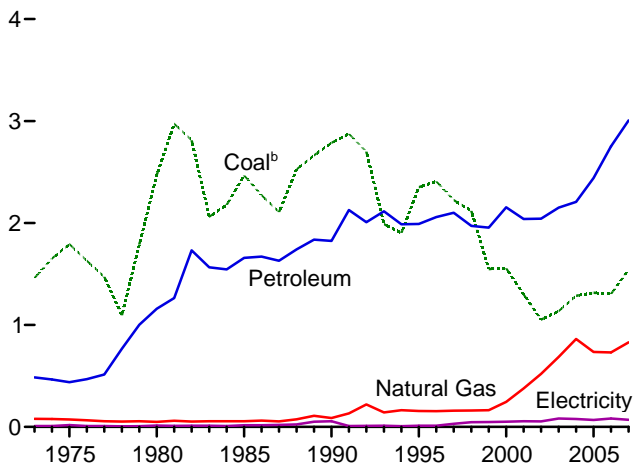
Imports by Source, 1973-2007



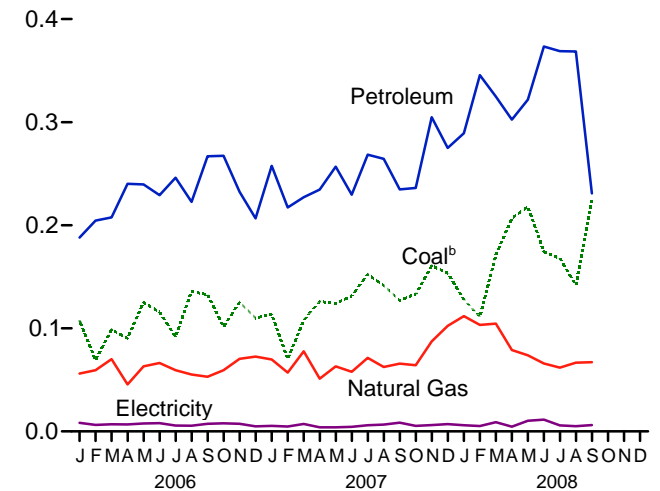
Imports by Source, Monthly



Exports by Source, 1973-2007



Exports by Source, Monthly



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

<sup>b</sup>Includes coal coke.

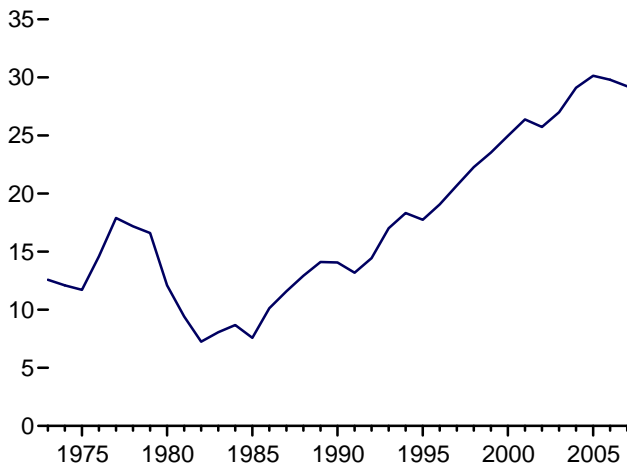
Note: Because vertical scales differ, graphs should not be compared.

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

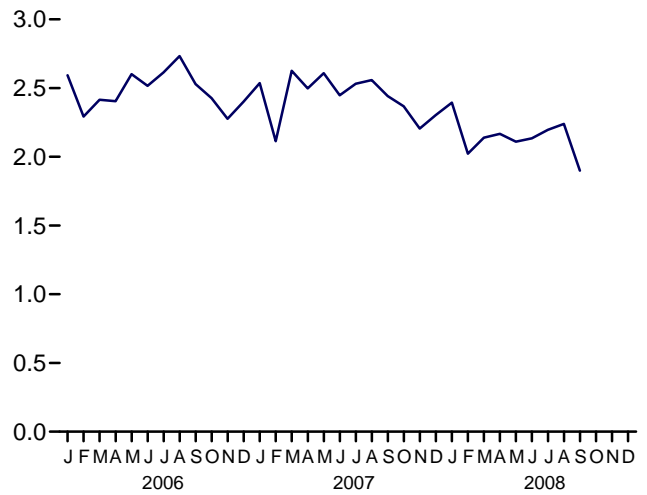
Sources: Tables 1.4a and 1.4b.

**Figure 1.4b Primary Energy Net Imports**  
(Quadrillion Btu, Except as noted)

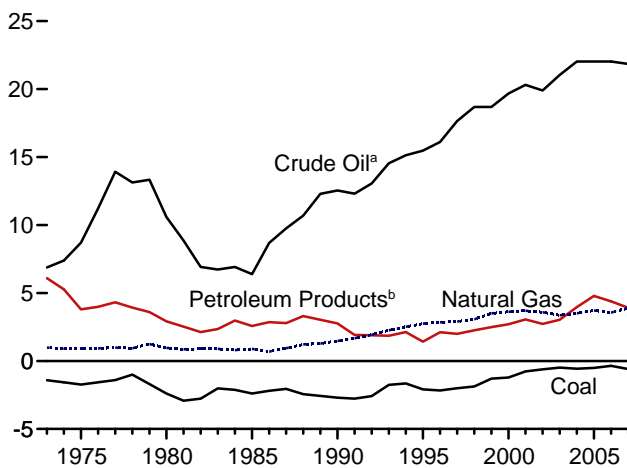
Total, 1973-2007



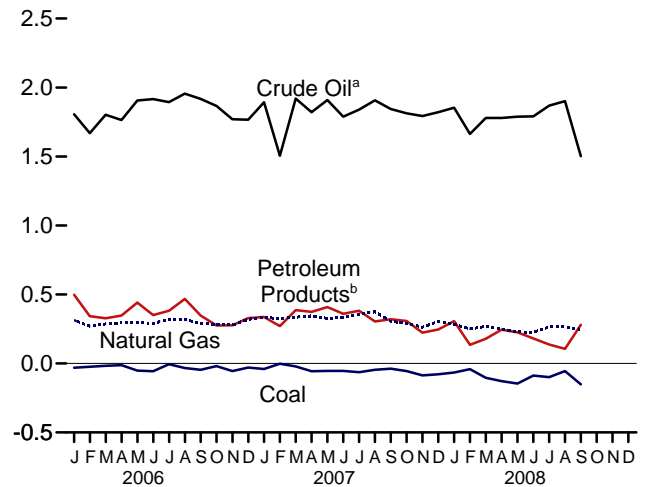
Total, Monthly



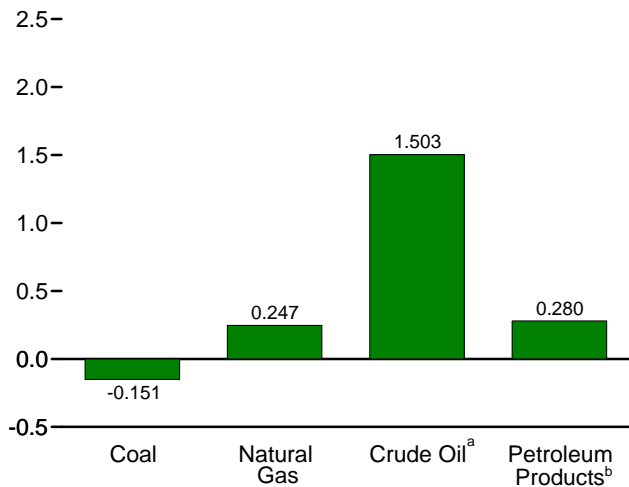
By Major Sources, 1973-2007



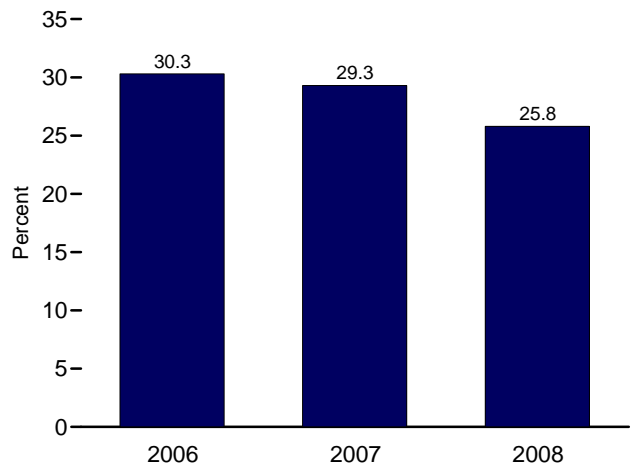
By Major Sources, Monthly



By Major Sources, September 2008



As Share of Consumption, January-September



<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.

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								
	Coal	Coal Coke	Natural Gas	Petroleum			Fuel Ethanol	Electricity	Total
				Crude Oil <sup>a</sup>	Petroleum Products <sup>b</sup>	Total			
<b>1973 Total</b> .....	<b>0.003</b>	<b>0.027</b>	<b>1.060</b>	<b>6.887</b>	<b>6.578</b>	<b>13.466</b>	<b>NA</b>	<b>0.057</b>	<b>14.613</b>
<b>1975 Total</b> .....	<b>.024</b>	<b>.045</b>	<b>.978</b>	<b>8.721</b>	<b>4.227</b>	<b>12.948</b>	<b>NA</b>	<b>.038</b>	<b>14.032</b>
<b>1980 Total</b> .....	<b>.030</b>	<b>.016</b>	<b>1.006</b>	<b>11.195</b>	<b>3.463</b>	<b>14.658</b>	<b>NA</b>	<b>.085</b>	<b>15.796</b>
<b>1985 Total</b> .....	<b>.049</b>	<b>.014</b>	<b>.952</b>	<b>6.814</b>	<b>3.796</b>	<b>10.609</b>	<b>NA</b>	<b>.157</b>	<b>11.781</b>
<b>1990 Total</b> .....	<b>.067</b>	<b>.019</b>	<b>1.551</b>	<b>12.766</b>	<b>4.351</b>	<b>17.117</b>	<b>NA</b>	<b>.063</b>	<b>18.817</b>
<b>1995 Total</b> .....	<b>.237</b>	<b>.095</b>	<b>2.901</b>	<b>15.669</b>	<b>3.211</b>	<b>18.881</b>	<b>.001</b>	<b>.146</b>	<b>22.260</b>
<b>1996 Total</b> .....	<b>.203</b>	<b>.063</b>	<b>3.002</b>	<b>16.341</b>	<b>3.943</b>	<b>20.284</b>	<b>.001</b>	<b>.148</b>	<b>23.702</b>
<b>1997 Total</b> .....	<b>.187</b>	<b>.078</b>	<b>3.063</b>	<b>17.876</b>	<b>3.864</b>	<b>21.740</b>	<b>(s)</b>	<b>.147</b>	<b>25.215</b>
<b>1998 Total</b> .....	<b>.218</b>	<b>.095</b>	<b>3.225</b>	<b>18.916</b>	<b>3.992</b>	<b>22.908</b>	<b>(s)</b>	<b>.135</b>	<b>26.581</b>
<b>1999 Total</b> .....	<b>.227</b>	<b>.080</b>	<b>3.664</b>	<b>18.935</b>	<b>4.198</b>	<b>23.133</b>	<b>(s)</b>	<b>.147</b>	<b>27.252</b>
<b>2000 Total</b> .....	<b>.313</b>	<b>.094</b>	<b>3.869</b>	<b>19.783</b>	<b>4.749</b>	<b>24.531</b>	<b>(s)</b>	<b>.166</b>	<b>28.973</b>
<b>2001 Total</b> .....	<b>.495</b>	<b>.063</b>	<b>4.068</b>	<b>20.348</b>	<b>5.051</b>	<b>25.398</b>	<b>.001</b>	<b>.131</b>	<b>30.157</b>
<b>2002 Total</b> .....	<b>.422</b>	<b>.080</b>	<b>4.104</b>	<b>19.920</b>	<b>4.754</b>	<b>24.674</b>	<b>.001</b>	<b>.125</b>	<b>29.407</b>
<b>2003 Total</b> .....	<b>.626</b>	<b>.068</b>	<b>4.042</b>	<b>21.060</b>	<b>5.159</b>	<b>26.219</b>	<b>.001</b>	<b>.104</b>	<b>31.060</b>
<b>2004 Total</b> .....	<b>.682</b>	<b>.170</b>	<b>4.365</b>	<b>22.082</b>	<b>6.114</b>	<b>28.196</b>	<b>.013</b>	<b>.117</b>	<b>33.543</b>
<b>2005 Total</b> .....	<b>.762</b>	<b>.088</b>	<b>4.450</b>	<b>22.091</b>	<b>7.157</b>	<b>29.248</b>	<b>.011</b>	<b>.152</b>	<b>34.710</b>
<b>2006 January</b> .....	<b>.076</b>	<b>.003</b>	<b>.369</b>	<b>1.811</b>	<b>.681</b>	<b>2.491</b>	<b>(s)</b>	<b>.013</b>	<b>2.953</b>
February .....	<b>.068</b>	<b>.005</b>	<b>.329</b>	<b>1.672</b>	<b>.545</b>	<b>2.216</b>	<b>.002</b>	<b>.012</b>	<b>2.632</b>
March .....	<b>.080</b>	<b>.008</b>	<b>.357</b>	<b>1.807</b>	<b>.530</b>	<b>2.337</b>	<b>.003</b>	<b>.013</b>	<b>2.799</b>
April .....	<b>.076</b>	<b>.005</b>	<b>.341</b>	<b>1.769</b>	<b>.582</b>	<b>2.351</b>	<b>.003</b>	<b>.012</b>	<b>2.787</b>
May .....	<b>.069</b>	<b>.008</b>	<b>.359</b>	<b>1.910</b>	<b>.676</b>	<b>2.586</b>	<b>.002</b>	<b>.013</b>	<b>3.037</b>
June .....	<b>.055</b>	<b>.010</b>	<b>.357</b>	<b>1.922</b>	<b>.574</b>	<b>2.496</b>	<b>.005</b>	<b>.013</b>	<b>2.935</b>
July .....	<b>.080</b>	<b>.011</b>	<b>.380</b>	<b>1.896</b>	<b>.625</b>	<b>2.522</b>	<b>.009</b>	<b>.016</b>	<b>3.018</b>
August .....	<b>.096</b>	<b>.009</b>	<b>.374</b>	<b>1.958</b>	<b>.688</b>	<b>2.646</b>	<b>.011</b>	<b>.016</b>	<b>3.152</b>
September .....	<b>.084</b>	<b>.015</b>	<b>.342</b>	<b>1.921</b>	<b>.611</b>	<b>2.532</b>	<b>.008</b>	<b>.007</b>	<b>2.989</b>
October .....	<b>.080</b>	<b>.015</b>	<b>.342</b>	<b>1.873</b>	<b>.536</b>	<b>2.409</b>	<b>.007</b>	<b>.009</b>	<b>2.863</b>
November .....	<b>.066</b>	<b>.005</b>	<b>.348</b>	<b>1.774</b>	<b>.505</b>	<b>2.279</b>	<b>.005</b>	<b>.010</b>	<b>2.712</b>
December .....	<b>.077</b>	<b>.006</b>	<b>.393</b>	<b>1.771</b>	<b>.531</b>	<b>2.302</b>	<b>.004</b>	<b>.012</b>	<b>2.795</b>
<b>Total</b> .....	<b>.906</b>	<b>.101</b>	<b>4.291</b>	<b>22.085</b>	<b>7.083</b>	<b>29.168</b>	<b>.062</b>	<b>.146</b>	<b>34.673</b>
<b>2007 January</b> .....	<b>.071</b>	<b>.006</b>	<b>.403</b>	<b>1.894</b>	<b>.592</b>	<b>2.487</b>	<b>.004</b>	<b>.012</b>	<b>2.982</b>
February .....	<b>.066</b>	<b>.003</b>	<b>.382</b>	<b>1.510</b>	<b>.484</b>	<b>1.994</b>	<b>.004</b>	<b>.014</b>	<b>2.463</b>
March .....	<b>.082</b>	<b>.003</b>	<b>.412</b>	<b>1.926</b>	<b>.608</b>	<b>2.533</b>	<b>.003</b>	<b>.013</b>	<b>3.046</b>
April .....	<b>.067</b>	<b>.004</b>	<b>.397</b>	<b>1.824</b>	<b>.605</b>	<b>2.429</b>	<b>.003</b>	<b>.014</b>	<b>2.914</b>
May .....	<b>.067</b>	<b>.006</b>	<b>.390</b>	<b>1.916</b>	<b>.659</b>	<b>2.575</b>	<b>.002</b>	<b>R .016</b>	<b>R 3.056</b>
June .....	<b>.076</b>	<b>.007</b>	<b>.391</b>	<b>1.798</b>	<b>.581</b>	<b>2.379</b>	<b>.003</b>	<b>.015</b>	<b>2.871</b>
July .....	<b>.084</b>	<b>.003</b>	<b>.429</b>	<b>1.844</b>	<b>.645</b>	<b>2.489</b>	<b>.005</b>	<b>.019</b>	<b>3.030</b>
August .....	<b>.093</b>	<b>.005</b>	<b>.437</b>	<b>1.914</b>	<b>.560</b>	<b>2.474</b>	<b>.006</b>	<b>.018</b>	<b>3.033</b>
September .....	<b>.087</b>	<b>.005</b>	<b>.370</b>	<b>1.851</b>	<b>.549</b>	<b>2.400</b>	<b>.002</b>	<b>.013</b>	<b>2.877</b>
October .....	<b>.072</b>	<b>.005</b>	<b>.356</b>	<b>1.815</b>	<b>.542</b>	<b>2.357</b>	<b>.004</b>	<b>.012</b>	<b>2.806</b>
November .....	<b>.072</b>	<b>.007</b>	<b>.349</b>	<b>1.796</b>	<b>.524</b>	<b>2.320</b>	<b>.001</b>	<b>.015</b>	<b>2.764</b>
December .....	<b>.070</b>	<b>.008</b>	<b>.407</b>	<b>1.825</b>	<b>.517</b>	<b>2.342</b>	<b>.001</b>	<b>.014</b>	<b>2.841</b>
<b>Total</b> .....	<b>.909</b>	<b>.061</b>	<b>4.723</b>	<b>21.914</b>	<b>6.867</b>	<b>28.780</b>	<b>.037</b>	<b>.175</b>	<b>34.685</b>
<b>2008 January</b> .....	<b>.060</b>	<b>.007</b>	<b>R .395</b>	<b>1.855</b>	<b>.594</b>	<b>2.449</b>	<b>.002</b>	<b>.017</b>	<b>R 2.930</b>
February .....	<b>.065</b>	<b>.006</b>	<b>R .355</b>	<b>1.667</b>	<b>.477</b>	<b>2.144</b>	<b>.002</b>	<b>.016</b>	<b>R 2.587</b>
March .....	<b>.066</b>	<b>.009</b>	<b>R .373</b>	<b>1.784</b>	<b>.499</b>	<b>2.283</b>	<b>.001</b>	<b>.016</b>	<b>R 2.749</b>
April .....	<b>.075</b>	<b>.011</b>	<b>R .329</b>	<b>1.781</b>	<b>.545</b>	<b>2.326</b>	<b>.005</b>	<b>.014</b>	<b>R 2.760</b>
May .....	<b>.068</b>	<b>.007</b>	<b>R .303</b>	<b>1.792</b>	<b>.544</b>	<b>2.335</b>	<b>.003</b>	<b>.018</b>	<b>R 2.734</b>
June .....	<b>.082</b>	<b>.013</b>	<b>R .292</b>	<b>1.794</b>	<b>.551</b>	<b>2.346</b>	<b>.006</b>	<b>.021</b>	<b>R 2.760</b>
July .....	<b>.064</b>	<b>.010</b>	<b>.326</b>	<b>1.874</b>	<b>.501</b>	<b>2.375</b>	<b>.005</b>	<b>.021</b>	<b>2.801</b>
August .....	<b>.079</b>	<b>.009</b>	<b>R .333</b>	<b>1.908</b>	<b>.467</b>	<b>2.375</b>	<b>.007</b>	<b>.020</b>	<b>R 2.822</b>
September .....	<b>.069</b>	<b>.006</b>	<b>.314</b>	<b>1.509</b>	<b>.504</b>	<b>2.013</b>	<b>.009</b>	<b>.017</b>	<b>2.427</b>
<b>9-Month Total</b> .....	<b>.628</b>	<b>.077</b>	<b>3.020</b>	<b>15.966</b>	<b>4.681</b>	<b>20.647</b>	<b>.039</b>	<b>.159</b>	<b>24.569</b>
<b>2007 9-Month Total</b> .....	<b>.694</b>	<b>.041</b>	<b>3.611</b>	<b>16.477</b>	<b>5.284</b>	<b>21.761</b>	<b>.031</b>	<b>.134</b>	<b>26.272</b>
<b>2006 9-Month Total</b> .....	<b>.683</b>	<b>.075</b>	<b>3.208</b>	<b>16.666</b>	<b>5.511</b>	<b>22.177</b>	<b>.045</b>	<b>.114</b>	<b>26.303</b>

<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.

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

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

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

data beginning in 1973.

Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke:** 1973-1975—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter. 1976-1980—Energy Information Administration (EIA), *Energy Data Report*, "Coke and Coal Chemicals," annual reports. 1981 forward—EIA, *Quarterly Coal Report*, quarterly reports. • **Natural Gas:** Tables 4.1 and A4. • **Crude Oil and Petroleum Products:** Tables 3.1, 10.3, and A2. • **Fuel Ethanol:** Table 10.3. • **Electricity:** Tables 7.1 and A6.

**Table 1.4b Primary Energy Exports by Source and Total Net Imports**  
(Quadrillion Btu)

	Exports								Net Imports <sup>a</sup>
	Coal	Coal Coke	Natural Gas	Petroleum			Electricity	Total	Total
				Crude Oil <sup>b</sup>	Petroleum Products <sup>c</sup>	Total			
<b>1973 Total</b> .....	<b>1.425</b>	<b>0.035</b>	<b>0.079</b>	<b>0.004</b>	<b>0.482</b>	<b>0.486</b>	<b>0.009</b>	<b>2.033</b>	<b>12.580</b>
<b>1975 Total</b> .....	<b>1.761</b>	<b>.032</b>	<b>.074</b>	<b>.012</b>	<b>.427</b>	<b>.439</b>	<b>.017</b>	<b>2.323</b>	<b>11.709</b>
<b>1980 Total</b> .....	<b>2.421</b>	<b>.051</b>	<b>.049</b>	<b>.609</b>	<b>.551</b>	<b>1.160</b>	<b>.014</b>	<b>3.695</b>	<b>12.101</b>
<b>1985 Total</b> .....	<b>2.438</b>	<b>.028</b>	<b>.056</b>	<b>.432</b>	<b>1.225</b>	<b>1.657</b>	<b>.017</b>	<b>4.196</b>	<b>7.584</b>
<b>1990 Total</b> .....	<b>2.772</b>	<b>.014</b>	<b>.087</b>	<b>.230</b>	<b>1.594</b>	<b>1.824</b>	<b>.055</b>	<b>4.752</b>	<b>14.065</b>
<b>1995 Total</b> .....	<b>2.318</b>	<b>.034</b>	<b>.156</b>	<b>.200</b>	<b>1.791</b>	<b>1.991</b>	<b>.012</b>	<b>4.511</b>	<b>17.750</b>
<b>1996 Total</b> .....	<b>2.368</b>	<b>.040</b>	<b>.155</b>	<b>.233</b>	<b>1.825</b>	<b>2.059</b>	<b>.011</b>	<b>4.633</b>	<b>19.069</b>
<b>1997 Total</b> .....	<b>2.193</b>	<b>.031</b>	<b>.159</b>	<b>.228</b>	<b>1.872</b>	<b>2.100</b>	<b>.031</b>	<b>4.514</b>	<b>20.701</b>
<b>1998 Total</b> .....	<b>2.092</b>	<b>.028</b>	<b>.161</b>	<b>.233</b>	<b>1.740</b>	<b>1.972</b>	<b>.047</b>	<b>4.299</b>	<b>22.281</b>
<b>1999 Total</b> .....	<b>1.525</b>	<b>.022</b>	<b>.164</b>	<b>.250</b>	<b>1.705</b>	<b>1.955</b>	<b>.049</b>	<b>3.715</b>	<b>23.537</b>
<b>2000 Total</b> .....	<b>1.528</b>	<b>.028</b>	<b>.245</b>	<b>.106</b>	<b>2.048</b>	<b>2.154</b>	<b>.051</b>	<b>4.006</b>	<b>24.967</b>
<b>2001 Total</b> .....	<b>1.265</b>	<b>.033</b>	<b>.377</b>	<b>.043</b>	<b>1.996</b>	<b>2.039</b>	<b>.056</b>	<b>3.770</b>	<b>26.386</b>
<b>2002 Total</b> .....	<b>1.032</b>	<b>.020</b>	<b>.520</b>	<b>.019</b>	<b>2.023</b>	<b>2.042</b>	<b>.054</b>	<b>3.668</b>	<b>25.739</b>
<b>2003 Total</b> .....	<b>1.117</b>	<b>.018</b>	<b>.686</b>	<b>.026</b>	<b>2.124</b>	<b>2.151</b>	<b>.082</b>	<b>4.054</b>	<b>27.007</b>
<b>2004 Total</b> .....	<b>1.253</b>	<b>.033</b>	<b>.862</b>	<b>.057</b>	<b>2.151</b>	<b>2.208</b>	<b>.078</b>	<b>4.433</b>	<b>29.110</b>
<b>2005 Total</b> .....	<b>1.273</b>	<b>.043</b>	<b>.735</b>	<b>.067</b>	<b>2.374</b>	<b>2.442</b>	<b>.068</b>	<b>4.561</b>	<b>30.149</b>
<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
<b>Total</b> .....	<b>1.264</b>	<b>.040</b>	<b>.730</b>	<b>.052</b>	<b>2.699</b>	<b>2.751</b>	<b>.083</b>	<b>4.868</b>	<b>29.805</b>
<b>2007</b> January .....	.111	.003	.070	.002	.256	.258	.005	.447	2.536
February .....	.068	.002	.057	.004	.213	.217	.005	.349	2.113
March .....	.104	.004	.078	.006	.221	.227	.007	.420	2.626
April .....	.123	.003	.051	.003	.231	.235	.004	.416	2.498
May .....	.121	.003	.063	.006	.250	.257	.004	.448	R 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	2.441
October .....	.128	.006	.064	.002	.234	.236	.005	.439	2.367
November .....	.159	.002	.087	.003	.301	.305	.006	.559	2.206
December .....	.149	.004	.102	.004	.271	.275	.007	.538	2.303
<b>Total</b> .....	<b>1.507</b>	<b>.036</b>	<b>.830</b>	<b>.058</b>	<b>2.949</b>	<b>3.007</b>	<b>.069</b>	<b>5.448</b>	R <b>29.237</b>
<b>2008</b> January .....	.125	.003	R .112	.002	.287	.289	.006	R .535	R 2.395
February .....	.107	.004	R .103	.003	.342	.346	.005	R .565	R 2.022
March .....	.170	.001	R .105	.005	.320	.325	.009	R .610	R 2.139
April .....	.203	.004	R .079	.002	.300	.302	.005	R .593	2.167
May .....	.214	.004	.074	.003	.318	.322	.010	.624	R 2.110
June .....	.171	.004	.066	.004	.370	.373	.011	.625	R 2.135
July .....	.163	.005	.062	.005	.364	.369	.006	.604	2.196
August .....	.134	.008	R .067	.007	.361	.369	.005	R .582	R 2.239
September .....	.220	.004	.067	.007	.224	.231	.006	.528	1.899
<b>9-Month Total</b> .....	<b>1.507</b>	<b>.036</b>	<b>.734</b>	<b>.040</b>	<b>2.886</b>	<b>2.926</b>	<b>.063</b>	<b>5.266</b>	<b>19.303</b>
<b>2007 9-Month Total</b> .....	<b>1.071</b>	<b>.024</b>	<b>.576</b>	<b>.049</b>	<b>2.142</b>	<b>2.191</b>	<b>.051</b>	<b>3.912</b>	<b>22.360</b>
<b>2006 9-Month Total</b> .....	<b>.936</b>	<b>.031</b>	<b>.528</b>	<b>.037</b>	<b>2.008</b>	<b>2.045</b>	<b>.063</b>	<b>3.602</b>	<b>22.700</b>

<sup>a</sup> Net imports equal imports minus exports.

<sup>b</sup> Crude oil and lease condensate.

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

R=Revised.

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

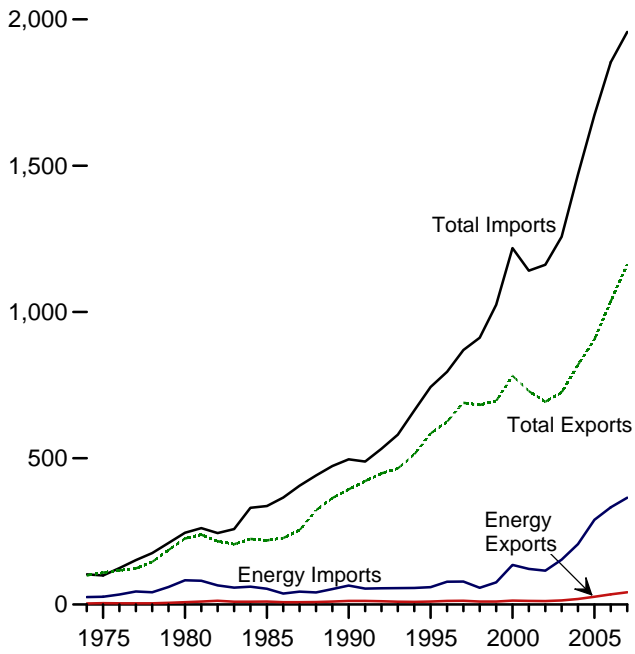
Web Page: See <http://www.eia.doe.gov/emeu/mer/overview.html> for all available

data beginning in 1973.

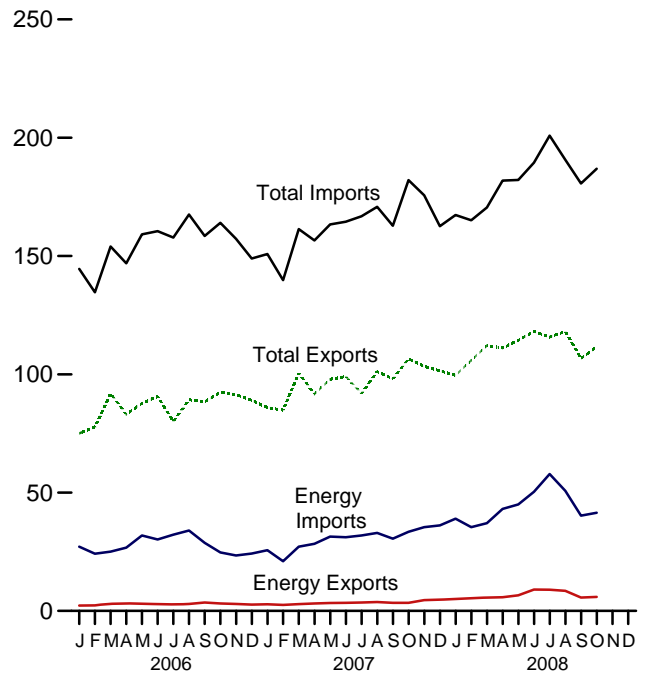
Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke:** 1973-1975—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter. 1976-1980—Energy Information Administration (EIA), *Energy Data Report*, "Coke and Coal Chemicals," annual reports. 1981 forward—EIA,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

**Figure 1.5 Merchandise Trade Value**  
(Billion Nominal Dollars)

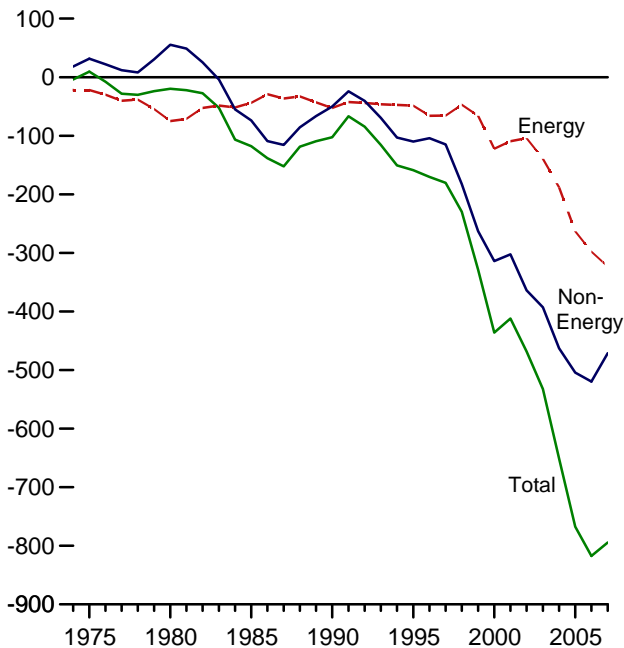
Imports and Exports, 1974-2007



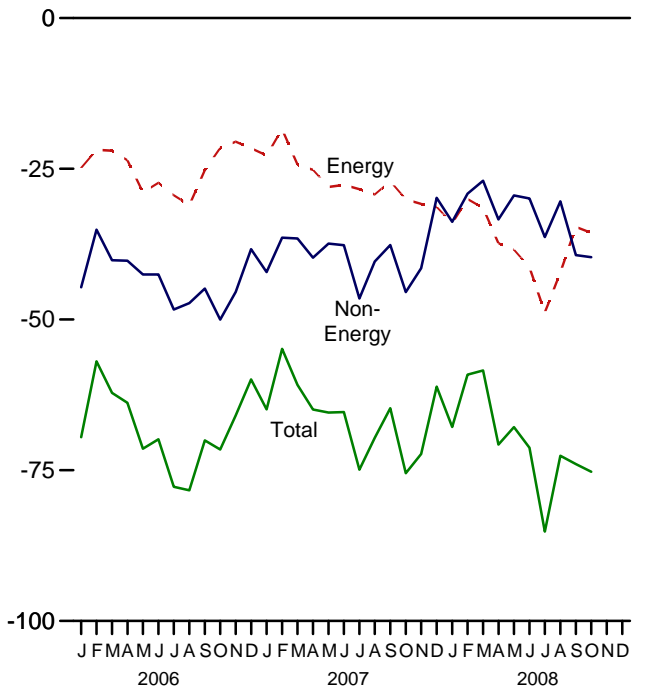
Imports and Exports, Monthly



Trade Balance, 1974-2007



Trade Balance, Monthly



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

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

**Table 1.5 Merchandise Trade Value**  
(Million Nominal Dollars)

	Petroleum <sup>a</sup>			Energy <sup>b</sup>			Non-Energy Balance	Total Merchandise		
	Exports	Imports	Balance	Exports	Imports	Balance		Exports	Imports	Balance
<b>1974 Total</b> .....	792	24,668	-23,876	3,444	25,454	-22,010	18,126	99,437	103,321	-3,884
<b>1975 Total</b> .....	907	25,197	-24,289	4,470	26,476	-22,006	31,557	108,856	99,305	9,551
<b>1980 Total</b> .....	2,833	78,637	-75,803	7,982	82,924	-74,942	55,246	225,566	245,262	-19,696
<b>1985 Total</b> .....	4,707	50,475	-45,768	9,971	53,917	-43,946	-73,765	218,815	336,526	-117,712
<b>1990 Total</b> .....	6,901	61,583	-54,682	12,233	64,661	-52,428	-50,068	393,592	496,088	-102,496
<b>1995 Total</b> .....	6,321	54,368	-48,047	10,358	59,109	-48,751	-110,050	584,742	743,543	-158,801
<b>1996 Total</b> .....	7,984	72,022	-64,038	12,181	78,086	-65,905	-104,309	625,075	795,289	-170,214
<b>1997 Total</b> .....	8,592	71,152	-62,560	12,682	78,277	-65,595	-114,927	689,182	869,704	-180,522
<b>1998 Total</b> .....	6,574	50,264	-43,690	10,251	57,323	-47,072	-182,686	682,138	911,896	-229,758
<b>1999 Total</b> .....	7,118	67,173	-60,055	9,880	75,803	-65,923	-262,898	695,797	1,024,618	-328,821
<b>2000 Total</b> .....	10,192	119,251	-109,059	13,179	135,367	-122,188	-313,916	781,918	1,218,022	-436,104
<b>2001 Total</b> .....	8,868	102,747	-93,879	12,494	121,923	-109,429	-302,470	729,100	1,140,999	-411,899
<b>2002 Total</b> .....	8,569	102,663	-94,094	11,541	115,748	-104,207	-364,056	693,103	1,161,366	-468,263
<b>2003 Total</b> .....	10,209	132,433	-122,224	13,768	153,298	-139,530	-392,820	724,771	1,257,121	-532,350
<b>2004 Total</b> .....	13,130	179,266	-166,136	18,642	206,660	-188,018	-462,912	818,775	1,469,704	-650,930
<b>2005 Total</b> .....	19,155	250,068	-230,913	26,488	289,723	-263,235	-504,242	905,978	1,673,455	-767,477
<b>2006</b> 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
<b>Total</b> .....	<b>28,171</b>	<b>299,714</b>	<b>-271,543</b>	<b>34,711</b>	<b>332,500</b>	<b>-297,789</b>	<b>-519,515</b>	<b>1,036,635</b>	<b>1,853,938</b>	<b>-817,304</b>
<b>2007</b> 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
<b>Total</b> .....	<b>33,293</b>	<b>327,620</b>	<b>-294,327</b>	<b>41,725</b>	<b>364,987</b>	<b>-323,262</b>	<b>-471,221</b>	<b>1,162,479</b>	<b>1,956,962</b>	<b>-794,483</b>
<b>2008</b> January .....	3,996	36,383	-32,387	4,948	38,973	-34,025	-33,787	99,549	167,362	-67,812
February .....	4,668	31,876	-27,208	5,360	35,388	-30,028	-29,123	105,930	165,081	-59,151
March .....	4,453	33,645	-29,192	5,630	37,118	-31,488	-26,966	112,085	170,539	-58,454
April .....	4,322	39,242	-34,920	5,749	43,100	-37,351	-33,398	111,131	181,880	-70,749
May .....	5,098	41,370	-36,272	6,565	44,979	-38,414	-29,431	114,291	182,136	-67,845
June .....	7,760	46,643	-38,883	9,015	50,351	-41,336	-29,927	118,184	189,447	-71,263
July .....	7,819	54,451	-46,632	8,982	57,840	-48,858	-36,323	115,718	200,899	-85,181
August .....	7,467	47,246	-39,779	8,510	50,718	-42,208	-30,400	118,082	190,690	-72,608
September .....	4,086	37,206	-33,120	5,629	40,277	-34,648	<sup>R</sup> -39,320	<sup>R</sup> 106,699	<sup>R</sup> 180,666	<sup>R</sup> -73,968
October .....	4,589	38,673	-34,084	5,897	41,507	-35,610	-39,651	111,590	186,851	-75,261
<b>10-Month Total</b> ...	<b>54,258</b>	<b>406,735</b>	<b>-352,477</b>	<b>66,285</b>	<b>440,252</b>	<b>-373,966</b>	<b>-328,326</b>	<b>1,113,260</b>	<b>1,815,552</b>	<b>-702,292</b>
<b>2007 10-Month Total</b> ...	<b>25,460</b>	<b>262,515</b>	<b>-237,055</b>	<b>32,311</b>	<b>293,429</b>	<b>-261,119</b>	<b>-399,916</b>	<b>957,669</b>	<b>1,618,705</b>	<b>-661,036</b>
<b>2006 10-Month Total</b> ...	<b>23,692</b>	<b>257,442</b>	<b>-233,750</b>	<b>29,111</b>	<b>284,821</b>	<b>-255,710</b>	<b>-435,741</b>	<b>856,247</b>	<b>1,547,698</b>	<b>-691,451</b>

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

<sup>b</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 components due to independent rounding. • The U.S. import statistics reflect both

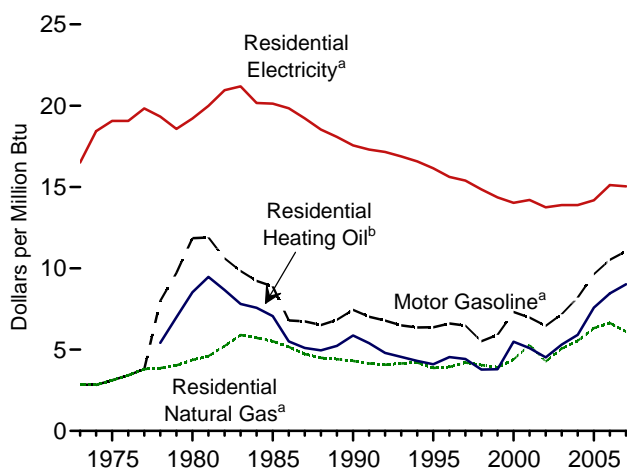
government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. • See "Nominal Price" in Glossary.

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

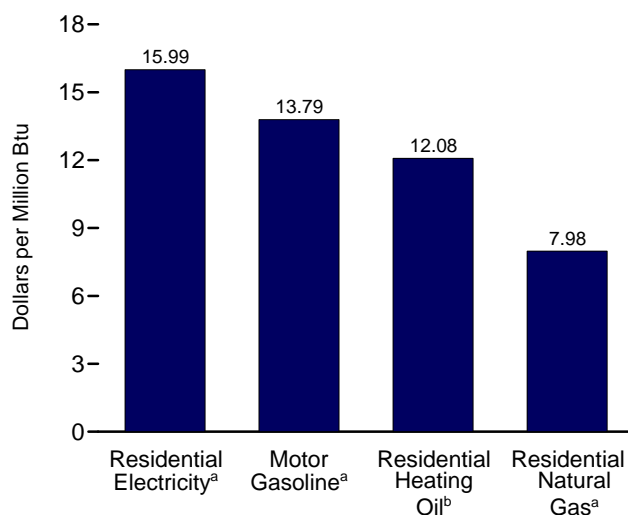
Sources: See end of section.

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

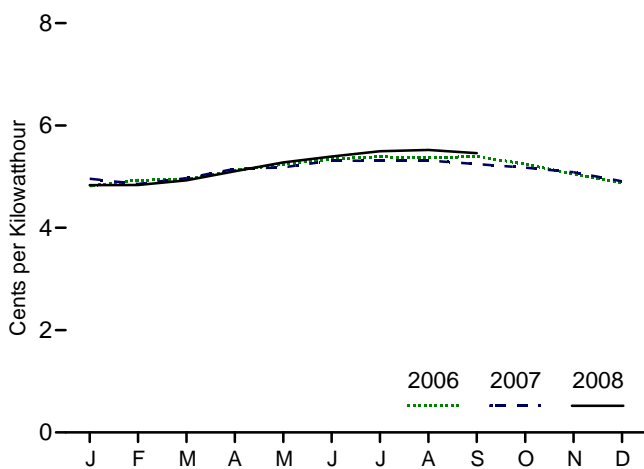
Costs, 1973-2007



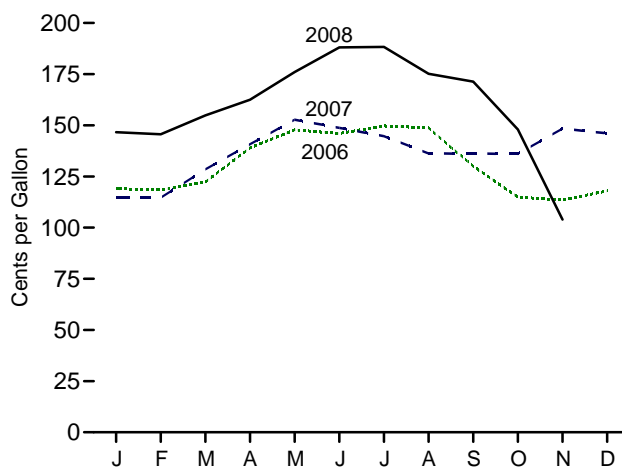
Costs, September 2008



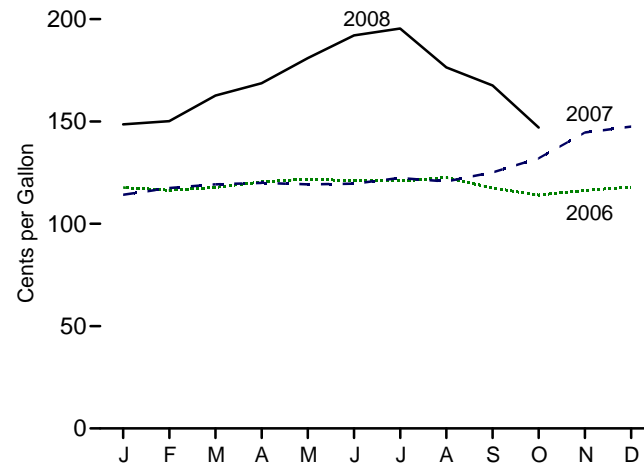
Residential Electricity<sup>a</sup>, Monthly



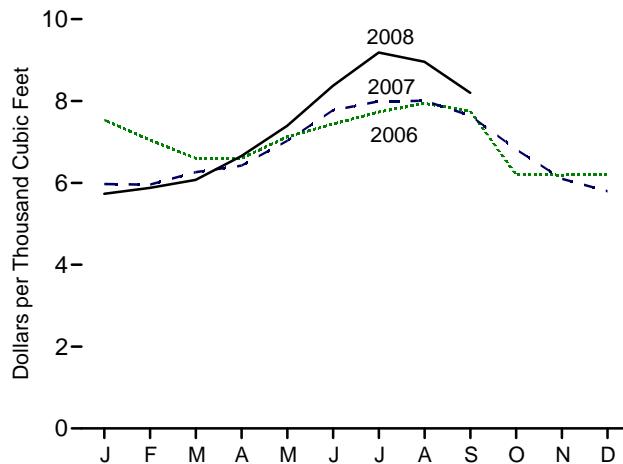
Motor Gasoline<sup>a</sup>, Monthly



Residential Heating Oil<sup>b</sup>, Monthly



Residential Natural Gas<sup>a</sup>, Monthly



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

Note: Because vertical scales differ, graphs should not be compared.  
 Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.  
 Source: Table 1.6.



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

	Consumer Price Index, All Urban Consumers <sup>a</sup>	Motor Gasoline <sup>b</sup>		Residential Heating Oil <sup>c</sup>		Residential Natural Gas <sup>b</sup>		Residential Electricity <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 Kilowatt-hour	Dollars per Million Btu
<b>1973 Average</b> .....	44.4	NA	NA	NA	NA	290.5	2.85	5.6	16.50
<b>1975 Average</b> .....	53.8	NA	NA	NA	NA	317.8	3.12	6.5	19.07
<b>1980 Average</b> .....	82.4	148.2	11.85	118.2	8.52	446.6	4.36	6.6	19.21
<b>1985 Average</b> .....	107.6	111.2	8.89	97.9	7.06	568.8	5.52	6.87	20.13
<b>1990 Average</b> .....	130.7	93.1	7.44	81.3	5.86	443.8	4.31	5.99	17.56
<b>1995 Average</b> .....	152.4	79.1	6.37	56.9	4.10	397.6	3.87	5.51	16.15
<b>1996 Average</b> .....	156.9	82.1	6.61	63.0	4.54	404.1	3.93	5.33	15.62
<b>1997 Average</b> .....	160.5	80.4	6.48	61.3	4.42	432.4	4.21	5.25	15.39
<b>1998 Average</b> .....	163.0	68.4	5.51	52.3	3.77	418.4	4.05	5.07	14.85
<b>1999 Average</b> .....	166.6	73.3	5.91	52.6	3.79	401.6	3.91	4.90	14.36
<b>2000 Average</b> .....	172.2	90.8	7.32	76.1	5.49	450.6	4.39	4.79	14.02
<b>2001 Average</b> .....	177.1	86.4	6.97	70.6	5.09	543.8	5.28	4.84	14.20
<b>2002 Average</b> .....	179.9	80.1	6.46	62.8	4.52	438.6	4.26	4.69	13.75
<b>2003 Average</b> .....	184.0	89.0	7.18	73.6	5.31	523.4	5.07	4.74	13.89
<b>2004 Average</b> .....	188.9	101.8	8.20	81.9	5.91	569.1	5.54	4.74	13.89
<b>2005 Average</b> .....	195.3	119.7	9.64	105.1	7.58	650.3	6.32	4.84	14.18
<b>2006</b> January .....	198.3	119.0	9.58	117.7	8.49	753.4	7.33	4.82	14.11
February .....	198.7	118.5	9.54	116.4	8.39	704.6	6.85	4.93	14.46
March .....	199.8	122.3	9.85	117.8	8.49	660.2	6.42	4.94	14.48
April .....	201.5	139.0	11.19	120.4	8.68	659.6	6.42	5.12	15.01
May .....	202.5	147.8	11.90	121.9	8.79	712.6	6.93	5.24	15.36
June .....	202.9	146.0	11.75	121.1	8.73	743.7	7.23	5.35	15.67
July .....	203.5	149.7	12.05	120.9	8.72	773.0	7.52	5.39	15.78
August .....	203.9	148.7	11.97	122.6	8.84	794.0	7.72	5.37	15.73
September .....	202.9	130.0	10.46	117.4	8.47	775.3	7.54	5.39	15.80
October .....	201.8	114.9	9.25	114.1	8.23	620.4	6.04	5.24	15.37
November .....	201.5	113.5	9.14	116.3	8.38	618.9	6.02	5.05	14.81
December .....	201.8	117.9	9.49	117.9	8.50	621.4	6.04	4.88	14.29
<b>Average</b> .....	<b>201.6</b>	<b>130.7</b>	<b>10.52</b>	<b>117.3</b>	<b>8.46</b>	<b>682.0</b>	<b>6.63</b>	<b>5.16</b>	<b>15.12</b>
<b>2007</b> January .....	202.416	114.7	9.23	114.2	8.23	597.3	5.81	4.96	14.54
February .....	203.499	114.6	9.23	117.5	8.47	595.6	5.79	4.86	14.23
March .....	205.352	128.5	10.34	119.3	8.60	626.2	6.09	4.97	14.57
April .....	206.686	140.7	11.33	120.0	8.65	642.0	6.25	5.15	15.10
May .....	207.949	152.7	12.29	119.3	8.60	702.6	6.83	5.18	15.18
June .....	208.352	148.8	11.97	119.6	8.62	777.5	7.56	5.31	15.57
July .....	208.299	144.6	11.64	122.4	8.82	799.3	7.78	5.31	15.56
August .....	207.917	136.3	10.97	120.7	8.70	800.3	7.79	5.31	15.58
September .....	208.490	136.2	10.96	125.1	9.02	764.5	7.44	5.25	15.38
October .....	208.936	136.1	10.95	132.1	9.52	682.0	6.63	5.17	15.16
November .....	210.177	148.4	11.94	144.6	10.43	610.0	5.93	5.09	14.91
December .....	210.036	146.1	11.76	147.5	10.64	579.4	5.64	4.91	14.39
<b>Average</b> .....	<b>207.342</b>	<b>137.4</b>	<b>11.06</b>	<b>125.0</b>	<b>9.01</b>	<b>627.5</b>	<b>6.10</b>	<b>5.13</b>	<b>15.04</b>
<b>2008</b> January .....	211.080	146.7	11.80	148.6	10.72	R 573.2	R 5.58	4.83	14.16
February .....	211.693	145.6	11.72	150.1	10.82	R 587.6	R 5.72	4.84	14.18
March .....	213.528	154.9	12.46	162.6	11.73	R 607.4	R 5.91	4.93	14.44
April .....	214.823	162.5	13.08	168.7	12.16	665.7	6.48	5.11	14.97
May .....	216.632	176.0	14.16	181.0	13.05	739.5	7.19	5.28	15.46
June .....	218.815	188.1	15.13	192.0	13.85	837.2	8.14	5.39	15.81
July .....	219.964	188.3	15.15	195.4	14.09	R 918.3	8.93	5.50	16.11
August .....	219.086	175.2	14.10	R 176.4	R 12.72	R 896.0	R 8.72	5.52	16.19
September .....	218.783	171.4	13.79	R 167.6	R 12.08	R 820.0	R 7.98	R 5.46	R 15.99
October .....	216.573	148.0	11.91	RE 147.1	RE 10.60	NA	NA	NA	NA
November .....	212.425	103.9	8.36	NA	NA	NA	NA	NA	NA

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

<sup>b</sup> Includes taxes.

<sup>c</sup> Excludes taxes.

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

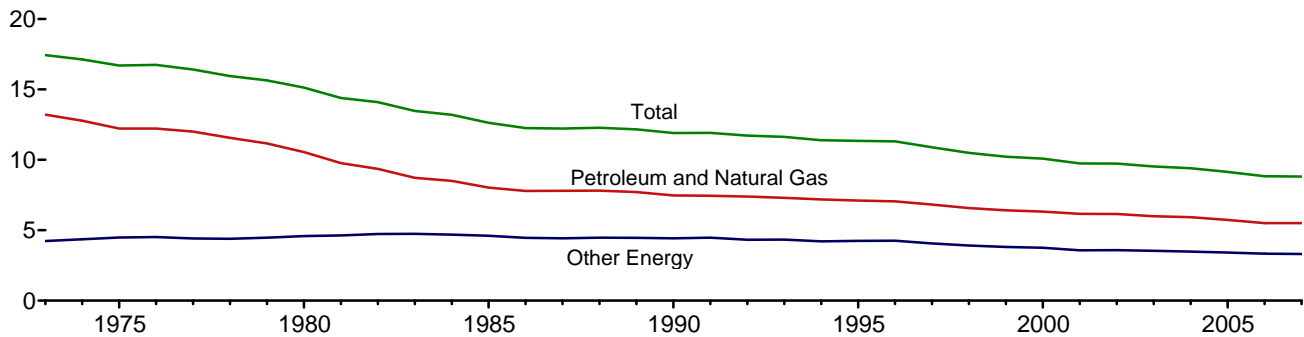
Notes: • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding. • Geographic

coverage is the 50 States and the District of Columbia.

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

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

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



Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.  
Source: Table 1.7.

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

	Energy Consumption			Gross Domestic Product (GDP)	Energy Consumption per Real Dollar of GDP		
	Petroleum and Natural Gas	Other Energy <sup>a</sup>	Total		Petroleum and Natural Gas	Other Energy <sup>a</sup>	Total
	Quadrillion Btu				Billion Chained (2000) Dollars	Thousand Btu per Chained (2000) Dollar	
1973 Year .....	57.352	18.356	75.708	4,341.5	13.21	4.23	17.44
1974 Year .....	55.187	18.804	73.991	4,319.6	12.78	4.35	17.13
1975 Year .....	52.678	19.321	71.999	4,311.2	12.22	4.48	16.70
1976 Year .....	55.520	20.492	76.012	4,540.9	12.23	4.51	16.74
1977 Year .....	57.053	20.947	78.000	4,750.5	12.01	4.41	16.42
1978 Year .....	57.966	22.021	79.986	5,015.0	11.56	4.39	15.95
1979 Year .....	57.789	23.114	80.903	5,173.4	11.17	4.47	15.64
1980 Year .....	54.438	23.684	78.122	5,161.7	10.55	4.59	15.13
1981 Year .....	51.678	24.490	76.168	5,291.7	9.77	4.63	14.39
1982 Year .....	48.588	24.565	73.153	5,189.3	9.36	4.73	14.10
1983 Year .....	47.275	25.763	73.038	5,423.8	8.72	4.75	13.47
1984 Year .....	49.445	27.269	76.714	5,813.6	8.51	4.69	13.20
1985 Year .....	48.626	27.865	76.491	6,053.7	8.03	4.60	12.64
1986 Year .....	48.787	27.969	76.756	6,263.6	7.79	4.47	12.25
1987 Year .....	50.505	28.668	79.173	6,475.1	7.80	4.43	12.23
1988 Year .....	52.670	30.149	82.819	6,742.7	7.81	4.47	12.28
1989 Year .....	53.813	31.131	84.944	6,981.4	7.71	4.46	12.17
1990 Year .....	53.156	31.496	84.652	7,112.5	7.47	4.43	11.90
1991 Year .....	52.878	31.729	84.607	7,100.5	7.45	4.47	11.92
1992 Year .....	54.240	31.716	85.956	7,336.6	7.39	4.32	11.72
1993 Year .....	54.973	32.630	87.603	7,532.7	7.30	4.33	11.63
1994 Year .....	56.290	32.970	89.260	7,835.5	7.18	4.21	11.39
1995 Year .....	57.108	34.064	91.173	8,031.7	7.11	4.24	11.35
1996 Year .....	58.758	35.417	94.175	8,328.9	7.05	4.25	11.31
1997 Year .....	59.382	35.383	94.765	8,703.5	6.82	4.07	10.89
1998 Year .....	59.647	35.536	95.183	9,066.9	6.58	3.92	10.50
1999 Year .....	60.747	36.070	96.817	9,470.3	6.41	3.81	10.22
2000 Year .....	62.089	36.887	98.975	9,817.0	6.32	3.76	10.08
2001 Year .....	60.959	35.367	96.326	9,890.7	6.16	3.58	9.74
2002 Year .....	61.785	36.073	97.858	10,048.8	6.15	3.59	9.74
2003 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 .....	62.149	37.706	99.856	11,294.8	5.50	3.34	8.84
2007 Year .....	63.410	<sup>R</sup> 38.157	<sup>R</sup> 101.568	11,523.9	5.50	3.31	8.81

<sup>a</sup> Coal, coal coke net imports, nuclear electric power, renewable energy, and electricity net imports.

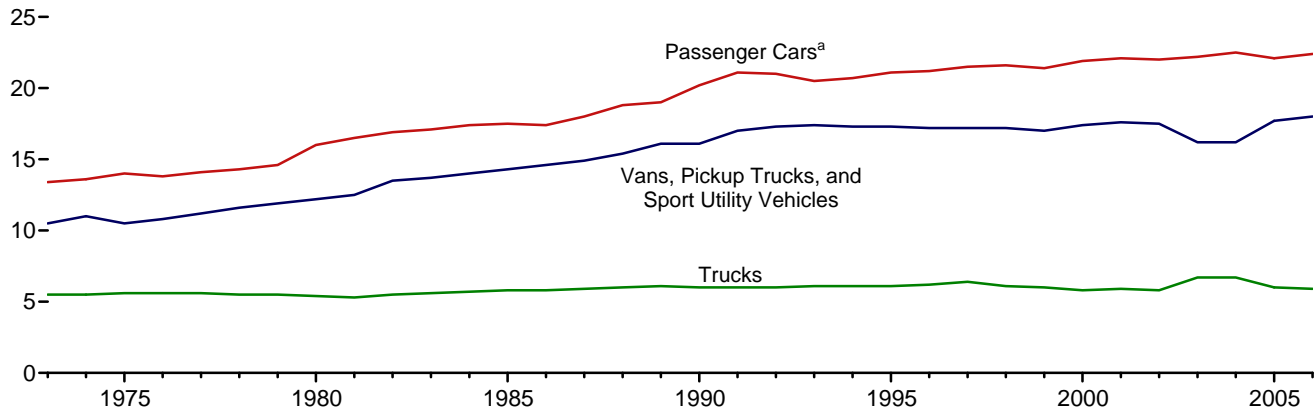
R=Revised.

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

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

Sources: • **Energy Consumption:** Table 1.3. • **Gross Domestic Product: 1973-2004**—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, August 2008, Table 2A. **2005 forward**—U.S. Department of Commerce, Bureau of Economic Analysis, *BEA News Release*, November 25, 2008, Table 3, which is available at Web site <http://www.bea.gov/bea/newsrel/gdpnewsrelease.htm>.

**Figure 1.8 Motor Vehicle Fuel Rates, 1973-2006**  
(Miles per Gallon)



<sup>a</sup>Motorcycles are included through 1989.

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

Source: Table 1.8.

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

	Passenger Cars <sup>a</sup>			Vans, Pickup Trucks, and Sport Utility Vehicles <sup>b</sup>			Trucks <sup>c</sup>			All Motor Vehicles <sup>d</sup>		
	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)
1973	9,884	737	13.4	9,779	931	10.5	15,370	2,775	5.5	10,099	850	11.9
1974	9,221	677	13.6	9,452	862	11.0	14,995	2,708	5.5	9,493	788	12.0
1975	9,309	665	14.0	9,829	934	10.5	15,167	2,722	5.6	9,627	790	12.2
1976	9,418	681	13.8	10,127	934	10.8	15,438	2,764	5.6	9,774	806	12.1
1977	9,517	676	14.1	10,607	947	11.2	16,700	3,002	5.6	9,978	814	12.3
1978	9,500	665	14.3	10,968	948	11.6	18,045	3,263	5.5	10,077	816	12.4
1979	9,062	620	14.6	10,802	905	11.9	18,502	3,380	5.5	9,722	776	12.5
1980	8,813	551	16.0	10,437	854	12.2	18,736	3,447	5.4	9,458	712	13.3
1981	8,873	538	16.5	10,244	819	12.5	19,016	3,565	5.3	9,477	697	13.6
1982	9,050	535	16.9	10,276	762	13.5	19,931	3,647	5.5	9,644	686	14.1
1983	9,118	534	17.1	10,497	767	13.7	21,083	3,769	5.6	9,760	686	14.2
1984	9,248	530	17.4	11,151	797	14.0	22,550	3,967	5.7	10,017	691	14.5
1985	9,419	538	17.5	10,506	735	14.3	20,597	3,570	5.8	10,020	685	14.6
1986	9,464	543	17.4	10,764	738	14.6	22,143	3,821	5.8	10,143	692	14.7
1987	9,720	539	18.0	11,114	744	14.9	23,349	3,937	5.9	10,453	694	15.1
1988	9,972	531	18.8	11,465	745	15.4	22,485	3,736	6.0	10,721	688	15.6
1989	<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 <sup>P</sup>	12,427	554	22.4	10,986	612	18.0	25,290	4,300	5.9	12,016	697	17.2

<sup>a</sup> Through 1989, includes motorcycles.

<sup>b</sup> Includes a small number of trucks with 2 axles and 4 tires, such as step vans.

<sup>c</sup> Single-unit trucks with 2 axles and 6 or more tires, and combination trucks.

<sup>d</sup> Includes buses and motorcycles, which are not shown separately.

P=Preliminary.

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

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

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

**Table 1.9 Heating Degree-Days by Census Division**

Census Divisions	November					Cumulative July through November				
	Normal <sup>a</sup>	2007	2008	Percent Change		Normal <sup>a</sup>	2007	2008	Percent Change	
				Normal to 2008	2007 to 2008				Normal to 2008	2007 to 2008
<b>New England</b> Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont .....	727	775	758	4	-2	1,384	1,246	1,433	4	15
<b>Middle Atlantic</b> New Jersey, New York, Pennsylvania .....	667	694	698	5	1	1,193	965	1,198	(s)	24
<b>East North Central</b> Illinois, Indiana, Michigan, Ohio, Wisconsin .....	757	762	786	4	3	1,337	1,145	1,355	1	18
<b>West North Central</b> Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota .....	840	788	806	-4	2	1,447	1,248	1,393	-4	12
<b>South Atlantic</b> Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia .....	339	350	417	23	19	528	447	625	18	40
<b>East South Central</b> Alabama, Kentucky, Mississippi, Tennessee .....	449	450	535	19	19	695	597	778	12	30
<b>West South Central</b> Arkansas, Louisiana, Oklahoma, Texas .....	293	253	273	-7	8	385	336	390	1	16
<b>Mountain</b> Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming .....	676	545	540	-20	-1	1,219	951	982	-19	3
<b>Pacific<sup>b</sup></b> California, Oregon, Washington .....	396	326	274	-31	-16	690	606	469	-32	-23
<b>U.S. Average<sup>b</sup></b> .....	<b>539</b>	<b>521</b>	<b>537</b>	(s)	<b>3</b>	<b>922</b>	<b>782</b>	<b>899</b>	<b>-2</b>	<b>15</b>

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

<sup>b</sup> Excludes Alaska and Hawaii.

(s)=Less than 0.5 percent and greater than -0.5 percent.

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

Web Pages: • See <http://www.eia.doe.gov/emeu/mer/overview.html> for current data. • See <http://www.eia.doe.gov/emeu/aer/overview.html> for

historical data.

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

**Table 1.10 Cooling Degree-Days by Census Division**

Census Divisions	November					Cumulative January through November				
	Normal <sup>a</sup>	2007	2008	Percent Change		Normal <sup>a</sup>	2007	2008	Percent Change	
				Normal to 2008	2007 to 2008				Normal to 2008	2007 to 2008
<b>New England</b> Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont .....	0	0	0	NM	NM	417	560	490	18	-12
<b>Middle Atlantic</b> New Jersey, New York, Pennsylvania .....	0	0	0	NM	NM	656	841	731	11	-13
<b>East North Central</b> Illinois, Indiana, Michigan, Ohio, Wisconsin .....	0	0	0	NM	NM	709	910	646	-9	-29
<b>West North Central</b> Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota .....	0	0	0	NM	NM	927	1,115	796	-14	-29
<b>South Atlantic</b> Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia .....	55	47	33	NM	NM	1,932	2,210	2,025	5	-8
<b>East South Central</b> Alabama, Kentucky, Mississippi, Tennessee .....	6	1	0	NM	NM	1,545	1,959	1,617	5	-17
<b>West South Central</b> Arkansas, Louisiana, Oklahoma, Texas .....	31	62	35	NM	NM	2,440	2,549	2,487	2	-2
<b>Mountain</b> Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming .....	4	20	10	NM	NM	1,243	1,523	1,335	7	-12
<b>Pacific<sup>b</sup></b> California, Oregon, Washington .....	4	0	5	NM	NM	703	785	953	36	21
<b>U.S. Average<sup>b</sup></b> .....	<b>15</b>	<b>17</b>	<b>11</b>	<b>NM</b>	<b>NM</b>	<b>1,210</b>	<b>1,406</b>	<b>1,274</b>	<b>5</b>	<b>-9</b>

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

<sup>b</sup> Excludes Alaska and Hawaii.

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

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

Web Pages: • See <http://www.eia.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.

## 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.

# 2

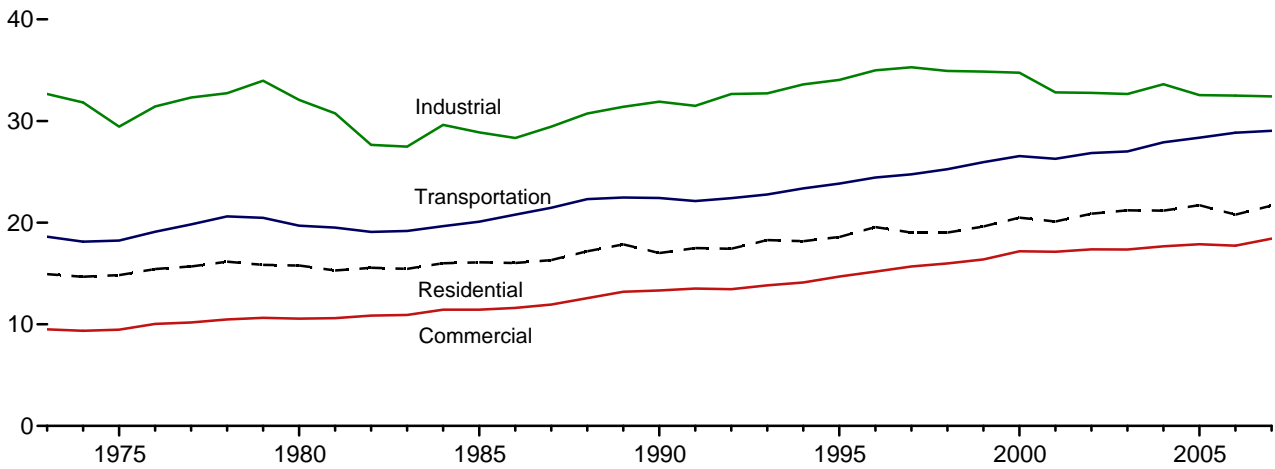
## Energy Consumption by Sector



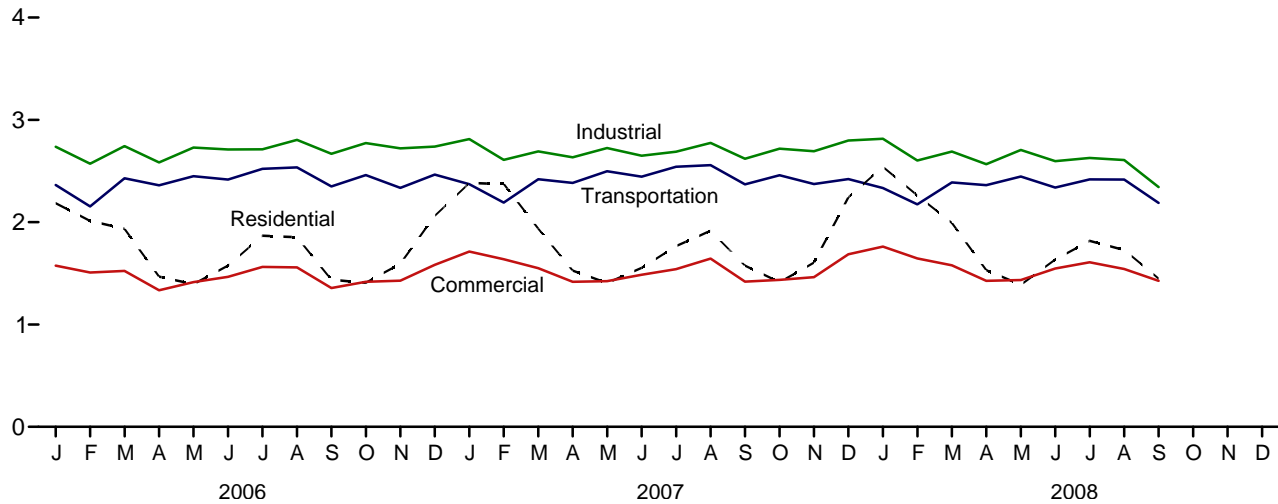
Office buildings, industries, residences, and transport systems, Baltimore, Maryland; east view from the inner harbor.  
Source: U.S. Department of Energy.

**Figure 2.1 Energy Consumption by Sector**  
(Quadrillion Btu)

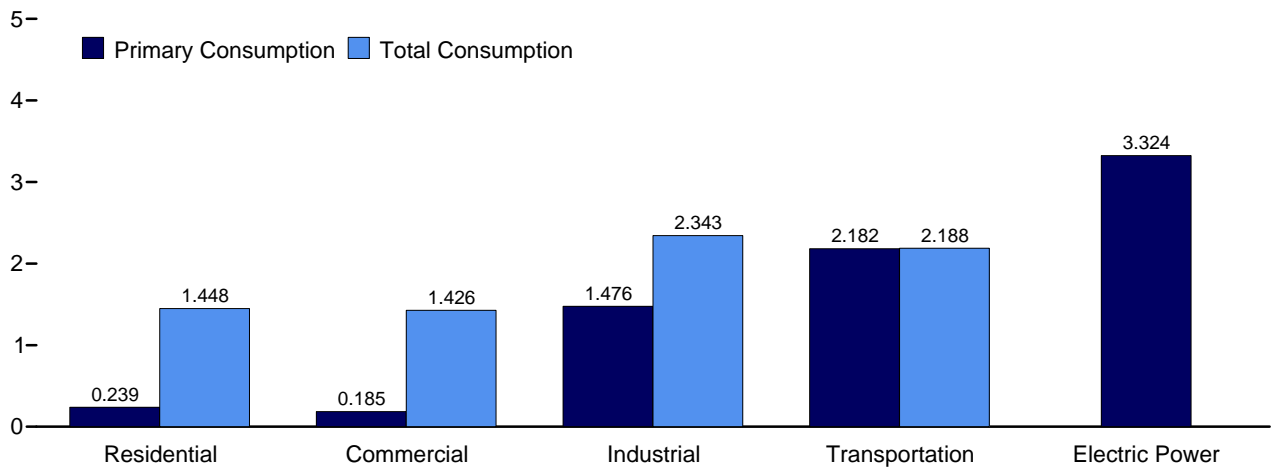
Total Consumption by End-Use Sector, 1973-2007



Total Consumption by End-Use Sector, Monthly



By Sector, September 2008



Note: Because vertical scales differ, graphs should not be compared.  
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>  
Source: Table 2.1.



**Table 2.1 Energy Consumption by Sector**  
(Trillion Btu)

	End-Use Sectors								Electric Power Sector <sup>c,d</sup>	Balancing Item <sup>g</sup>	Total <sup>h</sup>
	Residential		Commercial <sup>a</sup>		Industrial <sup>b</sup>		Transportation				
	Primary <sup>e</sup>	Total <sup>f</sup>	Primary <sup>e</sup>	Total <sup>f</sup>	Primary <sup>e</sup>	Total <sup>f</sup>	Primary <sup>e</sup>	Total <sup>f</sup>			
<b>1973 Total</b> .....	<b>8,250</b>	<b>14,930</b>	<b>4,381</b>	<b>9,507</b>	<b>24,741</b>	<b>32,653</b>	<b>18,576</b>	<b>18,612</b>	<b>19,753</b>	<b>7</b>	<b>75,708</b>
<b>1975 Total</b> .....	<b>8,006</b>	<b>14,842</b>	<b>4,023</b>	<b>9,466</b>	<b>21,454</b>	<b>29,447</b>	<b>18,209</b>	<b>18,244</b>	<b>20,307</b>	<b>1</b>	<b>71,999</b>
<b>1980 Total</b> .....	<b>7,453</b>	<b>15,787</b>	<b>4,074</b>	<b>10,563</b>	<b>22,610</b>	<b>32,077</b>	<b>19,658</b>	<b>19,696</b>	<b>24,327</b>	<b>-1</b>	<b>78,122</b>
<b>1985 Total</b> .....	<b>7,161</b>	<b>16,088</b>	<b>3,695</b>	<b>11,444</b>	<b>19,466</b>	<b>28,875</b>	<b>20,041</b>	<b>20,087</b>	<b>26,132</b>	<b>-4</b>	<b>76,491</b>
<b>1990 Total</b> .....	<b>6,570</b>	<b>17,015</b>	<b>3,858</b>	<b>13,333</b>	<b>21,206</b>	<b>31,894</b>	<b>22,366</b>	<b>22,420</b>	<b>30,660</b>	<b>-9</b>	<b>84,652</b>
<b>1995 Total</b> .....	<b>6,946</b>	<b>18,578</b>	<b>4,063</b>	<b>14,698</b>	<b>22,746</b>	<b>34,045</b>	<b>23,793</b>	<b>23,849</b>	<b>33,621</b>	<b>3</b>	<b>91,173</b>
<b>1996 Total</b> .....	<b>7,471</b>	<b>19,562</b>	<b>4,235</b>	<b>15,181</b>	<b>23,444</b>	<b>34,989</b>	<b>24,384</b>	<b>24,439</b>	<b>34,638</b>	<b>4</b>	<b>94,175</b>
<b>1997 Total</b> .....	<b>7,040</b>	<b>19,026</b>	<b>4,257</b>	<b>15,694</b>	<b>23,721</b>	<b>35,288</b>	<b>24,697</b>	<b>24,752</b>	<b>35,045</b>	<b>6</b>	<b>94,765</b>
<b>1998 Total</b> .....	<b>6,424</b>	<b>19,021</b>	<b>3,964</b>	<b>15,979</b>	<b>23,211</b>	<b>34,928</b>	<b>25,203</b>	<b>25,258</b>	<b>36,385</b>	<b>-3</b>	<b>95,183</b>
<b>1999 Total</b> .....	<b>6,784</b>	<b>19,621</b>	<b>4,007</b>	<b>16,384</b>	<b>22,991</b>	<b>34,855</b>	<b>25,894</b>	<b>25,951</b>	<b>37,136</b>	<b>6</b>	<b>96,817</b>
<b>2000 Total</b> .....	<b>7,169</b>	<b>20,488</b>	<b>4,227</b>	<b>17,176</b>	<b>22,871</b>	<b>34,758</b>	<b>26,491</b>	<b>26,552</b>	<b>38,214</b>	<b>2</b>	<b>98,975</b>
<b>2001 Total</b> .....	<b>6,879</b>	<b>20,106</b>	<b>4,036</b>	<b>17,141</b>	<b>21,836</b>	<b>32,806</b>	<b>26,215</b>	<b>26,278</b>	<b>37,366</b>	<b>-6</b>	<b>96,326</b>
<b>2002 Total</b> .....	<b>6,938</b>	<b>20,874</b>	<b>4,099</b>	<b>17,367</b>	<b>21,857</b>	<b>32,765</b>	<b>26,787</b>	<b>26,848</b>	<b>38,171</b>	<b>5</b>	<b>97,858</b>
<b>2003 Total</b> .....	<b>7,252</b>	<b>21,208</b>	<b>4,239</b>	<b>17,351</b>	<b>21,576</b>	<b>32,650</b>	<b>26,928</b>	<b>27,002</b>	<b>38,218</b>	<b>-3</b>	<b>98,209</b>
<b>2004 Total</b> .....	<b>7,019</b>	<b>21,178</b>	<b>4,180</b>	<b>17,664</b>	<b>22,455</b>	<b>33,609</b>	<b>27,820</b>	<b>27,899</b>	<b>38,876</b>	<b>(s)</b>	<b>100,351</b>
<b>2005 Total</b> .....	<b>6,941</b>	<b>21,717</b>	<b>4,014</b>	<b>17,875</b>	<b>21,467</b>	<b>32,546</b>	<b>28,280</b>	<b>28,361</b>	<b>39,799</b>	<b>6</b>	<b>100,506</b>
<b>2006</b>											
January .....	R 906	R 2,185	R 493	R 1,575	R 1,867	R 2,737	R 2,356	R 2,363	3,238	(s)	8,860
February .....	R 897	R 2,012	R 487	R 1,508	R 1,716	R 2,571	R 2,148	R 2,155	2,998	-1	8,245
March .....	R 813	R 1,935	444	R 1,524	R 1,854	R 2,744	R 2,423	R 2,429	3,099	-2	8,631
April .....	R 504	R 1,468	294	R 1,335	R 1,703	R 2,585	R 2,354	R 2,360	2,893	-3	7,745
May .....	R 344	R 1,394	R 225	R 1,415	R 1,767	R 2,730	R 2,443	R 2,449	3,210	-1	7,987
June .....	R 270	R 1,575	194	R 1,466	R 1,759	R 2,711	R 2,410	R 2,417	3,535	1	8,169
July .....	R 247	R 1,868	R 181	R 1,563	R 1,733	R 2,712	R 2,514	R 2,521	3,989	3	8,667
August .....	R 241	R 1,853	R 186	R 1,558	R 1,834	R 2,804	R 2,530	R 2,536	3,960	3	8,755
September .....	R 255	R 1,437	R 192	R 1,356	R 1,789	R 2,669	R 2,343	R 2,349	3,232	(s)	7,812
October .....	R 380	R 1,409	253	R 1,418	R 1,860	R 2,773	R 2,454	R 2,460	3,113	-2	8,058
November .....	R 561	R 1,594	327	R 1,428	R 1,842	R 2,721	R 2,329	R 2,336	3,020	-1	8,078
December .....	R 798	R 2,062	433	R 1,584	R 1,859	R 2,738	R 2,458	R 2,465	3,301	2	8,850
<b>Total</b> .....	<b>R 6,213</b>	<b>R 20,792</b>	<b>R 3,707</b>	<b>R 17,728</b>	<b>R 21,586</b>	<b>R 32,495</b>	<b>R 28,761</b>	<b>R 28,841</b>	<b>39,589</b>	<b>(s)</b>	<b>99,856</b>
<b>2007</b>											
January .....	R 999	R 2,382	R 524	R 1,713	R 1,927	R 2,812	R 2,363	R 2,371	3,465	1	9,279
February .....	R 1,098	R 2,374	R 573	R 1,639	R 1,800	R 2,610	R 2,184	R 2,191	3,159	(s)	8,814
March .....	R 804	R 1,936	R 445	R 1,551	R 1,821	R 2,691	R 2,413	R 2,421	3,116	-3	8,596
April .....	R 550	R 1,527	322	R 1,418	R 1,756	R 2,634	R 2,377	R 2,384	2,959	-3	7,960
May .....	R 340	R 1,406	R 220	R 1,424	R 1,781	R 2,724	R 2,492	R 2,498	R 3,219	-2	R 8,050
June .....	R 262	R 1,553	R 189	R 1,486	R 1,709	R 2,650	R 2,438	R 2,445	R 3,535	1	8,135
July .....	R 244	R 1,766	R 177	1,542	R 1,738	R 2,689	R 2,536	R 2,543	3,843	3	8,542
August .....	R 246	R 1,916	R 186	1,645	R 1,770	R 2,775	R 2,551	R 2,558	R 4,141	4	R 8,897
September .....	R 249	R 1,575	R 186	R 1,419	R 1,742	R 2,619	R 2,364	R 2,371	3,443	1	7,985
October .....	R 321	R 1,412	R 225	R 1,436	R 1,800	R 2,719	R 2,452	R 2,458	3,227	-1	8,024
November .....	R 574	R 1,605	R 338	R 1,463	R 1,799	R 2,694	R 2,366	R 2,373	3,057	-1	8,134
December .....	R 941	R 2,244	507	R 1,687	R 1,888	R 2,798	R 2,415	R 2,422	3,400	(s)	9,151
<b>Total</b> .....	<b>R 6,627</b>	<b>R 21,692</b>	<b>R 3,893</b>	<b>R 18,425</b>	<b>R 21,532</b>	<b>R 32,418</b>	<b>R 28,951</b>	<b>R 29,035</b>	<b>R 40,566</b>	<b>-1</b>	<b>R 101,568</b>
<b>2008</b>											
January .....	R 1,103	R 2,541	R 582	R 1,762	R 1,918	R 2,815	R 2,326	R 2,334	3,522	2	R 9,454
February .....	R 1,030	R 2,262	R 560	R 1,646	R 1,758	R 2,603	R 2,168	R 2,175	3,170	(s)	R 8,686
March .....	R 842	R 1,994	R 467	R 1,578	R 1,795	R 2,690	R 2,382	R 2,388	3,165	-1	R 8,649
April .....	R 548	R 1,531	R 327	R 1,426	R 1,693	R 2,567	R 2,356	R 2,363	2,963	-2	R 7,885
May .....	R 367	R 1,388	R 238	R 1,435	R 1,718	R 2,505	R 2,440	R 2,447	3,212	R -1	R 7,974
June .....	R 277	R 1,635	194	1,547	R 1,642	R 2,597	R 2,332	R 2,339	3,673	1	8,119
July .....	R 253	R 1,818	R 186	1,608	R 1,679	R 2,628	R 2,411	R 2,418	3,942	R 3	R 8,475
August .....	R 240	R 1,729	182	1,543	R 1,677	R 2,607	R 2,410	R 2,417	3,787	R 2	R 8,298
September .....	239	1,448	185	1,426	1,476	2,343	2,182	2,188	3,324	1	7,407
<b>9-Month Total</b> .....	<b>4,899</b>	<b>16,345</b>	<b>2,921</b>	<b>13,972</b>	<b>15,356</b>	<b>23,556</b>	<b>21,008</b>	<b>21,069</b>	<b>30,758</b>	<b>4</b>	<b>74,947</b>
<b>2007 9-Month Total</b> .....	<b>4,792</b>	<b>16,435</b>	<b>2,823</b>	<b>13,838</b>	<b>16,044</b>	<b>24,204</b>	<b>21,718</b>	<b>21,781</b>	<b>30,881</b>	<b>1</b>	<b>76,258</b>
<b>2006 9-Month Total</b> .....	<b>4,475</b>	<b>15,727</b>	<b>2,696</b>	<b>13,300</b>	<b>16,023</b>	<b>24,262</b>	<b>21,520</b>	<b>21,580</b>	<b>30,154</b>	<b>1</b>	<b>74,870</b>

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

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

<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.

<sup>d</sup> 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.

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

<sup>h</sup> Primary energy consumption total. See Table 1.3.

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

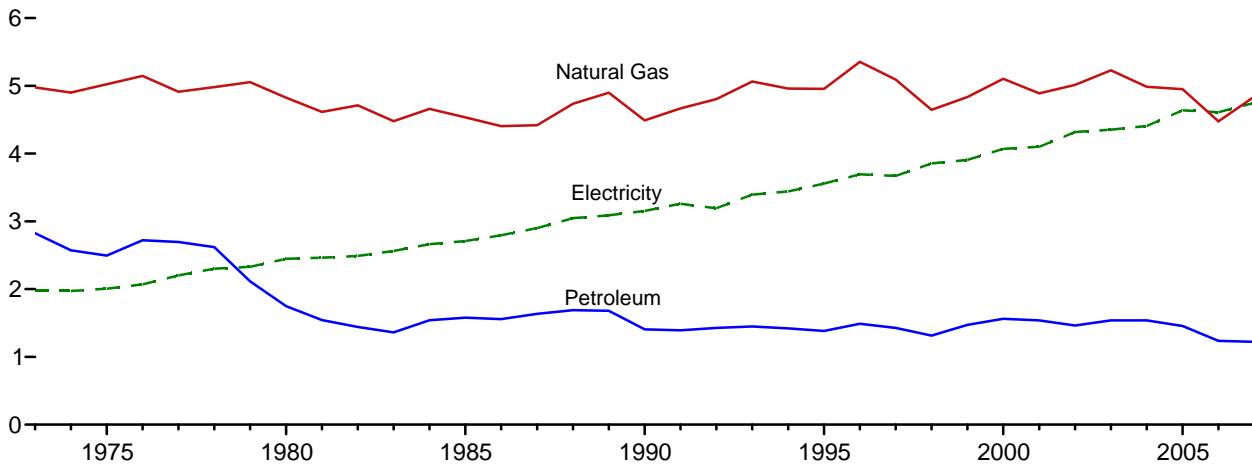
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

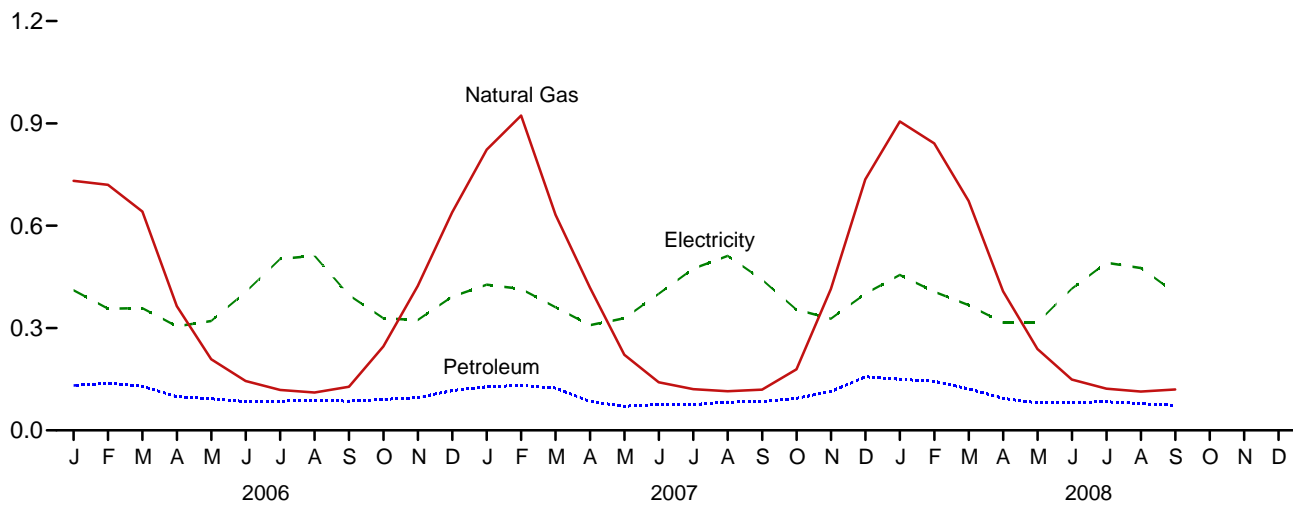
Sources: Tables 1.3 and 2.2-2.6.

**Figure 2.2 Residential Sector Energy Consumption**  
(Quadrillion Btu)

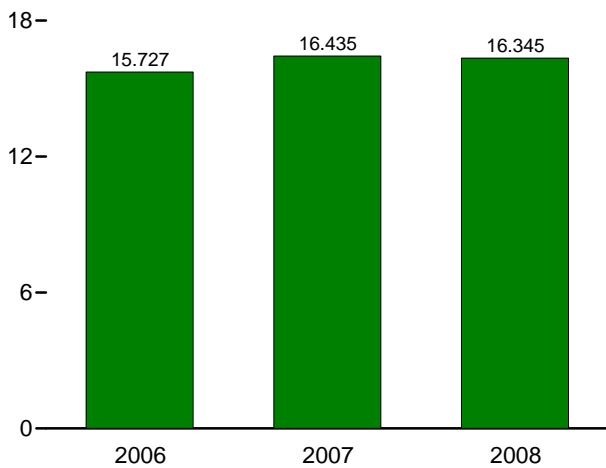
By Major Sources, 1973-2007



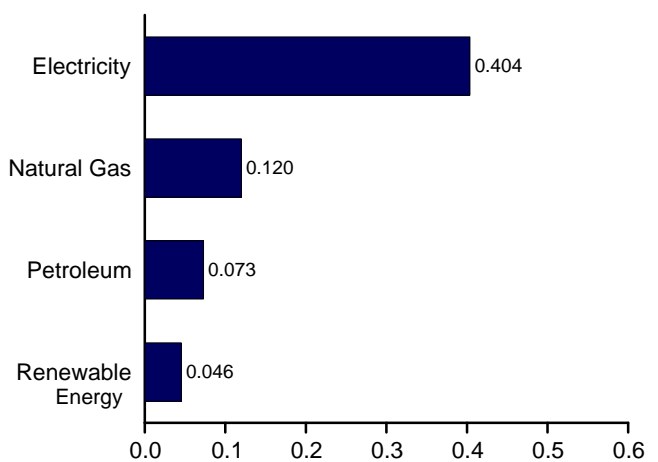
By Major Sources, Monthly



Total, January-September



By Major Sources, September 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)

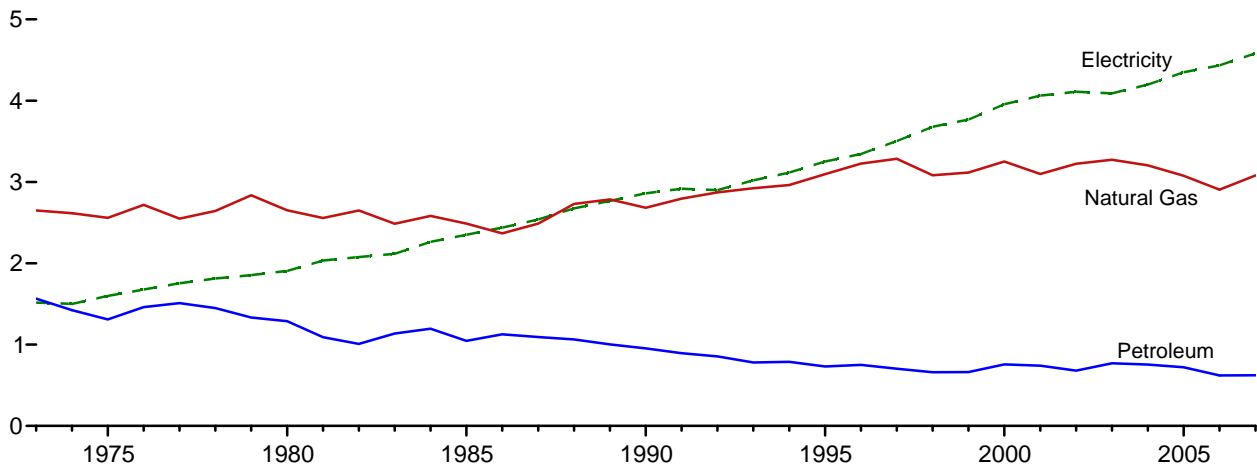
	Primary Consumption <sup>a</sup>									Electricity Retail Sales <sup>d</sup>	Electrical System Energy Losses <sup>e</sup>	Total
	Fossil Fuels				Renewable Energy <sup>b</sup>				Total Primary			
	Coal	Natural Gas <sup>c</sup>	Petroleum	Total	Geo-thermal	Solar/PV	Bio-mass	Total				
<b>1973 Total</b> .....	94	4,977	2,825	7,896	NA	NA	354	354	8,250	1,976	4,703	14,930
<b>1975 Total</b> .....	63	5,023	2,495	7,580	NA	NA	425	425	8,006	2,007	4,829	14,842
<b>1980 Total</b> .....	31	4,825	1,748	6,603	NA	NA	850	850	7,453	2,448	5,885	15,787
<b>1985 Total</b> .....	39	4,534	1,578	6,151	NA	NA	1,010	1,010	7,161	2,709	6,219	16,088
<b>1990 Total</b> .....	31	4,491	1,407	5,929	6	56	580	641	6,570	3,153	7,291	17,015
<b>1995 Total</b> .....	17	4,954	1,383	6,355	7	65	520	591	6,946	3,557	8,075	18,578
<b>1996 Total</b> .....	17	5,354	1,488	6,859	7	65	540	612	7,471	3,694	8,397	19,562
<b>1997 Total</b> .....	16	5,093	1,428	6,537	8	65	430	503	7,040	3,671	8,315	19,026
<b>1998 Total</b> .....	12	4,646	1,314	5,971	8	65	380	452	6,424	3,856	8,741	19,021
<b>1999 Total</b> .....	14	4,835	1,473	6,322	9	64	390	462	6,784	3,906	8,931	19,621
<b>2000 Total</b> .....	11	5,105	1,563	6,679	9	61	420	490	7,169	4,069	9,250	20,488
<b>2001 Total</b> .....	12	4,889	1,539	6,440	9	60	370	439	6,879	4,100	9,127	20,106
<b>2002 Total</b> .....	12	5,014	1,463	6,489	10	59	380	449	6,938	4,317	9,619	20,874
<b>2003 Total</b> .....	12	5,230	1,539	6,781	13	58	400	471	7,252	4,353	9,603	21,208
<b>2004 Total</b> .....	11	4,986	1,539	6,537	14	59	410	483	7,019	4,408	9,750	21,178
<b>2005 Total</b> .....	8	4,951	1,455	6,414	16	61	450	527	6,941	4,638	10,139	21,717
<b>2006 January</b> .....	1	732	R 132	R 864	2	6	35	42	R 906	411	868	R 2,185
February .....	1	720	R 139	R 859	1	5	31	38	R 897	357	758	R 2,012
March .....	1	641	R 129	R 771	2	6	35	42	R 813	358	763	R 1,935
April .....	(s)	364	R 99	R 463	2	6	34	41	R 504	305	659	R 1,468
May .....	(s)	209	R 93	R 302	2	6	35	42	R 344	321	730	R 1,394
June .....	(s)	145	R 84	R 229	2	6	34	41	R 270	405	900	R 1,575
July .....	(s)	118	R 86	R 205	2	6	35	42	R 247	503	1,119	R 1,868
August .....	(s)	111	R 87	R 198	2	6	35	42	R 241	512	1,100	R 1,853
September .....	(s)	128	R 86	R 214	2	6	34	41	R 255	396	786	R 1,437
October .....	(s)	246	R 91	R 338	2	6	35	42	R 380	328	701	R 1,409
November .....	1	423	R 96	R 520	2	6	34	41	R 561	324	710	R 1,594
December .....	1	639	R 116	R 756	2	6	35	42	R 798	392	871	R 2,062
<b>Total</b> .....	6	4,476	R 1,236	R 5,718	18	67	410	495	R 6,213	4,611	9,968	R 20,792
<b>2007 January</b> .....	1	823	R 128	R 952	2	6	39	47	R 999	427	955	R 2,382
February .....	1	923	R 132	R 1,055	2	6	35	43	R 1,098	414	862	R 2,374
March .....	1	632	R 124	R 757	2	6	39	47	R 804	361	771	R 1,936
April .....	(s)	419	R 85	R 504	2	6	38	46	R 550	308	669	R 1,527
May .....	(s)	221	R 71	R 293	2	6	39	47	R 340	329	737	R 1,406
June .....	(s)	141	R 75	R 217	2	6	38	46	R 262	400	891	R 1,553
July .....	(s)	121	R 76	R 197	2	6	39	47	R 244	474	1,047	R 1,766
August .....	(s)	115	R 83	R 198	2	6	39	47	R 246	512	1,159	R 1,916
September .....	(s)	119	R 84	R 204	2	6	38	46	R 249	442	884	R 1,575
October .....	1	179	R 94	R 274	2	6	39	47	R 321	354	737	R 1,412
November .....	1	414	R 114	R 529	2	6	38	46	R 574	327	704	R 1,605
December .....	1	736	R 157	R 894	2	6	39	47	R 941	400	902	R 2,244
<b>Total</b> .....	6	4,842	R 1,222	R 6,071	22	74	460	556	R 6,627	4,749	R 10,315	R 21,692
<b>2008 January</b> .....	1	R 906	R 150	R 1,056	2	6	39	47	R 1,103	456	982	R 2,541
February .....	1	841	R 144	R 986	2	6	36	44	R 1,030	406	826	R 2,262
March .....	1	R 672	R 122	R 795	2	6	39	47	R 842	367	785	R 1,994
April .....	R (s)	408	R 94	R 503	2	6	38	46	R 548	316	667	R 1,531
May .....	R (s)	239	R 81	R 320	2	6	39	47	R 367	316	706	R 1,388
June .....	(s)	149	R 82	R 231	2	6	38	46	R 277	415	943	R 1,635
July .....	(s)	122	R 84	R 206	2	6	39	47	R 253	491	1,073	R 1,818
August .....	(s)	114	R 79	R 193	2	6	39	47	R 240	476	1,013	R 1,729
September .....	(s)	120	73	194	2	6	38	46	239	404	805	1,448
<b>9-Month Total</b> .....	4	3,571	907	4,483	16	56	344	417	4,899	3,648	7,798	16,345
<b>2007 9-Month Total</b> .....	4	3,514	857	4,376	16	56	344	416	4,792	3,667	7,975	16,435
<b>2006 9-Month Total</b> .....	4	3,168	933	4,105	14	50	307	371	4,475	3,567	7,684	15,727

<sup>a</sup> See "Primary Energy Consumption" in Glossary.  
<sup>b</sup> Data are estimates. See Table 10.2a for notes on series components.  
<sup>c</sup> Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.  
<sup>d</sup> Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.  
<sup>e</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

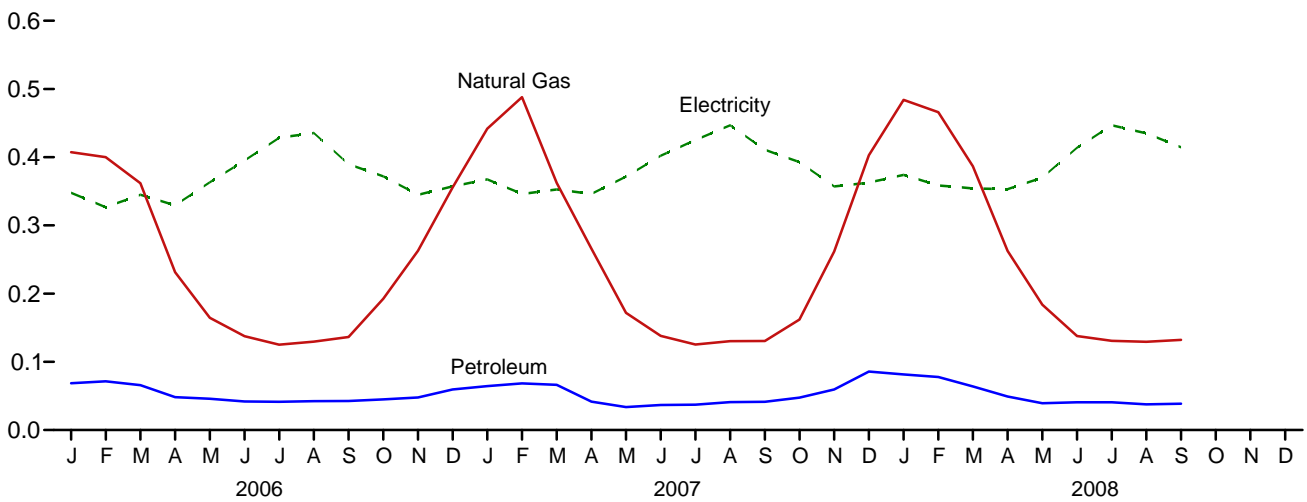
electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.  
R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.  
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding.  
• Geographic coverage is the 50 States and the District of Columbia.  
Web Page: See <http://www.eia.doe.gov/emeu/mer/consump.html> for all available data beginning in 1973.  
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

**Figure 2.3 Commercial Sector Energy Consumption**  
(Quadrillion Btu)

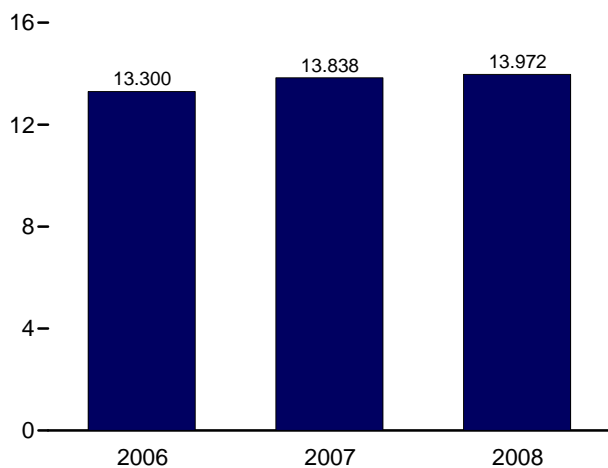
By Major Sources, 1973-2007



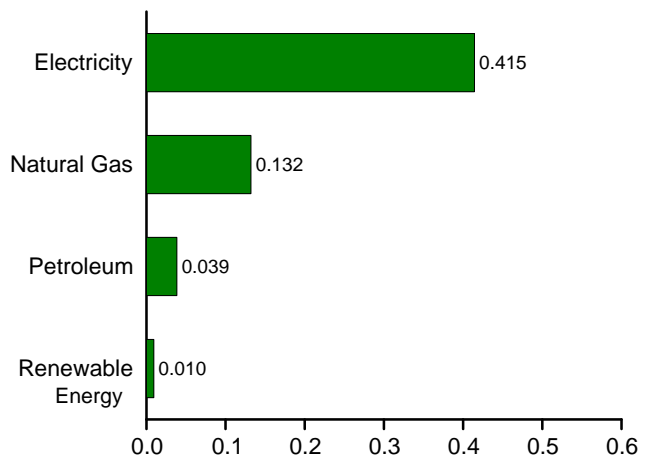
By Major Sources, Monthly



Total, January-September



By Major Sources, September 2008



Note: Because vertical scales differ, graphs should not be compared.  
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.  
Source: Table 2.3.

**Table 2.3 Commercial Sector Energy Consumption**  
(Trillion Btu)

	Primary Consumption <sup>a</sup>								Total Primary	Electricity Retail Sales <sup>f</sup>	Electrical System Energy Losses <sup>g</sup>	Total
	Fossil Fuels				Renewable Energy <sup>b</sup>							
	Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Total	Hydroelectric Power <sup>e</sup>	Geothermal	Bio-mass	Total				
<b>1973 Total</b> .....	160	2,649	1,565	4,374	NA	NA	7	7	4,381	1,517	3,609	9,507
<b>1975 Total</b> .....	147	2,558	1,310	4,015	NA	NA	8	8	4,023	1,598	3,845	9,466
<b>1980 Total</b> .....	115	2,651	1,287	4,053	NA	NA	21	21	4,074	1,906	4,582	10,563
<b>1985 Total</b> .....	137	2,488	1,045	3,670	NA	NA	24	24	3,695	2,351	5,398	11,444
<b>1990 Total</b> .....	124	2,682	953	3,760	1	3	94	98	3,858	2,860	6,615	13,333
<b>1995 Total</b> .....	117	3,096	732	3,945	1	5	113	118	4,063	3,252	7,382	14,698
<b>1996 Total</b> .....	122	3,226	751	4,099	1	5	129	135	4,235	3,344	7,603	15,181
<b>1997 Total</b> .....	129	3,285	704	4,118	1	6	131	138	4,257	3,503	7,935	15,694
<b>1998 Total</b> .....	93	3,083	661	3,837	1	7	118	127	3,964	3,678	8,338	15,979
<b>1999 Total</b> .....	103	3,115	661	3,879	1	7	121	129	4,007	3,766	8,610	16,384
<b>2000 Total</b> .....	92	3,252	756	4,099	1	8	119	128	4,227	3,956	8,993	17,176
<b>2001 Total</b> .....	97	3,097	741	3,935	1	8	92	101	4,036	4,062	9,043	17,141
<b>2002 Total</b> .....	90	3,225	680	3,995	(s)	9	95	104	4,099	4,110	9,158	17,367
<b>2003 Total</b> .....	82	3,274	770	4,126	1	11	101	113	4,239	4,090	9,023	17,351
<b>2004 Total</b> .....	103	3,204	755	4,062	1	12	105	118	4,180	4,198	9,286	17,564
<b>2005 Total</b> .....	97	3,076	721	3,894	1	14	105	119	4,014	4,351	9,511	17,875
<b>2006</b> January .....	7	407	69	R 483	(s)	1	9	10	R 493	348	735	R 1,575
February .....	6	400	72	R 478	(s)	1	8	9	R 487	327	694	R 1,508
March .....	6	362	R 66	R 434	(s)	1	8	10	R 444	345	736	R 1,524
April .....	4	231	R 48	R 284	(s)	1	8	10	R 294	329	712	R 1,335
May .....	4	165	R 46	215	(s)	1	9	10	R 225	363	827	1,415
June .....	5	138	42	R 184	(s)	1	8	10	R 194	395	877	1,466
July .....	5	125	R 41	R 171	(s)	1	9	10	R 181	428	954	R 1,563
August .....	5	130	R 42	177	(s)	1	9	10	R 186	436	936	R 1,558
September .....	4	136	43	R 183	(s)	1	8	R 10	R 192	390	774	R 1,356
October .....	6	192	R 45	R 243	(s)	1	9	10	R 253	372	793	R 1,418
November .....	7	263	48	R 317	(s)	1	8	10	R 327	345	757	R 1,428
December .....	8	355	R 59	R 422	(s)	1	9	10	R 433	357	794	1,584
<b>Total</b> .....	<b>66</b>	<b>2,905</b>	<b>R 620</b>	<b>R 3,590</b>	<b>1</b>	<b>14</b>	<b>102</b>	<b>117</b>	<b>R 3,707</b>	<b>4,435</b>	<b>9,586</b>	<b>R 17,728</b>
<b>2007</b> January .....	7	442	R 64	R 514	(s)	1	9	10	R 524	367	822	R 1,713
February .....	7	488	R 68	564	(s)	1	8	9	R 573	346	720	R 1,639
March .....	7	362	R 66	R 435	(s)	1	9	10	R 445	353	753	R 1,551
April .....	5	266	42	R 312	(s)	1	8	9	R 322	346	751	R 1,418
May .....	5	172	34	R 210	(s)	1	9	10	R 220	371	833	R 1,424
June .....	5	138	37	R 179	(s)	1	9	10	R 189	402	895	R 1,486
July .....	5	125	R 37	R 167	(s)	1	9	10	R 177	425	939	1,542
August .....	5	130	41	R 176	(s)	1	9	10	R 186	447	1,012	1,645
September .....	5	131	R 41	177	(s)	1	8	10	R 186	411	822	R 1,419
October .....	6	162	R 47	216	(s)	1	9	10	R 225	393	818	R 1,436
November .....	7	262	R 59	R 328	(s)	1	9	10	R 338	357	768	R 1,463
December .....	8	403	86	R 496	(s)	1	9	10	R 507	363	817	R 1,687
<b>Total</b> .....	<b>71</b>	<b>3,080</b>	<b>R 623</b>	<b>R 3,774</b>	<b>1</b>	<b>14</b>	<b>104</b>	<b>119</b>	<b>R 3,893</b>	<b>4,581</b>	<b>R 9,950</b>	<b>R 18,425</b>
<b>2008</b> January .....	7	R 484	R 81	R 573	(s)	1	8	9	R 582	374	806	R 1,762
February .....	7	466	R 78	551	(s)	1	8	9	R 560	358	728	R 1,646
March .....	7	387	R 64	R 457	(s)	1	8	10	R 467	354	757	R 1,578
April .....	R 5	263	R 49	R 317	(s)	1	9	10	R 327	353	747	R 1,426
May .....	R 5	184	R 39	R 228	(s)	1	9	10	R 238	370	827	R 1,435
June .....	R 6	138	41	184	(s)	1	9	10	R 194	414	939	1,547
July .....	5	131	41	R 176	(s)	1	9	10	R 186	447	975	1,608
August .....	5	129	38	172	(s)	1	9	10	182	435	926	1,543
September .....	5	132	39	176	(s)	1	8	10	185	415	827	1,426
<b>9-Month Total</b> .....	<b>51</b>	<b>2,313</b>	<b>469</b>	<b>2,833</b>	<b>1</b>	<b>11</b>	<b>76</b>	<b>88</b>	<b>2,921</b>	<b>3,520</b>	<b>7,531</b>	<b>13,972</b>
<b>2007 9-Month Total</b> .....	<b>50</b>	<b>2,254</b>	<b>430</b>	<b>2,734</b>	<b>1</b>	<b>11</b>	<b>77</b>	<b>89</b>	<b>2,823</b>	<b>3,469</b>	<b>7,546</b>	<b>13,838</b>
<b>2006 9-Month Total</b> .....	<b>46</b>	<b>2,094</b>	<b>468</b>	<b>2,608</b>	<b>1</b>	<b>10</b>	<b>76</b>	<b>88</b>	<b>2,696</b>	<b>3,361</b>	<b>7,243</b>	<b>13,300</b>

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

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

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

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

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

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

<sup>g</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

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

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

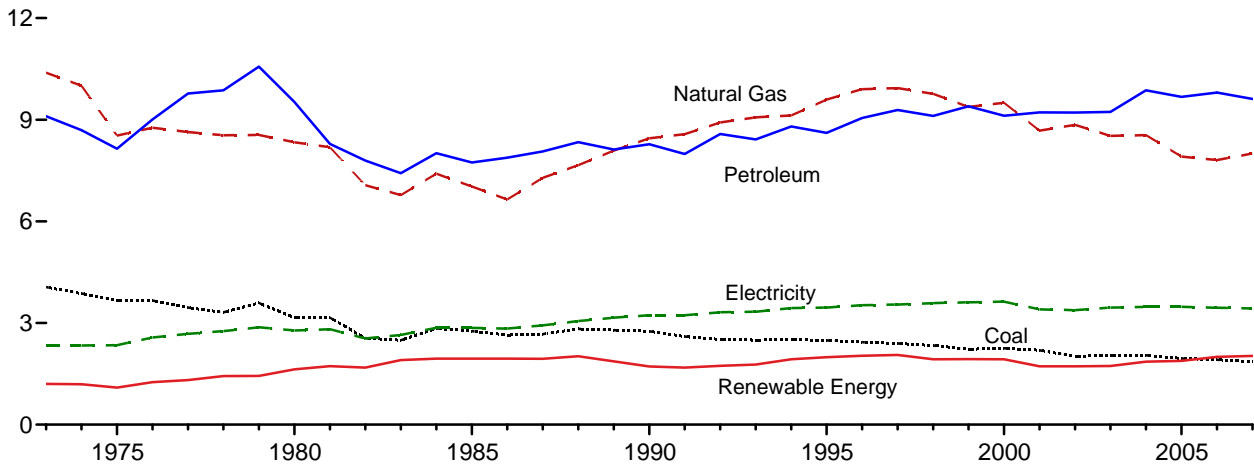
Notes: • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal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

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

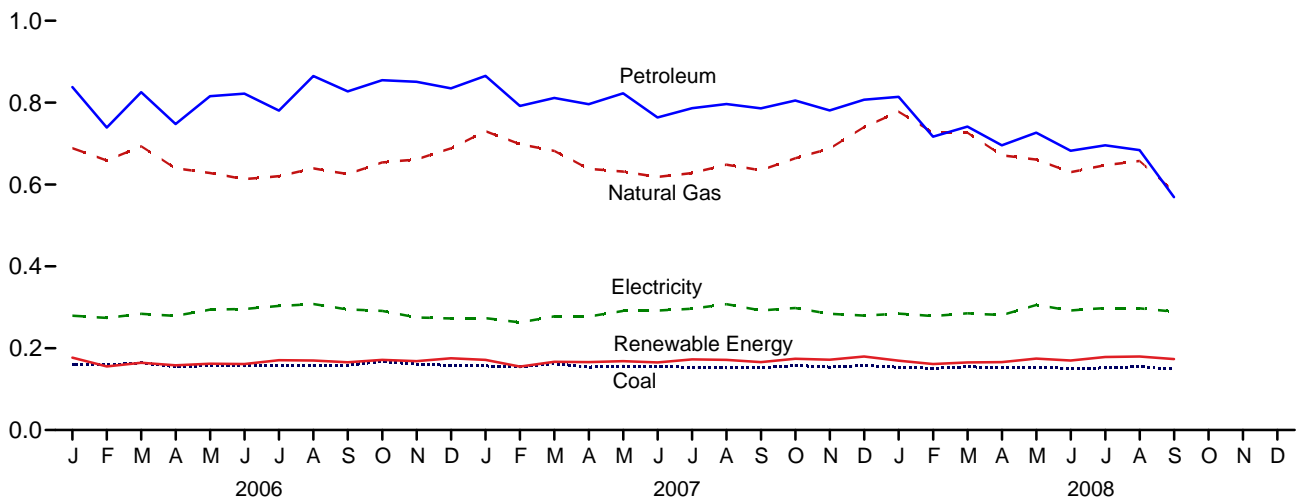
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

**Figure 2.4 Industrial Sector Energy Consumption**  
(Quadrillion Btu)

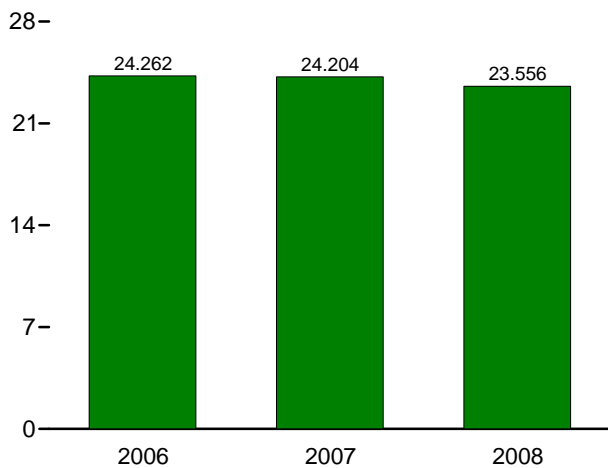
By Major Sources, 1973-2007



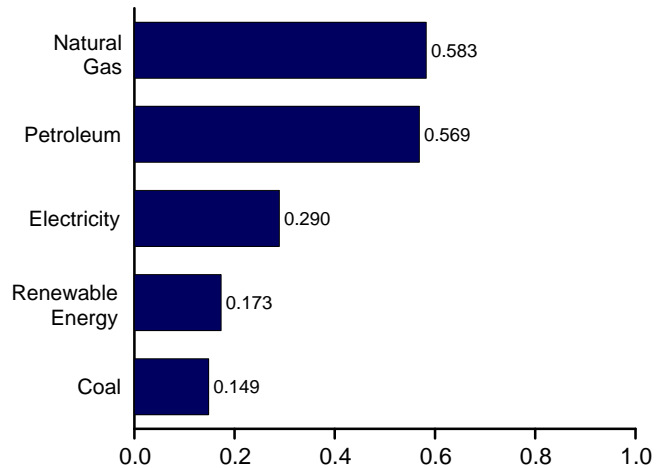
By Major Sources, Monthly



Total, January-September



By Major Sources, September 2008



Note: Because vertical scales differ, graphs should not be compared.  
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.  
Source: Table 2.4.

**Table 2.4 Industrial Sector Energy Consumption**  
(Trillion Btu)

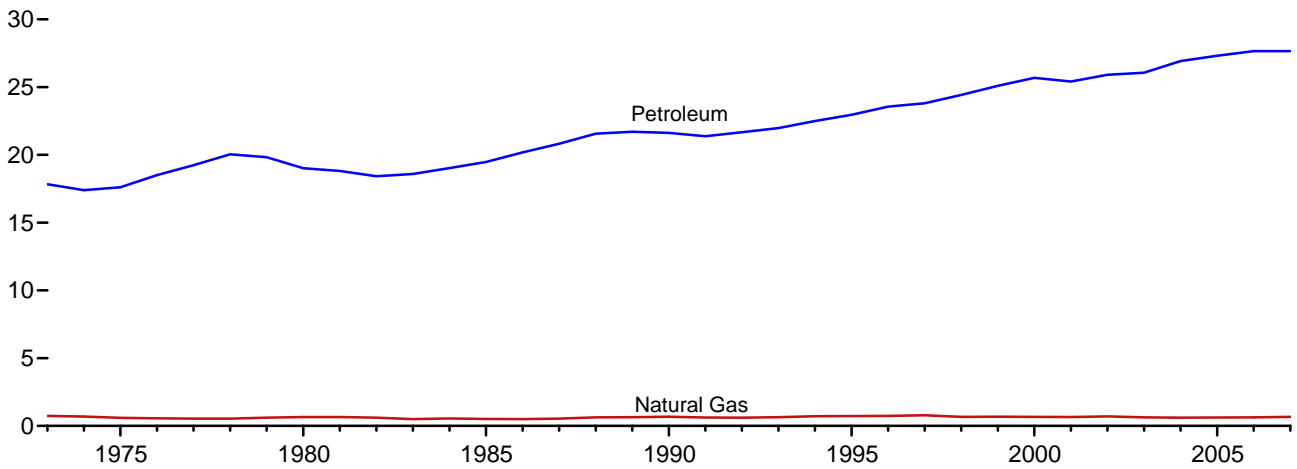
	Primary Consumption <sup>a</sup>									Electricity Retail Sales <sup>g</sup>	Electrical System Energy Losses <sup>h</sup>	Total <sup>e</sup>
	Fossil Fuels				Renewable Energy <sup>b</sup>				Total Primary			
	Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Total <sup>e</sup>	Hydroelectric Power <sup>f</sup>	Geothermal	Bio-mass	Total				
<b>1973 Total</b> .....	4,057	10,388	9,104	23,541	35	NA	1,165	1,200	24,741	2,341	5,571	32,653
<b>1975 Total</b> .....	3,667	8,532	8,146	20,359	32	NA	1,063	1,096	21,454	2,346	5,647	29,447
<b>1980 Total</b> .....	3,155	8,333	9,525	20,977	33	NA	1,600	1,633	22,610	2,781	6,686	32,077
<b>1985 Total</b> .....	2,760	7,032	7,738	17,516	33	NA	1,917	1,950	19,466	2,855	6,554	28,875
<b>1990 Total</b> .....	2,756	8,451	8,278	19,490	31	2	1,683	1,716	21,206	3,226	7,461	31,894
<b>1995 Total</b> .....	2,488	9,592	8,613	20,754	55	3	1,935	1,992	22,746	3,455	7,844	34,045
<b>1996 Total</b> .....	2,434	9,901	9,052	21,410	61	3	1,970	2,033	23,444	3,527	8,018	34,989
<b>1997 Total</b> .....	2,395	9,933	9,289	21,663	58	3	1,997	2,058	23,721	3,542	8,024	35,288
<b>1998 Total</b> .....	2,335	9,763	9,114	21,280	55	3	1,873	1,931	23,211	3,587	8,131	34,928
<b>1999 Total</b> .....	2,227	9,375	9,395	21,054	49	4	1,883	1,936	22,991	3,611	8,254	34,855
<b>2000 Total</b> .....	2,256	9,500	9,119	20,941	42	4	1,884	1,930	22,871	3,631	8,256	34,758
<b>2001 Total</b> .....	2,192	8,676	9,217	20,115	33	5	1,684	1,721	21,836	3,400	7,570	32,806
<b>2002 Total</b> .....	2,019	8,845	9,209	20,135	39	5	1,679	1,723	21,857	3,379	7,528	32,765
<b>2003 Total</b> .....	2,041	8,521	9,232	19,845	43	3	1,684	1,731	21,576	3,454	7,620	32,650
<b>2004 Total</b> .....	2,047	8,544	9,865	20,594	33	4	1,824	1,861	22,455	3,473	7,682	33,609
<b>2005 Total</b> .....	1,954	7,911	9,673	19,583	32	4	1,848	1,884	21,467	3,477	7,602	32,546
<b>2006</b> January .....	161	689	R 838	R 1,690	4	(s)	173	177	R 1,867	279	590	R 2,737
February .....	159	658	R 739	R 1,560	3	(s)	152	155	R 1,716	274	582	R 2,571
March .....	164	693	R 825	R 1,690	2	(s)	162	164	R 1,854	284	606	R 2,744
April .....	155	639	R 748	R 1,545	2	(s)	156	158	R 1,703	279	603	R 2,585
May .....	157	628	R 816	R 1,605	2	(s)	160	162	R 1,767	294	669	R 2,730
June .....	157	613	R 822	R 1,598	2	(s)	159	161	R 1,759	296	656	R 2,711
July .....	158	620	R 780	R 1,563	2	(s)	168	171	R 1,733	303	675	R 2,712
August .....	158	639	R 865	R 1,665	2	(s)	168	170	R 1,834	308	662	R 2,804
September .....	158	625	R 827	R 1,624	2	(s)	163	165	R 1,789	295	585	R 2,669
October .....	168	654	R 855	R 1,689	3	(s)	168	R 172	R 1,860	291	621	R 2,773
November .....	161	661	R 851	R 1,674	4	(s)	164	168	R 1,842	275	604	R 2,721
December .....	158	688	R 835	R 1,684	3	(s)	172	175	R 1,859	273	606	R 2,738
<b>Total</b> .....	<b>1,914</b>	<b>7,809</b>	<b>R 9,801</b>	<b>R 19,586</b>	<b>29</b>	<b>4</b>	<b>1,966</b>	<b>R 2,000</b>	<b>R 21,586</b>	<b>3,451</b>	<b>7,459</b>	<b>R 32,495</b>
<b>2007</b> January .....	157	730	R 865	R 1,755	4	(s)	167	171	R 1,927	273	612	R 2,812
February .....	154	698	R 792	R 1,645	2	(s)	153	155	R 1,800	263	547	R 2,610
March .....	162	682	R 811	R 1,654	2	(s)	164	167	R 1,821	278	593	R 2,691
April .....	154	638	R 796	R 1,590	2	(s)	164	166	R 1,756	277	R 601	R 2,634
May .....	156	631	R 823	R 1,613	2	(s)	166	168	R 1,781	291	R 652	R 2,724
June .....	156	618	R 764	R 1,544	2	(s)	163	165	R 1,709	292	649	R 2,650
July .....	153	628	R 786	R 1,566	1	(s)	171	172	R 1,738	296	655	R 2,689
August .....	152	648	R 796	R 1,599	2	(s)	169	171	R 1,770	308	697	R 2,775
September .....	152	635	R 786	R 1,576	1	(s)	165	166	R 1,742	292	585	R 2,619
October .....	158	664	R 805	R 1,626	1	(s)	172	174	R 1,800	298	R 621	R 2,719
November .....	154	688	R 781	R 1,627	1	(s)	170	172	R 1,799	284	610	R 2,694
December .....	158	740	R 807	R 1,709	2	(s)	R 178	179	R 1,888	280	631	R 2,798
<b>Total</b> .....	<b>1,865</b>	<b>8,002</b>	<b>R 9,612</b>	<b>R 19,504</b>	<b>23</b>	<b>5</b>	<b>R 2,001</b>	<b>2,028</b>	<b>R 21,532</b>	<b>3,432</b>	<b>7,454</b>	<b>R 32,418</b>
<b>2008</b> January .....	153	778	R 814	R 1,749	2	(s)	R 167	169	R 1,918	284	612	R 2,815
February .....	151	727	R 717	R 1,596	3	(s)	158	161	R 1,758	279	566	R 2,603
March .....	R 155	R 726	R 741	R 1,630	3	(s)	162	165	R 1,795	285	609	R 2,690
April .....	152	R 671	R 696	R 1,527	2	(s)	163	166	R 1,693	281	593	R 2,567
May .....	154	661	R 727	R 1,543	2	(s)	172	174	R 1,718	305	682	R 2,705
June .....	151	630	R 682	R 1,472	1	(s)	R 169	170	R 1,642	292	663	R 2,597
July .....	R 152	647	R 696	R 1,501	1	(s)	177	178	R 1,679	298	651	R 2,628
August .....	R 155	657	R 684	R 1,497	1	(s)	178	180	R 1,677	297	633	R 2,607
September .....	149	583	569	1,303	1	(s)	172	173	1,476	290	578	2,343
<b>9-Month Total</b> .....	<b>1,371</b>	<b>6,080</b>	<b>6,326</b>	<b>13,818</b>	<b>17</b>	<b>4</b>	<b>1,518</b>	<b>1,538</b>	<b>15,356</b>	<b>2,612</b>	<b>5,588</b>	<b>23,556</b>
<b>2007 9-Month Total</b> .....	<b>1,395</b>	<b>5,909</b>	<b>7,219</b>	<b>14,541</b>	<b>19</b>	<b>4</b>	<b>1,480</b>	<b>1,503</b>	<b>16,044</b>	<b>2,570</b>	<b>5,590</b>	<b>24,204</b>
<b>2006 9-Month Total</b> .....	<b>1,428</b>	<b>5,806</b>	<b>7,261</b>	<b>14,539</b>	<b>20</b>	<b>3</b>	<b>1,461</b>	<b>1,484</b>	<b>16,023</b>	<b>2,611</b>	<b>5,627</b>	<b>24,262</b>

<sup>a</sup> See "Primary Energy Consumption" in Glossary.  
<sup>b</sup> Most data are estimates. See Table 10.2b for notes on series components and estimation.  
<sup>c</sup> Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.  
<sup>d</sup> Does not include the fuel ethanol portion of motor gasoline—fuel ethanol is included in "Biomass."  
<sup>e</sup> Includes coal coke net imports, which are not separately displayed. See Tables 1.4a and 1.4b.  
<sup>f</sup> Conventional hydroelectric power.  
<sup>g</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

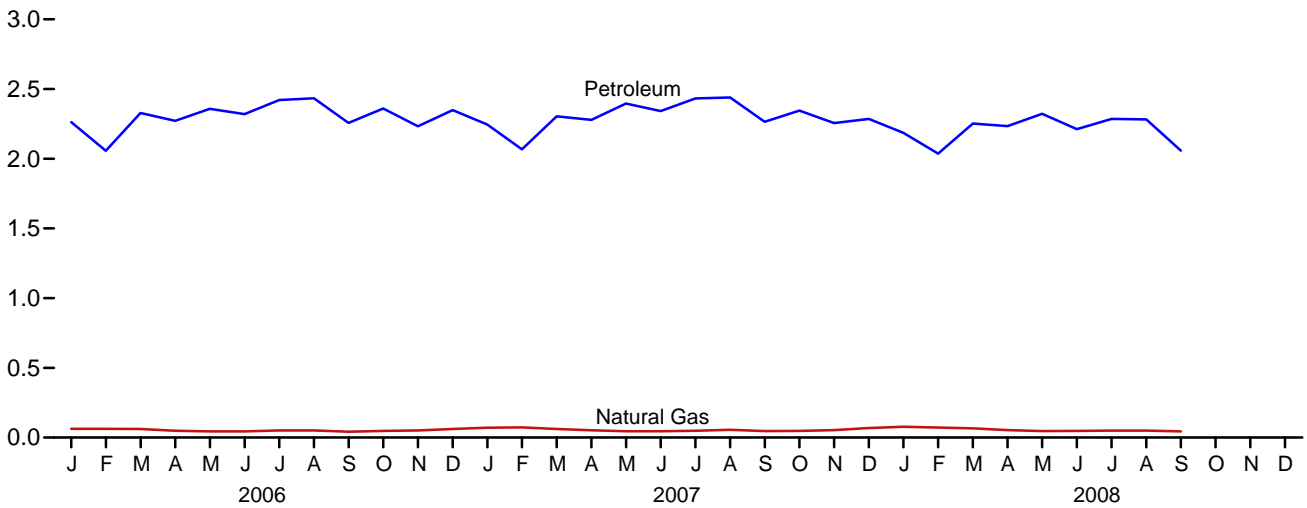
allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.  
R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.  
Notes: • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.  
Web Page: See <http://www.eia.doe.gov/emeu/mer/consump.html> for all available data beginning in 1973.  
Sources: Tables 1.4a, 1.4b, 2.6, 3.8b, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

**Figure 2.5 Transportation Sector Energy Consumption**  
(Quadrillion Btu)

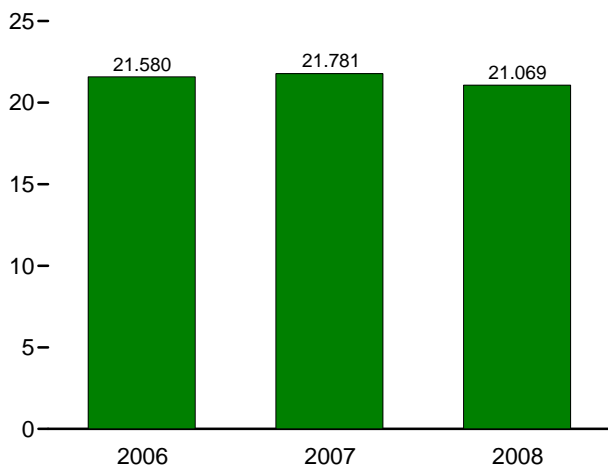
By Major Sources, 1973-2007



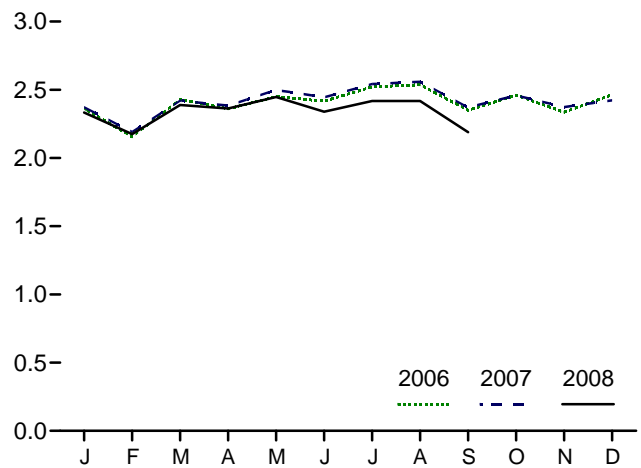
By Major Sources, Monthly



Total, January-September



Total, Monthly



Note: Because vertical scales differ, graphs should not be compared.  
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>  
Source: Table 2.5.



**Table 2.5 Transportation Sector Energy Consumption**  
(Trillion Btu)

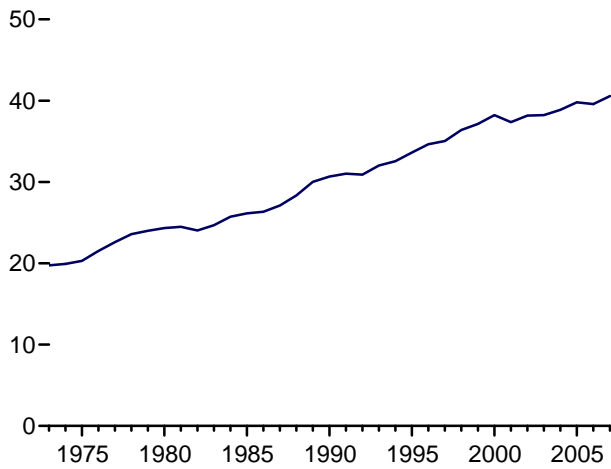
	Primary Consumption <sup>a</sup>						Electricity Retail Sales <sup>e</sup>	Electrical System Energy Losses <sup>f</sup>	Total
	Fossil Fuels				Renewable Energy <sup>b</sup>	Total Primary			
	Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Total	Biomass				
<b>1973 Total</b> .....	<b>3</b>	<b>743</b>	<b>17,831</b>	<b>18,576</b>	<b>NA</b>	<b>18,576</b>	<b>11</b>	<b>25</b>	<b>18,612</b>
<b>1975 Total</b> .....	<b>1</b>	<b>595</b>	<b>17,614</b>	<b>18,209</b>	<b>NA</b>	<b>18,209</b>	<b>10</b>	<b>24</b>	<b>18,244</b>
<b>1980 Total</b> .....	(g)	<b>650</b>	<b>19,009</b>	<b>19,658</b>	<b>NA</b>	<b>19,658</b>	<b>11</b>	<b>27</b>	<b>19,696</b>
<b>1985 Total</b> .....	(g)	<b>519</b>	<b>19,471</b>	<b>19,990</b>	<b>51</b>	<b>20,041</b>	<b>14</b>	<b>32</b>	<b>20,087</b>
<b>1990 Total</b> .....	(g)	<b>680</b>	<b>21,625</b>	<b>22,305</b>	<b>62</b>	<b>22,366</b>	<b>16</b>	<b>37</b>	<b>22,420</b>
<b>1995 Total</b> .....	(g)	<b>724</b>	<b>22,954</b>	<b>23,678</b>	<b>115</b>	<b>23,793</b>	<b>17</b>	<b>39</b>	<b>23,849</b>
<b>1996 Total</b> .....	(g)	<b>737</b>	<b>23,565</b>	<b>24,302</b>	<b>82</b>	<b>24,384</b>	<b>17</b>	<b>38</b>	<b>24,439</b>
<b>1997 Total</b> .....	(g)	<b>780</b>	<b>23,813</b>	<b>24,593</b>	<b>104</b>	<b>24,697</b>	<b>17</b>	<b>38</b>	<b>24,752</b>
<b>1998 Total</b> .....	(g)	<b>666</b>	<b>24,422</b>	<b>25,088</b>	<b>115</b>	<b>25,203</b>	<b>17</b>	<b>38</b>	<b>25,258</b>
<b>1999 Total</b> .....	(g)	<b>675</b>	<b>25,098</b>	<b>25,774</b>	<b>120</b>	<b>25,894</b>	<b>17</b>	<b>40</b>	<b>25,951</b>
<b>2000 Total</b> .....	(g)	<b>672</b>	<b>25,682</b>	<b>26,354</b>	<b>138</b>	<b>26,491</b>	<b>18</b>	<b>42</b>	<b>26,552</b>
<b>2001 Total</b> .....	(g)	<b>658</b>	<b>25,413</b>	<b>26,071</b>	<b>145</b>	<b>26,215</b>	<b>20</b>	<b>43</b>	<b>26,278</b>
<b>2002 Total</b> .....	(g)	<b>702</b>	<b>25,913</b>	<b>26,615</b>	<b>172</b>	<b>26,787</b>	<b>19</b>	<b>42</b>	<b>26,848</b>
<b>2003 Total</b> .....	(g)	<b>630</b>	<b>26,063</b>	<b>26,693</b>	<b>235</b>	<b>26,928</b>	<b>23</b>	<b>51</b>	<b>27,002</b>
<b>2004 Total</b> .....	(g)	<b>603</b>	<b>26,922</b>	<b>27,525</b>	<b>296</b>	<b>27,820</b>	<b>25</b>	<b>55</b>	<b>27,899</b>
<b>2005 Total</b> .....	(g)	<b>625</b>	<b>27,309</b>	<b>27,934</b>	<b>346</b>	<b>28,280</b>	<b>26</b>	<b>56</b>	<b>28,361</b>
<b>2006</b> January .....	(g)	63	R 2,262	R 2,325	31	R 2,356	2	5	R 2,363
February .....	(g)	62	R 2,057	R 2,119	29	R 2,148	2	4	R 2,155
March .....	(g)	62	R 2,329	R 2,390	33	R 2,423	2	5	R 2,429
April .....	(g)	49	R 2,271	R 2,320	34	R 2,354	2	4	R 2,360
May .....	(g)	44	R 2,358	R 2,402	41	R 2,443	2	4	R 2,449
June .....	(g)	45	R 2,320	R 2,365	45	R 2,410	2	5	R 2,417
July .....	(g)	51	R 2,421	R 2,472	42	R 2,514	2	5	R 2,521
August .....	(g)	51	R 2,434	R 2,485	45	R 2,530	2	5	R 2,536
September .....	(g)	42	R 2,257	R 2,299	44	R 2,343	2	4	R 2,349
October .....	(g)	47	R 2,360	R 2,408	46	R 2,454	2	4	R 2,460
November .....	(g)	51	R 2,233	R 2,284	45	R 2,329	2	4	R 2,336
December .....	(g)	61	R 2,349	R 2,410	48	R 2,458	2	5	R 2,465
<b>Total</b> .....	(g)	<b>626</b>	<b>R 27,652</b>	<b>R 28,279</b>	<b>483</b>	<b>R 28,761</b>	<b>25</b>	<b>54</b>	<b>R 28,841</b>
<b>2007</b> January .....	(g)	70	R 2,245	R 2,316	48	R 2,363	2	6	R 2,371
February .....	(g)	73	R 2,068	R 2,141	43	R 2,184	2	5	R 2,191
March .....	(g)	61	R 2,303	R 2,364	R 48	R 2,413	2	5	R 2,421
April .....	(g)	52	R 2,279	R 2,331	46	R 2,377	2	4	R 2,384
May .....	(g)	45	R 2,396	R 2,441	50	R 2,492	2	5	R 2,498
June .....	(g)	45	R 2,342	R 2,387	51	R 2,438	2	5	R 2,445
July .....	(g)	48	R 2,432	R 2,481	55	R 2,536	2	5	R 2,543
August .....	(g)	56	R 2,439	R 2,495	55	R 2,551	2	5	R 2,558
September .....	(g)	46	R 2,265	R 2,311	53	R 2,364	2	4	R 2,371
October .....	(g)	48	R 2,345	R 2,393	59	R 2,452	2	4	R 2,458
November .....	(g)	53	R 2,255	R 2,308	58	R 2,366	2	5	R 2,373
December .....	(g)	69	R 2,285	R 2,354	61	R 2,415	2	5	R 2,422
<b>Total</b> .....	(g)	<b>667</b>	<b>R 27,655</b>	<b>R 28,322</b>	<b>629</b>	<b>R 28,951</b>	<b>26</b>	<b>57</b>	<b>R 29,035</b>
<b>2008</b> January .....	(g)	78	R 2,186	R 2,264	62	R 2,326	2	5	R 2,334
February .....	(g)	71	R 2,037	R 2,108	60	R 2,168	2	5	R 2,175
March .....	(g)	66	R 2,252	R 2,317	64	R 2,382	2	5	R 2,388
April .....	(g)	53	R 2,234	R 2,287	R 69	R 2,356	2	4	R 2,363
May .....	(g)	46	R 2,322	R 2,368	72	R 2,440	2	5	R 2,447
June .....	(g)	47	R 2,212	R 2,259	73	R 2,332	2	5	R 2,339
July .....	(g)	R 50	R 2,285	R 2,335	76	R 2,411	2	5	R 2,418
August .....	(g)	R 49	R 2,282	R 2,332	79	R 2,410	2	5	R 2,417
September .....	(g)	44	2,059	2,103	79	2,182	2	4	2,188
<b>9-Month Total</b> .....	(g)	<b>505</b>	<b>19,868</b>	<b>20,373</b>	<b>635</b>	<b>21,008</b>	<b>20</b>	<b>42</b>	<b>21,069</b>
<b>2007 9-Month Total</b> .....	(g)	<b>498</b>	<b>20,770</b>	<b>21,267</b>	<b>450</b>	<b>21,718</b>	<b>20</b>	<b>43</b>	<b>21,781</b>
<b>2006 9-Month Total</b> .....	(g)	<b>467</b>	<b>20,710</b>	<b>21,177</b>	<b>343</b>	<b>21,520</b>	<b>19</b>	<b>41</b>	<b>21,580</b>

<sup>a</sup> See "Primary Energy Consumption" in Glossary.  
<sup>b</sup> Data are estimates. See Table 10.2b for notes on series components.  
<sup>c</sup> Natural gas only; does not include supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.  
<sup>d</sup> Does not include the fuel ethanol portion of motor gasoline—fuel ethanol is included in "Biomass."  
<sup>e</sup> Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.  
<sup>f</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

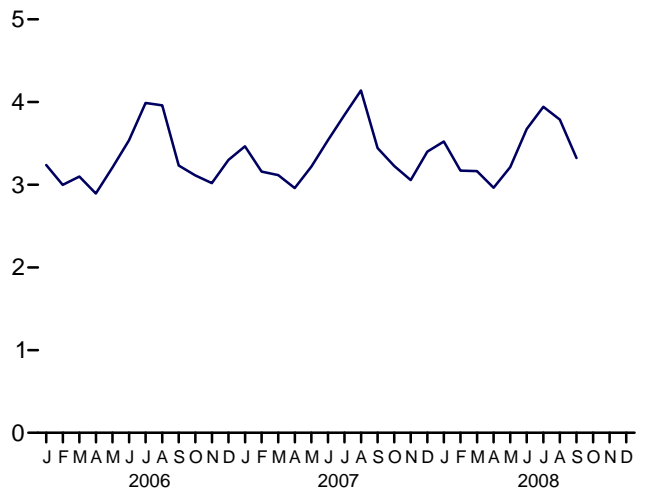
electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.  
<sup>g</sup> Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.  
R=Revised. NA=Not available.  
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding.  
• Geographic coverage is the 50 States and the District of Columbia.  
Web Page: See <http://www.eia.doe.gov/emeu/mer/consump.html> for all available data beginning in 1973.  
Sources: Tables 2.6, 3.8c, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

**Figure 2.6 Electric Power Sector Energy Consumption**  
(Quadrillion Btu)

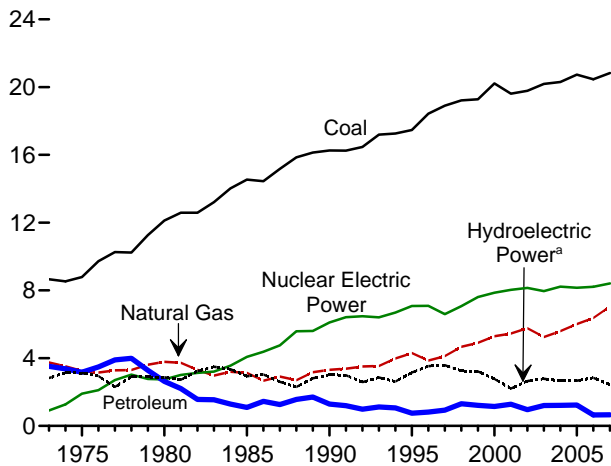
Total, 1973-2007



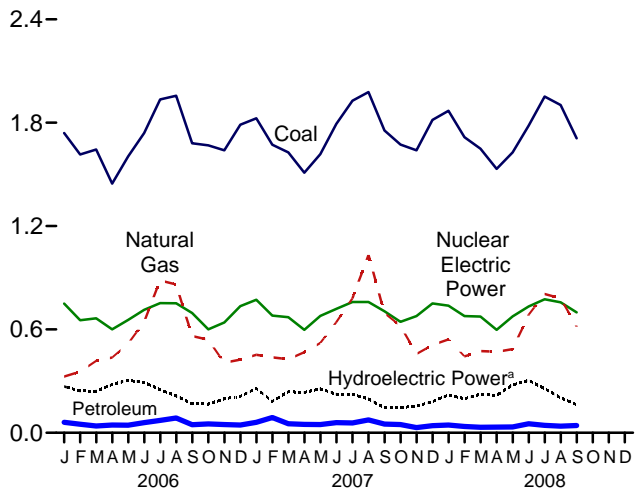
Total, Monthly



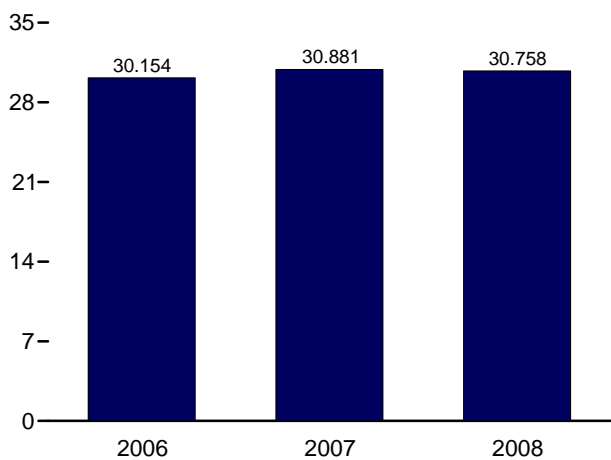
By Major Sources, 1973-2007



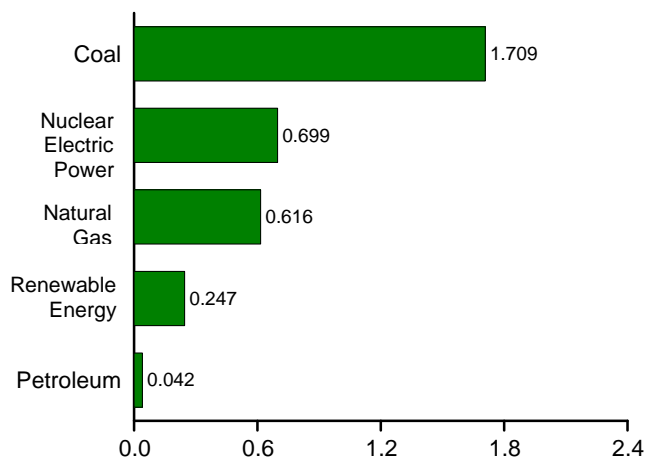
By Major Sources, Monthly



Total, January-September



By Major Sources, September 2008



<sup>a</sup>Conventional hydroelectric power.  
Note: Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.  
Source: Table 2.6.

**Table 2.6 Electric Power Sector Energy Consumption**  
(Trillion Btu)

	Primary Consumption <sup>a</sup>												Elec- tricity Net Imports	Total Primary
	Fossil Fuels				Nuclear Electric Power	Renewable Energy <sup>b</sup>								
	Coal	Natural Gas <sup>c</sup>	Petro- leum	Total		Hydro- electric Power <sup>d</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total			
<b>1973 Total</b> .....	8,658	3,748	3,515	15,921	910	2,827	43	NA	NA	3	2,873	49	19,753	
<b>1975 Total</b> .....	8,786	3,240	3,166	15,191	1,900	3,122	70	NA	NA	2	3,194	21	20,307	
<b>1980 Total</b> .....	12,123	3,778	2,634	18,534	2,739	2,867	110	NA	NA	4	2,982	71	24,327	
<b>1985 Total</b> .....	14,542	3,135	1,090	18,767	4,076	2,937	198	(s)	(s)	14	3,150	140	26,132	
<b>1990 Total<sup>e</sup></b> .....	16,261	3,309	1,289	20,859	6,104	3,014	326	4	29	317	3,689	8	30,660	
<b>1995 Total</b> .....	17,466	4,302	755	22,523	7,075	3,149	280	5	33	422	3,889	134	33,621	
<b>1996 Total</b> .....	18,429	3,862	817	23,109	7,087	3,528	300	5	33	438	4,305	137	34,638	
<b>1997 Total</b> .....	18,905	4,126	927	23,957	6,597	3,581	309	5	34	446	4,375	116	35,045	
<b>1998 Total</b> .....	19,216	4,675	1,306	25,197	7,068	3,241	311	5	31	444	4,032	88	36,385	
<b>1999 Total</b> .....	19,279	4,902	1,211	25,393	7,610	3,218	312	5	46	453	4,034	99	37,136	
<b>2000 Total</b> .....	20,220	5,293	1,144	26,658	7,862	2,768	296	5	57	453	3,579	115	38,214	
<b>2001 Total</b> .....	19,614	5,458	1,277	26,348	8,033	2,209	289	6	70	337	2,910	75	37,366	
<b>2002 Total</b> .....	19,783	5,767	961	26,511	8,143	2,650	305	6	105	380	3,445	72	38,171	
<b>2003 Total</b> .....	20,185	5,246	1,205	26,636	7,959	2,781	303	5	115	397	3,601	22	38,218	
<b>2004 Total</b> .....	20,305	5,595	1,212	27,112	8,222	2,656	311	6	142	388	3,503	39	38,876	
<b>2005 Total</b> .....	20,737	6,015	1,235	27,986	8,160	2,670	309	6	178	406	3,568	84	39,799	
<b>2006</b> January .....	1,740	326	61	2,128	750	268	26	(s)	24	37	355	5	3,238	
February .....	1,615	355	50	2,020	653	243	23	(s)	19	34	319	5	2,998	
March .....	1,644	417	39	2,101	665	242	27	(s)	23	35	327	6	3,099	
April .....	1,446	437	46	1,928	601	281	24	1	25	30	360	5	2,893	
May .....	1,605	517	44	2,166	655	304	23	1	24	33	384	5	3,210	
June .....	1,740	645	59	2,444	714	293	25	1	20	34	373	5	3,535	
July .....	1,936	885	72	2,893	753	250	27	1	19	36	333	10	3,989	
August .....	1,957	861	86	2,904	751	214	27	1	16	37	295	10	3,960	
September .....	1,681	561	47	2,289	695	169	26	1	19	34	248	(s)	3,232	
October .....	1,669	540	51	2,260	600	166	27	(s)	24	34	252	1	3,113	
November .....	1,640	406	48	2,094	641	197	25	(s)	25	35	283	3	3,020	
December .....	1,789	425	46	2,259	735	211	27	(s)	25	36	299	8	3,301	
<b>Total</b> .....	<b>20,462</b>	<b>6,375</b>	<b>648</b>	<b>27,485</b>	<b>8,214</b>	<b>2,839</b>	<b>306</b>	<b>5</b>	<b>264</b>	<b>412</b>	<b>3,827</b>	<b>63</b>	<b>39,589</b>	
<b>2007</b> January .....	1,826	453	60	2,339	772	258	27	(s)	24	38	347	6	3,465	
February .....	1,672	438	89	2,199	681	183	25	(s)	25	36	269	10	3,159	
March .....	1,628	428	53	2,108	671	239	26	(s)	30	36	331	6	3,116	
April .....	1,510	468	49	2,027	598	235	24	1	32	33	325	10	2,959	
May .....	1,617	521	48	2,186	678	255	25	1	28	34	343	R 12	R 3,219	
June .....	1,793	643	59	2,494	719	225	26	1	24	36	311	11	R 3,535	
July .....	1,928	781	57	2,766	759	223	27	1	19	36	306	13	3,843	
August .....	1,978	1,032	75	3,085	759	196	27	1	24	37	285	R 12	R 4,141	
September .....	1,755	695	51	2,501	705	144	26	1	26	35	232	5	3,443	
October .....	1,673	620	48	2,341	644	146	27	(s)	30	32	236	R 7	3,227	
November .....	1,640	457	30	2,127	678	155	26	(s)	27	36	243	9	3,057	
December .....	1,817	510	42	2,368	751	182	27	(s)	28	37	275	7	3,400	
<b>Total</b> .....	<b>20,835</b>	<b>7,046</b>	<b>660</b>	<b>28,542</b>	<b>8,415</b>	<b>2,440</b>	<b>312</b>	<b>6</b>	<b>319</b>	<b>427</b>	<b>3,503</b>	<b>R 106</b>	<b>R 40,566</b>	
<b>2008</b> January .....	1,869	542	45	2,455	738	219	25	(s)	37	36	318	11	3,522	
February .....	1,716	443	37	2,196	678	198	23	(s)	32	33	286	10	3,170	
March .....	1,649	474	32	2,155	675	224	26	1	41	36	327	7	3,165	
April .....	1,532	470	33	2,036	598	217	25	1	45	33	321	9	2,963	
May .....	1,628	485	34	2,147	676	278	26	1	44	32	382	8	3,212	
June .....	1,783	685	53	2,521	733	304	26	1	43	35	410	9	3,673	
July .....	1,952	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 .....	1,709	616	42	2,368	699	163	26	1	24	33	247	10	3,324	
<b>9-Month Total</b> .....	<b>15,740</b>	<b>5,302</b>	<b>357</b>	<b>21,399</b>	<b>6,328</b>	<b>2,063</b>	<b>230</b>	<b>7</b>	<b>324</b>	<b>311</b>	<b>2,935</b>	<b>96</b>	<b>30,758</b>	
<b>2007 9-Month Total</b> .....	<b>15,706</b>	<b>5,459</b>	<b>541</b>	<b>21,706</b>	<b>6,342</b>	<b>1,957</b>	<b>232</b>	<b>5</b>	<b>233</b>	<b>321</b>	<b>2,749</b>	<b>83</b>	<b>30,881</b>	
<b>2006 9-Month Total</b> .....	<b>15,364</b>	<b>5,003</b>	<b>504</b>	<b>20,871</b>	<b>6,238</b>	<b>2,264</b>	<b>227</b>	<b>5</b>	<b>190</b>	<b>308</b>	<b>2,994</b>	<b>52</b>	<b>30,154</b>	

<sup>a</sup> See "Primary Energy Consumption" in Glossary.  
<sup>b</sup> See Table 10.2c for notes on series components.  
<sup>c</sup> Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.  
<sup>d</sup> Conventional hydroelectric power.  
<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.  
Sources: Tables 3.8c, 4.3, 6.2, 7.1, 7.2b, 10.2c, A4, A5, and A6.

## Energy Consumption by Sector

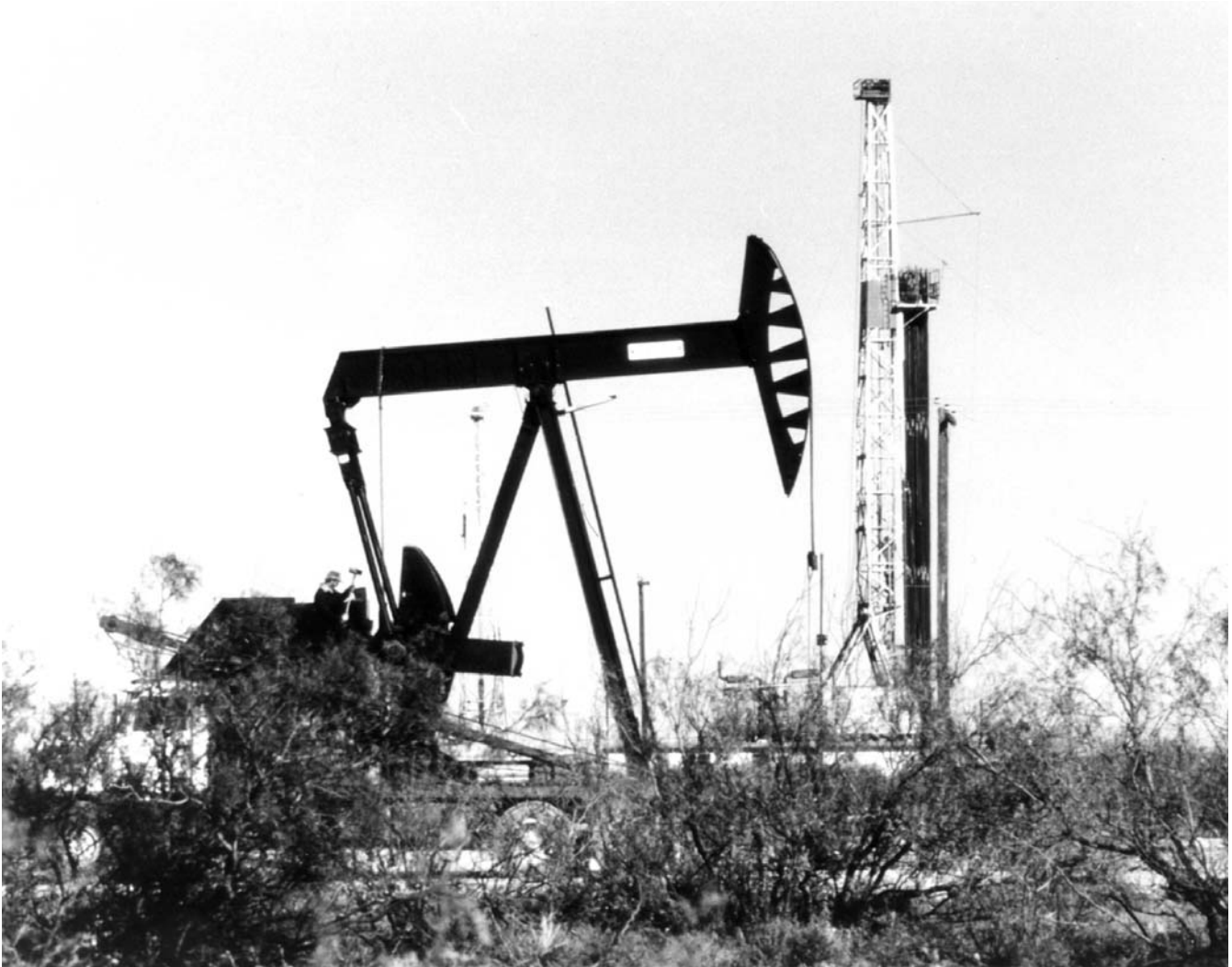
**Note 1. Energy Consumption Data and Surveys.** Most of the data in this section of the *Monthly Energy Review (MER)* are developed from a group of energy-related surveys, typically called "supply surveys," conducted by the Energy Information Administration (EIA). Supply surveys are directed to suppliers 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 steam-electric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring those thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, 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.

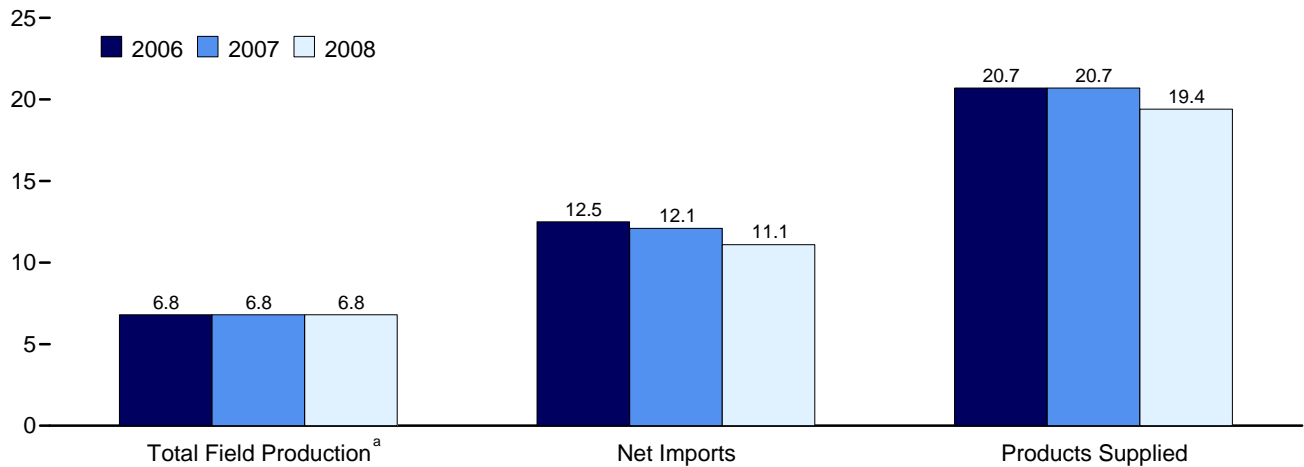
# Petroleum



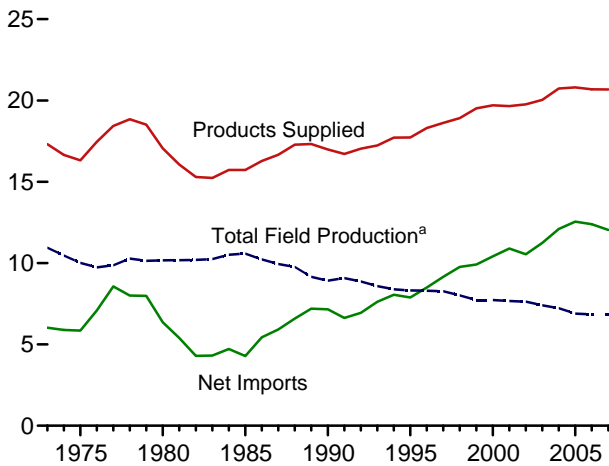
Oil pumping unit and drilling rig, Texas. Source: U.S. Department of Energy.

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

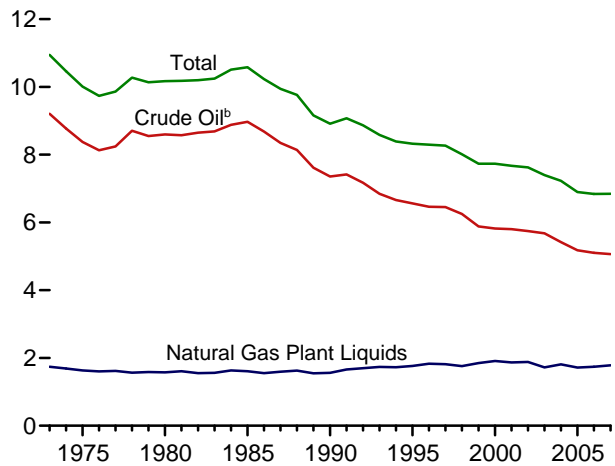
Overview, January-November



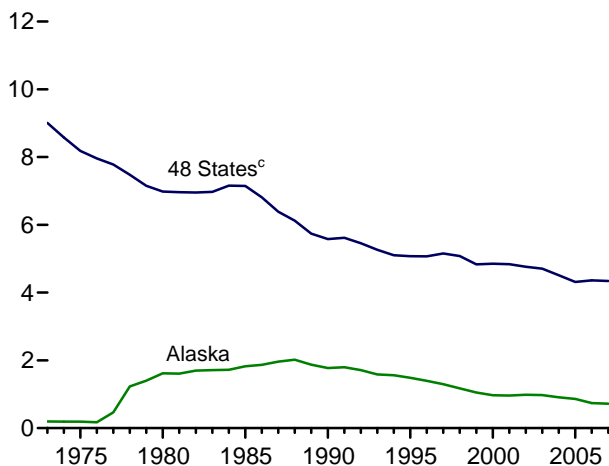
Overview, 1973-2007



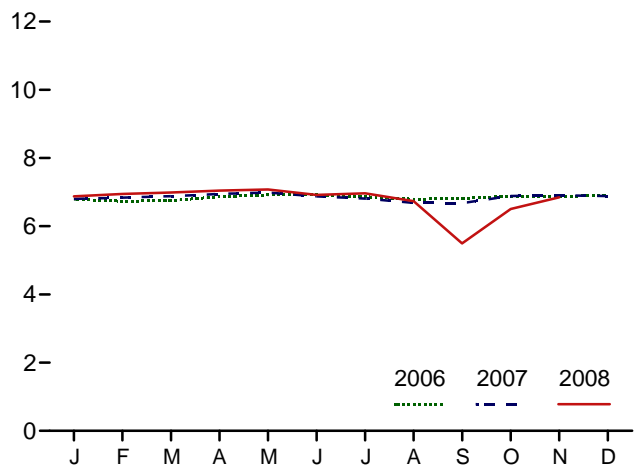
Total Field Production, 1973-2007



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



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



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

<sup>b</sup>Includes lease condensate.

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

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.

**Table 3.1 Petroleum Overview**  
(Thousand Barrels per Day)

	Field Production <sup>a</sup>					Processing Gain <sup>f</sup>	Trade			Stock Change <sup>i</sup>	Adjustments <sup>i</sup>	Petroleum Products Supplied
	Crude Oil <sup>b</sup>			NGPL <sup>d,e</sup>	Total		Imports <sup>g</sup>	Exports <sup>e</sup>	Net Imports <sup>h</sup>			
	48 States <sup>c</sup>	Alaska	Total									
<b>1973 Average</b> .....	<b>9,010</b>	<b>198</b>	<b>9,208</b>	<b>1,738</b>	<b>10,946</b>	<b>453</b>	<b>6,256</b>	<b>231</b>	<b>6,025</b>	<b>135</b>	<b>18</b>	<b>17,308</b>
<b>1975 Average</b> .....	<b>8,183</b>	<b>191</b>	<b>8,375</b>	<b>1,633</b>	<b>10,007</b>	<b>460</b>	<b>6,056</b>	<b>209</b>	<b>5,846</b>	<b>32</b>	<b>41</b>	<b>16,322</b>
<b>1980 Average</b> .....	<b>6,980</b>	<b>1,617</b>	<b>8,597</b>	<b>1,573</b>	<b>10,170</b>	<b>597</b>	<b>6,909</b>	<b>544</b>	<b>6,365</b>	<b>140</b>	<b>64</b>	<b>17,056</b>
<b>1985 Average</b> .....	<b>7,146</b>	<b>1,825</b>	<b>8,971</b>	<b>1,609</b>	<b>10,581</b>	<b>557</b>	<b>5,067</b>	<b>781</b>	<b>4,286</b>	<b>-103</b>	<b>200</b>	<b>15,726</b>
<b>1990 Average</b> .....	<b>5,582</b>	<b>1,773</b>	<b>7,355</b>	<b>1,559</b>	<b>8,914</b>	<b>683</b>	<b>8,018</b>	<b>857</b>	<b>7,161</b>	<b>107</b>	<b>338</b>	<b>16,988</b>
<b>1995 Average</b> .....	<b>5,076</b>	<b>1,484</b>	<b>6,560</b>	<b>1,762</b>	<b>8,322</b>	<b>774</b>	<b>8,835</b>	<b>949</b>	<b>7,886</b>	<b>-246</b>	<b>496</b>	<b>17,725</b>
<b>1996 Average</b> .....	<b>5,071</b>	<b>1,393</b>	<b>6,465</b>	<b>1,830</b>	<b>8,295</b>	<b>837</b>	<b>9,478</b>	<b>981</b>	<b>8,498</b>	<b>-151</b>	<b>528</b>	<b>18,309</b>
<b>1997 Average</b> .....	<b>5,156</b>	<b>1,296</b>	<b>6,452</b>	<b>1,817</b>	<b>8,269</b>	<b>850</b>	<b>10,162</b>	<b>1,003</b>	<b>9,158</b>	<b>143</b>	<b>487</b>	<b>18,620</b>
<b>1998 Average</b> .....	<b>5,077</b>	<b>1,175</b>	<b>6,252</b>	<b>1,759</b>	<b>8,011</b>	<b>886</b>	<b>10,708</b>	<b>945</b>	<b>9,764</b>	<b>239</b>	<b>495</b>	<b>18,917</b>
<b>1999 Average</b> .....	<b>4,832</b>	<b>1,050</b>	<b>5,881</b>	<b>1,850</b>	<b>7,731</b>	<b>886</b>	<b>10,852</b>	<b>940</b>	<b>9,912</b>	<b>-422</b>	<b>567</b>	<b>19,519</b>
<b>2000 Average</b> .....	<b>4,851</b>	<b>970</b>	<b>5,822</b>	<b>1,911</b>	<b>7,733</b>	<b>948</b>	<b>11,459</b>	<b>1,040</b>	<b>10,419</b>	<b>-69</b>	<b>532</b>	<b>19,701</b>
<b>2001 Average</b> .....	<b>4,839</b>	<b>963</b>	<b>5,801</b>	<b>1,868</b>	<b>7,670</b>	<b>903</b>	<b>11,871</b>	<b>971</b>	<b>10,900</b>	<b>325</b>	<b>501</b>	<b>19,649</b>
<b>2002 Average</b> .....	<b>4,761</b>	<b>984</b>	<b>5,746</b>	<b>1,880</b>	<b>7,626</b>	<b>957</b>	<b>11,530</b>	<b>984</b>	<b>10,546</b>	<b>-105</b>	<b>527</b>	<b>19,761</b>
<b>2003 Average</b> .....	<b>4,706</b>	<b>974</b>	<b>5,681</b>	<b>1,719</b>	<b>7,400</b>	<b>974</b>	<b>12,264</b>	<b>1,027</b>	<b>11,238</b>	<b>56</b>	<b>478</b>	<b>20,034</b>
<b>2004 Average</b> .....	<b>4,510</b>	<b>908</b>	<b>5,419</b>	<b>1,809</b>	<b>7,228</b>	<b>1,051</b>	<b>13,145</b>	<b>1,048</b>	<b>12,097</b>	<b>209</b>	<b>564</b>	<b>20,731</b>
<b>2005 Average</b> .....	<b>4,314</b>	<b>864</b>	<b>5,178</b>	<b>1,717</b>	<b>6,895</b>	<b>989</b>	<b>13,714</b>	<b>1,165</b>	<b>12,549</b>	<b>145</b>	<b>513</b>	<b>20,802</b>
<b>2006</b> January .....	4,274	832	5,106	1,682	6,788	1,001	13,796	1,059	12,737	484	395	20,436
February .....	4,224	821	5,045	1,682	6,727	1,028	13,565	1,276	12,289	235	767	20,577
March .....	4,293	752	5,045	1,702	6,747	907	12,904	1,170	11,734	-905	316	20,608
April .....	4,328	800	5,128	1,737	6,866	944	13,438	1,398	12,039	311	663	20,201
May .....	4,360	801	5,161	1,755	6,916	979	14,315	1,350	12,965	743	340	20,457
June .....	4,379	781	5,160	1,756	6,915	968	14,253	1,334	12,918	174	353	20,982
July .....	4,421	681	5,102	1,759	6,861	1,000	13,984	1,387	12,596	457	740	20,740
August .....	4,438	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 .....	4,392	714	5,106	1,773	6,879	992	13,317	1,506	11,810	-515	573	20,769
November .....	4,450	655	5,105	1,770	6,875	959	13,005	1,353	11,651	-798	386	20,669
December .....	4,381	785	5,166	1,736	6,903	1,048	12,721	1,164	11,556	-825	463	20,795
<b>Average</b> .....	<b>4,361</b>	<b>741</b>	<b>5,102</b>	<b>1,739</b>	<b>6,841</b>	<b>994</b>	<b>13,707</b>	<b>1,317</b>	<b>12,390</b>	<b>60</b>	<b>522</b>	<b>20,687</b>
<b>2007</b> January .....	4,348	775	5,123	1,677	6,800	1,035	13,706	1,446	12,260	146	618	20,567
February .....	4,369	756	5,125	1,710	6,835	961	12,173	1,350	10,823	-2,065	625	21,309
March .....	4,356	750	5,106	1,776	6,882	944	13,956	1,274	12,682	367	396	20,536
April .....	4,441	748	5,189	1,755	6,944	948	13,842	1,360	12,482	540	701	20,536
May .....	4,429	768	5,197	1,793	6,990	939	14,204	1,441	12,764	966	894	20,620
June .....	4,379	717	5,096	1,780	6,877	1,007	13,553	1,331	12,222	195	813	20,723
July .....	4,305	719	5,024	1,785	6,809	1,023	13,754	1,506	12,248	125	792	20,747
August .....	4,304	610	4,914	1,768	6,682	1,010	13,634	1,483	12,151	-574	608	21,025
September .....	4,241	642	4,884	1,793	6,677	991	13,646	1,361	12,285	29	491	20,415
October .....	4,342	701	5,043	1,840	6,883	983	12,981	1,325	11,655	-286	668	20,476
November .....	4,274	743	5,017	1,886	6,902	1,011	13,188	1,767	11,421	-596	604	20,535
December .....	4,318	738	5,056	1,828	6,885	1,093	12,869	1,542	11,327	-788	627	20,719
<b>Average</b> .....	<b>4,342</b>	<b>722</b>	<b>5,064</b>	<b>1,783</b>	<b>6,847</b>	<b>996</b>	<b>13,468</b>	<b>1,433</b>	<b>12,036</b>	<b>-148</b>	<b>653</b>	<b>20,680</b>
<b>2008</b> January .....	E 4,383	E 711	E 5,093	E 1,783	E 6,876	E 1,056	E 13,493	E 1,623	E 11,869	E 483	E 795	E 20,114
February .....	E 4,407	E 706	E 5,113	E 1,830	E 6,943	E 964	E 12,604	E 2,072	E 10,531	E -506	E 837	E 19,782
March .....	E 4,413	E 726	E 5,139	E 1,847	E 6,986	E 930	E 12,550	E 1,823	E 10,728	E -285	E 803	E 19,732
April .....	E 4,461	E 701	E 5,162	E 1,880	E 7,042	E 930	E 13,252	E 1,754	E 11,498	E 403	E 702	E 19,768
May .....	E 4,482	E 685	E 5,166	E 1,908	E 7,074	E 1,011	E 12,862	E 1,806	E 11,056	E 264	E 851	E 19,729
June .....	E 4,454	E 655	E 5,109	E 1,810	E 6,919	E 982	E 13,367	E 2,165	E 11,202	E 406	E 856	E 19,553
July .....	E 4,470	E 640	E 5,110	E 1,856	E 6,966	E 984	E 13,064	E 2,069	E 10,995	E 434	E 902	E 19,412
August .....	E 4,351	E 544	E 4,895	E 1,839	E 6,734	E 1,013	E 13,060	E 2,068	E 10,992	E 368	E 895	E 19,267
September .....	RE 3,279	RE 681	RE 3,960	R 1,537	RE 5,497	R 841	R 11,512	R 1,338	R 10,174	R -169	R 1,115	R 17,796
October .....	E 3,929	E 726	E 4,655	E 1,851	E 6,506	E 960	E 13,494	E 1,532	E 11,962	E 1,218	E 835	E 19,045
November .....	E 4,268	E 740	E 5,008	E 1,839	E 6,847	E 973	E 12,831	E 1,694	E 11,137	E 530	E 836	E 19,263
<b>11-Month Average</b> ...	<b>E 4,264</b>	<b>E 683</b>	<b>E 4,947</b>	<b>E 1,817</b>	<b>E 6,764</b>	<b>E 968</b>	<b>E 12,921</b>	<b>E 1,812</b>	<b>E 11,109</b>	<b>E 291</b>	<b>E 857</b>	<b>E 19,407</b>
<b>2007 11-Month Average</b> ...	<b>4,344</b>	<b>721</b>	<b>5,065</b>	<b>1,779</b>	<b>6,844</b>	<b>987</b>	<b>13,524</b>	<b>1,422</b>	<b>12,102</b>	<b>-89</b>	<b>656</b>	<b>20,677</b>
<b>2006 11-Month Average</b> ...	<b>4,359</b>	<b>737</b>	<b>5,096</b>	<b>1,739</b>	<b>6,835</b>	<b>989</b>	<b>13,799</b>	<b>1,331</b>	<b>12,468</b>	<b>142</b>	<b>528</b>	<b>20,677</b>

<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."

<sup>b</sup> Includes lease condensate.  
<sup>c</sup> United States excluding Alaska and Hawaii.  
<sup>d</sup> Natural gas plant liquids.  
<sup>e</sup> See Note 6, "Petroleum Data Discrepancies," at end of section.  
<sup>f</sup> Refinery and blender net production minus refinery and blender net inputs.  
<sup>g</sup> Includes Strategic Petroleum Reserve imports. See Table 3.3b  
<sup>h</sup> Net imports equal imports minus exports.  
<sup>i</sup> A negative value indicates a decrease in stocks and a positive value indicates an increase. The current month stock change estimate is based on the change from the previous month's estimate, rather than the stocks values shown in Table 3.4. Includes crude oil stocks in the Strategic Petroleum Reserve, but excludes

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

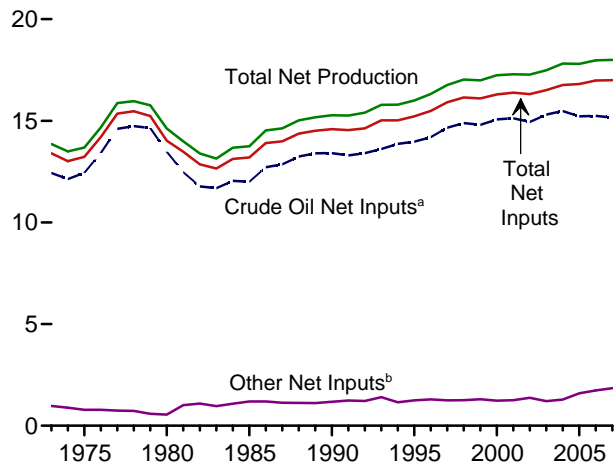
<sup>j</sup> An adjustment for crude oil, finished motor gasoline, motor gasoline blending components, fuel ethanol, and distillate fuel oil. See EIA, *Petroleum Supply Monthly*, Appendix B, Note 3.

R=Revised. E=Estimate.  
 Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.  
 Web Pages: • For all available data beginning in 1973, see <http://www.eia.doe.gov/emeu/mer/mer/petro.html>. • For related information, see [http://www.eia.doe.gov/oil\\_gas/petroleum/info\\_glance/petroleum.html](http://www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html).

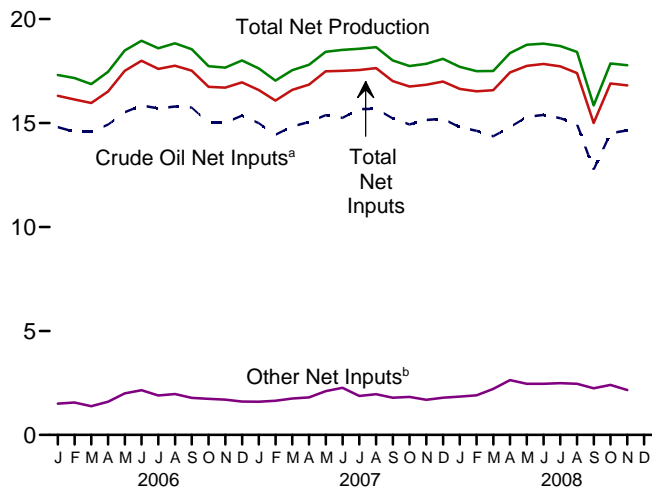
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual*, annual reports. • **1976-1980:** Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual*, annual reports. • **1981-2007:** EIA, *Petroleum Supply Annual*, annual reports.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

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

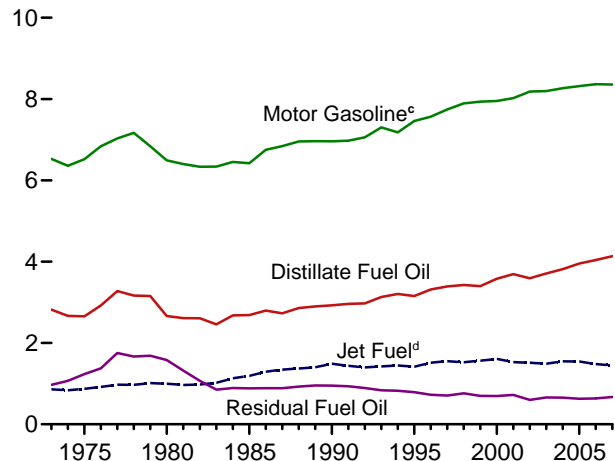
Net Inputs and Net Production, 1973-2007



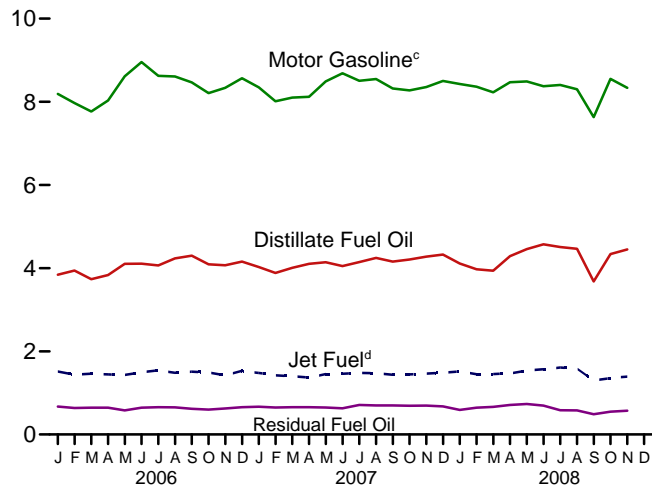
Net Inputs and Net Production, Monthly



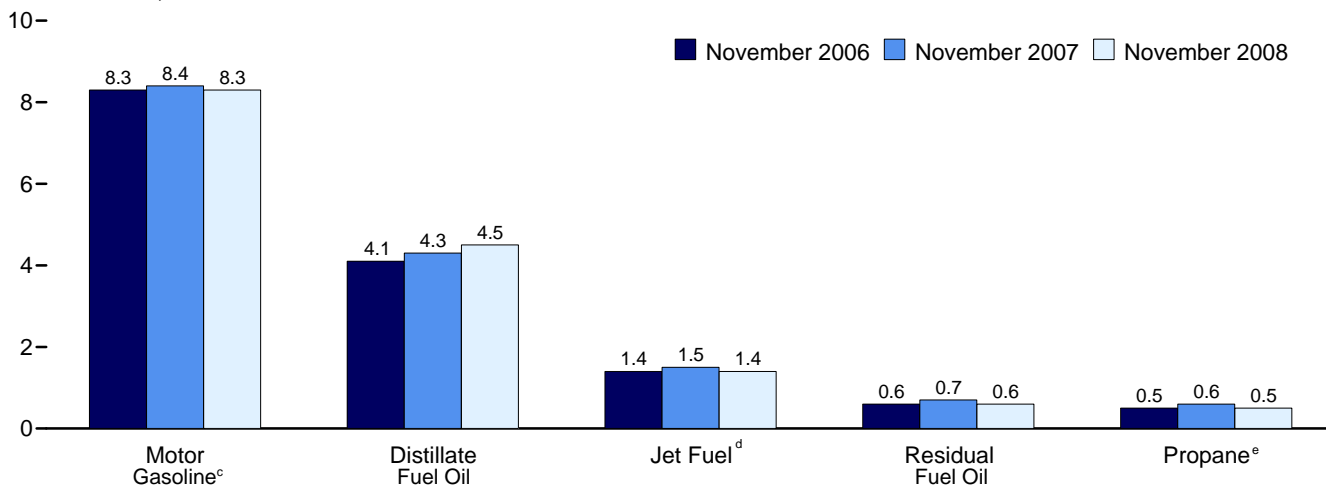
Net Production, Selected Products, 1973-2007



Net Production, Selected Products, Monthly



Net Production, Selected Products



<sup>a</sup>Includes lease condensate.

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

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

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

<sup>e</sup>Includes propylene.

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

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

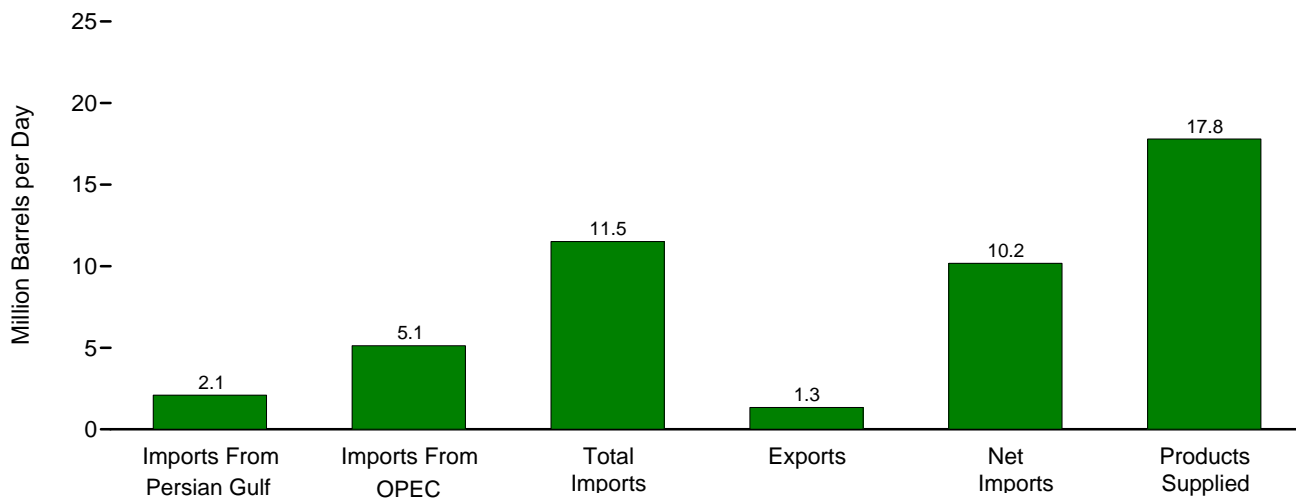
Source: Table 3.2.



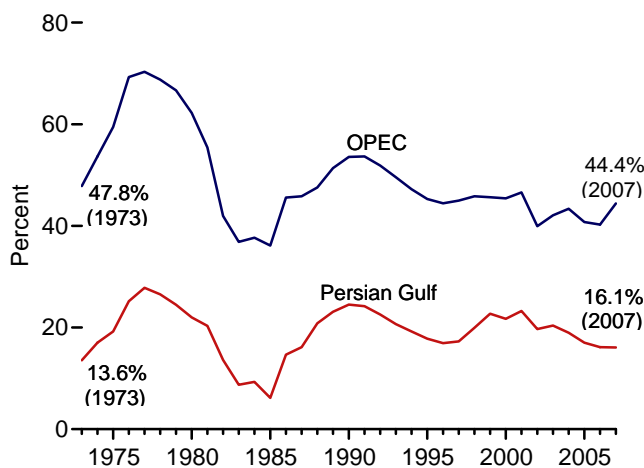


### Figure 3.3a Petroleum Trade: Overview

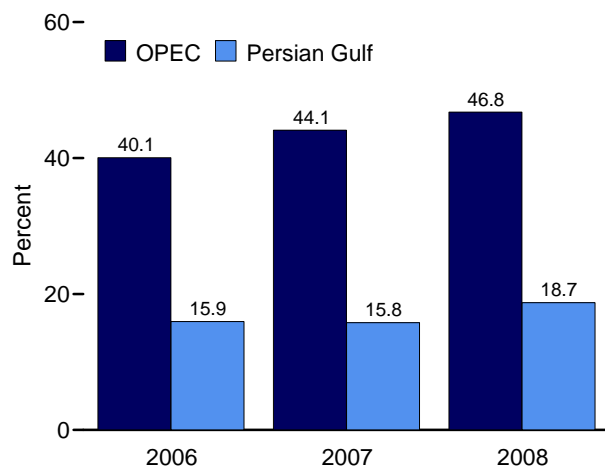
Overview, September 2008



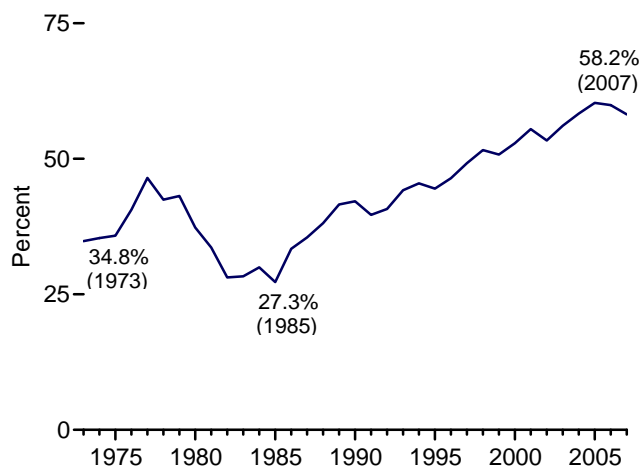
Imports From OPEC and Persian Gulf as Share of Total Imports, 1973-2007



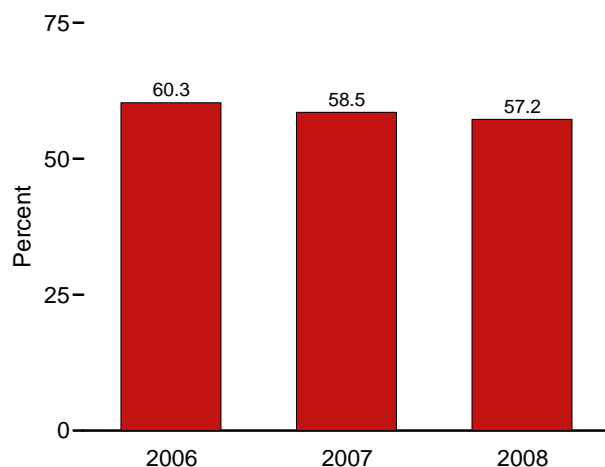
Imports From OPEC and Persian Gulf as Share of Total Imports, January-September



Net Imports as Share of Products Supplied, 1973-2007



Net Imports as Share of Products Supplied, January-November



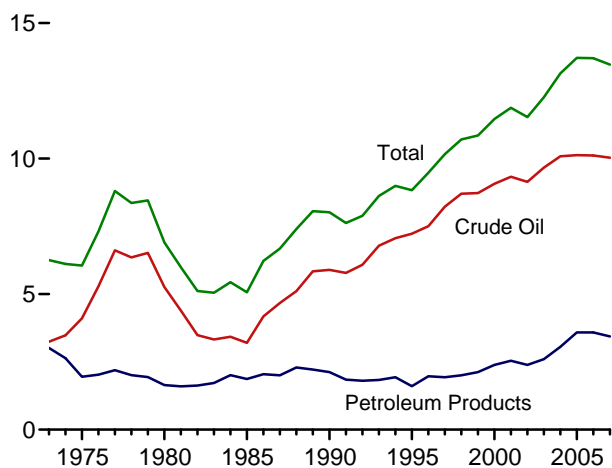
Notes: • OPEC=Organization of the Petroleum Exporting Countries.  
• Because vertical scales differ, graphs should not be compared.

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

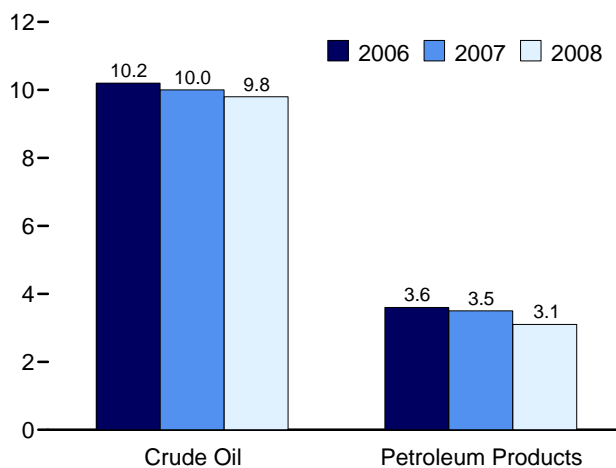


**Figure 3.3b Petroleum Trade: Imports**  
(Million Barrels per Day)

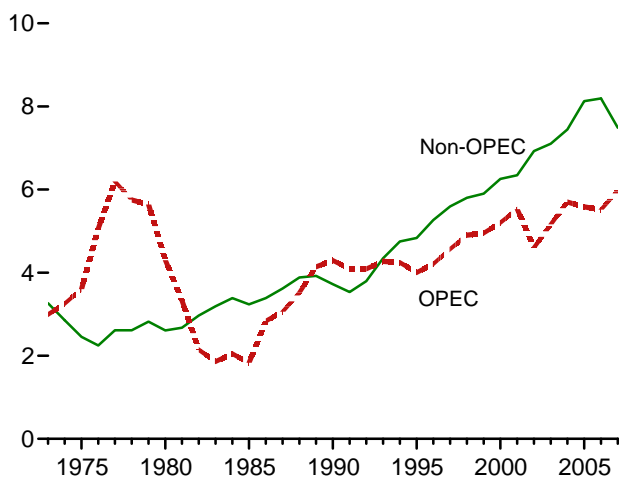
Total, 1973-2007



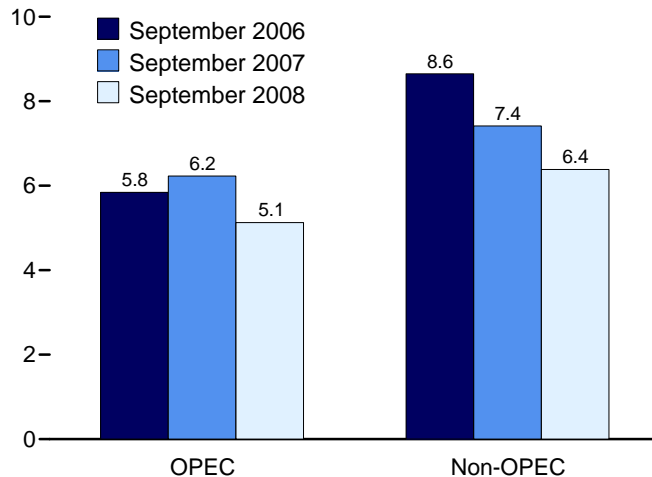
Crude Oil and Petroleum Products, January-November



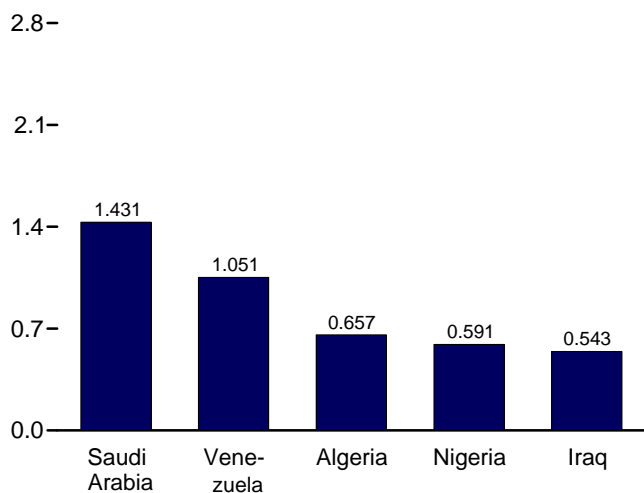
OPEC and Non-OPEC, 1973-2007



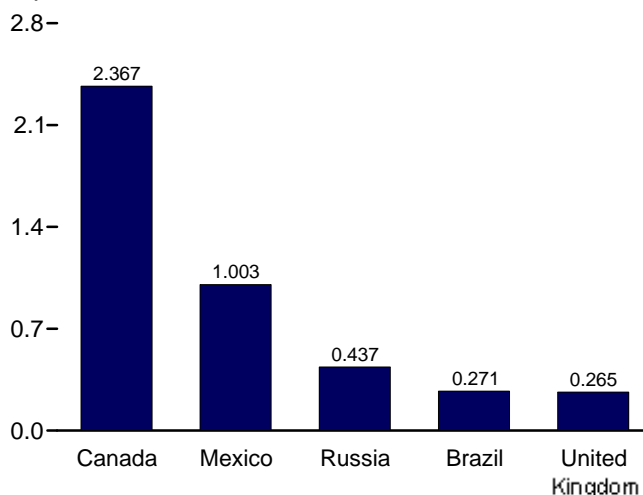
OPEC and Non-OPEC



From Selected OPEC Countries, September 2008



From Selected Non-OPEC Countries, September 2008



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

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.  
Sources: Tables 3.3b-3.3d.



**Table 3.3c Petroleum Trade: Imports From OPEC Countries**  
(Thousand Barrels per Day)

	Algeria	Angola <sup>a</sup>	Ecuador <sup>b</sup>	Iraq	Kuwait <sup>c</sup>	Libya	Nigeria	Saudi Arabia <sup>c</sup>	Venezuela	Other <sup>d</sup>	Total OPEC
1973 Average	136	(a)	48	4	47	164	459	486	1,135	514	2,993
1975 Average	282	(a)	57	2	16	232	762	715	702	832	3,601
1980 Average	488	(a)	27	28	27	554	857	1,261	481	577	4,300
1985 Average	187	(a)	67	46	21	4	293	168	605	439	1,830
1990 Average	280	(a)	49	518	86	0	800	1,339	1,025	199	4,296
1995 Average	234	(a)	(b)	0	218	0	627	1,344	1,480	98	4,002
1996 Average	256	(a)	(b)	1	236	0	617	1,363	1,676	62	4,211
1997 Average	285	(a)	(b)	89	253	0	698	1,407	1,773	64	4,569
1998 Average	290	(a)	(b)	336	301	0	696	1,491	1,719	73	4,905
1999 Average	259	(a)	(b)	725	248	0	657	1,478	1,493	93	4,953
2000 Average	225	(a)	(b)	620	272	0	896	1,572	1,546	72	5,203
2001 Average	278	(a)	(b)	795	250	0	885	1,662	1,553	105	5,528
2002 Average	264	(a)	(b)	459	228	0	621	1,552	1,398	83	4,605
2003 Average	382	(a)	(b)	481	220	0	867	1,774	1,376	61	5,162
2004 Average	452	(a)	(b)	656	250	20	1,140	1,558	1,554	70	5,701
2005 Average	478	(a)	(b)	531	243	56	1,166	1,537	1,529	47	5,587
2006 January	713	(a)	(b)	532	78	70	1,227	1,369	1,566	41	5,596
February	452	(a)	(b)	446	160	70	1,348	1,451	1,553	22	5,502
March	429	(a)	(b)	476	118	42	1,116	1,364	1,532	10	5,088
April	543	(a)	(b)	531	225	69	1,098	1,595	1,400	28	5,488
May	675	(a)	(b)	666	231	66	1,190	1,492	1,470	30	5,819
June	774	(a)	(b)	617	201	144	1,095	1,529	1,306	26	5,691
July	743	(a)	(b)	592	155	119	1,073	1,313	1,469	46	5,509
August	803	(a)	(b)	620	155	111	1,035	1,514	1,439	52	5,729
September	796	(a)	(b)	655	227	73	1,078	1,564	1,386	63	5,842
October	817	(a)	(b)	505	239	107	1,088	1,382	1,356	42	5,538
November	462	(a)	(b)	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)	(b)	553	185	87	1,114	1,463	1,419	38	5,517
2007 January	778	574	(b)	531	172	59	1,136	1,542	1,195	87	6,074
February	555	464	(b)	314	150	105	1,109	1,163	1,360	58	5,278
March	727	708	(b)	523	305	150	1,347	1,244	1,287	11	6,302
April	782	514	(b)	562	135	82	948	1,488	1,412	28	5,950
May	744	692	(b)	341	168	69	964	1,614	1,522	67	6,181
June	709	514	(b)	573	263	172	968	1,534	1,364	24	6,121
July	747	404	(b)	460	202	187	906	1,436	1,399	18	5,759
August	827	412	(b)	520	139	129	1,224	1,499	1,320	43	6,115
September	702	591	(b)	603	170	74	1,181	1,560	1,315	35	6,231
October	410	342	(b)	490	157	134	1,241	1,411	1,388	46	5,619
November	447	435	(b)	508	154	103	1,306	1,620	1,381	7	5,961
December	600	439	(b)	378	158	141	1,271	1,686	1,387	50	6,111
Average	670	508	(b)	484	181	117	1,134	1,485	1,361	39	5,980
2008 January	636	578	260	543	239	105	1,191	1,503	1,290	70	6,413
February	384	350	186	780	266	87	1,025	1,627	1,131	14	5,850
March	441	388	238	773	203	124	1,174	1,542	1,033	18	5,934
April	632	591	170	679	181	133	1,221	1,462	1,189	4	6,262
May	620	476	162	583	263	111	918	1,604	1,171	19	5,926
June	492	649	184	693	183	115	1,020	1,493	1,215	43	6,084
July	456	652	227	696	122	128	822	1,675	1,340	5	6,121
August	530	495	298	663	203	113	1,166	1,573	1,305	47	6,390
September	657	416	233	543	115	59	591	1,431	1,051	32	5,128
9-Month Average	539	511	218	661	197	108	1,015	1,546	1,193	28	6,015
2007 9-Month Average	732	542	(b)	493	190	114	1,087	1,456	1,353	41	6,008
2006 9-Month Average	660	(a)	(b)	572	172	85	1,138	1,465	1,458	35	5,585

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

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

<sup>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>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,

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](http://www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html).

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

**Table 3.3d Petroleum Trade: Imports From Non-OPEC Countries**  
(Thousand Barrels per Day)

	Brazil	Canada	Colombia	Mexico	Netherlands	Norway	Russia <sup>a</sup>	United Kingdom	U.S. Virgin Islands	Other	Total Non-OPEC
<b>1973 Average</b> .....	9	1,325	9	16	53	1	26	15	329	1,480	3,263
<b>1975 Average</b> .....	5	846	9	71	19	17	14	14	406	1,052	2,454
<b>1980 Average</b> .....	3	455	4	533	2	144	1	176	388	903	2,609
<b>1985 Average</b> .....	61	770	23	816	58	32	8	310	247	913	3,237
<b>1990 Average</b> .....	49	934	182	755	55	102	45	189	282	1,128	3,721
<b>1995 Average</b> .....	8	1,332	219	1,068	15	273	25	383	278	1,233	4,833
<b>1996 Average</b> .....	9	1,424	234	1,244	19	313	25	308	313	1,377	5,267
<b>1997 Average</b> .....	5	1,563	271	1,385	25	309	13	226	300	1,495	5,593
<b>1998 Average</b> .....	26	1,598	354	1,351	31	236	24	250	293	1,640	5,803
<b>1999 Average</b> .....	26	1,539	468	1,324	27	304	89	365	280	1,478	5,899
<b>2000 Average</b> .....	51	1,807	342	1,373	30	343	72	366	291	1,581	6,257
<b>2001 Average</b> .....	82	1,828	296	1,440	43	341	90	324	268	1,631	6,343
<b>2002 Average</b> .....	116	1,971	260	1,547	66	393	210	478	236	1,649	6,925
<b>2003 Average</b> .....	108	2,072	195	1,623	87	270	254	440	288	1,766	7,103
<b>2004 Average</b> .....	104	2,138	176	1,665	101	244	298	380	330	2,008	7,444
<b>2005 Average</b> .....	156	2,181	196	1,662	151	233	410	396	328	2,413	8,127
<b>2006</b> 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
<b>Average</b> .....	<b>193</b>	<b>2,353</b>	<b>155</b>	<b>1,705</b>	<b>174</b>	<b>196</b>	<b>369</b>	<b>272</b>	<b>328</b>	<b>2,446</b>	<b>8,190</b>
<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
<b>Average</b> .....	<b>200</b>	<b>2,455</b>	<b>155</b>	<b>1,532</b>	<b>128</b>	<b>142</b>	<b>414</b>	<b>277</b>	<b>346</b>	<b>1,839</b>	<b>7,489</b>
<b>2008</b> January .....	225	2,586	198	1,307	92	86	392	213	380	1,600	7,079
February .....	172	2,464	240	1,327	141	100	451	155	351	1,352	6,753
March .....	191	2,542	165	1,358	129	80	402	218	290	1,240	6,617
April .....	234	2,534	169	1,364	185	137	402	229	340	1,395	6,990
May .....	335	2,346	278	1,218	192	183	441	237	340	1,366	6,936
June .....	314	2,359	179	1,254	264	122	764	286	314	1,426	7,283
July .....	272	2,390	191	1,290	148	94	556	187	294	1,520	6,943
August .....	208	2,199	257	1,400	143	84	490	222	298	1,370	6,669
September .....	271	2,367	149	1,003	196	74	437	265	345	1,277	6,384
<b>9-Month Average</b> .....	<b>247</b>	<b>2,420</b>	<b>203</b>	<b>1,281</b>	<b>165</b>	<b>107</b>	<b>481</b>	<b>224</b>	<b>328</b>	<b>1,395</b>	<b>6,851</b>
<b>2007 9-Month Average</b> .....	<b>216</b>	<b>2,473</b>	<b>148</b>	<b>1,564</b>	<b>127</b>	<b>154</b>	<b>416</b>	<b>288</b>	<b>333</b>	<b>1,896</b>	<b>7,615</b>
<b>2006 9-Month Average</b> .....	<b>194</b>	<b>2,330</b>	<b>178</b>	<b>1,763</b>	<b>191</b>	<b>203</b>	<b>385</b>	<b>290</b>	<b>324</b>	<b>2,497</b>	<b>8,356</b>

<sup>a</sup> 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

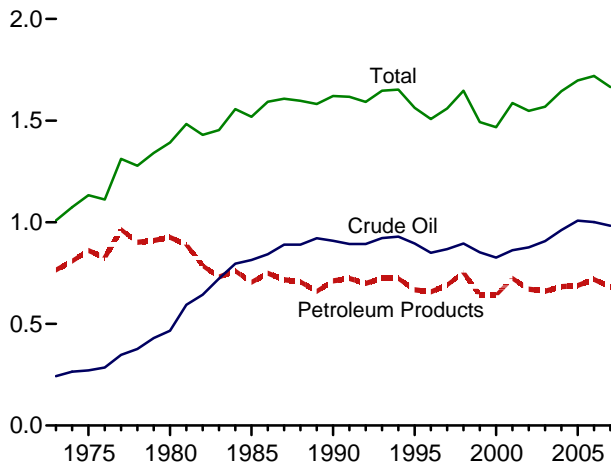
coverage is the 50 States and the District of Columbia.

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](http://www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html).

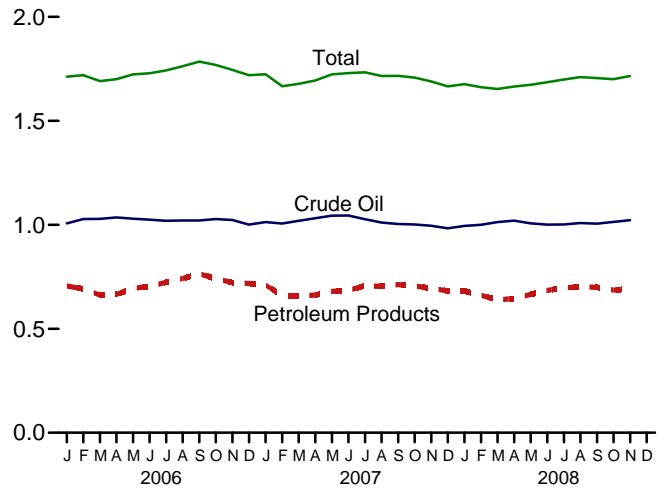
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual*, annual reports. • **1976-1980:** Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual*, annual reports. • **1981-2007:** EIA, *Petroleum Supply Annual*, annual reports.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

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

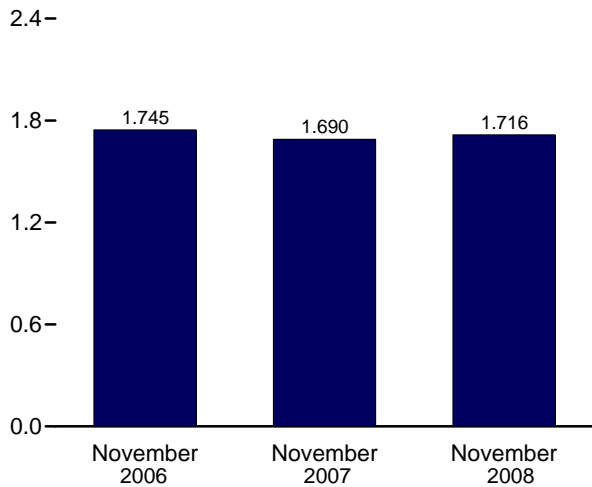
Overview, 1973-2007



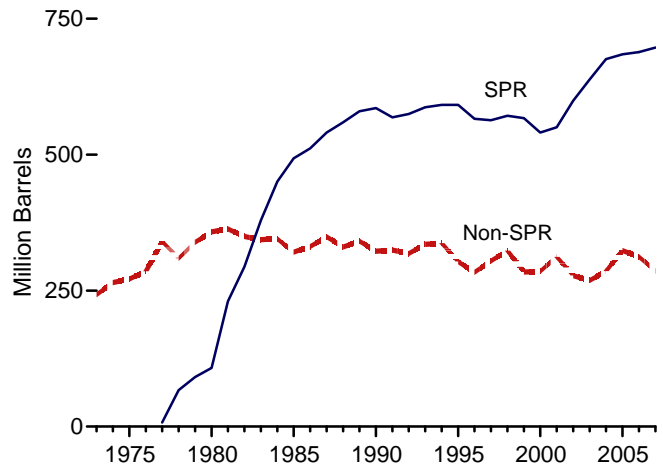
Overview, Monthly



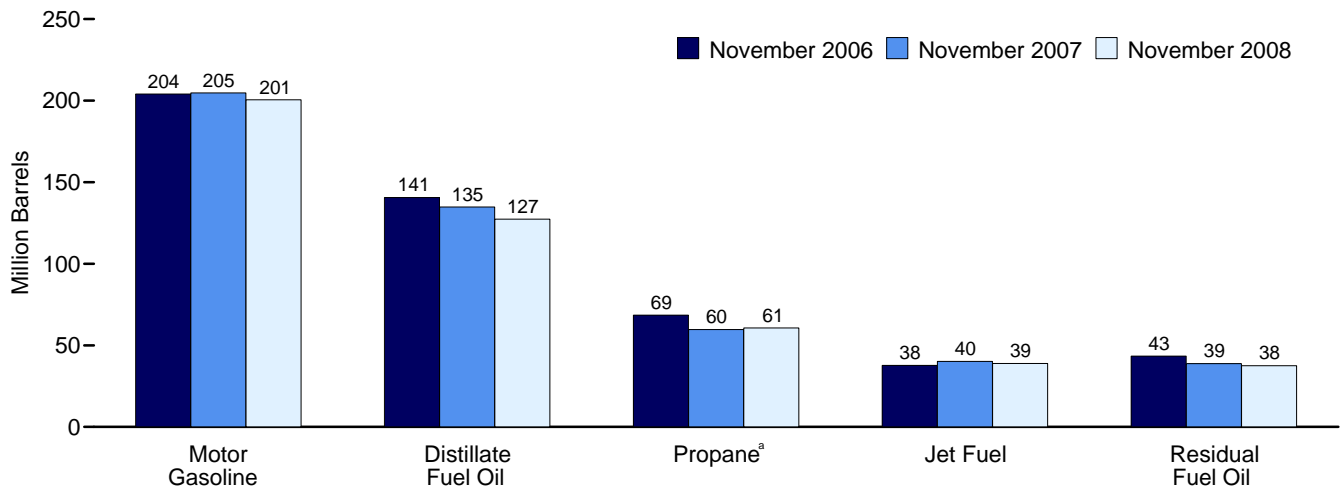
Total Stocks (Crude Oil and Petroleum Products)



SPR and Non-SPR Crude Oil Stocks, 1973-2007



Selected Products



<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 3.4.



**Table 3.4 Petroleum Stocks**  
(Million Barrels)

	Crude Oil <sup>a</sup>			Distillate Fuel Oil <sup>f,g</sup>	Jet Fuel <sup>h</sup>	LPG <sup>b</sup>		Motor Gasoline <sup>f,j</sup>	Residual Fuel Oil <sup>f</sup>	Other <sup>k</sup>	Total <sup>f</sup>
	SPR <sup>c</sup>	Non-SPR <sup>d,e,f</sup>	Total <sup>e,f</sup>			Propane <sup>f,i</sup>	Total <sup>f</sup>				
1973 Year .....	--	242	242	196	29	65	99	209	53	179	1,008
1975 Year .....	--	271	271	209	30	82	125	235	74	188	1,133
1980 Year .....	108	358	466	205	42	65	120	261	92	205	1,392
1985 Year .....	493	321	814	144	40	39	74	223	50	174	1,519
1990 Year .....	586	323	908	132	52	49	98	220	49	162	1,621
1995 Year .....	592	303	895	130	40	43	93	202	37	165	1,563
1996 Year .....	566	284	850	127	40	43	86	195	46	164	1,507
1997 Year .....	563	305	868	138	44	44	89	210	40	169	1,560
1998 Year .....	571	324	895	156	45	65	115	216	45	176	1,647
1999 Year .....	567	284	852	125	41	43	89	193	36	157	1,493
2000 Year .....	541	286	826	118	45	41	83	196	36	164	1,468
2001 Year .....	550	312	862	145	42	66	121	210	41	166	1,586
2002 Year .....	599	278	877	134	39	53	106	209	31	152	1,548
2003 Year .....	638	269	907	137	39	50	94	207	38	147	1,568
2004 Year .....	676	286	961	126	40	55	104	218	42	153	1,645
2005 Year .....	685	324	1,008	136	42	57	109	208	37	157	1,698
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
August .....	690	321	1,011	135	41	55	122	194	36	177	1,716
September .....	693	311	1,004	134	43	58	126	200	37	173	1,717
October .....	694	307	1,001	134	42	61	124	199	39	169	1,708
November .....	696	300	995	135	40	60	112	205	39	164	1,690
December .....	697	286	983	134	39	52	96	218	39	156	1,665
2008 January .....	698	296	995	130	42	39	78	231	39	162	1,677
February .....	699	302	1,000	117	40	29	66	234	39	166	1,662
March .....	700	313	1,013	107	38	26	65	221	39	169	1,653
April .....	701	319	1,020	106	39	31	78	210	40	172	1,665
May .....	704	303	1,007	113	40	38	92	207	41	173	1,673
June .....	706	295	1,001	121	40	43	103	210	42	170	1,686
July .....	707	295	1,002	130	41	47	114	206	37	169	1,699
August .....	707	302	1,009	132	41	54	128	195	39	167	1,710
September .....	R 702	R 303	R 1,006	R 127	R 38	R 59	R 138	R 189	R 39	R 168	R 1,705
October .....	E 702	E 312	E 1,014	E 128	E 37	E 60	RF 136	E 196	E 39	RE 150	E 1,700
November .....	E 702	E 321	E 1,022	E 127	E 39	E 61	F 129	E 201	E 38	E 160	E 1,716

<sup>a</sup> Includes lease condensate.  
<sup>b</sup> Liquefied petroleum gases.  
<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.  
<sup>d</sup> All crude oil stocks other than those in "SPR."  
<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.  
<sup>f</sup> See Note 4, "Petroleum New Stock Basis," at end of section.  
<sup>g</sup> Does not include stocks that are held in the Northeast Heating Oil Reserve.  
<sup>h</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>i</sup> Includes propylene.  
<sup>j</sup> Includes finished motor gasoline, motor gasoline blending components, and gasohol; excludes oxygenates.  
<sup>k</sup> Asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks,

petroleum coke, special naphthas, unfinished oils, waxes, other hydrocarbons and oxygenates, and miscellaneous products. Beginning in 2005, also includes naphtha-type jet fuel.  
R=Revised. E=Estimate. F=Forecast. --=Not applicable.

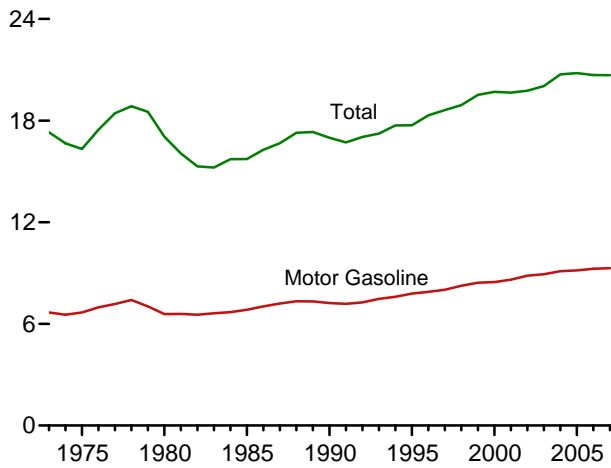
Notes: • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

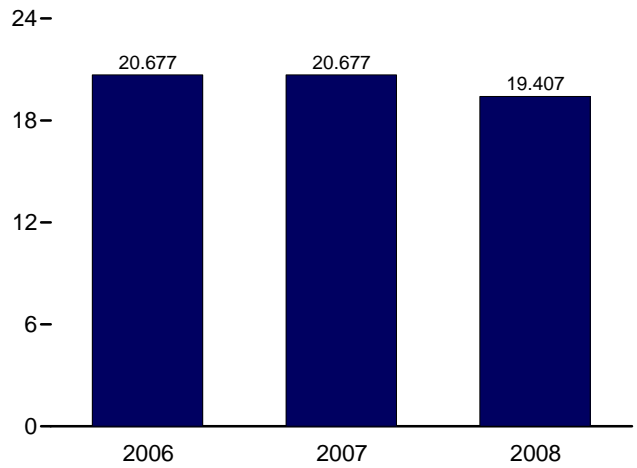
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual*, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual*, annual reports. • 1981-2007: *Petroleum Supply Annual*, annual reports. • 2008: EIA,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

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

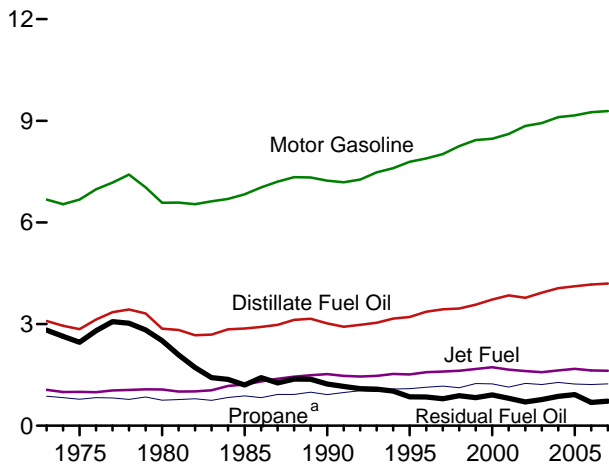
Total and Motor Gasoline, 1973-2007



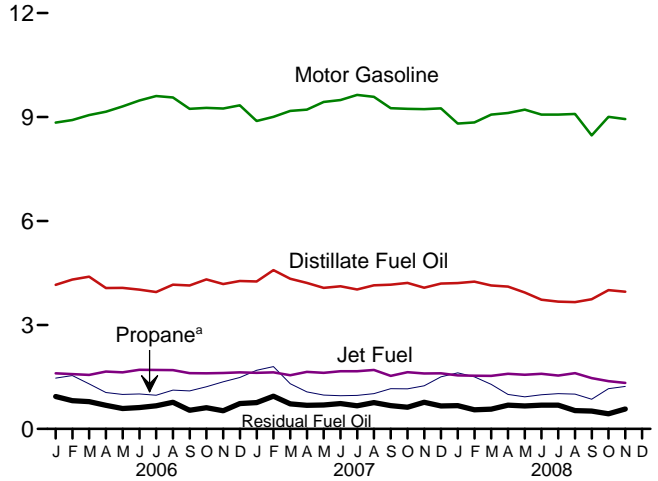
Total, January-November



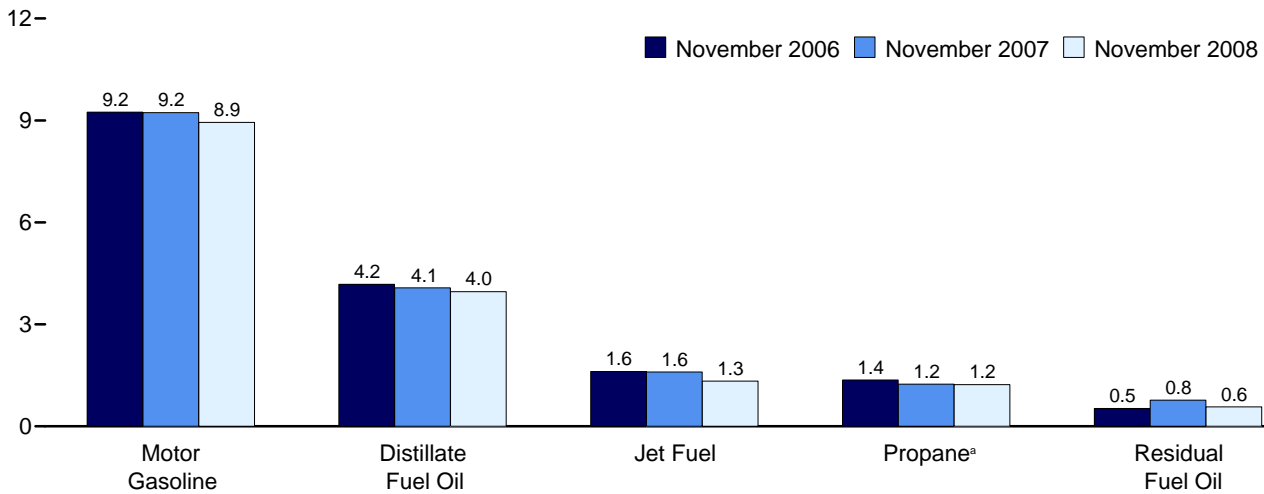
Selected Products, 1973-2007



Selected Products, Monthly



Selected Products



<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**  
(Thousand Barrels per Day)

	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Kerosene	LPG <sup>a</sup>		Lubricants	Motor Gasoline <sup>d</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>e</sup>	Total
						Propane <sup>c</sup>	Total						
<b>1973 Average</b>	522	45	3,092	1,059	216	872	1,449	162	6,674	261	2,822	1,005	17,308
1975 Average	419	39	2,851	1,001	159	783	1,333	137	6,675	247	2,462	1,001	16,322
1980 Average	396	35	2,866	1,068	158	754	1,469	159	6,579	237	2,508	1,581	17,056
1985 Average	425	27	2,868	1,218	114	883	1,599	145	6,831	264	1,202	1,032	15,726
1990 Average	483	24	3,021	1,522	43	917	1,556	164	7,235	339	1,229	1,373	16,988
1995 Average	486	21	3,207	1,514	54	1,096	1,899	156	7,789	365	852	1,381	17,725
1996 Average	484	20	3,365	1,578	62	1,136	2,012	151	7,891	379	848	1,518	18,309
1997 Average	505	22	3,435	1,599	66	1,170	2,038	160	8,017	377	797	1,605	18,620
1998 Average	521	19	3,461	1,622	78	1,120	1,952	168	8,253	447	887	1,508	18,917
1999 Average	547	21	3,572	1,673	73	1,246	2,195	169	8,431	477	830	1,532	19,519
2000 Average	525	20	3,722	1,725	67	1,235	2,231	166	8,472	406	909	1,458	19,701
2001 Average	519	19	3,847	1,655	72	1,142	2,044	153	8,610	437	811	1,481	19,649
2002 Average	512	18	3,776	1,614	43	1,248	2,163	151	8,848	463	700	1,474	19,761
2003 Average	503	16	3,927	1,578	55	1,215	2,074	140	8,935	455	772	1,579	20,034
2004 Average	537	17	4,058	1,630	64	1,276	2,132	141	9,105	524	865	1,657	20,731
2005 Average	546	19	4,118	1,679	70	1,229	2,030	141	9,159	515	920	1,605	20,802
<b>2006</b>													
January	295	9	4,159	1,605	76	1,465	2,128	119	8,839	490	934	1,783	20,436
February	330	16	4,308	1,582	118	1,540	2,344	199	8,911	407	816	1,546	20,577
March	413	22	4,395	1,560	99	1,299	2,157	139	9,054	520	786	1,464	20,608
April	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	715	18	4,019	1,704	28	1,007	1,901	148	9,478	548	618	1,805	20,982
July	662	20	3,950	1,700	38	970	1,969	134	9,607	492	667	1,502	20,740
August	743	28	4,162	1,696	29	1,119	2,011	137	9,564	535	768	1,761	21,434
September	667	18	4,141	1,608	27	1,094	1,937	119	9,236	624	538	1,644	20,559
October	592	19	4,315	1,605	30	1,216	1,998	164	9,267	514	612	1,654	20,769
November	478	13	4,180	1,613	25	1,362	2,143	122	9,244	563	525	1,762	20,669
December	199	13	4,268	1,631	48	1,483	2,182	96	9,338	633	732	1,656	20,795
<b>Average</b>	<b>521</b>	<b>18</b>	<b>4,169</b>	<b>1,633</b>	<b>54</b>	<b>1,215</b>	<b>2,052</b>	<b>137</b>	<b>9,253</b>	<b>522</b>	<b>689</b>	<b>1,640</b>	<b>20,687</b>
<b>2007</b>													
January	353	16	4,256	1,616	52	1,694	2,468	151	8,886	435	759	1,574	20,567
February	289	13	4,582	1,634	48	1,798	2,575	128	9,006	430	946	1,658	21,309
March	370	14	4,334	1,551	35	1,305	2,113	152	9,178	561	723	1,506	20,536
April	455	20	4,214	1,647	27	1,070	1,998	144	9,215	437	682	1,696	20,536
May	507	17	4,068	1,618	14	978	1,846	157	9,434	551	690	1,717	20,620
June	637	22	4,114	1,663	15	958	1,924	134	9,491	480	733	1,509	20,723
July	651	17	4,026	1,664	7	969	1,912	147	9,640	420	669	1,593	20,747
August	647	21	4,146	1,703	28	1,018	1,912	139	9,582	539	761	1,548	21,025
September	606	17	4,161	1,533	32	1,162	1,925	127	9,254	546	674	1,541	20,415
October	595	21	4,213	1,637	28	1,157	1,984	150	9,236	437	626	1,549	20,476
November	458	15	4,074	1,600	46	1,243	2,109	138	9,229	464	768	1,633	20,535
December	348	11	4,193	1,603	58	1,504	2,287	128	9,251	573	665	1,603	20,719
<b>Average</b>	<b>494</b>	<b>17</b>	<b>4,196</b>	<b>1,622</b>	<b>32</b>	<b>1,235</b>	<b>2,085</b>	<b>142</b>	<b>9,286</b>	<b>490</b>	<b>723</b>	<b>1,593</b>	<b>20,680</b>
<b>2008</b>													
January	302	13	4,209	1,546	31	1,620	2,333	132	8,814	501	672	1,561	20,114
February	313	13	4,251	1,537	50	1,504	2,314	131	8,842	203	552	1,576	19,782
March	295	13	4,140	1,533	46	1,288	2,120	143	9,069	474	571	1,328	19,732
April	360	19	4,108	1,592	25	995	1,855	144	9,117	482	684	1,382	19,768
May	444	19	3,936	1,564	28	928	1,864	142	9,216	456	661	1,398	19,729
June	581	16	3,728	1,589	28	988	1,872	135	9,071	450	688	1,395	19,553
July	556	14	3,672	1,541	29	1,017	1,932	137	9,072	522	687	1,249	19,412
August	522	20	3,657	1,611	24	1,002	1,940	157	9,090	471	526	1,247	19,267
September	R 536	R 16	R 3,740	R 1,467	R 27	R 856	R 1,418	R 96	R 8,469	R 358	R 516	R 1,153	R 17,796
October	F 485	RF 18	E 4,004	E 1,376	RF 20	E 1,160	F 1,941	RF 148	E 9,005	F 450	E 437	RE 1,161	E 19,045
November	F 403	F 14	E 3,960	E 1,329	F 42	E 1,228	F 2,040	F 121	E 8,941	F 472	E 574	E 1,367	E 19,263
<b>11-Month Average</b>	<b>E 436</b>	<b>E 16</b>	<b>E 3,945</b>	<b>E 1,517</b>	<b>E 32</b>	<b>E 1,143</b>	<b>E 1,966</b>	<b>E 135</b>	<b>E 8,975</b>	<b>E 441</b>	<b>E 597</b>	<b>E 1,346</b>	<b>E 19,407</b>
<b>2007 11-Month Average</b>	<b>508</b>	<b>18</b>	<b>4,196</b>	<b>1,624</b>	<b>30</b>	<b>1,210</b>	<b>2,066</b>	<b>143</b>	<b>9,289</b>	<b>482</b>	<b>728</b>	<b>1,593</b>	<b>20,677</b>
<b>2006 11-Month Average</b>	<b>551</b>	<b>19</b>	<b>4,160</b>	<b>1,633</b>	<b>54</b>	<b>1,190</b>	<b>2,040</b>	<b>141</b>	<b>9,245</b>	<b>512</b>	<b>685</b>	<b>1,638</b>	<b>20,677</b>

<sup>a</sup> Liquefied petroleum gases.

<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>c</sup> Includes propylene.

<sup>d</sup> 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.

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

Notes: • Petroleum products supplied is an approximation of petroleum

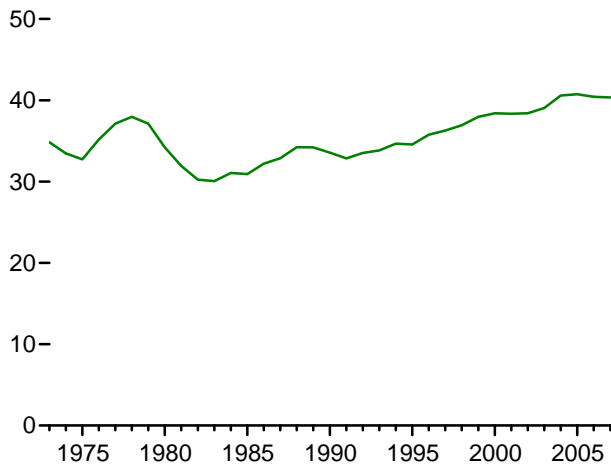
consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the 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](http://www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html).

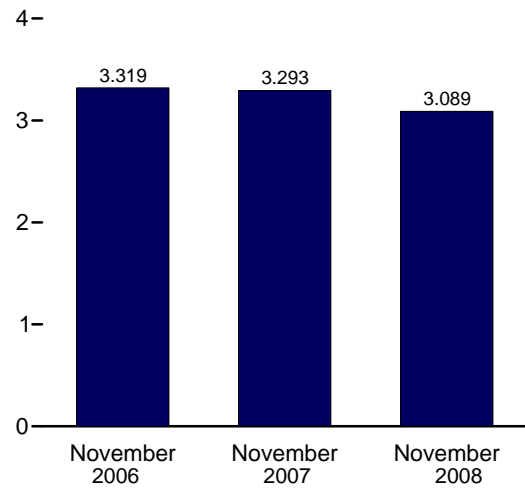
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual*, annual reports. • **1976-1980:** Energy Information Administration (EIA), *Energy Data Reports, Petroleum Statement, Annual*, annual reports. • **1981-2007:** EIA, *Petroleum Supply Annual*, annual reports.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

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

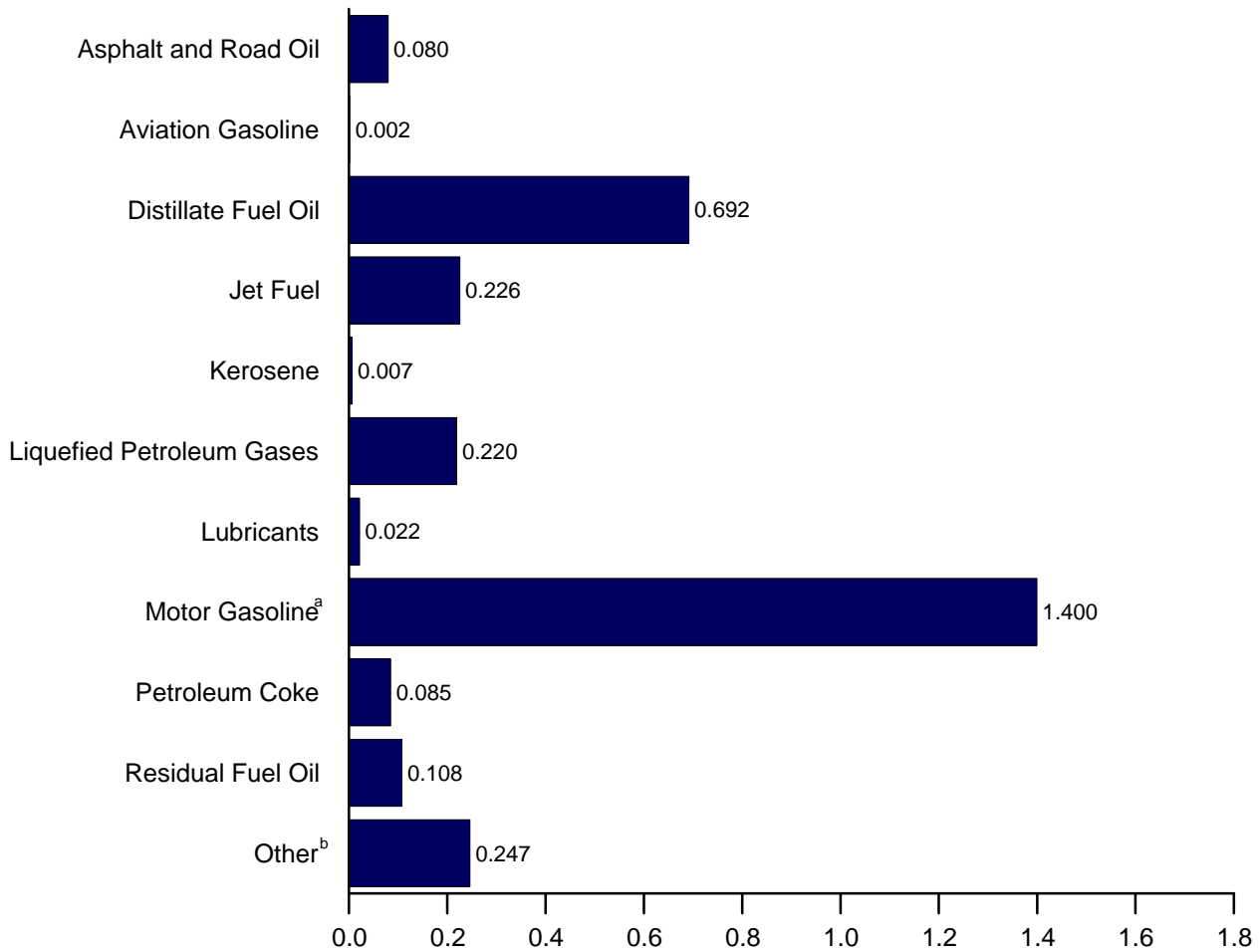
Total, 1973-2007



Total



By Product, November 2008



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

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

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

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Source: Table 3.6.

**Table 3.6 Heat Content of Petroleum Products Supplied by Type**  
(Trillion Btu)

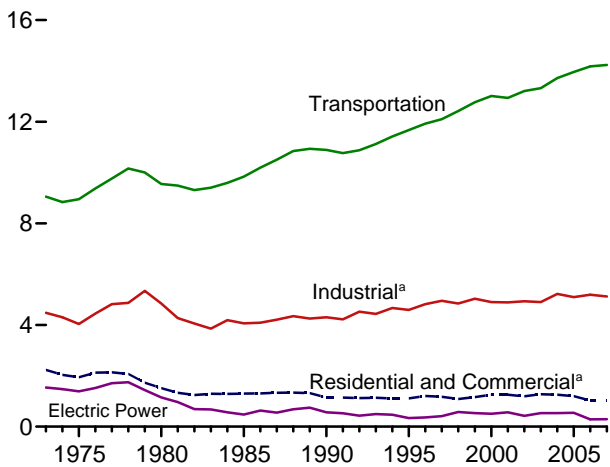
	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Kerosene	LPG <sup>a</sup>		Lubricants	Motor Gasoline <sup>d</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>e</sup>	Total
						Propane <sup>c</sup>	Total						
<b>1973 Total</b> .....	1,264	83	6,575	2,167	447	1,221	1,981	359	12,797	573	6,477	2,117	34,840
<b>1975 Total</b> .....	1,014	71	6,061	2,047	329	1,097	1,807	304	12,798	542	5,649	2,107	32,731
<b>1980 Total</b> .....	962	64	6,110	2,190	329	1,059	1,976	354	12,648	522	5,772	3,275	34,202
<b>1985 Total</b> .....	1,029	50	6,098	2,497	236	1,236	2,103	322	13,098	582	2,759	2,149	30,922
<b>1990 Total</b> .....	1,170	45	6,422	3,129	88	1,284	2,059	362	13,872	745	2,820	2,840	33,553
<b>1995 Total</b> .....	1,178	40	6,818	3,132	112	1,534	2,512	346	14,825	802	1,955	2,834	34,553
<b>1996 Total</b> .....	1,176	37	7,175	3,274	128	1,594	2,660	335	15,064	837	1,952	3,119	35,757
<b>1997 Total</b> .....	1,224	40	7,304	3,308	136	1,638	2,690	354	15,254	829	1,828	3,298	36,266
<b>1998 Total</b> .....	1,263	35	7,359	3,357	162	1,568	2,575	371	15,701	982	2,036	3,093	36,934
<b>1999 Total</b> .....	1,324	39	7,595	3,462	151	1,745	2,897	375	16,036	1,048	1,905	3,128	37,960
<b>2000 Total</b> .....	1,276	36	7,935	3,580	140	1,734	2,945	369	16,155	895	2,091	2,981	38,404
<b>2001 Total</b> .....	1,257	35	8,179	3,426	150	1,598	2,697	338	16,373	961	1,861	3,056	38,333
<b>2002 Total</b> .....	1,240	34	8,028	3,340	90	1,747	2,852	334	16,819	1,018	1,605	3,041	38,401
<b>2003 Total</b> .....	1,220	30	8,349	3,265	113	1,701	2,747	309	16,981	1,000	1,772	3,260	39,047
<b>2004 Total</b> .....	1,304	31	8,652	3,383	133	1,791	2,824	313	17,379	1,156	1,990	3,429	40,594
<b>2005 Total</b> .....	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 .....	85	3	794	274	17	154	241	26	1,465	97	153	264	3,420
April .....	102	3	710	281	14	121	213	27	1,433	80	129	251	3,244
May .....	130	3	735	287	8	118	214	23	1,506	91	114	282	3,395
June .....	142	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 .....	133	3	724	274	5	126	209	22	1,446	113	101	273	3,302
October .....	122	3	779	282	5	145	223	31	1,499	96	119	287	3,446
November .....	95	2	730	274	4	157	232	22	1,447	102	99	311	3,319
December .....	41	2	771	287	8	176	244	18	1,510	118	143	309	3,451
<b>Total</b> .....	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 .....	54	2	747	259	8	193	259	22	1,316	73	167	284	3,190
March .....	76	2	783	273	6	155	235	29	1,485	105	141	270	3,403
April .....	91	3	736	280	5	123	215	26	1,443	79	129	287	3,294
May .....	104	3	735	284	2	116	205	30	1,526	103	135	290	3,417
June .....	127	3	719	283	3	110	207	24	1,486	87	138	246	3,324
July .....	134	3	727	293	1	115	213	28	1,560	78	130	272	3,438
August .....	133	3	749	299	5	121	213	26	1,550	101	148	257	3,484
September .....	121	3	727	261	5	134	207	23	1,449	99	127	253	3,274
October .....	122	3	761	288	5	138	221	28	1,494	82	122	267	3,393
November .....	91	2	712	272	8	143	227	25	1,445	84	145	282	3,293
December .....	72	2	757	282	10	179	255	24	1,497	107	130	299	3,434
<b>Total</b> .....	1,197	32	8,921	3,358	67	1,729	2,733	313	17,689	1,077	1,659	3,308	40,353
<b>2008</b> January .....	62	2	760	272	5	193	260	25	1,426	93	131	297	3,333
February .....	60	2	718	253	8	167	241	23	1,338	35	101	287	3,067
March .....	61	2	748	269	8	153	236	27	1,467	88	111	252	3,270
April .....	72	3	718	271	4	114	200	26	1,427	87	129	233	3,170
May .....	91	3	711	275	5	110	208	27	1,491	85	129	245	3,270
June .....	116	2	651	270	5	114	202	25	1,420	81	130	234	3,136
July .....	114	2	663	271	5	121	215	26	1,468	97	134	221	3,217
August .....	107	3	660	283	4	119	216	29	1,471	88	103	228	3,193
September .....	<sup>R</sup> 107	<sup>R</sup> 2	<sup>R</sup> 654	<sup>R</sup> 250	<sup>R</sup> 5	<sup>R</sup> 98	<sup>R</sup> 153	<sup>R</sup> 17	<sup>R</sup> 1,326	<sup>R</sup> 65	<sup>R</sup> 97	<sup>R</sup> 179	<sup>R</sup> 2,854
October .....	<sup>F</sup> 100	<sup>F</sup> 3	<sup>E</sup> 723	<sup>E</sup> 242	<sup>F</sup> 4	<sup>E</sup> 138	<sup>F</sup> 216	<sup>RF</sup> 28	<sup>E</sup> 1,457	<sup>F</sup> 84	<sup>E</sup> 85	<sup>E</sup> 215	<sup>E</sup> 3,156
November .....	<sup>F</sup> 80	<sup>F</sup> 2	<sup>E</sup> 692	<sup>E</sup> 226	<sup>F</sup> 7	<sup>E</sup> 141	<sup>F</sup> 220	<sup>F</sup> 22	<sup>E</sup> 1,400	<sup>F</sup> 85	<sup>E</sup> 108	<sup>E</sup> 247	<sup>E</sup> 3,089
<b>11-Month Total</b> .....	<sup>E</sup> 970	<sup>E</sup> 27	<sup>E</sup> 7,698	<sup>E</sup> 2,882	<sup>E</sup> 60	<sup>E</sup> 1,469	<sup>E</sup> 2,365	<sup>E</sup> 275	<sup>E</sup> 15,691	<sup>E</sup> 890	<sup>E</sup> 1,258	<sup>E</sup> 2,639	<sup>E</sup> 34,756
<b>2007 11-Month Total</b> .....	1,125	30	8,164	3,076	56	1,550	2,478	289	16,192	970	1,529	3,009	36,920
<b>2006 11-Month Total</b> .....	1,220	31	8,093	3,093	103	1,525	2,457	285	16,112	1,030	1,438	3,107	36,969

<sup>a</sup> Liquefied petroleum gases.  
<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>c</sup> Includes propylene.  
<sup>d</sup> 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

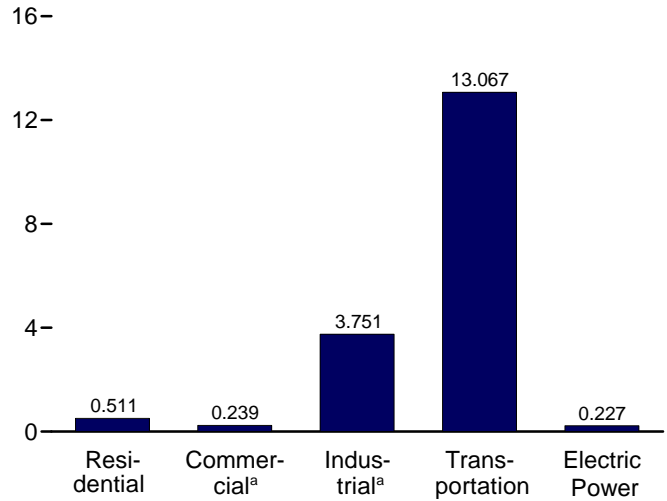
as fuel. Beginning in 2005, also includes naphtha-type jet fuel.  
R=Revised. E=Estimate. F=Forecast.  
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products 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](http://www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html).  
Sources: Tables 3.5, A1, and A3.

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

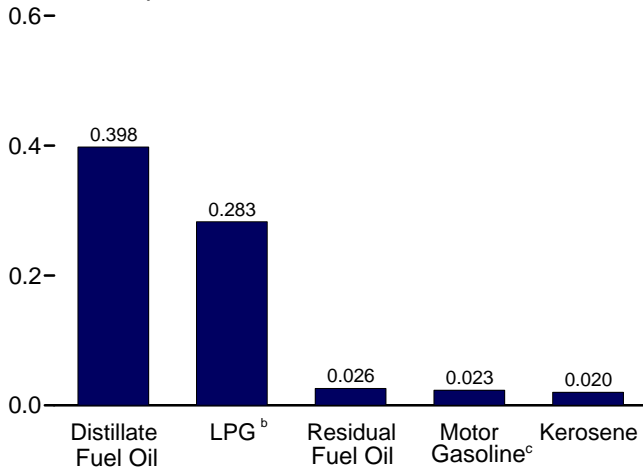
By Sector, 1973-2007



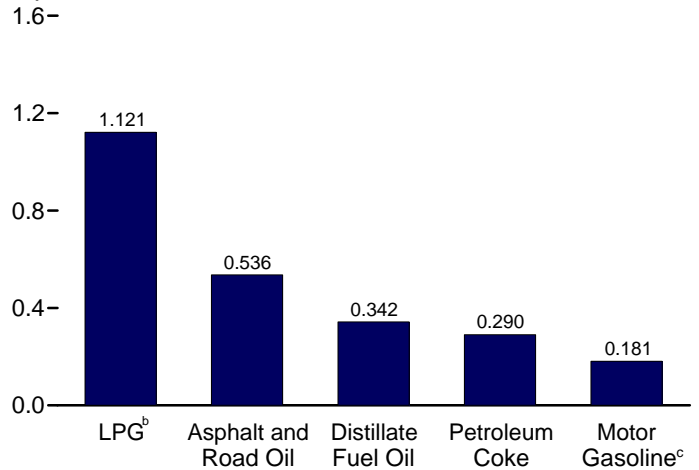
By Sector, September 2008



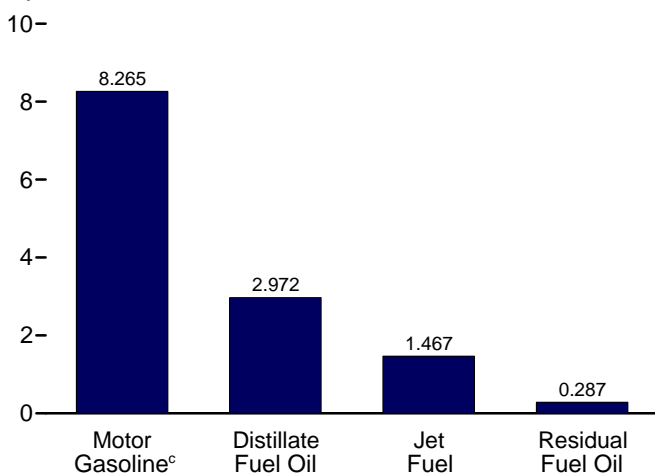
Residential and Commercial Sectors<sup>a</sup>, Selected Products, September 2008



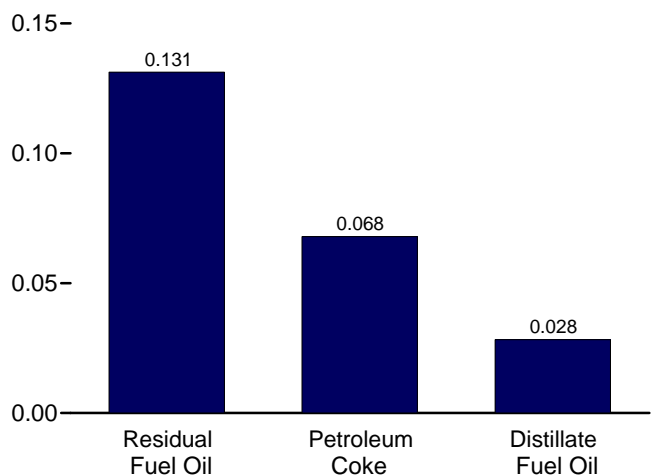
Industrial Sector<sup>a</sup>, Selected Products, September 2008



Transportation Sector, Selected Products, September 2008



Electric Power Sector, September 2008



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

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Includes ethanol blended into motor gasoline.

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

**Table 3.7a Petroleum Consumption: Residential and Commercial Sectors**  
(Thousand Barrels per Day)

	Residential Sector				Commercial Sector <sup>a</sup>						
	Distillate Fuel Oil	Kero-sene	Liquefied Petroleum Gases	Total	Distillate Fuel Oil	Kero-sene	Liquefied Petroleum Gases	Motor Gasoline <sup>b</sup>	Petro-leum Coke	Residual Fuel Oil	Total
1973 Average .....	942	110	435	1,487	303	31	77	45	NA	290	746
1975 Average .....	850	78	389	1,316	276	24	69	46	NA	214	629
1980 Average .....	617	51	242	910	243	20	43	56	NA	245	606
1985 Average .....	514	77	249	839	297	16	44	50	NA	99	506
1990 Average .....	460	31	276	767	252	6	49	58	0	100	465
1995 Average .....	426	36	306	767	225	11	54	10	(s)	62	361
1996 Average .....	434	43	358	835	227	10	63	14	(s)	60	373
1997 Average .....	411	45	349	805	209	12	62	22	(s)	48	353
1998 Average .....	363	52	329	744	202	15	58	20	(s)	37	332
1999 Average .....	389	54	404	847	206	13	71	15	(s)	32	338
2000 Average .....	424	46	427	897	230	14	75	23	(s)	40	383
2001 Average .....	427	46	406	879	239	15	72	20	(s)	30	376
2002 Average .....	404	29	412	845	209	8	73	24	(s)	35	348
2003 Average .....	425	34	426	885	226	9	75	32	(s)	48	391
2004 Average .....	433	41	401	875	221	10	71	25	(s)	53	380
2005 Average .....	402	40	391	833	210	10	69	24	(s)	50	365
2006 January .....	461	45	R 361	R 867	260	10	R 64	R 24	(s)	45	R 403
February .....	535	71	R 397	R 1,003	301	16	R 70	R 25	(s)	52	R 465
March .....	433	59	R 366	R 857	244	13	R 65	R 25	(s)	42	R 389
April .....	309	50	R 333	R 692	174	11	R 59	R 25	0	30	R 300
May .....	284	28	R 324	R 637	160	7	R 57	R 26	0	28	R 277
June .....	265	17	R 322	R 604	149	4	R 57	R 26	0	26	R 262
July .....	246	23	R 334	R 602	138	5	R 59	R 27	(s)	24	R 253
August .....	254	17	R 341	R 612	143	4	R 60	R 26	(s)	25	R 259
September .....	272	16	R 328	R 617	153	4	R 58	R 26	(s)	27	R 268
October .....	276	18	R 339	R 633	156	4	R 60	R 26	(s)	27	R 273
November .....	309	15	R 363	R 688	174	3	R 64	R 26	(s)	30	R 298
December .....	388	28	R 370	R 787	219	7	R 65	R 26	(s)	38	R 355
Average .....	335	32	R 348	R 715	189	7	R 61	R 26	(s)	33	R 316
2007 January .....	421	31	R 418	R 870	237	7	R 74	R 25	(s)	43	R 385
February .....	510	28	R 437	R 975	287	6	R 77	R 25	(s)	52	R 448
March .....	447	21	R 358	R 826	252	5	R 63	R 25	(s)	46	R 391
April .....	261	16	R 339	R 615	147	4	R 60	R 25	(s)	27	R 262
May .....	191	8	R 313	R 512	108	2	R 55	R 26	0	19	R 210
June .....	222	9	R 326	R 557	125	2	R 58	R 26	0	23	R 234
July .....	217	4	R 324	R 545	122	1	R 57	R 27	0	22	R 229
August .....	244	17	R 324	R 584	137	4	R 57	R 26	(s)	25	R 250
September .....	260	19	R 326	R 605	146	4	R 58	R 26	(s)	26	R 260
October .....	297	17	R 336	R 650	167	4	R 59	R 26	(s)	30	R 286
November .....	404	27	R 358	R 789	228	6	R 63	R 26	(s)	41	R 364
December .....	597	35	R 388	R 1,020	337	8	R 68	R 26	(s)	61	R 500
Average .....	338	19	R 353	R 711	191	4	R 62	R 26	(s)	34	R 318
2008 January .....	569	18	R 395	R 983	321	4	R 70	R 24	(s)	58	R 477
February .....	579	30	R 392	R 1,001	326	7	R 69	R 24	(s)	59	R 486
March .....	426	27	R 359	R 813	240	6	R 63	R 25	(s)	43	R 378
April .....	330	15	R 314	R 660	186	3	R 55	R 25	(s)	34	R 304
May .....	235	17	R 316	R 568	132	4	R 56	R 25	0	24	R 241
June .....	257	17	R 317	R 591	145	4	R 56	R 25	0	26	R 256
July .....	244	17	R 327	R 589	137	4	R 58	R 25	0	25	R 249
August .....	219	15	R 329	R 563	123	3	R 58	R 25	0	22	R 232
September .....	254	16	240	511	143	4	42	23	(s)	26	239
9-Month Average .....	345	19	332	696	194	4	59	25	(s)	35	317
2007 9-Month Average .....	306	17	351	674	173	4	62	26	(s)	31	295
2006 9-Month Average .....	338	36	345	719	191	8	61	26	(s)	33	318

<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 into motor gasoline.

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 data beginning in 1973.

Sources: See end of section.

**Table 3.7b Petroleum Consumption: Industrial Sector**  
(Thousand Barrels per Day)

	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
<b>1973 Average</b> .....	522	691	75	902	88	133	254	809	1,005	4,479
<b>1975 Average</b> .....	419	630	58	844	68	116	246	658	1,001	4,038
<b>1980 Average</b> .....	396	621	87	1,172	82	82	234	586	1,581	4,842
<b>1985 Average</b> .....	425	526	21	1,285	75	114	261	326	1,032	4,065
<b>1990 Average</b> .....	483	541	6	1,215	84	97	325	179	1,373	4,304
<b>1995 Average</b> .....	486	532	7	1,527	80	105	328	147	1,381	4,594
<b>1996 Average</b> .....	484	557	9	1,580	78	105	343	146	1,518	4,819
<b>1997 Average</b> .....	505	566	9	1,617	82	111	331	127	1,605	4,953
<b>1998 Average</b> .....	521	570	11	1,553	86	105	390	100	1,508	4,844
<b>1999 Average</b> .....	547	558	6	1,709	87	80	426	90	1,532	5,035
<b>2000 Average</b> .....	525	563	8	1,720	86	79	361	105	1,458	4,903
<b>2001 Average</b> .....	519	611	11	1,557	79	155	390	89	1,481	4,892
<b>2002 Average</b> .....	512	566	7	1,668	78	163	383	83	1,474	4,934
<b>2003 Average</b> .....	503	534	12	1,561	72	171	375	96	1,579	4,903
<b>2004 Average</b> .....	537	570	14	1,647	73	195	423	108	1,657	5,223
<b>2005 Average</b> .....	546	594	19	1,549	72	187	404	123	1,605	5,100
<b>2006</b> January .....	295	693	20	R 1,684	61	R 189	380	149	1,783	R 5,252
February .....	330	639	31	R 1,854	102	R 190	298	131	1,546	R 5,122
March .....	413	729	26	R 1,706	71	R 193	427	131	1,464	R 5,161
April .....	513	548	22	R 1,556	78	R 196	345	109	1,467	R 4,833
May .....	633	531	13	R 1,512	64	R 199	401	93	1,630	R 5,076
June .....	715	451	8	R 1,503	76	R 202	446	85	1,805	R 5,292
July .....	662	400	10	R 1,558	69	R 205	383	86	1,502	R 4,875
August .....	743	506	8	R 1,591	70	R 204	432	91	1,761	R 5,407
September .....	667	586	7	R 1,532	61	R 197	529	82	1,644	R 5,305
October .....	592	694	8	R 1,580	84	R 198	421	90	1,654	R 5,321
November .....	478	668	7	R 1,695	63	R 197	478	83	1,762	R 5,432
December .....	199	682	13	R 1,726	49	R 199	548	122	1,656	R 5,195
<b>Average</b> .....	521	594	14	R 1,623	71	R 198	425	104	1,640	R 5,189
<b>2007</b> January .....	353	769	14	R 1,952	78	R 190	345	121	1,574	R 5,396
February .....	289	780	13	R 2,037	66	R 192	352	127	1,658	R 5,514
March .....	370	655	9	R 1,672	78	R 196	490	117	1,506	R 5,093
April .....	455	669	7	R 1,581	74	R 197	366	110	1,696	R 5,156
May .....	507	599	4	R 1,460	81	R 202	476	109	1,717	R 5,154
June .....	637	528	4	R 1,522	69	R 203	390	106	1,509	R 4,967
July .....	651	458	2	R 1,513	76	R 206	343	94	1,593	R 4,935
August .....	647	479	8	R 1,512	72	R 205	458	97	1,548	R 5,025
September .....	606	588	8	R 1,523	66	R 198	468	96	1,541	R 5,093
October .....	595	594	7	R 1,570	77	R 197	370	90	1,549	R 5,049
November .....	458	500	12	R 1,669	71	R 197	399	127	1,633	R 5,066
December .....	348	423	15	R 1,809	66	R 198	493	104	1,603	R 5,059
<b>Average</b> .....	494	585	9	R 1,649	73	R 198	413	108	1,593	R 5,123
<b>2008</b> January .....	302	595	8	R 1,845	68	R 188	423	101	1,561	R 5,091
February .....	313	594	13	R 1,830	67	R 189	125	82	1,576	R 4,790
March .....	295	564	12	R 1,677	74	R 194	410	88	1,328	R 4,642
April .....	360	540	7	R 1,467	74	R 195	415	103	1,382	R 4,544
May .....	444	482	7	R 1,475	73	R 197	394	100	1,398	R 4,571
June .....	581	259	7	R 1,481	69	R 194	372	96	1,395	R 4,455
July .....	556	225	8	R 1,528	71	R 194	455	102	1,249	R 4,387
August .....	522	232	7	R 1,535	81	R 194	400	78	1,247	R 4,295
September .....	536	342	7	1,121	49	181	290	71	1,153	3,751
<b>9-Month Average</b> .....	435	425	9	1,551	70	192	367	91	1,365	4,504
<b>2007 9-Month Average</b> .....	503	612	8	1,638	73	199	411	108	1,593	5,145
<b>2006 9-Month Average</b> .....	554	564	16	1,609	72	197	405	106	1,623	5,147

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

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

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

R=Revised.

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

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

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

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

Sources: See end of section.



**Table 3.7c Petroleum Consumption: Transportation and Electric Power Sectors**  
(Thousand Barrels per Day)

	Transportation Sector								Electric Power Sector <sup>a</sup>			
	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total	Distillate Fuel Oil <sup>d</sup>	Petroleum Coke	Residual Fuel Oil <sup>e</sup>	Total
<b>1973 Average</b> .....	45	1,045	1,042	35	74	6,496	317	9,054	129	7	1,406	1,542
<b>1975 Average</b> .....	39	998	992	31	70	6,512	310	8,951	107	1	1,280	1,388
<b>1980 Average</b> .....	35	1,311	1,062	13	77	6,441	608	9,546	79	2	1,069	1,151
<b>1985 Average</b> .....	27	1,491	1,218	21	71	6,667	342	9,838	40	3	435	478
<b>1990 Average</b> .....	24	1,722	1,522	16	80	7,080	443	10,888	45	14	507	566
<b>1995 Average</b> .....	21	1,973	1,514	13	76	7,674	397	11,668	51	37	247	334
<b>1996 Average</b> .....	20	2,096	1,578	11	73	7,772	370	11,921	51	36	273	360
<b>1997 Average</b> .....	22	2,198	1,599	10	78	7,883	310	12,099	52	46	311	410
<b>1998 Average</b> .....	19	2,263	1,622	13	81	8,128	294	12,420	64	56	456	576
<b>1999 Average</b> .....	21	2,352	1,673	10	82	8,336	290	12,765	66	51	418	535
<b>2000 Average</b> .....	20	2,422	1,725	8	81	8,370	386	13,012	82	45	378	505
<b>2001 Average</b> .....	19	2,489	1,655	10	74	8,435	255	12,938	80	47	437	564
<b>2002 Average</b> .....	18	2,536	1,614	10	73	8,662	295	13,208	60	80	287	427
<b>2003 Average</b> .....	16	2,665	1,578	12	68	8,733	249	13,321	76	79	379	534
<b>2004 Average</b> .....	17	2,783	1,630	14	69	8,885	321	13,718	52	101	382	535
<b>2005 Average</b> .....	19	2,858	1,679	20	68	8,948	365	13,957	54	111	382	547
<b>2006 January</b> .....	9	2,712	1,605	R 20	58	R 8,626	565	R 13,594	34	110	175	319
February .....	16	2,799	1,582	R 22	96	R 8,696	484	R 13,697	33	108	149	291
March .....	22	2,965	1,560	21	67	R 8,836	523	R 13,994	24	93	91	208
April .....	22	3,001	1,654	R 19	73	R 8,933	426	R 14,128	33	98	117	248
May .....	22	3,065	1,633	R 18	60	R 9,083	356	R 14,237	32	88	111	230
June .....	18	3,116	1,704	R 18	72	R 9,250	328	R 14,506	38	102	178	317
July .....	20	3,119	1,700	R 19	65	R 9,375	333	R 14,630	46	109	225	379
August .....	28	3,207	1,696	R 19	66	R 9,333	357	R 14,706	53	102	296	450
September .....	18	3,103	1,608	19	58	R 9,013	296	R 14,114	27	95	133	255
October .....	19	3,158	1,605	R 19	80	R 9,043	351	R 14,274	31	94	144	268
November .....	13	2,996	1,613	R 20	59	R 9,021	268	R 13,992	32	85	143	260
December .....	13	2,945	1,631	R 21	47	R 9,113	451	R 14,219	34	85	121	240
<b>Average</b> .....	18	3,017	1,633	20	67	R 9,029	395	R 14,178	35	97	157	289
<b>2007 January</b> .....	16	2,785	1,616	24	74	R 8,671	413	R 13,598	45	90	182	317
February .....	13	2,915	1,634	R 25	62	R 8,789	422	R 13,860	90	78	345	513
March .....	14	2,942	1,551	R 20	74	R 8,956	393	R 13,950	38	70	167	275
April .....	20	3,107	1,647	R 19	70	R 8,993	381	R 14,237	30	70	165	266
May .....	17	3,137	1,618	18	76	R 9,207	419	R 14,492	33	76	143	252
June .....	22	3,195	1,663	R 18	65	R 9,262	420	R 14,646	44	90	185	319
July .....	17	3,186	1,664	R 18	72	R 9,407	373	R 14,737	43	77	180	300
August .....	21	3,219	1,703	R 18	68	R 9,351	392	R 14,772	67	80	247	394
September .....	17	3,132	1,533	R 18	62	R 9,031	388	R 14,181	35	77	163	275
October .....	21	3,120	1,637	R 19	73	R 9,013	357	R 14,240	36	67	149	251
November .....	15	2,912	1,600	R 20	67	R 9,007	529	R 14,150	29	64	71	165
December .....	11	2,801	1,603	R 22	62	R 9,028	396	R 13,922	35	80	104	219
<b>Average</b> .....	17	3,038	1,622	R 20	69	R 9,062	406	R 14,234	43	77	174	294
<b>2008 January</b> .....	13	2,671	1,546	R 22	64	R 8,601	408	R 13,326	53	78	106	237
February .....	13	2,711	1,537	R 22	64	R 8,629	322	R 13,298	41	77	89	207
March .....	13	2,883	1,533	R 20	70	R 8,850	362	R 13,731	27	63	78	168
April .....	19	3,023	1,592	18	70	R 8,897	459	R 14,079	28	66	88	182
May .....	19	3,060	1,564	R 18	69	R 8,993	446	R 14,170	27	62	91	180
June .....	16	3,019	1,589	R 18	66	R 8,852	407	R 13,966	49	79	159	286
July .....	14	3,033	1,541	R 18	67	R 8,853	436	R 13,961	33	67	125	225
August .....	20	3,057	1,611	19	76	R 8,871	321	R 13,974	27	71	105	203
September .....	16	2,972	1,467	14	47	8,265	287	13,067	28	68	131	227
<b>9-Month Average</b> .....	16	2,937	1,554	19	66	8,759	384	13,734	35	70	108	213
<b>2007 9-Month Average</b> .....	18	3,070	1,625	20	69	9,077	400	14,279	47	79	196	322
<b>2006 9-Month Average</b> .....	19	3,011	1,638	19	68	9,019	407	14,183	35	100	164	300

<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 2005, 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.

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

amount of fuel oil no. 4.

R=Revised.

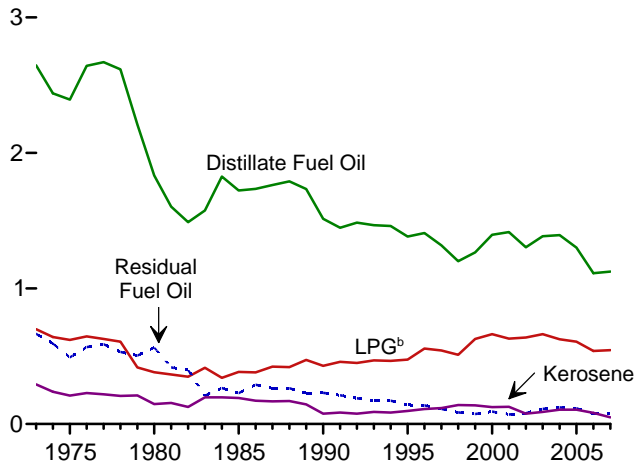
Notes: • Transportation sector data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and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

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

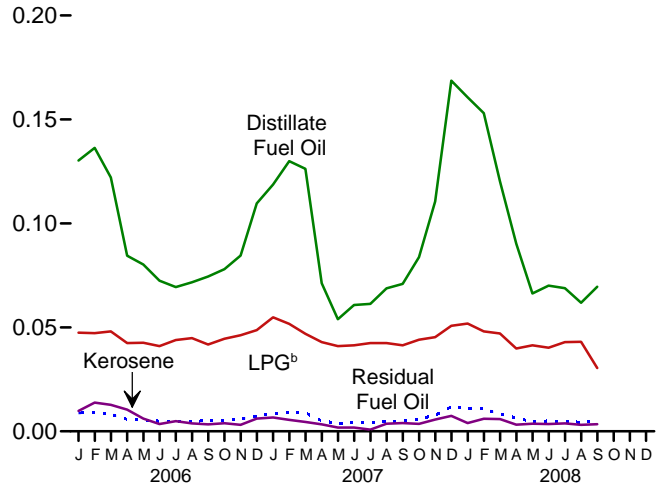
Sources: See end of section.

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

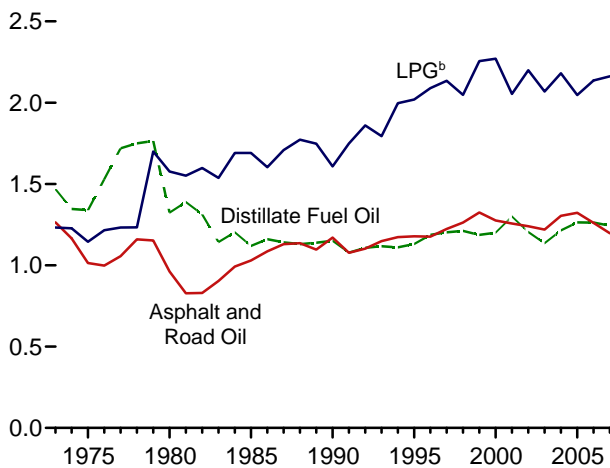
Residential and Commercial Sectors<sup>a</sup>, 1973-2007



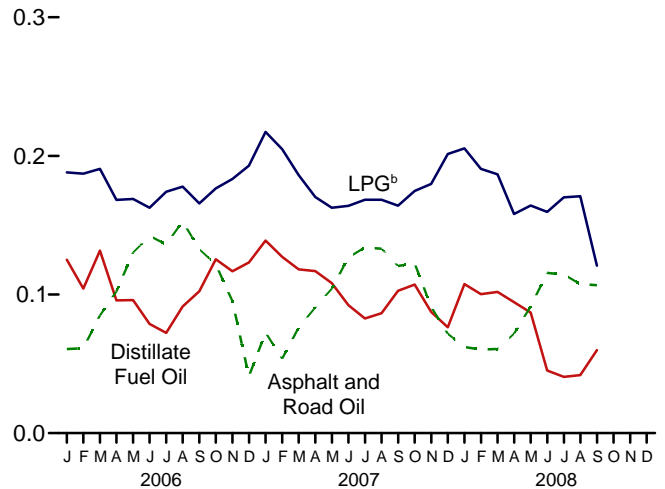
Residential and Commercial Sectors<sup>a</sup>, Monthly



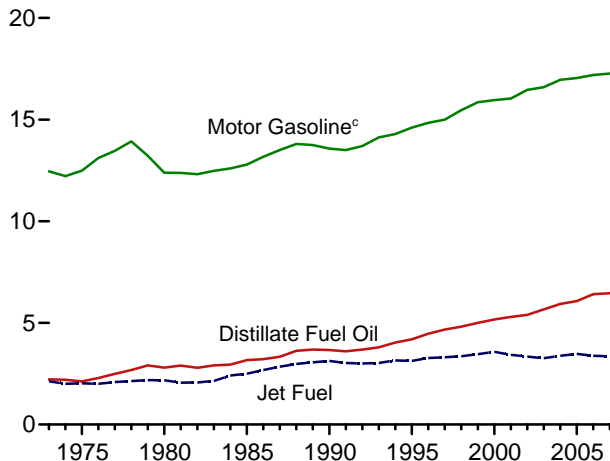
Industrial Sector<sup>a</sup>, 1973-2007



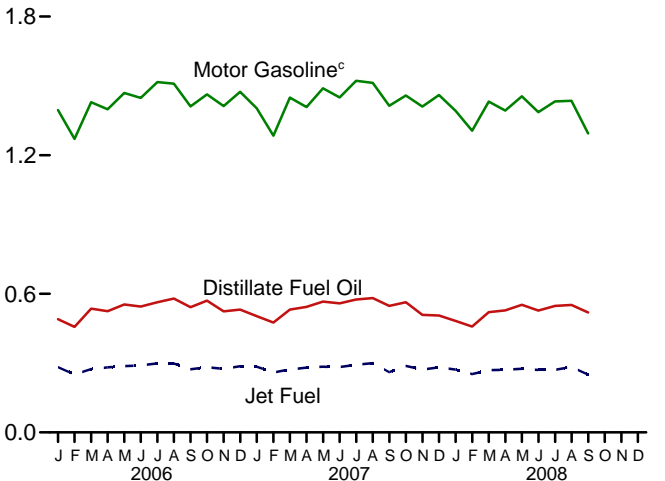
Industrial Sector<sup>a</sup>, Monthly



Transportation Sector, 1973-2007



Transportation Sector, Monthly



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

<sup>b</sup> Liquefied petroleum gases.

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

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.

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

	Residential Sector				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
<b>1973 Total</b> .....	<b>2,003</b>	<b>227</b>	<b>595</b>	<b>2,825</b>	<b>644</b>	<b>65</b>	<b>105</b>	<b>87</b>	<b>NA</b>	<b>665</b>	<b>1,565</b>
<b>1975 Total</b> .....	<b>1,807</b>	<b>161</b>	<b>528</b>	<b>2,495</b>	<b>587</b>	<b>49</b>	<b>93</b>	<b>89</b>	<b>NA</b>	<b>492</b>	<b>1,310</b>
<b>1980 Total</b> .....	<b>1,316</b>	<b>107</b>	<b>325</b>	<b>1,748</b>	<b>518</b>	<b>41</b>	<b>57</b>	<b>107</b>	<b>NA</b>	<b>565</b>	<b>1,287</b>
<b>1985 Total</b> .....	<b>1,092</b>	<b>159</b>	<b>327</b>	<b>1,578</b>	<b>631</b>	<b>33</b>	<b>58</b>	<b>96</b>	<b>NA</b>	<b>228</b>	<b>1,045</b>
<b>1990 Total</b> .....	<b>978</b>	<b>64</b>	<b>365</b>	<b>1,407</b>	<b>536</b>	<b>12</b>	<b>64</b>	<b>111</b>	<b>0</b>	<b>230</b>	<b>953</b>
<b>1995 Total</b> .....	<b>905</b>	<b>74</b>	<b>404</b>	<b>1,383</b>	<b>479</b>	<b>22</b>	<b>71</b>	<b>18</b>	<b>(s)</b>	<b>141</b>	<b>732</b>
<b>1996 Total</b> .....	<b>926</b>	<b>89</b>	<b>473</b>	<b>1,488</b>	<b>483</b>	<b>21</b>	<b>84</b>	<b>27</b>	<b>(s)</b>	<b>137</b>	<b>751</b>
<b>1997 Total</b> .....	<b>874</b>	<b>93</b>	<b>461</b>	<b>1,428</b>	<b>444</b>	<b>25</b>	<b>81</b>	<b>43</b>	<b>(s)</b>	<b>111</b>	<b>704</b>
<b>1998 Total</b> .....	<b>772</b>	<b>108</b>	<b>434</b>	<b>1,314</b>	<b>429</b>	<b>31</b>	<b>77</b>	<b>39</b>	<b>(s)</b>	<b>85</b>	<b>661</b>
<b>1999 Total</b> .....	<b>828</b>	<b>111</b>	<b>534</b>	<b>1,473</b>	<b>438</b>	<b>27</b>	<b>94</b>	<b>28</b>	<b>(s)</b>	<b>73</b>	<b>661</b>
<b>2000 Total</b> .....	<b>905</b>	<b>95</b>	<b>564</b>	<b>1,563</b>	<b>491</b>	<b>30</b>	<b>99</b>	<b>45</b>	<b>(s)</b>	<b>92</b>	<b>756</b>
<b>2001 Total</b> .....	<b>908</b>	<b>95</b>	<b>535</b>	<b>1,539</b>	<b>508</b>	<b>31</b>	<b>94</b>	<b>37</b>	<b>(s)</b>	<b>70</b>	<b>742</b>
<b>2002 Total</b> .....	<b>860</b>	<b>60</b>	<b>543</b>	<b>1,463</b>	<b>444</b>	<b>16</b>	<b>96</b>	<b>45</b>	<b>(s)</b>	<b>80</b>	<b>681</b>
<b>2003 Total</b> .....	<b>905</b>	<b>70</b>	<b>564</b>	<b>1,539</b>	<b>481</b>	<b>19</b>	<b>100</b>	<b>60</b>	<b>(s)</b>	<b>111</b>	<b>771</b>
<b>2004 Total</b> .....	<b>924</b>	<b>85</b>	<b>531</b>	<b>1,539</b>	<b>470</b>	<b>20</b>	<b>94</b>	<b>49</b>	<b>(s)</b>	<b>122</b>	<b>756</b>
<b>2005 Total</b> .....	<b>854</b>	<b>84</b>	<b>517</b>	<b>1,455</b>	<b>447</b>	<b>22</b>	<b>91</b>	<b>46</b>	<b>(s)</b>	<b>116</b>	<b>722</b>
<b>2006</b> January .....	83	8	R 40	R 132	47	2	R 7	4	(s)	9	69
February .....	87	11	R 40	R 139	49	3	R 7	R 4	(s)	9	72
March .....	78	10	R 41	R 129	44	2	R 7	4	(s)	8	R 66
April .....	54	8	R 36	R 99	30	2	R 6	4	0	6	R 48
May .....	51	5	R 36	R 93	29	1	R 6	4	0	5	R 46
June .....	46	3	R 35	R 84	26	1	R 6	4	0	5	R 42
July .....	44	4	R 37	R 86	25	1	7	4	(s)	5	R 41
August .....	46	3	R 38	R 87	26	1	R 7	4	(s)	5	R 42
September .....	48	3	R 36	R 86	27	1	R 6	4	(s)	5	43
October .....	50	3	R 38	R 91	28	1	R 7	4	(s)	5	R 45
November .....	54	3	R 39	R 96	30	1	R 7	4	(s)	6	48
December .....	70	5	R 41	R 116	40	1	R 7	4	(s)	7	60
<b>Total</b> .....	<b>712</b>	<b>66</b>	<b>R 458</b>	<b>R 1,236</b>	<b>401</b>	<b>15</b>	<b>R 81</b>	<b>R 49</b>	<b>(s)</b>	<b>75</b>	<b>R 621</b>
<b>2007</b> January .....	76	5	R 47	R 128	43	1	R 8	4	(s)	8	R 65
February .....	83	5	R 44	R 132	47	1	R 8	R 4	(s)	9	R 68
March .....	81	4	R 40	R 124	46	1	R 7	4	(s)	9	R 66
April .....	46	3	R 36	R 85	26	1	R 6	4	(s)	5	42
May .....	34	1	R 35	R 71	19	(s)	R 6	4	0	4	R 34
June .....	39	1	R 35	R 75	22	(s)	R 6	4	0	4	37
July .....	39	1	R 36	R 76	22	(s)	R 6	4	0	4	R 37
August .....	44	3	R 36	R 83	25	1	R 6	4	(s)	5	R 41
September .....	45	3	R 35	R 84	26	1	R 6	4	(s)	5	42
October .....	54	3	R 37	R 94	30	1	R 7	4	(s)	6	48
November .....	71	5	R 39	R 114	40	1	R 7	4	(s)	8	R 59
December .....	108	6	R 43	R 157	61	1	R 8	4	(s)	12	R 86
<b>Total</b> .....	<b>719</b>	<b>40</b>	<b>R 463</b>	<b>R 1,222</b>	<b>405</b>	<b>9</b>	<b>R 82</b>	<b>R 49</b>	<b>(s)</b>	<b>79</b>	<b>R 624</b>
<b>2008</b> January .....	103	3	R 44	R 150	58	1	R 8	4	(s)	11	R 82
February .....	98	5	R 41	R 144	55	1	R 7	4	(s)	11	R 78
March .....	77	5	R 40	R 122	43	1	R 7	4	(s)	8	R 64
April .....	58	3	R 34	R 94	33	1	R 6	4	(s)	6	R 49
May .....	42	3	R 35	R 81	24	1	R 6	4	0	5	40
June .....	45	3	R 34	R 82	25	1	R 6	4	0	5	41
July .....	44	3	R 36	R 84	25	1	R 6	4	0	5	R 41
August .....	40	3	R 37	R 79	22	1	R 6	4	0	4	38
September .....	44	3	26	73	25	1	5	4	(s)	5	39
<b>9-Month Total</b> .....	<b>550</b>	<b>30</b>	<b>327</b>	<b>907</b>	<b>310</b>	<b>7</b>	<b>58</b>	<b>35</b>	<b>(s)</b>	<b>60</b>	<b>471</b>
<b>2007 9-Month Total</b> .....	<b>487</b>	<b>26</b>	<b>344</b>	<b>857</b>	<b>275</b>	<b>6</b>	<b>61</b>	<b>37</b>	<b>(s)</b>	<b>54</b>	<b>432</b>
<b>2006 9-Month Total</b> .....	<b>538</b>	<b>56</b>	<b>339</b>	<b>933</b>	<b>303</b>	<b>13</b>	<b>60</b>	<b>36</b>	<b>(s)</b>	<b>57</b>	<b>469</b>

<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 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

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/pepro.html> for all available data beginning in 1973.

Sources: Tables 3.7a, A1, and A3.

**Table 3.8b Heat Content of Petroleum Consumption: Industrial Sector**  
(Trillion Btu)

	Industrial Sector <sup>a</sup>									Total
	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>	
<b>1973 Total</b> .....	1,264	1,469	156	1,233	195	255	558	1,858	2,117	9,104
<b>1975 Total</b> .....	1,014	1,339	119	1,144	149	223	540	1,509	2,107	8,146
<b>1980 Total</b> .....	962	1,324	181	1,577	182	158	516	1,349	3,275	9,525
<b>1985 Total</b> .....	1,029	1,119	44	1,690	166	218	575	748	2,149	7,738
<b>1990 Total</b> .....	1,170	1,150	12	1,608	186	185	714	411	2,840	8,278
<b>1995 Total</b> .....	1,178	1,131	15	2,019	178	200	721	337	2,834	8,614
<b>1996 Total</b> .....	1,176	1,187	18	2,089	173	200	757	335	3,119	9,053
<b>1997 Total</b> .....	1,224	1,203	19	2,134	182	212	727	291	3,298	9,290
<b>1998 Total</b> .....	1,263	1,211	22	2,048	191	199	858	230	3,093	9,116
<b>1999 Total</b> .....	1,324	1,187	13	2,256	193	152	936	207	3,128	9,396
<b>2000 Total</b> .....	1,276	1,200	16	2,271	190	150	796	241	2,981	9,120
<b>2001 Total</b> .....	1,257	1,300	23	2,054	174	295	858	203	3,056	9,220
<b>2002 Total</b> .....	1,240	1,204	14	2,200	172	309	842	190	3,041	9,213
<b>2003 Total</b> .....	1,220	1,136	24	2,068	159	324	825	220	3,260	9,237
<b>2004 Total</b> .....	1,304	1,214	28	2,181	161	372	934	249	3,429	9,872
<b>2005 Total</b> .....	1,323	1,264	39	2,047	160	356	889	281	3,320	9,680
<b>2006</b> January .....	61	125	4	R 188	11	R 31	71	29	319	R 839
February .....	61	104	5	R 187	17	R 28	50	23	263	R 740
March .....	85	132	5	R 191	13	R 31	80	25	264	R 826
April .....	102	96	4	R 168	14	R 31	62	21	251	R 749
May .....	130	96	2	R 169	12	R 32	75	18	282	R 817
June .....	142	79	1	R 163	14	R 32	81	16	296	R 823
July .....	136	72	2	R 174	13	R 33	72	17	263	R 781
August .....	153	91	1	R 178	13	R 33	81	18	298	R 866
September .....	133	102	1	R 166	11	R 31	96	16	273	R 828
October .....	122	125	1	R 177	16	R 32	79	18	287	R 856
November .....	95	117	1	R 183	11	R 31	86	16	311	R 852
December .....	41	123	2	R 193	9	R 32	102	24	309	R 836
<b>Total</b> .....	<b>1,261</b>	<b>1,263</b>	<b>30</b>	<b>R 2,136</b>	<b>156</b>	<b>R 376</b>	<b>934</b>	<b>239</b>	<b>3,416</b>	<b>R 9,811</b>
<b>2007</b> January .....	73	139	2	R 217	15	R 31	64	24	302	R 866
February .....	54	127	2	R 205	11	R 28	59	22	284	R 793
March .....	76	118	2	R 186	15	R 32	92	23	270	R 812
April .....	91	117	1	R 170	13	R 31	66	21	287	R 797
May .....	104	108	1	R 163	15	R 33	89	21	290	R 824
June .....	127	92	1	R 164	13	R 32	71	20	246	R 765
July .....	134	83	(s)	R 168	14	R 33	64	18	272	R 787
August .....	133	87	1	R 168	13	R 33	86	19	257	R 797
September .....	121	103	1	R 164	12	R 31	85	18	253	R 787
October .....	122	107	1	R 175	15	R 32	69	18	267	R 806
November .....	91	87	2	R 180	13	R 31	72	24	282	R 782
December .....	72	76	3	R 201	12	R 32	92	20	299	R 808
<b>Total</b> .....	<b>1,197</b>	<b>1,245</b>	<b>18</b>	<b>R 2,162</b>	<b>161</b>	<b>R 378</b>	<b>909</b>	<b>248</b>	<b>3,308</b>	<b>R 9,625</b>
<b>2008</b> January .....	62	107	1	R 205	13	R 30	79	20	297	R 815
February .....	60	100	2	R 191	12	R 29	22	15	287	R 718
March .....	61	102	2	R 187	14	R 31	77	17	252	R 743
April .....	72	94	1	R 158	13	R 30	75	19	233	R 697
May .....	91	87	1	R 164	14	R 32	74	20	245	R 728
June .....	116	45	1	R 160	13	R 30	67	18	234	R 684
July .....	114	41	1	R 170	13	R 31	85	20	221	R 697
August .....	107	42	1	R 171	15	R 31	75	15	228	R 686
September .....	107	60	1	121	9	28	52	13	179	571
<b>9-Month Total</b> .....	<b>790</b>	<b>679</b>	<b>13</b>	<b>1,526</b>	<b>116</b>	<b>274</b>	<b>605</b>	<b>157</b>	<b>2,177</b>	<b>6,338</b>
<b>2007 9-Month Total</b> .....	<b>912</b>	<b>974</b>	<b>12</b>	<b>1,606</b>	<b>121</b>	<b>283</b>	<b>675</b>	<b>186</b>	<b>2,460</b>	<b>7,228</b>
<b>2006 9-Month Total</b> .....	<b>1,003</b>	<b>898</b>	<b>25</b>	<b>1,583</b>	<b>120</b>	<b>281</b>	<b>667</b>	<b>182</b>	<b>2,509</b>	<b>7,268</b>

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

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

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

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.

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

	Transportation Sector							Electric Power Sector <sup>a</sup>				
	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total	Distillate Fuel Oil <sup>d</sup>	Petroleum Coke	Residual Fuel Oil <sup>e</sup>	Total
<b>1973 Total</b> .....	83	2,222	2,131	48	163	12,455	727	17,831	273	15	3,226	3,515
<b>1975 Total</b> .....	71	2,121	2,029	42	155	12,485	711	17,614	226	2	2,937	3,166
<b>1980 Total</b> .....	64	2,795	2,179	17	172	12,383	1,398	19,009	169	5	2,459	2,634
<b>1985 Total</b> .....	50	3,170	2,497	28	156	12,784	786	19,471	85	7	998	1,090
<b>1990 Total</b> .....	45	3,661	3,129	22	176	13,575	1,016	21,625	97	30	1,163	1,289
<b>1995 Total</b> .....	40	4,195	3,132	17	168	14,607	911	23,069	108	81	566	755
<b>1996 Total</b> .....	37	4,469	3,274	15	163	14,837	851	23,647	109	80	628	817
<b>1997 Total</b> .....	40	4,672	3,308	13	172	14,999	712	23,917	111	102	715	927
<b>1998 Total</b> .....	35	4,812	3,357	17	180	15,463	674	24,537	136	124	1,047	1,306
<b>1999 Total</b> .....	39	5,001	3,462	13	182	15,855	665	25,218	140	112	959	1,211
<b>2000 Total</b> .....	36	5,165	3,580	11	179	15,960	888	25,820	175	99	871	1,144
<b>2001 Total</b> .....	35	5,292	3,426	13	164	16,041	586	25,556	171	103	1,003	1,277
<b>2002 Total</b> .....	34	5,392	3,340	13	162	16,465	677	26,084	127	175	659	961
<b>2003 Total</b> .....	30	5,666	3,265	16	150	16,597	571	26,296	161	175	869	1,205
<b>2004 Total</b> .....	31	5,932	3,383	18	152	16,959	740	27,214	111	222	879	1,212
<b>2005 Total</b> .....	35	6,076	3,475	27	151	17,043	837	27,644	115	243	876	1,235
<b>2006 January</b> .....	1	490	282	2	11	R 1,395	110	R 2,292	6	21	34	61
February .....	2	457	251	2	16	R 1,271	85	R 2,084	5	18	26	50
March .....	3	535	274	2	13	R 1,429	102	R 2,359	4	17	18	39
April .....	3	524	281	2	13	R 1,398	80	R 2,303	6	18	22	46
May .....	3	553	287	2	11	R 1,469	69	R 2,396	6	16	22	44
June .....	3	545	290	2	13	R 1,448	62	R 2,362	7	18	34	59
July .....	3	563	299	2	12	R 1,517	65	R 2,461	8	20	44	72
August .....	4	579	298	2	12	R 1,510	70	R 2,475	9	19	58	86
September .....	3	542	274	2	11	R 1,411	56	R 2,298	5	17	25	47
October .....	3	570	282	2	15	R 1,463	68	R 2,404	6	17	28	51
November .....	2	524	274	2	11	R 1,412	51	R 2,276	6	15	27	48
December .....	2	532	287	2	9	R 1,474	88	R 2,393	6	16	24	46
<b>Total</b> .....	<b>33</b>	<b>6,414</b>	<b>3,379</b>	<b>R 26</b>	<b>147</b>	<b>R 17,197</b>	<b>906</b>	<b>R 28,103</b>	<b>74</b>	<b>214</b>	<b>361</b>	<b>648</b>
<b>2007 January</b> .....	3	503	284	3	14	R 1,403	80	R 2,289	8	17	36	60
February .....	2	476	259	R 2	11	R 1,284	74	R 2,108	15	13	61	89
March .....	2	531	273	2	14	R 1,449	77	R 2,348	7	13	33	53
April .....	3	543	280	2	13	R 1,408	72	R 2,321	5	13	31	49
May .....	3	566	284	2	14	R 1,490	82	R 2,441	6	14	28	48
June .....	3	558	283	2	12	R 1,450	79	R 2,388	8	16	35	59
July .....	3	575	293	2	13	R 1,522	73	R 2,481	8	14	35	57
August .....	3	581	299	2	13	R 1,513	76	R 2,488	12	15	48	75
September .....	3	547	261	2	11	R 1,414	73	R 2,311	6	14	31	51
October .....	3	563	288	2	14	R 1,458	70	R 2,398	6	12	29	48
November .....	2	509	272	2	12	R 1,410	100	R 2,308	5	12	13	30
December .....	2	506	282	R 2	12	R 1,461	77	R 2,341	6	15	20	42
<b>Total</b> .....	<b>32</b>	<b>6,459</b>	<b>3,358</b>	<b>R 26</b>	<b>152</b>	<b>R 17,262</b>	<b>933</b>	<b>R 28,222</b>	<b>92</b>	<b>168</b>	<b>399</b>	<b>660</b>
<b>2008 January</b> .....	2	482	272	R 2	12	R 1,392	79	R 2,242	10	15	21	45
February .....	2	458	253	2	11	R 1,306	59	R 2,091	7	14	16	37
March .....	2	521	269	2	13	R 1,432	71	R 2,310	5	12	15	32
April .....	3	528	271	2	13	R 1,393	87	R 2,296	5	12	17	33
May .....	3	553	275	2	13	R 1,455	87	R 2,387	5	12	18	34
June .....	2	528	270	2	12	R 1,386	77	R 2,277	9	14	30	53
July .....	2	548	271	2	13	R 1,432	85	R 2,352	6	13	24	43
August .....	3	552	283	2	14	R 1,435	63	R 2,352	5	13	21	39
September .....	2	519	250	1	8	1,294	54	2,130	5	12	25	42
<b>9-Month Total</b> .....	<b>22</b>	<b>4,688</b>	<b>2,414</b>	<b>18</b>	<b>109</b>	<b>12,525</b>	<b>661</b>	<b>20,437</b>	<b>55</b>	<b>116</b>	<b>186</b>	<b>357</b>
<b>2007 9-Month Total</b> .....	<b>24</b>	<b>4,881</b>	<b>2,516</b>	<b>19</b>	<b>115</b>	<b>12,933</b>	<b>686</b>	<b>21,175</b>	<b>75</b>	<b>129</b>	<b>337</b>	<b>541</b>
<b>2006 9-Month Total</b> .....	<b>27</b>	<b>4,789</b>	<b>2,536</b>	<b>19</b>	<b>113</b>	<b>12,848</b>	<b>699</b>	<b>21,030</b>	<b>56</b>	<b>165</b>	<b>282</b>	<b>504</b>

<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 2005, 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.

R=Revised.

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

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

Sources: Tables 3.7c, A1, and A3.

## 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:

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

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

Following are notes on the individual sector groupings:

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

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

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

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

**Distillate Fuel Oil Consumed by the End-Use Sectors, Monthly**—Residential sector and commercial sector monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. (For each month of the current year, the residential and commercial consumption increase from the same month in the previous year is based on the percent increase in that month's No. 2

heating oil sales from the same month in the previous year.) The years' No. 2 heating oil sales totals are from the following sources: for 1973–1980, the Ethyl Corporation, *Monthly Report of Heating Oil Sales*; for 1981 and 1982, the American Petroleum Institute, *Monthly Report of Heating Oil Sales*; and for 1983 forward, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale.

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

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

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

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

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

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

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

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

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

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

Sales of LPG to the residential and commercial sector are converted from thousand gallons per year to thousand barrels per year and are assumed to be the annual consumption of LPG by the sector.

The quantity of LPG sold each year for consumption in internal combustion engines is allocated between the transportation and industrial sectors on the basis of data for special fuels used on highways published by the U.S. Department of Transportation, Federal Highway Administration, in *Highway Statistics*. The allocations of LPG sold for internal combustion engine use to the transportation sector range from a low of 20 percent (in 2001) to a high of 73 percent (in 1994).

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

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

1973–1982: EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports, based primarily on data collected by Form EIA-174, "Sales of Liquefied Petroleum Gases."

1983: End-use consumption estimates for 1983 are based on 1982 end-use consumption because the collection of data under Form EIA-174 was discontinued after data year 1982.

1984 forward: American Petroleum Institute (API), "Sales of Natural Gas Liquids and Liquefied Refinery Gases," which is based on an LPG sales survey jointly sponsored by API, the Gas Processors Association, and the National Liquefied Petroleum Gas Association. EIA adjusts the data to remove quantities of pentanes plus and to estimate withheld values.



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

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

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

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

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

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

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

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

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

Following are notes on the individual sector groupings:

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

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

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

**Residual Fuel Oil Consumed by the End-Use Sectors, Monthly**—Commercial sector monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. (For each month of the current year, the consumption increase from the same month in the previous year is based on the percent increase in that month's No. 2 heating oil sales from the same month in the previous year.) The years' No. 2 heating oil sales totals are from the following sources: for 1973–1980, the Ethyl Corporation, *Monthly Report of Heating Oil Sales*; for 1981 and 1982, the American Petroleum Institute, *Monthly Report of Heating Oil Sales*; and for 1983–1996, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale.

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

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

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

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



# 4

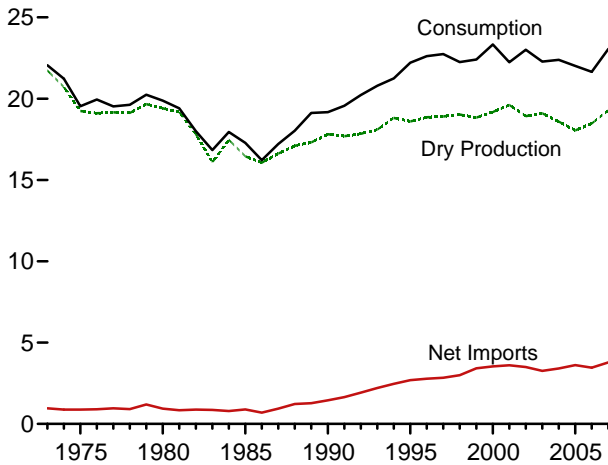
## Natural Gas



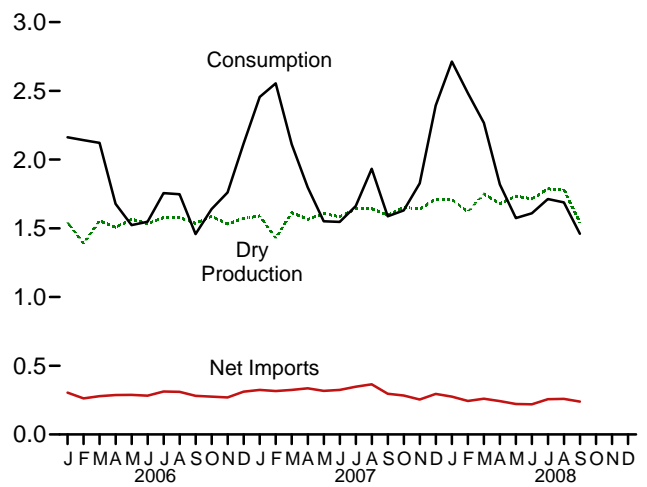
Natural gas pipeline, El Paso County, Texas. Source: U.S. Department of Energy.

**Figure 4.1 Natural Gas**  
(Trillion Cubic Feet)

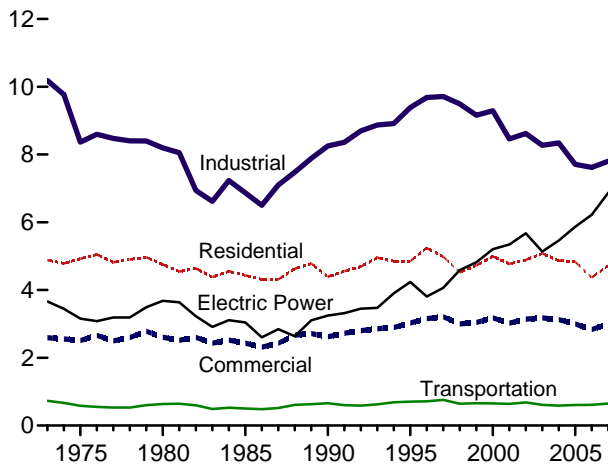
Overview, 1973-2007



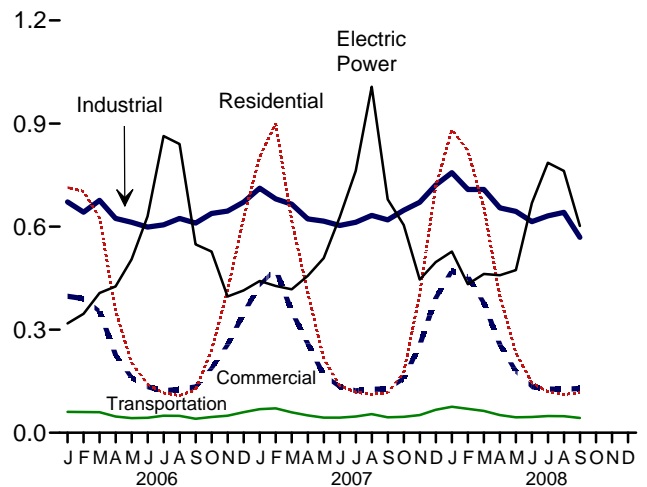
Overview, Monthly



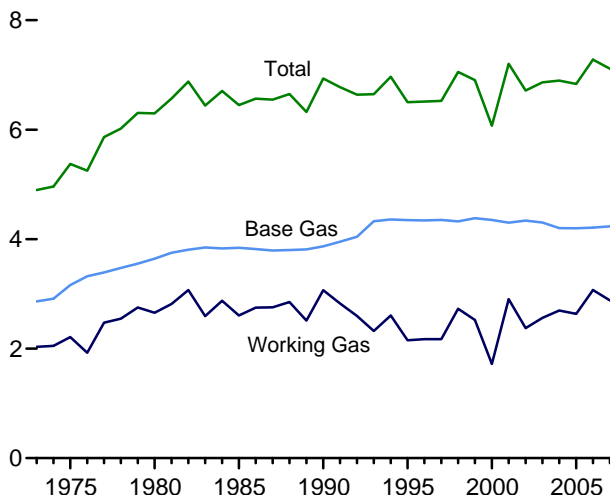
Consumption by Sector, 1973-2007



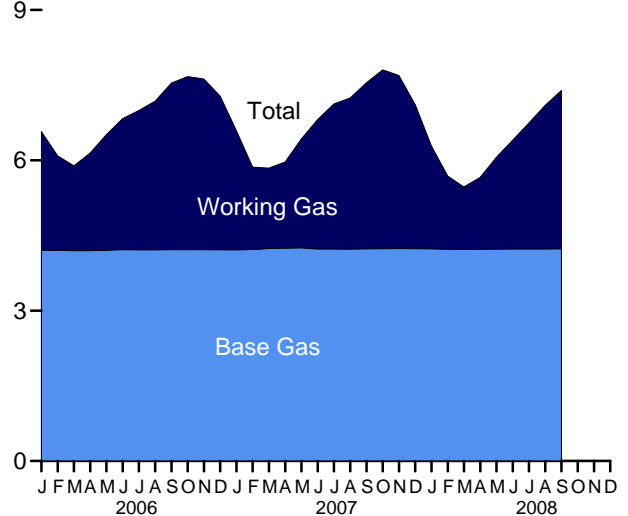
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2007



Underground Storage, End of Month



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.

**Table 4.1 Natural Gas Overview**  
(Billion Cubic Feet)

	Gross Withdrawals <sup>a</sup>	Marketed Production (Wet) <sup>b</sup>	Extraction Loss <sup>c</sup>	Dry Gas Production <sup>d</sup>	Supplemental Gaseous Fuels <sup>e</sup>	Trade			Net Storage Withdrawals <sup>f</sup>	Balancing Item <sup>g</sup>	Consumption <sup>h</sup>
						Imports	Exports	Net Imports			
<b>1973 Total</b> .....	24,067	22,648	917	21,731	NA	1,033	77	956	-442	-196	22,049
<b>1975 Total</b> .....	21,104	20,109	872	19,236	NA	953	73	880	-344	-235	19,538
<b>1980 Total</b> .....	21,870	20,180	777	19,403	155	985	49	936	23	-640	19,877
<b>1985 Total</b> .....	19,607	17,270	816	16,454	126	950	55	894	235	-428	17,281
<b>1990 Total</b> .....	21,523	18,594	784	17,810	123	1,532	86	1,447	-513	307	19,174
<b>1995 Total</b> .....	23,744	19,506	908	18,599	110	2,841	154	2,687	415	396	22,207
<b>1996 Total</b> .....	24,114	19,812	958	18,854	109	2,937	153	2,784	2	860	22,610
<b>1997 Total</b> .....	24,213	19,866	964	18,902	103	2,994	157	2,837	24	871	22,737
<b>1998 Total</b> .....	24,108	19,961	938	19,024	102	3,152	159	2,993	-530	657	22,246
<b>1999 Total</b> .....	23,823	19,805	973	18,832	98	3,586	163	3,422	172	-119	22,405
<b>2000 Total</b> .....	24,174	20,198	1,016	19,182	90	3,782	244	3,538	829	-305	23,333
<b>2001 Total</b> .....	24,501	20,570	954	19,616	86	3,977	373	3,604	-1,166	99	22,239
<b>2002 Total</b> .....	23,941	19,885	957	18,928	68	4,015	516	3,499	468	44	23,007
<b>2003 Total</b> .....	24,119	19,974	876	19,099	68	3,944	680	3,264	-197	44	22,277
<b>2004 Total</b> .....	23,970	19,517	927	18,591	60	4,259	854	3,404	-114	448	22,389
<b>2005 Total</b> .....	23,457	18,927	876	18,051	64	4,341	729	3,612	52	232	22,011
<b>2006</b>											
January .....	1,982	1,618	76	1,543	6	360	56	305	271	39	2,162
February .....	1,801	1,458	68	1,390	6	321	59	262	495	-11	2,141
March .....	1,993	1,630	76	1,554	6	348	69	279	206	77	2,122
April .....	1,920	1,582	74	1,508	5	332	45	287	-260	139	1,678
May .....	1,967	1,642	77	1,566	4	351	63	288	-374	40	1,524
June .....	1,934	1,609	75	1,534	6	348	66	282	-317	43	1,547
July .....	1,980	1,655	77	1,578	5	371	59	312	-166	26	1,756
August .....	1,989	1,656	77	1,578	6	365	55	310	-194	48	1,748
September .....	1,940	1,611	75	1,536	5	334	53	281	-364	(s)	1,458
October .....	2,015	1,665	78	1,587	6	334	59	275	-135	-93	1,640
November .....	1,966	1,607	75	1,532	6	339	70	269	51	-97	1,761
December .....	2,020	1,649	77	1,572	6	383	72	311	351	-125	2,116
<b>Total</b> .....	<b>23,507</b>	<b>19,382</b>	<b>906</b>	<b>18,476</b>	<b>66</b>	<b>4,186</b>	<b>724</b>	<b>3,462</b>	<b>-436</b>	<b>85</b>	<b>21,653</b>
<b>2007</b>											
January .....	2,043	E 1,659	69	E 1,590	E 6	393	69	324	684	-148	2,456
February .....	1,841	E 1,493	64	E 1,429	E 6	373	57	316	731	73	2,555
March .....	2,078	E 1,687	74	E 1,614	E 6	402	77	325	48	119	2,112
April .....	1,999	E 1,636	71	E 1,565	E 5	387	51	336	-120	11	1,798
May .....	2,078	E 1,683	75	E 1,608	E 4	380	62	318	-459	81	1,552
June .....	1,978	E 1,655	71	E 1,584	E 5	381	57	324	-389	23	1,547
July .....	2,055	E 1,717	74	E 1,643	E 5	419	71	348	-313	-21	1,662
August .....	2,059	E 1,716	73	E 1,643	E 5	427	62	365	-126	46	1,933
September .....	2,006	E 1,668	72	E 1,596	E 5	361	65	296	-298	-11	1,588
October .....	2,107	E 1,731	77	E 1,654	E 4	347	64	284	-258	-53	1,631
November .....	2,094	E 1,714	76	E 1,638	E 5	341	86	254	108	-177	1,828
December .....	2,197	E 1,790	77	E 1,713	E 4	397	101	295	569	-188	2,394
<b>Total</b> .....	<b>24,536</b>	<b>E 20,151</b>	<b>874</b>	<b>E 19,278</b>	<b>E 61</b>	<b>4,608</b>	<b>822</b>	<b>3,785</b>	<b>177</b>	<b>-246</b>	<b>23,054</b>
<b>2008</b>											
January .....	2,196	E 1,783	75	E 1,709	E 2	R 386	R 111	R 275	824	R -96	R 2,713
February .....	2,077	E 1,693	72	E 1,621	E 4	R 346	R 102	R 244	593	R 22	2,484
March .....	2,243	E 1,828	78	E 1,750	E 5	R 364	R 104	R 260	219	R 32	R 2,267
April .....	2,133	E 1,756	76	E 1,679	E 5	R 321	R 78	R 243	-190	R 82	1,819
May .....	2,188	E 1,814	80	E 1,734	E 4	R 295	73	R 222	-402	R 16	R 1,574
June .....	2,145	E 1,788	73	E 1,715	E 5	R 285	65	R 220	-339	R 9	1,609
July .....	2,218	E 1,864	77	E 1,787	E 4	318	61	257	-342	R 6	R 1,713
August .....	R 2,187	RE 1,859	77	RE 1,781	E 5	R 325	R 66	R 250	-350	R -7	R 1,689
September .....	1,967	E 1,603	62	E 1,542	E 5	E 306	E 67	E 249	-300	-26	1,460
<b>9-Month Total</b> .....	<b>19,353</b>	<b>E 15,988</b>	<b>669</b>	<b>E 15,319</b>	<b>E 39</b>	<b>E 2,946</b>	<b>E 727</b>	<b>E 2,219</b>	<b>-288</b>	<b>38</b>	<b>17,328</b>
<b>2007 9-Month Total</b> .....	<b>18,138</b>	<b>E 14,916</b>	<b>644</b>	<b>E 14,272</b>	<b>E 48</b>	<b>3,523</b>	<b>571</b>	<b>2,952</b>	<b>-242</b>	<b>172</b>	<b>17,202</b>
<b>2006 9-Month Total</b> .....	<b>17,506</b>	<b>14,461</b>	<b>676</b>	<b>13,785</b>	<b>48</b>	<b>3,130</b>	<b>523</b>	<b>2,607</b>	<b>-704</b>	<b>400</b>	<b>16,136</b>

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

<sup>b</sup> Gross withdrawals minus repressuring, nonhydrocarbon gases removed, and vented and flared. See Note 1, "Production," at end of section.

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

<sup>d</sup> Marketed production (wet) minus extraction loss.

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

<sup>f</sup> Net withdrawals from underground storage. For 1980-2006, also includes net withdrawals of liquefied natural gas in above-ground tanks. See Note 4, "Storage," at end of section.

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

<sup>h</sup> See Note 6, "Consumption," at end of section.

<sup>i</sup> May include unknown quantities of nonhydrocarbon gases.

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

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

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

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

Sources: • **Imports and Exports:** Table 4.2. • **Consumption:** Table 4.3. • **Balancing Item:** Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net storage withdrawals. • **All Other Data:** 1973-2002—Energy Information Administration (EIA), *Natural Gas Annual*, annual reports. 2003 forward—EIA, *Natural Gas Monthly*, November 2008, Table 1.

**Table 4.2 Natural Gas Trade by Country**  
(Billion Cubic Feet)

	Imports										Exports			
	Algeria <sup>a</sup>	Canada <sup>b</sup>	Egypt <sup>a</sup>	Mexico <sup>b</sup>	Nigeria <sup>a</sup>	Oman <sup>a</sup>	Qatar <sup>a</sup>	Trinidad and Tobago <sup>a</sup>	Other <sup>a,c</sup>	Total	Canada <sup>b</sup>	Japan <sup>a</sup>	Mexico <sup>b</sup>	Total
<b>1973 Total</b> .....	3	1,028	0	2	0	0	0	0	0	1,033	15	48	14	77
<b>1975 Total</b> .....	5	948	0	0	0	0	0	0	0	953	10	53	9	73
<b>1980 Total</b> .....	86	797	0	102	0	0	0	0	0	985	(s)	45	4	49
<b>1985 Total</b> .....	24	926	0	0	0	0	0	0	0	950	(s)	53	2	55
<b>1990 Total</b> .....	84	1,448	0	0	0	0	0	0	0	1,532	17	53	16	86
<b>1995 Total</b> .....	18	2,816	0	7	0	0	0	0	0	2,841	28	65	61	154
<b>1996 Total</b> .....	35	2,883	0	14	0	0	0	0	5	2,937	52	68	34	153
<b>1997 Total</b> .....	66	2,899	0	17	0	0	0	0	12	2,994	56	62	38	157
<b>1998 Total</b> .....	69	3,052	0	15	0	0	0	0	17	3,152	40	66	53	159
<b>1999 Total</b> .....	76	3,368	0	55	0	0	20	51	17	3,586	39	64	61	163
<b>2000 Total</b> .....	47	3,544	0	12	13	10	46	99	11	3,782	73	66	106	244
<b>2001 Total</b> .....	65	3,729	0	10	38	12	23	98	2	3,977	167	66	141	373
<b>2002 Total</b> .....	27	3,785	0	2	8	3	35	151	5	4,015	189	63	263	516
<b>2003 Total</b> .....	53	3,437	0	0	50	9	14	378	3	3,944	271	66	343	680
<b>2004 Total</b> .....	120	3,607	0	0	12	9	12	462	36	4,259	395	62	397	854
<b>2005 Total</b> .....	97	3,700	73	9	8	2	3	439	9	4,341	358	65	305	729
<b>2006</b> January .....	3	320	3	1	3	0	0	30	0	360	32	6	18	56
February .....	3	282	5	(s)	3	0	0	28	0	321	33	6	20	59
March .....	3	314	0	1	0	0	0	30	0	348	37	6	26	69
April .....	3	273	14	(s)	6	0	0	36	0	332	16	6	24	45
May .....	0	283	20	(s)	3	0	0	44	0	351	21	6	36	63
June .....	3	286	14	0	6	0	0	39	0	348	23	6	37	66
July .....	3	313	15	0	6	0	0	33	0	371	17	6	37	59
August .....	0	313	9	0	6	0	0	37	0	365	17	6	32	55
September .....	0	290	9	3	6	0	0	25	0	334	23	4	26	53
October .....	0	296	3	1	9	0	0	25	0	334	30	3	25	59
November .....	0	290	17	1	6	0	0	25	0	339	45	5	20	70
December .....	0	328	11	4	3	0	0	37	0	383	47	4	21	72
<b>Total</b> .....	17	3,590	120	13	57	0	0	389	0	4,186	341	61	322	724
<b>2007</b> January .....	3	336	9	4	5	0	0	37	0	393	41	5	24	69
February .....	0	321	6	8	6	0	0	33	0	373	34	5	17	57
March .....	9	309	15	6	9	0	0	54	0	402	53	5	19	77
April .....	24	279	14	9	9	0	0	51	0	387	32	4	15	51
May .....	24	283	15	3	15	0	3	38	0	380	35	4	24	62
June .....	12	291	15	4	20	0	6	30	3	381	28	3	26	57
July .....	0	315	12	5	12	0	3	62	9	419	38	4	29	71
August .....	3	335	12	4	15	0	6	46	6	427	28	4	30	62
September .....	3	318	12	2	3	0	0	24	0	361	33	4	28	65
October .....	0	314	3	2	0	0	0	29	0	347	31	2	29	<sup>d</sup> 64
November .....	0	311	3	3	0	0	0	24	0	341	58	3	26	86
December .....	0	372	0	4	0	0	0	21	0	397	72	4	25	101
<b>Total</b> .....	77	3,783	115	54	95	0	18	448	18	4,608	482	47	292	<sup>d</sup> 822
<b>2008</b> January .....	0	<sup>R</sup> 356	3	1	0	0	0	25	0	<sup>R</sup> 386	68	3	<sup>R</sup> 40	<sup>R</sup> 111
February .....	0	<sup>R</sup> 322	0	0	0	0	0	21	3	<sup>R</sup> 346	62	3	<sup>R</sup> 37	<sup>R</sup> 102
March .....	0	<sup>R</sup> 339	0	1	0	0	0	21	3	<sup>R</sup> 364	69	4	<sup>R</sup> 31	<sup>R</sup> 104
April .....	0	<sup>R</sup> 289	3	(s)	3	0	0	26	0	<sup>R</sup> 321	46	4	<sup>R</sup> 28	<sup>R</sup> 78
May .....	0	<sup>R</sup> 259	3	4	0	0	0	25	3	<sup>R</sup> 295	43	5	25	73
June .....	0	<sup>R</sup> 250	6	3	3	0	3	21	0	<sup>R</sup> 285	30	5	30	65
July .....	0	284	6	4	0	0	0	25	0	318	29	5	28	61
August .....	0	<sup>R</sup> 285	3	4	3	0	0	24	5	<sup>R</sup> 325	<sup>R</sup> 25	6	<sup>R</sup> 35	<sup>R</sup> 66
September .....	0	<sup>E</sup> 268	9	<sup>E</sup> 6	3	0	0	20	0	<sup>E</sup> 306	<sup>E</sup> 28	4	<sup>E</sup> 35	<sup>E</sup> 67
<b>9-Month Total</b> .....	0	<sup>E</sup> 2,652	34	<sup>E</sup> 23	12	0	3	207	14	<sup>E</sup> 2,946	<sup>E</sup> 401	38	<sup>E</sup> 289	<sup>E</sup> 727
<b>2007 9-Month Total</b> .....	77	2,786	109	45	95	0	18	374	18	3,523	322	37	212	571
<b>2006 9-Month Total</b> .....	17	2,675	89	6	40	0	0	303	0	3,130	219	48	256	523

<sup>a</sup> As liquefied natural gas.

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

<sup>c</sup> 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.

<sup>d</sup> Includes 2 billion cubic feet to Russia.

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

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

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*, November 2008, Table 4; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

**Table 4.3 Natural Gas Consumption by Sector**  
(Billion Cubic Feet)

	End-Use Sectors										Electric Power Sector <sup>f,g</sup>	Total
	Residential	Commercial <sup>a</sup>	Lease and Plant Fuel	Industrial			Total	Transportation				
				Other Industrial				Pipelines <sup>d</sup> and Distribution <sup>e</sup>	Vehicle Fuel	Total		
				CHP <sup>b</sup>	Non-CHP <sup>c</sup>	Total						
<b>1973 Total</b> .....	4,879	2,597	1,496	(h)	8,689	8,689	10,185	728	NA	728	3,660	22,049
<b>1975 Total</b> .....	4,924	2,508	1,396	(h)	6,968	6,968	8,365	583	NA	583	3,158	19,538
<b>1980 Total</b> .....	4,752	2,611	1,026	(h)	7,172	7,172	8,198	635	NA	635	3,682	19,877
<b>1985 Total</b> .....	4,433	2,432	966	(h)	5,901	5,901	6,867	504	NA	504	3,044	17,281
<b>1990 Total</b> .....	4,391	2,623	1,236	1,055	5,963	7,018	8,255	660	(s)	660	3,245	19,174
<b>1995 Total</b> .....	4,850	3,031	1,220	1,258	6,906	8,164	9,384	700	5	705	4,237	22,207
<b>1996 Total</b> .....	5,241	3,158	1,250	1,289	7,146	8,435	9,685	711	6	718	3,807	22,610
<b>1997 Total</b> .....	4,984	3,215	1,203	1,282	7,229	8,511	9,714	751	8	760	4,065	22,737
<b>1998 Total</b> .....	4,520	2,999	1,173	1,355	6,965	8,320	9,493	635	9	645	4,588	22,246
<b>1999 Total</b> .....	4,726	3,045	1,079	1,401	6,678	8,079	9,158	645	12	657	4,820	22,405
<b>2000 Total</b> .....	4,996	3,182	1,151	1,386	6,757	8,142	9,293	642	13	655	5,206	23,333
<b>2001 Total</b> .....	4,771	3,023	1,119	1,310	6,035	7,344	8,463	625	15	640	5,342	22,239
<b>2002 Total</b> .....	4,889	3,144	1,113	1,240	6,267	7,507	8,620	667	15	682	5,672	23,007
<b>2003 Total</b> .....	5,079	3,179	1,122	1,144	6,007	7,150	8,273	591	18	610	5,135	22,277
<b>2004 Total</b> .....	4,869	3,129	1,098	1,191	6,052	7,243	8,341	566	21	587	5,464	22,389
<b>2005 Total</b> .....	4,827	2,999	1,112	1,084	5,514	6,597	7,709	584	23	607	5,869	22,011
<b>2006</b> January .....	714	397	94	91	486	577	672	59	2	61	318	2,162
February .....	702	390	86	83	474	556	642	59	2	60	346	2,141
March .....	626	353	95	91	491	581	676	58	2	60	407	2,122
April .....	355	226	92	84	448	532	624	45	2	47	426	1,678
May .....	204	161	94	92	426	518	612	41	2	43	504	1,524
June .....	141	134	93	94	412	506	599	41	2	43	630	1,547
July .....	116	122	95	103	407	510	605	47	2	49	864	1,756
August .....	108	127	95	104	424	528	624	47	2	49	840	1,748
September .....	125	133	93	91	426	517	610	39	2	41	548	1,458
October .....	240	188	96	97	445	542	638	44	2	46	528	1,640
November .....	413	256	94	89	462	551	645	47	2	50	397	1,761
December .....	624	347	96	95	480	576	671	58	2	60	414	2,116
<b>Total</b> .....	<b>4,368</b>	<b>2,835</b>	<b>1,124</b>	<b>1,115</b>	<b>5,380</b>	<b>6,495</b>	<b>7,618</b>	<b>584</b>	<b>25</b>	<b>609</b>	<b>6,222</b>	<b>21,653</b>
<b>2007</b> January .....	803	431	E 96	97	519	616	712	E 66	2	E 69	442	2,456
February .....	900	476	E 87	88	506	594	681	E 69	2	E 71	427	2,555
March .....	617	353	E 98	89	479	567	665	E 57	2	E 59	417	2,112
April .....	408	259	E 95	86	442	527	622	E 49	2	E 51	457	1,798
May .....	216	168	E 98	90	428	518	616	E 42	2	E 44	508	1,552
June .....	137	135	E 96	99	408	507	603	E 42	2	E 44	627	1,547
July .....	118	122	E 100	109	404	513	613	E 45	2	E 47	762	1,662
August .....	112	127	E 100	135	398	533	632	E 52	2	E 54	1,007	1,933
September .....	117	128	E 97	109	413	523	619	E 43	2	E 45	679	1,588
October .....	175	158	E 100	107	440	547	647	E 44	2	E 46	605	1,631
November .....	404	255	E 99	91	480	571	671	E 49	2	E 51	446	1,828
December .....	717	392	E 104	103	515	617	721	E 65	2	E 67	496	2,394
<b>Total</b> .....	<b>4,724</b>	<b>3,005</b>	<b>E 1,168</b>	<b>1,202</b>	<b>5,432</b>	<b>6,634</b>	<b>7,803</b>	<b>E 622</b>	<b>26</b>	<b>E 649</b>	<b>6,874</b>	<b>23,054</b>
<b>2008</b> January .....	R 882	R 471	E 103	93	561	654	R 757	E 73	3	E 76	528	R 2,713
February .....	R 820	454	E 98	83	R 527	610	R 708	E 67	2	E 69	432	2,484
March .....	R 656	377	E 106	86	R 516	R 602	R 708	E 61	3	E 64	462	R 2,267
April .....	398	256	E 102	79	R 473	553	R 654	E 49	2	E 52	459	1,819
May .....	233	179	E 105	84	R 455	539	R 644	RE 42	3	E 45	473	R 1,574
June .....	145	134	E 104	88	R 423	511	615	E 43	2	E 46	669	1,609
July .....	119	128	E 108	89	R 434	523	631	RE 46	3	RE 49	786	R 1,713
August .....	111	126	E 108	92	441	533	641	RE 46	3	RE 48	762	R 1,689
September .....	117	129	E 93	72	404	476	569	E 41	2	E 43	602	1,460
<b>9-Month Total</b> .....	<b>3,481</b>	<b>2,255</b>	<b>E 927</b>	<b>764</b>	<b>4,236</b>	<b>5,001</b>	<b>5,928</b>	<b>E 469</b>	<b>23</b>	<b>E 492</b>	<b>5,172</b>	<b>17,328</b>
<b>2007 9-Month Total</b> .....	<b>3,428</b>	<b>2,199</b>	<b>E 865</b>	<b>901</b>	<b>3,998</b>	<b>4,899</b>	<b>5,764</b>	<b>E 464</b>	<b>20</b>	<b>E 484</b>	<b>5,327</b>	<b>17,202</b>
<b>2006 9-Month Total</b> .....	<b>3,091</b>	<b>2,044</b>	<b>837</b>	<b>833</b>	<b>3,993</b>	<b>4,826</b>	<b>5,664</b>	<b>436</b>	<b>19</b>	<b>454</b>	<b>4,884</b>	<b>16,136</b>

<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.

<sup>b</sup> Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants.

<sup>c</sup> All industrial sector fuel use other than that in "Lease and Plant Fuel" and "CHP."

<sup>d</sup> Natural gas consumed in the operation of pipelines, primarily in compressors.

<sup>e</sup> Natural gas used as fuel in the delivery of natural gas to consumers.

<sup>f</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>g</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

<sup>h</sup> Included in "Non-CHP."

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

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

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

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

Sources: • Residential, Commercial, Lease and Plant Fuel, Other Industrial Total and Pipelines and Distribution: 1973-2002—Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports. 2003 forward—EIA, *Natural Gas Monthly (NGM)*, November 2008, Table 2. • Industrial CHP: Table 7.4c. • Vehicle Fuel: 1990 and 1991—EIA, *NGA 2000*, (November 2001), Table 95. 1992-1998—"Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by multiplying by the motor gasoline conversion factor (see Table A3) and dividing by the natural gas end-use sectors conversion factor (see Table A4). 1999-2002—EIA, *NGA*, annual reports. 2003 forward—EIA, *NGM*, November 2008, Table 2. • Electric Power Sector: Table 7.4b.

**Table 4.4 Natural Gas in Underground Storage**

(Volumes in Billion Cubic Feet)

	Natural Gas in Underground Storage, End of Period			Change in Working Gas From Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total <sup>a</sup>	Volume	Percent	Withdrawals	Injections	Net <sup>b,c</sup>
<b>1973 Total</b> .....	2,864	2,034	4,898	305	17.6	1,533	1,974	-442
<b>1975 Total</b> .....	3,162	2,212	5,374	162	7.9	1,760	2,104	-344
<b>1980 Total</b> .....	3,642	2,655	6,297	-99	-3.6	1,910	1,896	14
<b>1985 Total</b> .....	3,842	2,607	6,448	-270	-9.4	2,359	2,128	231
<b>1990 Total</b> .....	3,868	3,068	6,936	555	22.1	1,934	2,433	-499
<b>1995 Total</b> .....	4,349	2,153	6,503	-453	-17.4	2,974	2,566	408
<b>1996 Total</b> .....	4,341	2,173	6,513	19	.9	2,911	2,906	6
<b>1997 Total</b> .....	4,350	2,175	6,525	2	.1	2,824	2,800	24
<b>1998 Total</b> .....	4,326	2,730	7,056	554	25.5	2,379	2,905	-526
<b>1999 Total</b> .....	4,383	2,523	6,906	-207	-7.6	2,772	2,598	174
<b>2000 Total</b> .....	4,352	1,719	6,071	-806	-31.9	3,498	2,684	814
<b>2001 Total</b> .....	4,301	2,904	7,204	1,185	68.9	2,309	3,464	-1,156
<b>2002 Total</b> .....	4,340	2,375	6,715	-528	-18.2	3,138	2,670	468
<b>2003 Total</b> .....	4,303	2,563	6,866	187	7.9	3,099	3,292	-193
<b>2004 Total</b> .....	4,201	2,696	6,897	133	5.2	3,157	3,150	-113
<b>2005 Total</b> .....	4,200	2,635	6,835	-61	-2.3	3,057	3,002	55
<b>2006</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
<b>Total</b> .....	4,211	3,070	7,281	435	16.5	2,493	2,924	-431
<b>2007</b> January .....	4,215	2,379	6,594	8	.3	740	56	684
February .....	4,214	1,649	5,863	-238	-12.6	782	51	731
March .....	4,242	1,603	5,845	-89	-5.2	269	221	48
April .....	4,246	1,720	5,966	-225	-11.6	154	274	-120
May .....	4,251	2,179	6,430	-131	-5.7	39	498	-459
June .....	4,230	2,580	6,810	-37	-1.4	48	437	-389
July .....	4,229	2,894	7,123	114	4.1	84	397	-313
August .....	4,226	3,017	7,243	48	1.6	168	294	-126
September .....	4,232	3,316	7,547	-7	-.2	73	372	-298
October .....	4,236	3,567	7,803	115	3.3	76	334	-258
November .....	4,238	3,456	7,694	49	1.5	255	148	108
December .....	4,234	2,879	7,113	-191	-6.2	633	64	569
<b>Total</b> .....	4,234	2,879	7,113	-191	-6.2	3,321	3,144	177
<b>2008</b> January .....	4,232	2,055	6,287	-324	-13.6	892	68	824
February .....	4,222	1,465	5,687	-184	-11.1	649	56	593
March .....	4,221	1,247	5,468	-356	-22.2	350	131	219
April .....	4,223	1,436	5,659	-284	-16.5	106	295	-190
May .....	4,226	1,836	6,062	-342	-15.7	56	458	-402
June .....	4,230	2,171	6,401	-409	-15.8	80	420	-339
July .....	4,228	2,516	6,745	-377	-13.0	88	430	-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
<b>9-Month Total</b> .....	--	--	--	--	--	2,410	2,698	-288
<b>2007 9-Month Total</b> .....	--	--	--	--	--	2,357	2,599	-242
<b>2006 9-Month Total</b> .....	--	--	--	--	--	1,729	2,420	-691

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

<sup>b</sup> For 1980-2006, 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, "Storage," at end of section.

-- =Not applicable.

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

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

Sources: • **Storage Activity: 1973-1975**—Energy Information Administration (EIA), *Natural Gas Annual 1994, Volume 2*, Table 9. **1976-1979**—EIA, *Natural Gas*

*Production and Consumption 1979*, Table 1. **1980-1995**—EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 11. **1996-2002**—EIA, *Natural Gas Monthly (NGM)*, monthly issues. **2003 forward**—EIA, *NGM*, November 2008, Table 6.

• **All Other Data: 1973 and 1974**—American Gas Association (AGA), *Gas Facts, 1972 Data*, Table 57, *Gas Facts, 1973 Data*, Table 57, and *Gas Facts, 1974 Data*, Table 40. **1975 and 1976**—Federal Energy Administration (FEA), Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report." **1977 and 1978**—EIA, Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report." **1979-1995**—EIA, Form EIA-191, "Underground Gas Storage Report," and FERC, Form FERC-8, "Underground Gas Storage Report." **1996-2005**—EIA, *NGM*, monthly issues. **2006 forward**—EIA, *NGM*, November 2008, Table 6.



# Natural Gas

## Note 1. Natural Gas Production.

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

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

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

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

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

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

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

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

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

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

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

Although the total amount of supplemental gaseous fuels consumed is known for 1980 forward, EIA estimates the amount consumed by each energy-use sector. It is assumed that supplemental gaseous fuels are commingled with natural gas consumed by the residential, commercial, other industrial, and electric power sectors, but are not commingled with natural gas used for lease and plant fuel, pipelines and distribution, or vehicle fuel. The estimated consumption of supplemental gaseous fuels by each sector (residential, commercial, other industrial, and electric power) is calculated as that sector's natural gas consumption (see Table 4.3) divided by the sum of natural gas consumption by the residential, commercial, other industrial, and electric power sectors (see Table 4.3). For estimated sectoral consumption of supplemental gaseous fuels in Btu, the residential, commercial, and other industrial values in cubic feet are multiplied by the "End-Use Sectors" conversion factors (see Table A4), and the electric power values in cubic feet are multiplied by the "Electric Power Sector" conversion factors (see Table A4). Total supplemental gaseous fuels consumption in Btu is calculated as the sum of the Btu values for the sectors.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

# 5

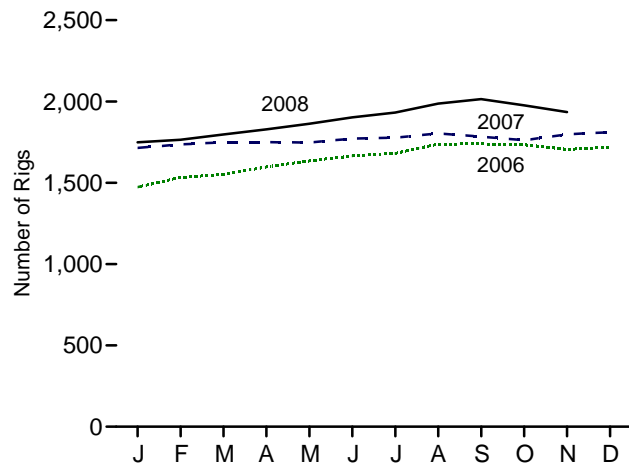
## Crude Oil and Natural Gas Resource Development



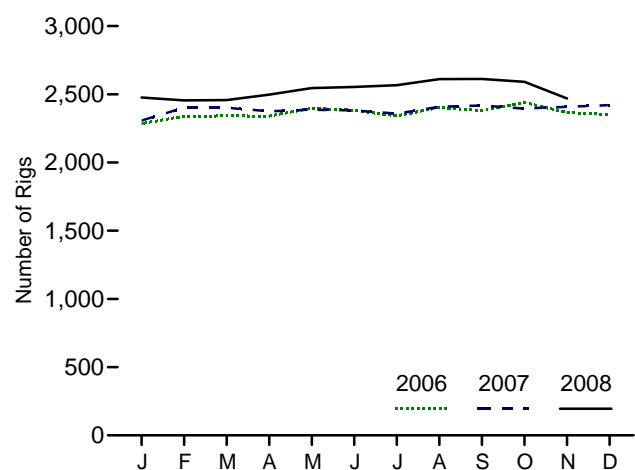
Semisubmersible drilling rig in the Gulf of Mexico. Source: U.S. Department of Energy.

**Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators**

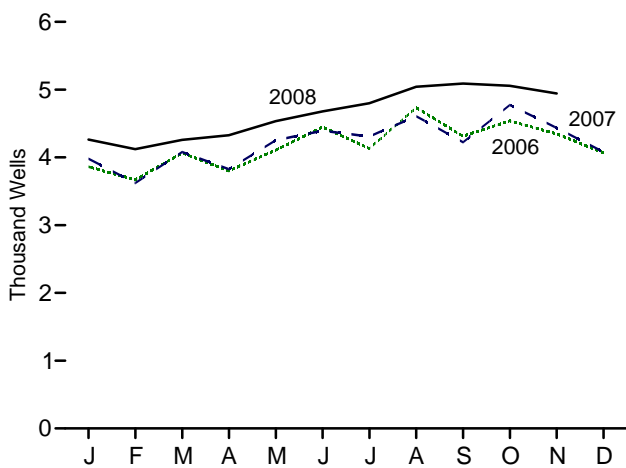
Rotary Rigs in Operation, Monthly



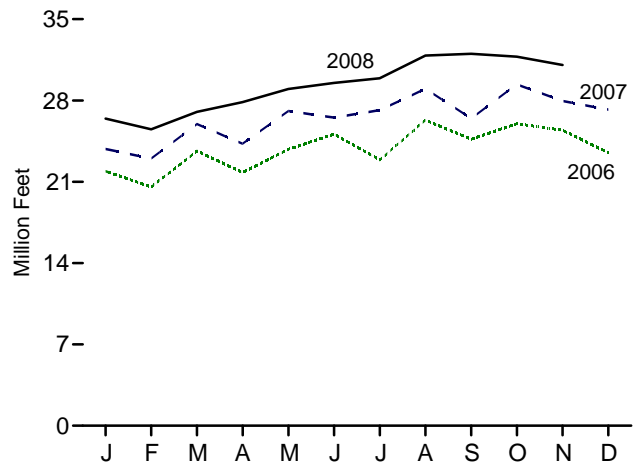
Active Well Service Rig Count, Monthly



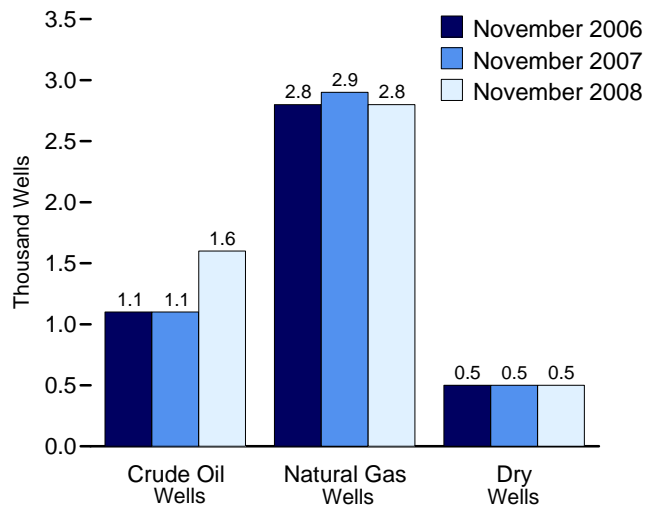
Wells Drilled, Monthly



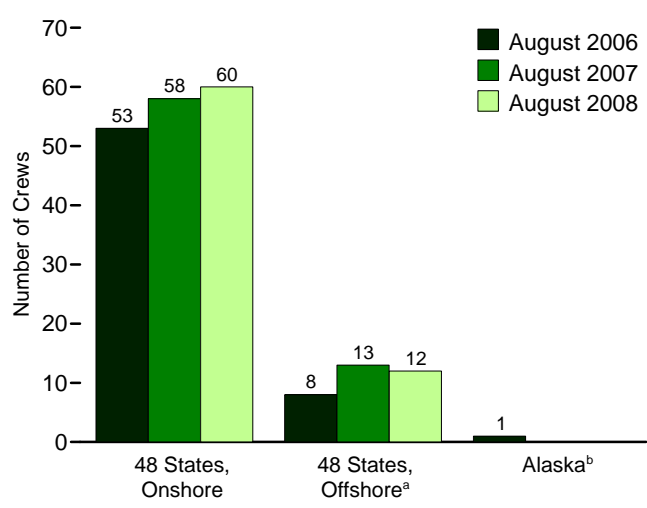
Footage Drilled, Monthly



Wells Drilled by Type



Maximum U.S. Active Seismic Crew Counts



<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>					Active Well Service Rig Count <sup>c</sup>
	By Site		By Type		Total <sup>b</sup>	
	Onshore	Offshore	Crude Oil	Natural Gas		
<b>1973 Average</b> .....	1,110	84	NA	NA	1,194	2,008
<b>1975 Average</b> .....	1,554	106	NA	NA	1,660	2,486
<b>1980 Average</b> .....	2,678	231	NA	NA	2,909	4,089
<b>1985 Average</b> .....	1,774	206	NA	NA	1,980	4,716
<b>1990 Average</b> .....	902	108	532	464	1,010	3,658
<b>1995 Average</b> .....	622	101	323	385	723	3,041
<b>1996 Average</b> .....	671	108	306	464	779	3,445
<b>1997 Average</b> .....	821	122	376	564	943	3,499
<b>1998 Average</b> .....	703	123	264	560	827	3,014
<b>1999 Average</b> .....	519	106	128	496	625	2,232
<b>2000 Average</b> .....	778	140	197	720	918	2,692
<b>2001 Average</b> .....	1,003	153	217	939	1,156	2,267
<b>2002 Average</b> .....	717	113	137	691	830	1,830
<b>2003 Average</b> .....	924	108	157	872	1,032	1,967
<b>2004 Average</b> .....	1,095	97	165	1,025	1,192	2,064
<b>2005 Average</b> .....	1,287	94	194	1,184	1,381	2,222
<b>2006</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
July .....	1,587	94	298	1,379	1,681	2,342
August .....	1,639	99	316	1,417	1,738	2,404
September .....	1,646	93	305	1,429	1,739	2,380
October .....	1,644	90	288	1,441	1,734	2,440
November .....	1,620	87	288	1,414	1,706	2,366
December .....	1,634	84	281	1,431	1,718	2,351
<b>Average</b> .....	<b>1,559</b>	<b>90</b>	<b>274</b>	<b>1,372</b>	<b>1,649</b>	<b>2,364</b>
<b>2007</b> January .....	1,630	84	270	1,440	1,714	2,307
February .....	1,651	85	266	1,466	1,736	2,401
March .....	1,667	81	282	1,461	1,749	2,401
April .....	1,675	75	285	1,461	1,750	2,375
May .....	1,671	77	282	1,464	1,748	2,387
June .....	1,692	79	283	1,483	1,771	2,381
July .....	1,698	79	285	1,486	1,777	2,358
August .....	1,731	73	306	1,492	1,804	2,408
September .....	1,718	65	302	1,475	1,783	2,418
October .....	1,713	49	321	1,435	1,762	2,395
November .....	1,737	61	341	1,451	1,798	2,408
December .....	1,749	62	338	1,468	1,811	2,420
<b>Average</b> .....	<b>1,695</b>	<b>72</b>	<b>297</b>	<b>1,466</b>	<b>1,768</b>	<b>2,388</b>
<b>2008</b> January .....	1,690	60	321	1,421	1,749	2,476
February .....	1,709	56	331	1,426	1,765	2,455
March .....	1,737	60	343	1,444	1,797	2,457
April .....	1,765	64	358	1,461	1,829	2,498
May .....	1,794	68	375	1,478	1,863	2,546
June .....	1,834	67	383	1,510	1,902	2,554
July .....	1,865	67	380	1,543	1,932	2,567
August .....	1,920	67	397	1,581	1,987	2,611
September .....	1,942	72	417	1,585	2,014	2,612
October .....	1,903	73	422	1,542	1,976	2,591
November .....	1,872	63	426	1,498	1,935	2,469
<b>11-Month Average</b> .....	<b>1,822</b>	<b>65</b>	<b>378</b>	<b>1,500</b>	<b>1,887</b>	<b>2,531</b>
<b>2007 11-Month Average</b> .....	<b>1,691</b>	<b>73</b>	<b>294</b>	<b>1,466</b>	<b>1,764</b>	<b>2,385</b>
<b>2006 11-Month Average</b> .....	<b>1,551</b>	<b>91</b>	<b>273</b>	<b>1,366</b>	<b>1,642</b>	<b>2,365</b>

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

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

<sup>c</sup> The number of rigs doing true workovers (where tubing is pulled from the well), or doing rod string and pump repair operations, and that are, on average, crewed

and working every day of the month.

NA=Not available.

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**: Weatherford International, Ltd., Houston, Texas.

**Table 5.2 Crude Oil and Natural Gas Exploratory and Development Wells**

	Wells Drilled												Total Footage Drilled Thousand Feet
	Exploratory				Development				Total				
	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	
	Number												
<b>1973 Total</b> .....	642	1,067	5,952	7,661	9,525	5,866	4,368	19,759	10,167	6,933	10,320	27,420	138,223
<b>1975 Total</b> .....	982	1,248	7,129	9,359	15,966	6,879	6,517	29,362	16,948	8,127	13,646	38,721	180,494
<b>1980 Total</b> .....	1,777	2,099	9,081	12,957	31,182	15,362	11,704	58,248	32,959	17,461	20,785	71,205	316,943
<b>1985 Total</b> .....	1,680	1,200	8,954	11,834	33,581	13,124	12,257	58,962	35,261	14,324	21,211	70,796	314,409
<b>1990 Total</b> .....	778	812	3,648	5,238	11,696	10,296	4,569	26,561	12,474	11,108	8,217	31,799	155,253
<b>1995 Total</b> .....	570	557	2,023	3,150	7,345	7,412	2,764	17,521	7,915	7,969	4,787	20,671	116,590
<b>1996 Total</b> .....	489	576	1,955	3,020	8,122	8,367	2,915	19,404	8,611	8,943	4,870	22,424	125,971
<b>1997 Total</b> .....	491	561	2,108	3,160	10,553	10,874	3,740	25,167	11,044	11,435	5,848	28,327	161,215
<b>1998 Total</b> .....	327	566	1,585	2,478	7,229	10,944	3,160	21,333	7,556	11,510	4,745	23,811	137,048
<b>1999 Total</b> .....	196	565	1,157	1,918	4,538	11,334	2,360	18,232	4,734	11,899	3,517	20,150	102,594
<b>2000 Total</b> .....	288	657	1,333	2,278	7,698	16,278	2,784	26,760	7,986	16,935	4,117	29,038	143,947
<b>2001 Total</b> .....	353	1,046	1,714	3,113	8,452	20,913	2,825	32,190	8,805	21,959	4,539	35,303	179,624
<b>2002 Total</b> .....	255	843	1,271	2,369	6,469	16,382	2,435	25,286	6,724	17,225	3,706	27,655	144,640
<b>2003 Total</b> .....	349	991	1,285	2,625	7,677	19,596	2,613	29,886	8,026	20,587	3,898	32,511	176,557
<b>2004 Total</b> .....	386	1,653	1,331	3,370	8,290	22,075	2,644	33,009	8,866	23,728	3,975	36,739	202,813
<b>2005 Total</b> .....	515	2,087	1,431	4,033	9,866	25,693	3,081	38,640	10,371	27,780	4,512	42,673	237,214
<b>2006 January</b> .....	R 65	R 176	R 95	R 336	R 952	R 2,267	R 307	R 3,526	R 1,017	R 2,443	R 402	R 3,862	R 21,910
February .....	51	192	112	355	852	2,192	269	3,313	903	2,384	381	3,668	20,559
March .....	R 42	R 209	R 96	R 347	R 955	R 2,456	R 306	R 3,717	R 997	R 2,665	R 402	R 4,064	R 23,649
April .....	44	167	128	339	950	2,212	299	3,461	994	2,379	427	3,800	21,796
May .....	R 61	R 211	R 138	R 410	R 1,018	R 2,409	R 271	R 3,698	R 1,079	R 2,620	R 409	R 4,108	R 23,801
June .....	R 78	217	139	434	1,106	2,571	R 336	R 4,013	R 1,184	R 2,788	R 475	R 4,447	R 25,102
July .....	R 37	R 223	R 134	R 394	R 1,105	R 2,332	R 301	R 3,738	R 1,142	R 2,555	R 435	R 4,132	R 22,889
August .....	R 62	R 277	R 142	R 481	R 1,080	R 2,854	R 317	R 4,251	R 1,142	R 3,131	R 459	R 4,732	R 26,300
September .....	R 57	R 226	R 139	R 422	R 1,049	R 2,553	R 289	R 3,891	R 1,106	R 2,779	R 428	R 4,313	R 24,665
October .....	R 61	R 250	R 129	R 440	R 1,090	R 2,674	R 336	R 4,100	R 1,151	R 2,924	R 465	R 4,540	R 26,002
November .....	R 60	R 285	R 119	R 464	R 1,079	R 2,466	R 338	R 3,883	R 1,139	R 2,751	R 457	R 4,347	R 25,427
December .....	R 35	R 251	R 156	R 442	R 1,039	R 2,314	R 273	R 3,626	R 1,074	R 2,565	R 429	R 4,068	R 23,509
<b>Total</b> .....	R 653	R 2,684	R 1,527	R 4,864	R 12,275	R 29,300	R 3,642	R 45,217	R 12,928	R 31,984	R 5,169	R 50,081	R 285,609
<b>2007 January</b> .....	R 59	R 274	R 122	R 455	R 977	R 2,253	R 295	R 3,525	R 1,036	R 2,527	R 417	R 3,980	R 23,821
February .....	R 62	R 242	R 100	R 404	R 893	R 2,077	R 247	R 3,217	R 955	R 2,319	R 347	R 3,621	R 22,990
March .....	R 66	R 313	R 117	R 496	R 990	R 2,298	R 294	R 3,582	R 1,056	R 2,611	R 411	R 4,078	R 25,965
April .....	R 60	R 298	R 128	R 486	R 947	R 2,143	R 250	R 3,340	R 1,007	R 2,441	R 378	R 3,826	R 24,273
May .....	R 58	R 331	R 153	R 542	R 1,034	R 2,370	R 309	R 3,713	R 1,092	R 2,701	R 462	R 4,255	R 27,085
June .....	R 84	R 290	R 118	R 492	R 1,071	R 2,555	R 274	R 3,900	R 1,155	R 2,845	R 392	R 4,392	R 26,525
July .....	R 83	R 335	R 133	R 551	R 1,023	R 2,424	R 311	R 3,758	R 1,106	R 2,759	R 444	R 4,309	R 27,168
August .....	R 66	R 322	R 123	R 511	R 1,051	R 2,688	R 359	R 4,098	R 1,117	R 3,010	R 482	R 4,609	R 29,002
September .....	R 80	R 302	R 141	R 523	R 958	R 2,462	R 280	R 3,700	R 1,038	R 2,764	R 421	R 4,223	R 26,449
October .....	R 79	R 367	R 159	R 605	R 1,132	R 2,698	R 339	R 4,169	R 1,211	R 3,065	R 498	R 4,774	R 29,383
November .....	R 63	R 338	R 189	R 590	R 1,032	R 2,523	R 291	R 3,846	R 1,095	R 2,861	R 480	R 4,436	R 27,956
December .....	R 83	R 303	R 127	R 493	R 1,043	R 2,275	R 268	R 3,586	R 1,106	R 2,578	R 395	R 4,079	R 27,205
<b>Total</b> .....	R 823	R 3,715	R 1,610	R 6,148	R 12,151	R 28,766	R 3,517	R 44,434	R 12,974	R 32,481	R 5,127	R 50,582	R 317,823
<b>2008 January</b> .....	R 85	R 299	R 145	R 529	R 1,140	R 2,320	R 275	R 3,735	R 1,225	R 2,619	R 420	R 4,264	R 26,434
February .....	R 85	R 293	R 100	R 478	R 1,172	R 2,197	R 274	R 3,643	R 1,257	R 2,490	R 374	R 4,121	R 25,513
March .....	R 78	R 267	R 137	R 482	R 1,173	R 2,293	R 310	R 3,776	R 1,251	R 2,560	R 447	R 4,258	R 27,025
April .....	R 74	R 215	R 142	R 431	R 1,276	R 2,311	R 310	R 3,897	R 1,350	R 2,526	R 452	R 4,328	R 27,859
May .....	R 106	R 233	R 124	R 463	R 1,324	R 2,443	R 305	R 4,072	R 1,430	R 2,676	R 429	R 4,535	R 28,988
June .....	R 66	R 253	R 145	R 464	R 1,370	R 2,522	R 322	R 4,214	R 1,436	R 2,775	R 467	R 4,678	R 29,507
July .....	R 82	R 261	R 143	R 486	R 1,361	R 2,630	R 323	R 4,314	R 1,443	R 2,891	R 466	R 4,800	R 29,912
August .....	R 84	R 265	R 157	R 506	R 1,415	R 2,775	R 347	R 4,537	R 1,499	R 3,040	R 504	R 5,043	R 31,871
September .....	R 99	R 256	R 156	R 511	R 1,507	R 2,722	R 350	R 4,579	R 1,606	R 2,978	R 506	R 5,090	R 32,012
October .....	R 101	R 251	R 154	R 506	R 1,520	R 2,686	R 344	R 4,550	R 1,621	R 2,937	R 498	R 5,056	R 31,769
November .....	93	241	152	486	1,543	2,574	341	4,458	1,636	2,815	493	4,944	31,051
<b>11-Month Total</b> ...	953	2,834	1,555	5,342	14,801	27,473	3,501	45,775	15,754	30,307	5,056	51,117	321,940
<b>2007 11-Month Total</b> ...	760	3,412	1,483	5,655	11,108	26,491	3,249	40,848	11,868	29,903	4,732	46,503	290,618
<b>2006 11-Month Total</b> ...	618	2,433	1,371	4,422	11,236	26,986	3,369	41,591	11,854	29,419	4,740	46,013	262,100

R=Revised.

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

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

• Geographic coverage is the 50 States and the District of Columbia.  
 Web Page: See <http://www.eia.doe.gov/emeu/mer/resource.html> for all available data beginning in 1973.  
 Sources: • 1973-1989: 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, Offshore <sup>a</sup>				Alaska <sup>b</sup>				Total
	Dimensions <sup>c</sup>			Total <sup>d</sup>	Dimensions <sup>c</sup>			Total <sup>d</sup>	Dimensions <sup>c</sup>			Total <sup>d</sup>	
	2	3	4		2	3	4		2	3	4		
<b>2000</b> August .....	4	40	1	45	7	7	0	15	0	1	0	1	61
<b>2001</b> August .....	8	32	1	41	7	8	0	15	0	0	0	0	56
<b>2002</b> August .....	7	26	0	33	8	7	0	15	1	1	0	2	50
<b>2003</b> August .....	8	22	0	30	7	4	0	11	1	1	0	2	43
<b>2004</b> January .....	8	25	0	33	5	5	0	10	0	0	0	0	43
February .....	8	27	0	35	5	5	0	10	0	0	0	0	45
March .....	8	27	0	35	5	5	0	10	0	0	0	0	45
April .....	9	27	0	36	5	4	0	9	0	0	0	0	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>2005</b> January .....	8	33	0	41	5	4	0	9	0	2	0	2	52
February .....	8	34	0	42	5	4	0	9	0	2	0	2	53
March .....	6	33	0	39	6	6	0	12	0	0	0	0	51
April .....	8	30	0	38	6	6	0	12	0	0	0	0	50
May .....	8	34	0	42	7	6	0	13	0	0	0	0	55
June .....	9	35	0	44	7	5	0	12	0	1	0	1	57
July .....	8	34	0	42	6	5	0	11	0	1	0	1	54
August .....	8	35	0	43	6	5	0	11	0	1	0	1	55
September .....	7	37	0	44	6	5	0	11	0	1	0	1	56
October .....	6	39	0	45	6	5	0	11	0	1	0	1	57
November .....	5	40	0	45	6	5	0	11	0	1	0	1	57
December .....	6	40	0	46	6	5	0	11	0	1	0	1	58
<b>2006</b> January .....	5	38	0	43	6	5	0	11	0	1	0	1	55
February .....	5	39	0	44	6	6	0	12	0	1	0	1	57
March .....	4	42	0	46	6	6	0	12	0	1	0	1	59
April .....	4	42	0	46	5	6	0	11	0	1	0	1	58
May .....	4	42	0	46	5	6	0	11	0	1	0	1	58
June .....	9	35	0	44	7	5	0	12	0	1	0	1	57
July .....	5	51	0	56	4	5	0	9	0	1	0	1	66
August .....	4	49	0	53	3	5	0	8	0	1	0	1	62
September .....	4	51	0	55	2	5	0	7	0	1	0	1	63
October .....	5	51	0	56	2	5	0	7	0	1	0	1	64
November .....	5	51	0	56	3	5	0	8	0	1	0	1	65
December .....	5	50	0	55	3	5	0	8	0	1	0	1	64
<b>2007</b> January .....	3	51	0	54	3	5	0	8	0	1	0	1	63
February .....	3	51	0	54	3	5	0	8	0	1	0	1	63
March .....	4	55	0	59	3	5	0	8	0	1	0	1	68
April .....	4	55	0	59	4	6	1	11	0	1	0	1	71
May .....	3	55	0	58	4	6	1	11	0	1	0	1	70
June .....	3	55	0	58	3	6	1	10	0	1	0	1	69
July .....	2	57	0	59	3	6	1	10	0	0	0	0	69
August .....	2	56	0	58	4	8	1	13	0	0	0	0	71
September .....	3	58	0	61	3	8	1	12	0	0	0	0	73
October .....	4	60	0	65	3	8	1	12	0	0	0	0	77
November .....	4	60	0	65	3	10	1	14	0	0	0	0	79
December .....	5	54	0	60	4	10	1	15	0	0	0	0	75
<b>2008</b> January .....	6	55	0	61	4	10	1	15	0	0	0	0	76
February .....	6	55	0	61	4	11	1	16	0	0	0	0	77
March .....	6	54	0	60	3	11	1	15	0	0	0	0	75
April .....	4	53	0	57	3	11	1	15	0	0	0	0	72
May .....	4	54	0	58	3	11	1	15	0	0	0	0	73
June .....	2	56	0	58	3	11	1	15	0	0	0	0	73
July .....	2	58	0	60	3	8	1	12	0	0	0	0	72
August .....	2	58	0	60	3	8	1	12	0	0	0	0	72

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

<sup>b</sup> All onshore.

<sup>c</sup> In **two-dimensional** (2D) reflection seismic surveying both the sound source and the sound detectors (numbering up to a hundred or more per shot) are moved along a straight line. The resultant product can be thought of as a vertical sonic cross-section of the subsurface beneath the survey line. It is constructed by summing many compressional (pressure) wave reflections from the various sound source and sound detector locations at the halfway sound path points beneath each location (common depth point stacking). In **three-dimensional** (3D) reflection seismic surveying the sound detectors (numbering up to a thousand or more) are spread out over an area and the sound source is moved from location to location through the area. The resultant product can be thought of as a cube of common depth point stacked reflections. Advantages over 2D include the additional dimension, the fact that many more reflections are available for stacking at each point, which provides greatly improved resolution of subsurface features, and elimination of the "ghost" or "side swipe" reflections from nearby offline features that 2D surveys

are prone to (except, of course, along the outer faces of the cube). **Four dimensional** (4D) reflection seismic surveying is the exact repetition of a 3D survey at two or more time intervals. The primary application of 4D is mapping the movement of fluid interfaces in producing oil and gas reservoirs.

<sup>d</sup> 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.

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.

## 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*.



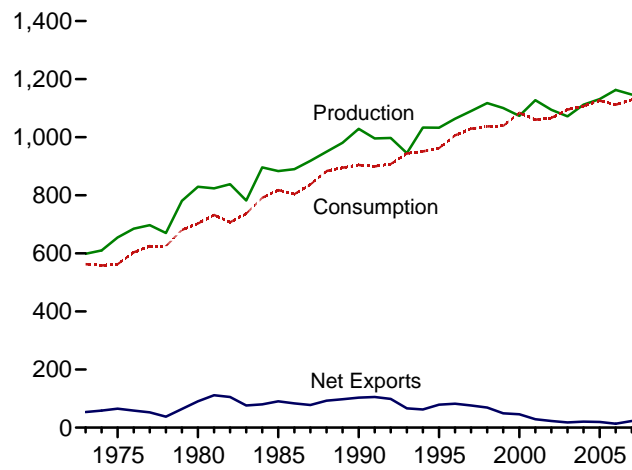
# Coal



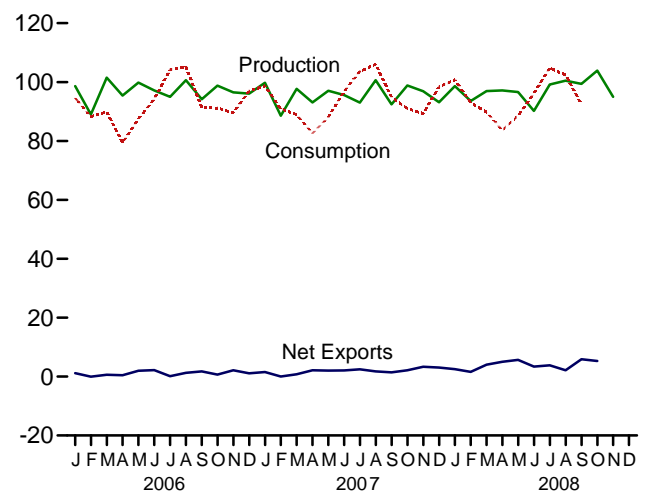
Coal yard, Curtis Bay, Maryland. Source: U.S. Department of Energy.

**Figure 6.1 Coal**  
(Million Short Tons)

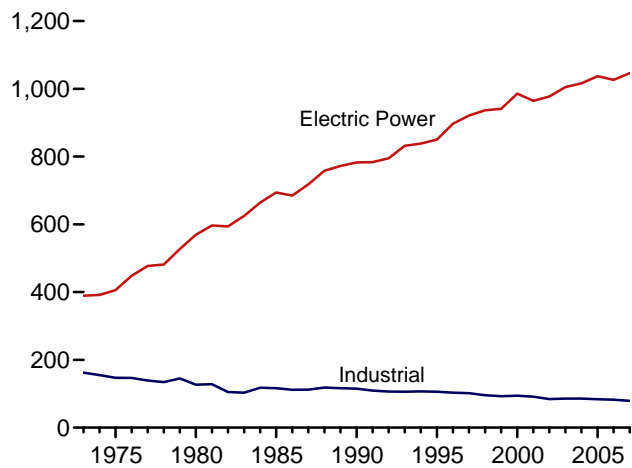
Overview, 1973-2007



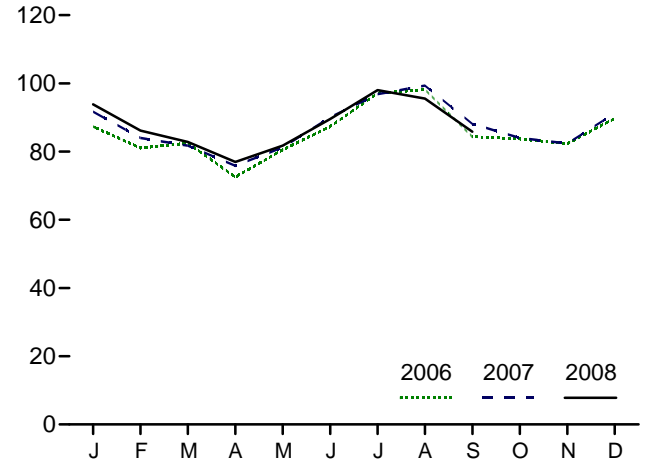
Overview, Monthly



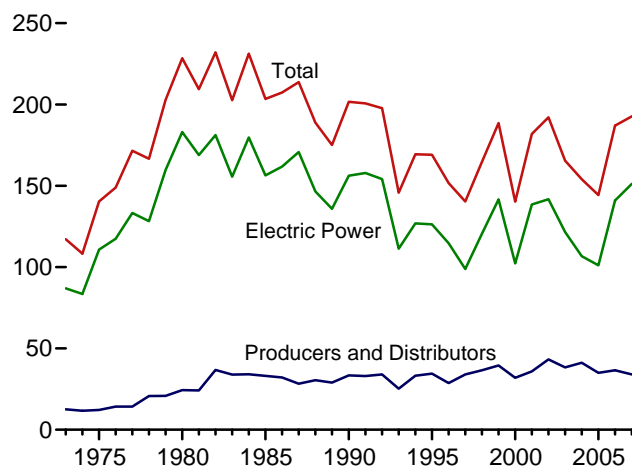
Consumption by Sector, 1973-2007



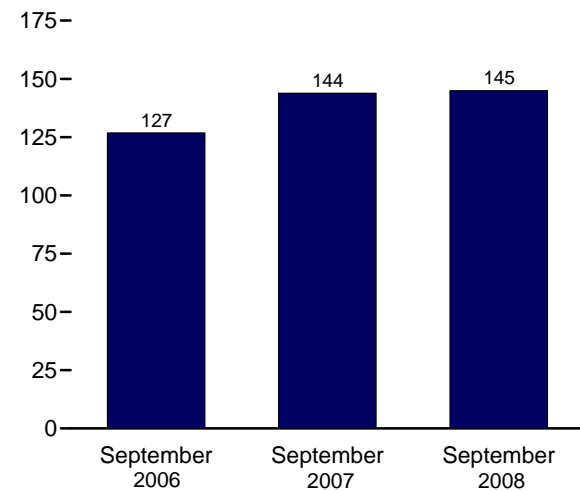
Electric Power Sector Consumption, Monthly



Stocks, End of Year, 1973-2007



Electric Power Sector Stocks, End of Month



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.

**Table 6.1 Coal Overview**  
(Thousand Short Tons)

	Production <sup>a</sup>	Waste Coal Supplied <sup>b</sup>	Trade			Stock Change <sup>d</sup>	Losses and Unaccounted for <sup>e</sup>	Consumption
			Imports	Exports	Net Imports <sup>c</sup>			
<b>1973 Total</b> .....	598,568	NA	127	53,587	-53,460	( <sup>f</sup> )	<sup>f</sup> -17,476	562,584
<b>1975 Total</b> .....	654,641	NA	940	66,309	-65,369	32,154	-5,522	562,640
<b>1980 Total</b> .....	829,700	NA	1,194	91,742	-90,548	25,595	10,827	702,730
<b>1985 Total</b> .....	883,638	NA	1,952	92,680	-90,727	-27,934	2,796	818,049
<b>1990 Total</b> .....	1,029,076	3,339	2,699	105,804	-103,104	26,542	-1,730	904,498
<b>1995 Total</b> .....	1,032,974	8,561	9,473	88,547	-79,074	-275	632	962,104
<b>1996 Total</b> .....	1,063,856	8,778	8,115	90,473	-82,357	-17,456	1,411	1,006,321
<b>1997 Total</b> .....	1,089,932	8,096	7,487	83,545	-76,058	-11,253	3,678	1,029,544
<b>1998 Total</b> .....	1,117,535	8,690	8,724	78,048	-69,324	24,228	-4,430	1,037,103
<b>1999 Total</b> .....	1,100,431	8,683	9,089	58,476	-49,387	23,988	-2,906	1,038,647
<b>2000 Total</b> .....	1,073,612	9,089	12,513	58,489	-45,976	-48,309	938	1,084,095
<b>2001 Total</b> .....	1,127,689	10,085	19,787	48,666	-28,879	41,630	7,120	1,060,146
<b>2002 Total</b> .....	1,094,283	9,052	16,875	39,601	-22,726	10,215	4,040	1,066,355
<b>2003 Total</b> .....	1,071,753	10,016	25,044	43,014	-17,970	-26,659	-4,403	1,094,861
<b>2004 Total</b> .....	1,112,099	11,299	27,280	47,998	-20,718	-11,462	6,887	1,107,255
<b>2005 Total</b> .....	1,131,498	13,352	30,460	49,942	-19,482	-9,702	9,092	1,125,978
<b>2006</b> 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
<b>Total</b> .....	<b>1,162,750</b>	<b>14,409</b>	<b>36,246</b>	<b>49,647</b>	<b>-13,401</b>	<b>42,642</b>	<b>8,824</b>	<b>1,112,292</b>
<b>2007</b> January .....	99,784	937	2,844	4,368	-1,524	-4,354	4,796	98,756
February .....	88,580	1,096	2,656	2,685	-28	-4,479	3,195	90,931
March .....	97,677	1,191	3,285	4,086	-801	7,079	2,028	88,959
April .....	93,084	1,087	2,687	4,841	-2,154	7,944	1,470	82,603
May .....	97,038	1,049	2,691	4,747	-2,056	4,416	3,524	88,091
June .....	95,566	1,247	3,027	5,114	-2,087	-619	-1,559	96,903
July .....	93,003	1,255	3,373	5,812	-2,438	-9,990	-1,750	103,560
August .....	100,627	1,315	3,716	5,471	-1,756	-6,135	280	106,042
September .....	92,404	1,203	3,470	4,914	-1,445	955	-3,611	94,818
October .....	98,825	1,254	2,896	5,019	-2,123	8,199	-1,269	91,027
November .....	96,910	1,189	2,889	6,245	-3,355	4,292	1,189	89,262
December .....	93,138	1,263	2,812	5,861	-3,050	-1,590	-5,386	98,328
<b>Total</b> .....	<b>1,146,635</b>	<b>14,087</b>	<b>36,347</b>	<b>59,163</b>	<b>-22,816</b>	<b>5,717</b>	<b>2,908</b>	<b>1,129,281</b>
<b>2008</b> January .....	98,619	1,340	2,381	4,915	-2,535	-8,105	<sup>R</sup> 4,783	<sup>R</sup> 100,746
February .....	93,555	1,208	2,619	4,205	-1,586	-3,392	<sup>R</sup> 3,609	<sup>R</sup> 92,961
March .....	96,933	1,085	2,640	6,682	-4,041	<sup>R</sup> 4,948	<sup>R</sup> -713	<sup>R</sup> 89,742
April .....	97,149	1,121	2,985	7,979	-4,994	<sup>R</sup> 6,677	<sup>R</sup> 2,940	<sup>R</sup> 83,660
May .....	96,585	1,190	2,702	8,394	-5,692	<sup>R</sup> 4,725	<sup>R</sup> -1,143	<sup>R</sup> 88,501
June .....	90,199	<sup>R</sup> 1,324	3,295	6,695	-3,401	<sup>R</sup> -4,859	<sup>R</sup> -3,247	<sup>R</sup> 96,228
July .....	<sup>R</sup> 99,162	<sup>R</sup> 1,263	2,569	6,404	-3,835	<sup>R</sup> -12,674	<sup>R</sup> 4,526	<sup>R</sup> 104,738
August .....	<sup>R</sup> 100,458	<sup>R</sup> 1,287	3,144	5,264	-2,120	<sup>R</sup> -2,476	<sup>R</sup> -262	<sup>R</sup> 102,363
September .....	<sup>R</sup> 99,381	<sup>R</sup> 1,308	2,772	8,653	-5,881	<sup>R</sup> 5,362	<sup>R</sup> -2,951	<sup>R</sup> 92,397
October .....	103,886	NA	<sup>R</sup> 2,921	<sup>R</sup> 8,233	<sup>R</sup> -5,312	NA	NA	NA
November .....	94,991	NA	NA	NA	NA	NA	NA	NA
<b>11-Month Total</b> ...	<b>1,070,917</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>2007 11-Month Total</b> ...	<b>1,053,497</b>	<b>12,824</b>	<b>33,535</b>	<b>53,302</b>	<b>-19,767</b>	<b>7,308</b>	<b>8,294</b>	<b>1,030,953</b>
<b>2006 11-Month Total</b> ...	<b>1,066,687</b>	<b>13,164</b>	<b>33,157</b>	<b>45,465</b>	<b>-12,309</b>	<b>41,149</b>	<b>11,032</b>	<b>1,015,362</b>

<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).

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

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

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

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

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

<sup>f</sup> In 1973, stock change is included in "Losses and Unaccounted for."

R=Revised. NA=Not available.

Notes: • For methodology used to calculate production, consumption, and stocks, see Note 1, "Coal Production," Note 2, "Coal Consumption," and Note 3, "Coal Stocks," at end of section. • Data values preceded by "F" are derived from the Energy Information Administration's Short-Term Integrated Forecasting System.

See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

**Table 6.2 Coal Consumption by Sector**  
(Thousand Short Tons)

	End-Use Sectors									Transportation	Electric Power Sector <sup>e,f</sup>	Total
	Residential	Commercial			Coke Plants	Industrial			Total			
		CHP <sup>a</sup>	Other <sup>b</sup>	Total		CHP <sup>c</sup>	Non-CHP <sup>d</sup>	Total				
<b>1973 Total</b> .....	4,113	( <sup>g</sup> )	7,004	7,004	94,101	( <sup>h</sup> )	68,038	68,038	162,139	( <sup>h</sup> )	389,212	562,584
<b>1975 Total</b> .....	2,823	( <sup>g</sup> )	6,587	6,587	83,598	( <sup>h</sup> )	63,646	63,646	147,244	24	405,962	562,640
<b>1980 Total</b> .....	1,355	( <sup>g</sup> )	5,097	5,097	66,657	( <sup>h</sup> )	60,347	60,347	127,004	( <sup>h</sup> )	569,274	702,730
<b>1985 Total</b> .....	1,711	( <sup>g</sup> )	6,068	6,068	41,056	( <sup>h</sup> )	75,372	75,372	116,429	( <sup>h</sup> )	693,841	818,049
<b>1990 Total</b> .....	1,345	1,191	4,189	5,379	38,877	27,781	48,549	76,330	115,207	( <sup>h</sup> )	782,567	904,498
<b>1995 Total</b> .....	755	1,419	3,633	5,052	33,011	29,363	43,693	73,055	106,067	( <sup>h</sup> )	850,230	962,104
<b>1996 Total</b> .....	721	1,660	3,625	5,285	31,706	29,434	42,254	71,689	103,395	( <sup>h</sup> )	896,921	1,006,321
<b>1997 Total</b> .....	711	1,738	4,015	5,752	30,203	29,853	41,661	71,515	101,718	( <sup>h</sup> )	921,364	1,029,544
<b>1998 Total</b> .....	534	1,443	2,879	4,322	28,189	28,553	38,887	67,439	95,628	( <sup>h</sup> )	936,619	1,037,103
<b>1999 Total</b> .....	585	1,490	2,803	4,293	28,108	27,763	36,975	64,738	92,846	( <sup>h</sup> )	940,922	1,038,647
<b>2000 Total</b> .....	454	1,547	2,126	3,673	28,939	28,031	37,177	65,208	94,147	( <sup>h</sup> )	985,821	1,084,095
<b>2001 Total</b> .....	481	1,448	2,441	3,888	26,075	25,755	39,514	65,268	91,344	( <sup>h</sup> )	964,433	1,060,146
<b>2002 Total</b> .....	533	1,405	2,506	3,912	23,656	26,232	34,515	60,747	84,403	( <sup>h</sup> )	977,507	1,066,355
<b>2003 Total</b> .....	551	1,816	1,869	3,685	24,248	24,846	36,415	61,261	85,509	( <sup>h</sup> )	1,005,116	1,094,861
<b>2004 Total</b> .....	512	1,917	2,693	4,610	23,670	26,613	35,582	62,195	85,865	( <sup>h</sup> )	1,016,268	1,107,255
<b>2005 Total</b> .....	378	1,922	2,420	4,342	23,434	25,875	34,465	60,340	83,774	( <sup>h</sup> )	1,037,485	1,125,978
<b>2006</b> January .....	27	186	130	316	1,879	2,217	2,866	5,083	6,961	( <sup>h</sup> )	87,317	94,621
February .....	25	169	118	287	1,830	2,024	3,023	5,046	6,876	( <sup>h</sup> )	81,043	88,231
March .....	25	170	118	288	2,005	2,115	2,945	5,060	7,065	( <sup>h</sup> )	82,499	89,877
April .....	16	134	56	189	1,862	2,050	2,742	4,792	6,654	( <sup>h</sup> )	72,560	79,419
May .....	17	139	58	197	1,968	2,059	2,735	4,794	6,762	( <sup>h</sup> )	80,515	87,490
June .....	18	147	61	208	1,939	2,104	2,710	4,814	6,753	( <sup>h</sup> )	87,319	94,298
July .....	18	163	46	208	1,933	2,202	2,671	4,872	6,806	( <sup>h</sup> )	97,113	104,145
August .....	18	163	46	209	1,911	2,202	2,675	4,877	6,788	( <sup>h</sup> )	98,183	105,198
September .....	15	138	39	177	1,939	2,061	2,815	4,876	6,815	( <sup>h</sup> )	84,327	91,334
October .....	22	136	117	254	2,094	2,074	3,031	5,105	7,199	( <sup>h</sup> )	83,724	91,199
November .....	26	159	137	296	1,865	2,020	3,048	5,068	6,933	( <sup>h</sup> )	82,293	89,548
December .....	30	183	158	341	1,733	2,136	2,949	5,085	6,818	( <sup>h</sup> )	89,742	96,930
<b>Total</b> .....	<b>258</b>	<b>1,886</b>	<b>1,083</b>	<b>2,968</b>	<b>22,957</b>	<b>25,262</b>	<b>34,210</b>	<b>59,472</b>	<b>82,429</b>	( <sup>h</sup> )	<b>1,026,636</b>	<b>1,112,292</b>
<b>2007</b> January .....	30	192	148	340	1,818	2,030	2,834	4,864	6,682	( <sup>h</sup> )	91,704	98,756
February .....	29	185	145	330	1,730	1,895	2,959	4,855	6,585	( <sup>h</sup> )	83,988	90,931
March .....	26	171	133	303	2,027	1,968	2,891	4,859	6,887	( <sup>h</sup> )	81,742	88,959
April .....	19	145	77	222	1,865	1,832	2,850	4,682	6,547	( <sup>h</sup> )	75,815	82,603
May .....	19	144	73	217	1,950	1,889	2,795	4,684	6,634	( <sup>h</sup> )	81,221	88,091
June .....	18	137	73	210	1,921	1,906	2,801	4,707	6,629	( <sup>h</sup> )	90,047	96,903
July .....	19	149	65	214	1,913	1,942	2,647	4,589	6,501	( <sup>h</sup> )	96,826	103,560
August .....	20	160	69	229	1,883	1,999	2,569	4,569	6,452	( <sup>h</sup> )	99,341	106,042
September .....	18	143	63	206	1,882	1,839	2,729	4,568	6,450	( <sup>h</sup> )	88,144	94,818
October .....	24	146	134	280	1,957	1,910	2,839	4,749	6,706	( <sup>h</sup> )	84,016	91,027
November .....	29	170	163	333	1,810	1,790	2,956	4,746	6,556	( <sup>h</sup> )	82,344	89,262
December .....	31	183	177	360	1,958	3,081	1,662	4,744	6,702	( <sup>h</sup> )	91,235	98,328
<b>Total</b> .....	<b>282</b>	<b>1,924</b>	<b>1,320</b>	<b>3,244</b>	<b>22,715</b>	<b>24,082</b>	<b>32,533</b>	<b>56,615</b>	<b>79,331</b>	( <sup>h</sup> )	<b>1,046,424</b>	<b>1,129,281</b>
<b>2008</b> January .....	29	198	136	333	1,834	1,940	R 2,753	R 4,693	R 6,527	( <sup>h</sup> )	93,856	R 100,746
February .....	27	185	127	312	1,792	1,938	R 2,715	R 4,654	R 6,445	( <sup>h</sup> )	86,176	R 92,961
March .....	27	183	126	308	1,910	1,925	R 2,744	R 4,669	R 6,579	( <sup>h</sup> )	82,828	R 89,742
April .....	R 19	160	R 54	R 214	1,864	1,910	2,709	4,619	6,483	( <sup>h</sup> )	76,945	R 83,660
May .....	R 19	163	R 55	R 218	1,911	2,020	2,593	4,613	6,524	( <sup>h</sup> )	81,739	R 88,501
June .....	R 22	187	R 63	R 250	1,805	1,951	2,653	4,605	6,410	( <sup>h</sup> )	89,546	R 96,228
July .....	R 20	182	R 44	R 227	R 1,915	2,041	R 2,500	R 4,542	R 6,457	( <sup>h</sup> )	98,035	R 104,738
August .....	R 20	188	R 46	R 234	R 2,034	1,967	R 2,565	R 4,533	R 6,567	( <sup>h</sup> )	95,542	R 102,363
September .....	19	175	42	217	1,818	1,987	2,513	4,501	6,319	( <sup>h</sup> )	85,843	92,397
<b>9-Month Total</b> .....	<b>201</b>	<b>1,622</b>	<b>692</b>	<b>2,314</b>	<b>16,883</b>	<b>17,681</b>	<b>23,747</b>	<b>41,427</b>	<b>58,311</b>	( <sup>h</sup> )	<b>790,510</b>	<b>851,336</b>
<b>2007 9-Month Total</b> .....	<b>197</b>	<b>1,425</b>	<b>846</b>	<b>2,271</b>	<b>16,990</b>	<b>17,301</b>	<b>25,076</b>	<b>42,377</b>	<b>59,367</b>	( <sup>h</sup> )	<b>788,829</b>	<b>850,663</b>
<b>2006 9-Month Total</b> .....	<b>181</b>	<b>1,407</b>	<b>671</b>	<b>2,078</b>	<b>17,265</b>	<b>19,033</b>	<b>25,181</b>	<b>44,214</b>	<b>61,479</b>	( <sup>h</sup> )	<b>770,877</b>	<b>834,615</b>

<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 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>g</sup> Included in "Commercial Other."

<sup>h</sup> Included in "Industrial Non-CHP."

R=Revised.

Notes: • CHP monthly values are from Table 7.4c; electric power sector monthly values are from Table 7.4b; all other monthly values are estimates derived from collected quarterly and annual data. See Note 2, "Coal Consumption," at end of section. • Data values preceded by "F" are derived from the Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

**Table 6.3 Coal Stocks by Sector**  
(Thousand Short Tons)

	Producers and Distributors	End-Use Sectors					Electric Power Sector <sup>b,c</sup>	Total
		Residential and Commercial	Industrial			Total		
			Coke Plants	Other <sup>a</sup>	Total			
<b>1973 Year</b> .....	12,530	290	6,998	10,370	17,368	17,658	86,967	117,155
<b>1975 Year</b> .....	12,108	233	8,797	8,529	17,326	17,559	110,724	140,391
<b>1980 Year</b> .....	24,379	NA	9,067	11,951	21,018	21,018	183,010	228,407
<b>1985 Year</b> .....	33,133	NA	3,420	10,438	13,857	13,857	156,376	203,367
<b>1990 Year</b> .....	33,418	NA	3,329	8,716	12,044	12,044	156,166	201,629
<b>1995 Year</b> .....	34,444	NA	2,632	5,702	8,334	8,334	126,304	169,083
<b>1996 Year</b> .....	28,648	NA	2,667	5,688	8,355	8,355	114,623	151,627
<b>1997 Year</b> .....	33,973	NA	1,978	5,597	7,576	7,576	98,826	140,374
<b>1998 Year</b> .....	36,530	NA	2,026	5,545	7,571	7,571	120,501	164,602
<b>1999 Year</b> .....	39,475	NA	1,943	5,569	7,511	7,511	<sup>c</sup> 141,604	188,590
<b>2000 Year</b> .....	31,905	NA	1,494	4,587	6,081	6,081	102,296	140,282
<b>2001 Year</b> .....	35,900	NA	1,510	6,006	7,516	7,516	138,496	181,912
<b>2002 Year</b> .....	43,257	NA	1,364	5,792	7,156	7,156	141,714	192,127
<b>2003 Year</b> .....	38,277	NA	905	4,718	5,623	5,623	121,567	165,468
<b>2004 Year</b> .....	41,151	NA	1,344	4,842	6,186	6,186	106,669	154,006
<b>2005 Year</b> .....	34,971	NA	2,615	5,582	8,196	8,196	101,137	144,304
<b>2006</b> January .....	33,486	NA	2,661	5,427	8,088	8,088	105,401	146,975
February .....	34,947	NA	2,708	5,272	7,980	7,980	105,986	148,913
March .....	35,113	NA	2,754	5,118	7,872	7,872	112,141	155,126
April .....	37,489	NA	2,783	5,297	8,079	8,079	125,097	170,665
May .....	34,587	NA	2,811	5,476	8,287	8,287	133,841	176,715
June .....	35,307	NA	2,839	5,655	8,494	8,494	135,734	179,535
July .....	38,147	NA	2,817	5,816	8,633	8,633	127,894	174,674
August .....	35,357	NA	2,795	5,977	8,772	8,772	123,884	168,013
September .....	33,170	NA	2,772	6,138	8,910	8,910	126,872	168,952
October .....	34,251	NA	2,824	6,261	9,085	9,085	134,941	178,277
November .....	35,752	NA	2,876	6,383	9,259	9,259	140,442	185,453
December .....	36,548	NA	2,928	6,506	9,434	9,434	140,964	186,946
<b>2007</b> January .....	35,986	NA	2,745	6,256	9,001	9,001	137,606	182,592
February .....	34,450	NA	2,561	6,006	8,568	8,568	135,096	178,113
March .....	34,007	NA	2,444	5,756	8,200	8,200	142,986	185,193
April .....	33,695	NA	2,417	5,728	8,145	8,145	151,296	193,136
May .....	33,107	NA	2,391	5,700	8,091	8,091	156,354	197,552
June .....	32,484	NA	2,364	5,672	8,037	8,037	156,412	196,933
July .....	31,967	NA	2,211	5,719	7,929	7,929	147,047	186,943
August .....	30,885	NA	2,091	5,765	7,856	7,856	142,067	180,808
September .....	30,090	NA	1,972	5,811	7,783	7,783	143,890	181,763
October .....	31,112	NA	1,960	5,748	7,708	7,708	151,141	189,962
November .....	32,069	NA	1,948	5,686	7,634	7,634	154,551	194,254
December .....	33,977	NA	1,936	5,624	7,560	7,560	151,127	192,663
<b>2008</b> January .....	28,258	F 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	R 454	1,560	4,858	6,418	<sup>R</sup> 6,872	152,349	<sup>R</sup> 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	R 491	<sup>R</sup> 1,828	<sup>R</sup> 5,056	<sup>R</sup> 6,884	<sup>R</sup> 7,375	142,863	<sup>R</sup> 179,982
August .....	28,019	R 498	<sup>R</sup> 1,899	<sup>R</sup> 5,132	<sup>R</sup> 7,031	<sup>R</sup> 7,530	141,957	<sup>R</sup> 177,506
September .....	30,235	506	1,971	5,208	7,179	7,685	144,948	182,868

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

<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.

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.

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

Sources: See end of section.

## Coal

**Note 1. Coal Production.** Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the 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, mining, and construction consumption data were included where appropriate. Starting in January 1988, monthly consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Governors of the Federal Reserve System. 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 forward: EIA, Form EIA-6A, “Coal Distribution Report,” annual; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

### **Residential and Commercial**

1973–1976: DOI, BOM, *Minerals Yearbook*.

January–September 1977: DOI, BOM, Form 6-1400, “Monthly Coal Report, Retail Dealers—Upper Lake Docks.”

October 1977–1979: EIA, Form EIA-2, “Monthly Coal Report, Retail Dealers—Upper Lake Docks.”



2008: EIA, Form EIA-3, “Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users” (data for “Commercial and Institutional Coal Users”); and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Industrial Coke Plants**

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1980: EIA, Form EIA-5/5A, “Coke and Coal Chemicals—Monthly/Annual.”

1981–1984: EIA, Form EIA 5/5A, “Coke Plant Report—Quarterly/Annual Supplement.”

1985 forward: EIA, Form EIA-5, “Coke Plant Report—Quarterly”; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Industrial Other**

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1979: EIA, Form EIA-3, “Monthly Coal Consumption Report—Manufacturing Plants.”

1998–2007: EIA, Form EIA-3, “Quarterly Coal Consumption Report—Manufacturing Plants.”

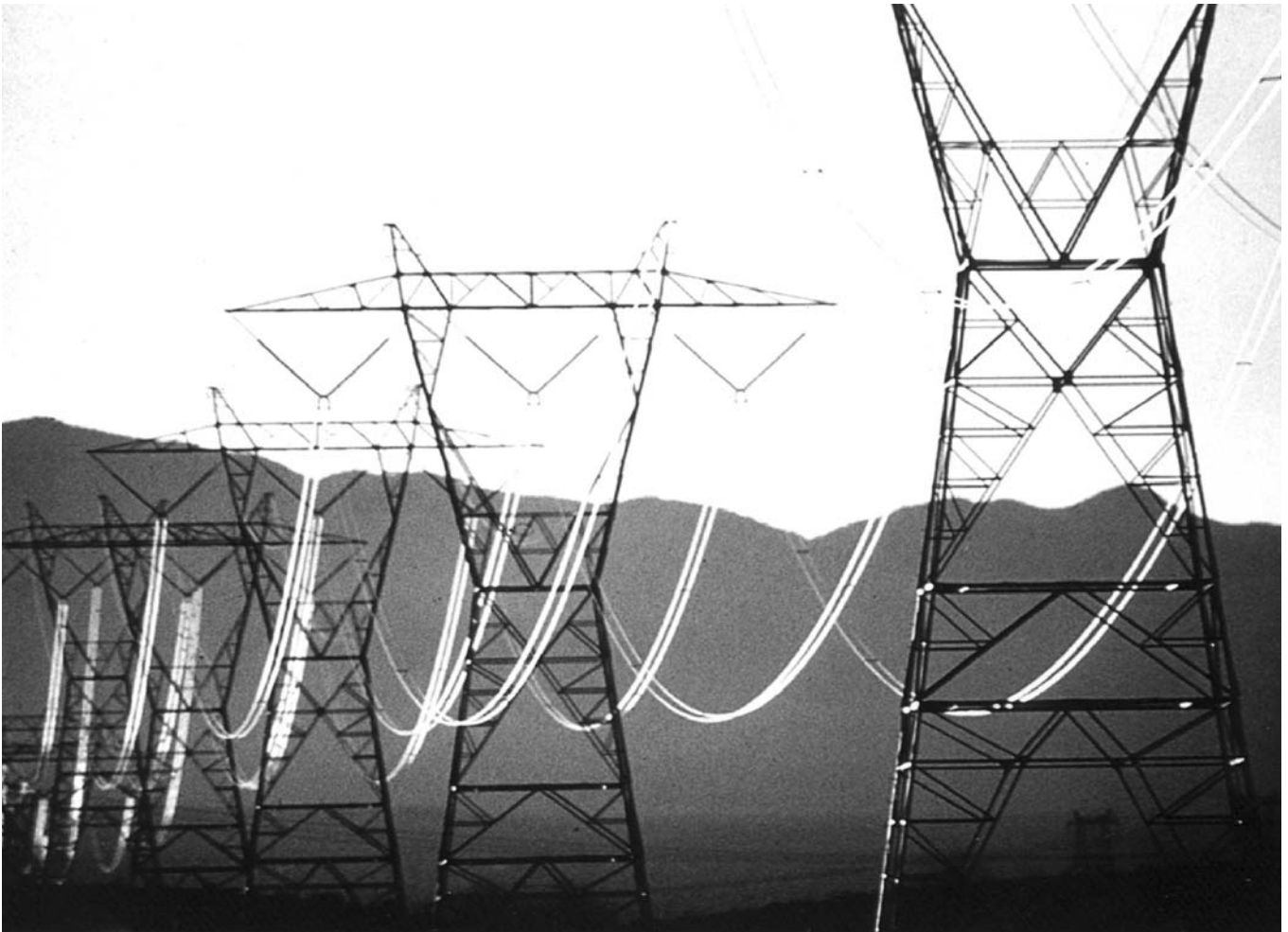
2008: EIA, Form EIA-3, “Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users”; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Electric Power**

Table 7.5.



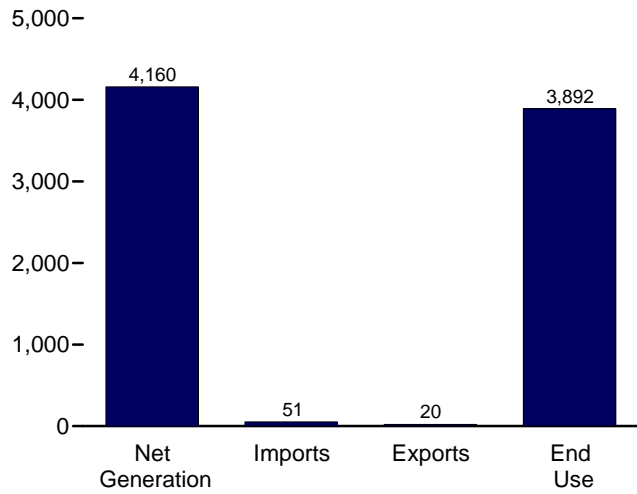
# Electricity



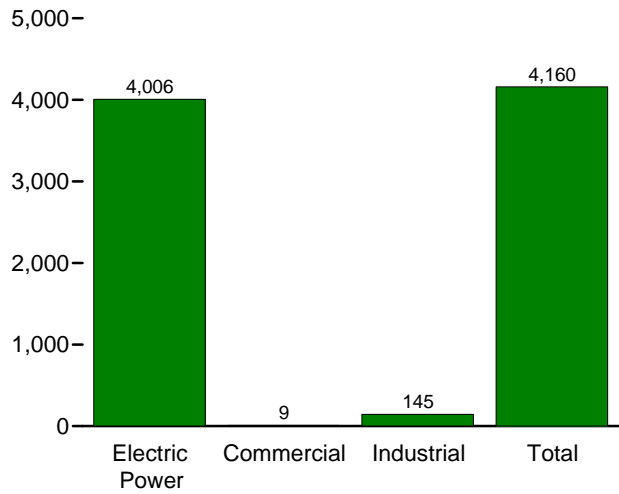
High-tension power lines and towers. Source: U.S. Department of Energy.

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

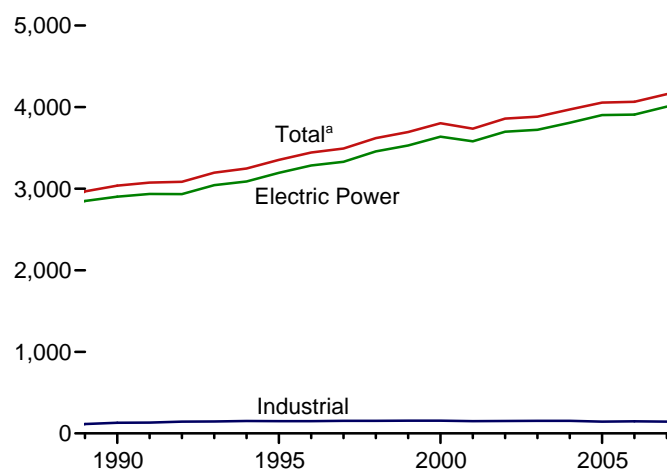
Overview, 2007



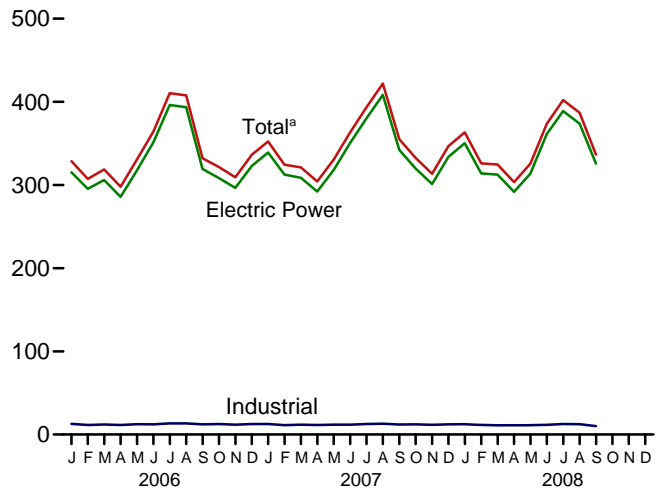
Net Generation, 2007



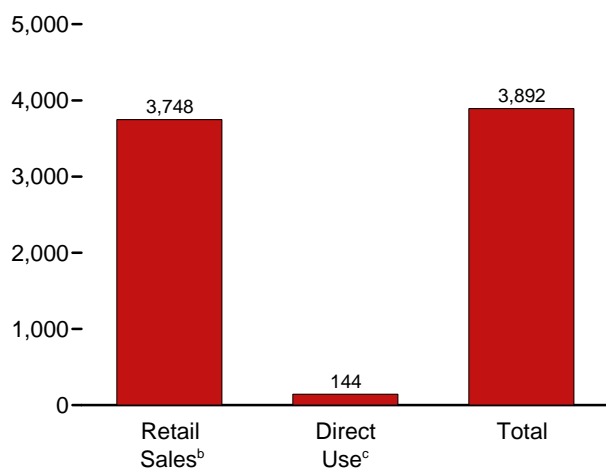
Net Generation by Sector, 1989-2007



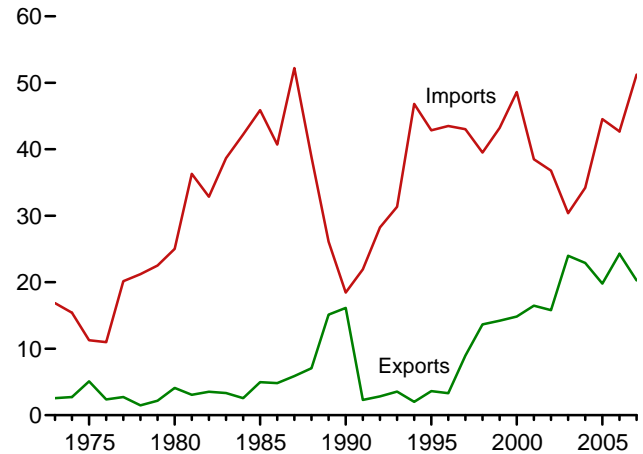
Net Generation by Sector, Monthly



End Use, 2007



Trade, 1973-2007



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

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

<sup>c</sup>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.

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

	Net Generation				Trade			T&D Losses <sup>e</sup> and Unaccounted for <sup>f</sup>	End Use		
	Electric Power Sector <sup>a</sup>	Com- mercial Sector <sup>b</sup>	Indus- trial <sup>c</sup>	Total	Imports <sup>d</sup>	Exports <sup>d</sup>	Net Imports <sup>d</sup>		Retail Sales <sup>g</sup>	Direct Use <sup>h</sup>	Total
1973 Total .....	1,861	NA	3	1,864	17	3	14	165	1,713	NA	1,713
1975 Total .....	1,918	NA	3	1,921	11	5	6	180	1,747	NA	1,747
1980 Total .....	2,286	NA	3	2,290	25	4	21	216	2,094	NA	2,094
1985 Total .....	2,470	NA	3	2,473	46	5	41	190	2,324	NA	2,324
1990 Total .....	2,901	6	131	3,038	18	16	2	203	2,713	125	2,837
1995 Total .....	3,194	8	151	3,353	43	4	39	229	3,013	151	3,164
1996 Total .....	3,284	9	151	3,444	43	3	40	231	3,101	153	3,254
1997 Total .....	3,329	9	154	3,492	43	9	34	224	3,146	156	3,302
1998 Total .....	3,457	9	154	3,620	40	14	26	221	3,264	161	3,425
1999 Total .....	3,530	9	156	3,695	43	14	29	240	3,312	172	3,484
2000 Total .....	3,638	8	157	3,802	49	15	34	244	3,421	171	3,592
2001 Total .....	3,580	7	149	3,737	39	16	22	202	3,394	163	3,557
2002 Total .....	3,698	7	153	3,858	37	16	21	248	3,465	166	3,632
2003 Total .....	3,721	7	155	3,883	30	24	6	228	3,494	168	3,662
2004 Total .....	3,808	8	154	3,971	34	23	11	266	3,547	168	3,716
2005 Total .....	3,902	8	145	4,055	45	20	25	269	3,661	150	3,811
2006 January .....	315	1	13	329	4	2	1	13	305	E 12	317
February .....	295	1	11	307	3	2	2	17	281	E 11	292
March .....	306	1	12	319	4	2	2	19	290	E 12	302
April .....	286	1	11	298	3	2	1	20	268	E 11	280
May .....	R 317	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 12	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 12	313
Total .....	3,908	8	148	4,065	43	24	18	266	3,670	144	3,817
2007 January .....	339	1	13	352	3	2	2	28	314	E 12	326
February .....	313	1	11	324	4	1	3	16	301	E 11	312
March .....	309	1	12	321	4	2	2	20	291	E 12	303
April .....	292	1	11	304	4	1	3	22	274	E 11	285
May .....	318	1	12	331	5	1	R 3	R 31	291	E 12	303
June .....	350	1	12	363	4	1	3	33	321	E 12	333
July .....	380	1	13	394	5	2	4	34	351	E 12	364
August .....	408	1	13	422	5	2	3	41	372	E 13	385
September .....	342	1	12	355	4	2	1	8	336	E 12	348
October .....	320	1	12	333	R 4	2	2	16	307	E 12	319
November .....	301	1	12	314	4	2	3	20	284	E 12	296
December .....	334	1	12	347	4	2	2	30	306	E 12	318
Total .....	4,006	9	145	4,160	51	20	31	299	3,748	E 144	3,892
2008 January .....	350	1	12	363	5	2	3	27	327	E 12	340
February .....	314	1	11	326	5	2	3	11	307	E 11	318
March .....	313	1	11	325	5	3	2	20	296	E 11	307
April .....	292	1	11	303	4	1	3	16	279	E 11	290
May .....	314	1	11	326	5	3	2	26	291	E 11	302
June .....	361	1	12	374	6	3	3	36	329	E 12	341
July .....	389	1	13	402	6	2	4	31	363	E 13	375
August .....	374	1	12	387	6	1	4	24	355	E 12	367
September .....	326	1	10	337	5	2	3	4	325	E 10	335
9-Month Total .....	3,032	6	104	3,142	47	19	28	195	2,872	E 103	2,975
2007 9-Month Total .....	3,052	6	109	3,167	39	15	24	233	2,851	E 108	2,958
2006 9-Month Total .....	2,980	6	111	3,098	33	18	15	201	2,801	E 110	2,912

<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> 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.

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

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

<sup>h</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.

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

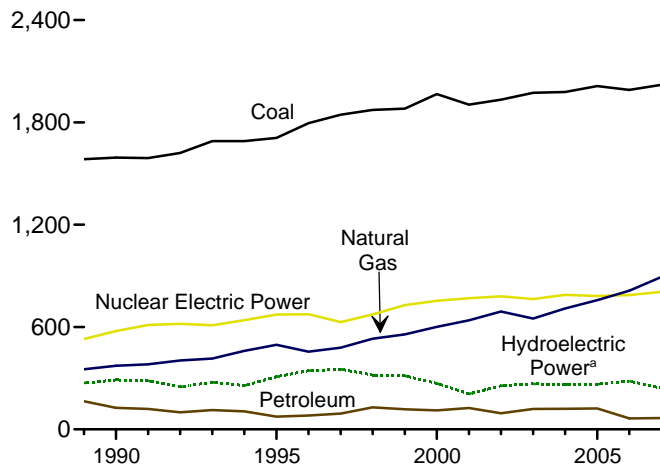
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

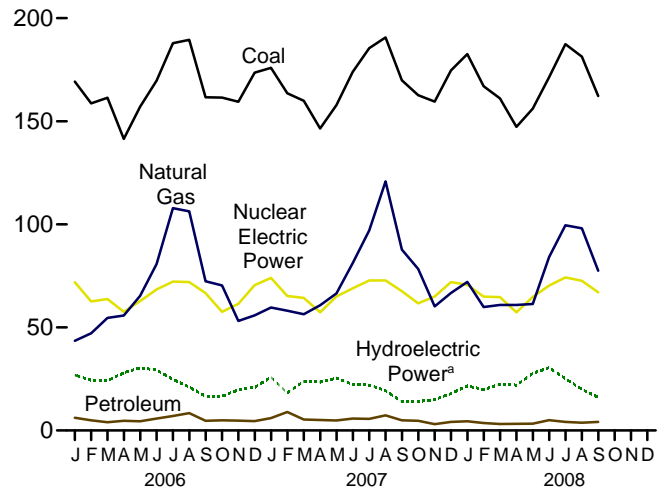
Sources: See end of section.

**Figure 7.2 Electricity Net Generation**  
(Billion Kilowatthours)

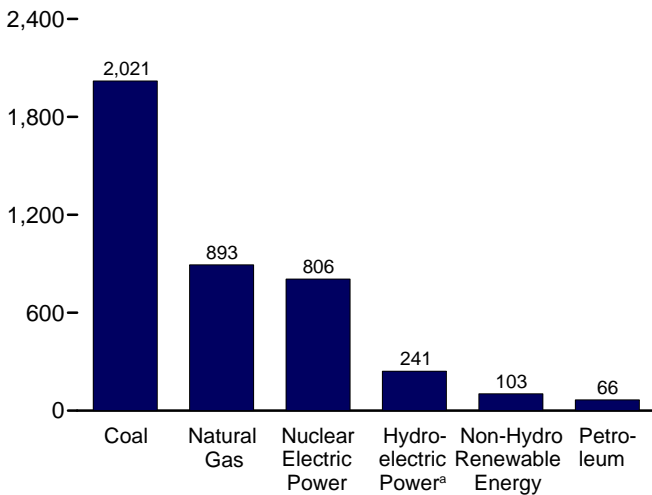
Total (All Sectors), Major Sources, 1989-2007



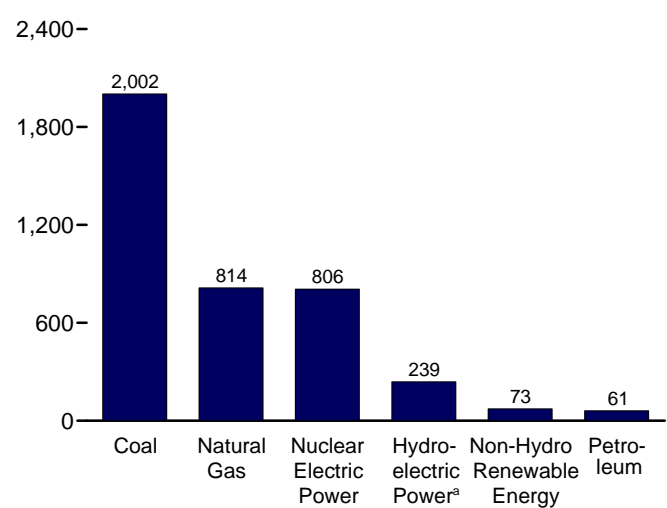
Total (All Sectors), Major Sources, Monthly



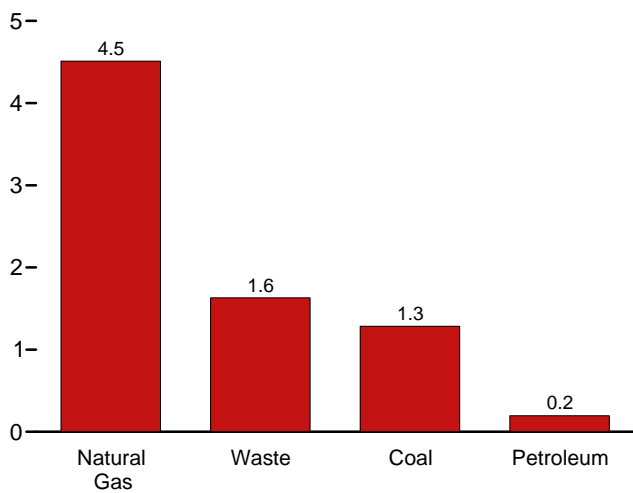
Total (All Sectors), Major Sources, 2007



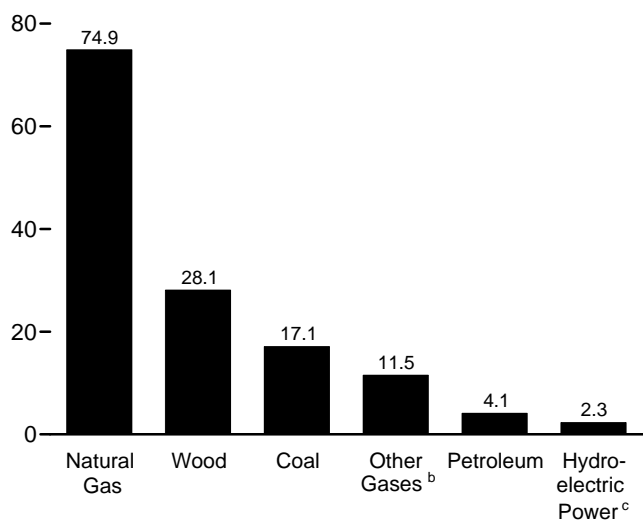
Electric Power Sector, Major Sources, 2007



Commercial Sector, Major Sources, 2007



Industrial Sector, Major Sources, 2007



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

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

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

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.

**Table 7.2a Electricity Net Generation: Total (All Sectors)**  
(Sum of Tables 7.2b and 7.2c; Million Kilowatthours)

	Fossil Fuels				Nuclear Electric Power	Hydro-electric Pumped Storage <sup>e</sup>	Renewable Energy						Total <sup>i</sup>
	Coal <sup>a</sup>	Petroleum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>			Conventional Hydro-electric Power	Biomass		Geo-thermal	Solar/PV <sup>h</sup>	Wind	
								Wood <sup>f</sup>	Waste <sup>g</sup>				
<b>1973 Total</b> .....	<b>847,651</b>	<b>314,343</b>	<b>340,858</b>	<b>NA</b>	<b>83,479</b>	<b>(j)</b>	<b>275,431</b>	<b>130</b>	<b>198</b>	<b>1,966</b>	<b>NA</b>	<b>NA</b>	<b>1,864,057</b>
<b>1975 Total</b> .....	<b>852,786</b>	<b>289,095</b>	<b>299,778</b>	<b>NA</b>	<b>172,505</b>	<b>(j)</b>	<b>303,153</b>	<b>18</b>	<b>174</b>	<b>3,246</b>	<b>NA</b>	<b>NA</b>	<b>1,920,755</b>
<b>1980 Total</b> .....	<b>1,161,562</b>	<b>245,994</b>	<b>346,240</b>	<b>NA</b>	<b>251,116</b>	<b>(j)</b>	<b>279,182</b>	<b>275</b>	<b>158</b>	<b>5,073</b>	<b>NA</b>	<b>NA</b>	<b>2,289,600</b>
<b>1985 Total</b> .....	<b>1,402,128</b>	<b>100,202</b>	<b>291,946</b>	<b>NA</b>	<b>383,691</b>	<b>(j)</b>	<b>284,311</b>	<b>743</b>	<b>640</b>	<b>9,325</b>	<b>11</b>	<b>6</b>	<b>2,473,002</b>
<b>1990 Total</b> <sup>k</sup> .....	<b>1,594,011</b>	<b>126,621</b>	<b>372,765</b>	<b>10,383</b>	<b>576,862</b>	<b>-3,508</b>	<b>292,866</b>	<b>32,522</b>	<b>13,260</b>	<b>15,434</b>	<b>367</b>	<b>2,789</b>	<b>3,037,988</b>
<b>1995 Total</b> .....	<b>1,709,426</b>	<b>74,554</b>	<b>496,058</b>	<b>13,870</b>	<b>673,402</b>	<b>-2,725</b>	<b>310,833</b>	<b>36,521</b>	<b>20,405</b>	<b>13,378</b>	<b>497</b>	<b>3,164</b>	<b>3,353,487</b>
<b>1996 Total</b> .....	<b>1,795,196</b>	<b>81,411</b>	<b>455,056</b>	<b>14,356</b>	<b>674,729</b>	<b>-3,088</b>	<b>347,162</b>	<b>36,800</b>	<b>20,911</b>	<b>14,329</b>	<b>521</b>	<b>3,234</b>	<b>3,444,188</b>
<b>1997 Total</b> .....	<b>1,845,016</b>	<b>92,555</b>	<b>479,399</b>	<b>13,351</b>	<b>628,644</b>	<b>-4,040</b>	<b>356,453</b>	<b>36,948</b>	<b>21,709</b>	<b>14,726</b>	<b>511</b>	<b>3,288</b>	<b>3,492,172</b>
<b>1998 Total</b> .....	<b>1,873,516</b>	<b>128,800</b>	<b>531,257</b>	<b>13,492</b>	<b>673,702</b>	<b>-4,467</b>	<b>323,336</b>	<b>36,338</b>	<b>22,448</b>	<b>14,774</b>	<b>502</b>	<b>3,026</b>	<b>3,620,295</b>
<b>1999 Total</b> .....	<b>1,881,087</b>	<b>118,061</b>	<b>556,396</b>	<b>14,126</b>	<b>728,254</b>	<b>-6,097</b>	<b>319,536</b>	<b>37,041</b>	<b>22,572</b>	<b>14,827</b>	<b>495</b>	<b>4,488</b>	<b>3,694,810</b>
<b>2000 Total</b> .....	<b>1,966,265</b>	<b>111,221</b>	<b>601,038</b>	<b>13,955</b>	<b>753,893</b>	<b>-5,539</b>	<b>275,573</b>	<b>37,595</b>	<b>23,131</b>	<b>14,093</b>	<b>493</b>	<b>5,593</b>	<b>3,802,105</b>
<b>2001 Total</b> .....	<b>1,903,956</b>	<b>124,880</b>	<b>639,129</b>	<b>9,039</b>	<b>768,826</b>	<b>-8,823</b>	<b>216,961</b>	<b>35,200</b>	<b>14,548</b>	<b>13,741</b>	<b>543</b>	<b>6,737</b>	<b>3,736,644</b>
<b>2002 Total</b> .....	<b>1,933,130</b>	<b>94,567</b>	<b>691,006</b>	<b>11,463</b>	<b>780,064</b>	<b>-8,743</b>	<b>264,329</b>	<b>38,665</b>	<b>15,044</b>	<b>14,491</b>	<b>555</b>	<b>10,354</b>	<b>3,858,452</b>
<b>2003 Total</b> .....	<b>1,973,737</b>	<b>119,406</b>	<b>649,908</b>	<b>15,600</b>	<b>763,733</b>	<b>-8,535</b>	<b>275,806</b>	<b>37,529</b>	<b>15,812</b>	<b>14,424</b>	<b>534</b>	<b>11,187</b>	<b>3,883,185</b>
<b>2004 Total</b> .....	<b>1,978,620</b>	<b>120,771</b>	<b>708,854</b>	<b>16,766</b>	<b>788,528</b>	<b>-8,488</b>	<b>268,417</b>	<b>37,576</b>	<b>15,497</b>	<b>14,811</b>	<b>575</b>	<b>14,144</b>	<b>3,970,555</b>
<b>2005 Total</b> .....	<b>2,013,179</b>	<b>122,522</b>	<b>757,974</b>	<b>16,317</b>	<b>781,986</b>	<b>-6,558</b>	<b>270,321</b>	<b>38,681</b>	<b>15,479</b>	<b>14,692</b>	<b>550</b>	<b>17,811</b>	<b>4,055,423</b>
<b>2006</b>													
January .....	169,258	6,144	43,529	1,326	71,912	-533	27,437	3,426	1,391	1,230	13	2,383	328,658
February .....	158,648	4,934	47,152	1,260	62,616	-447	24,762	3,044	1,273	1,111	20	1,922	307,333
March .....	161,355	4,035	54,585	1,421	63,721	-435	24,625	3,214	1,342	1,261	33	2,359	318,730
April .....	141,456	4,708	55,795	1,352	57,567	-587	28,556	2,968	1,228	1,129	52	2,472	297,858
May .....	157,051	4,440	65,302	1,440	62,776	-444	30,818	3,024	1,371	1,096	71	2,459	330,616
June .....	169,726	5,787	80,787	1,326	68,391	-423	29,757	3,126	1,328	1,199	70	2,052	364,260
July .....	187,860	7,024	107,862	1,374	72,186	-638	25,439	3,419	1,401	1,261	62	1,955	410,421
August .....	189,488	8,388	106,289	1,474	72,016	-695	21,728	3,466	1,388	1,289	83	1,655	407,763
September .....	161,630	4,661	72,402	1,299	66,642	-629	17,201	3,241	1,309	1,219	54	1,879	332,055
October .....	161,434	4,907	70,351	1,358	57,509	-507	17,055	3,193	1,336	1,275	32	2,442	321,567
November .....	159,472	4,760	53,161	1,216	61,392	-553	20,272	3,166	1,360	1,207	16	2,540	309,159
December .....	173,547	4,577	55,829	1,215	70,490	-667	21,596	3,360	1,385	1,290	3	2,472	336,283
<b>Total</b> .....	<b>1,990,926</b>	<b>64,364</b>	<b>813,044</b>	<b>16,060</b>	<b>787,219</b>	<b>-6,558</b>	<b>289,246</b>	<b>38,649</b>	<b>16,110</b>	<b>14,568</b>	<b>508</b>	<b>26,589</b>	<b>4,064,702</b>
<b>2007</b>													
January .....	175,919	5,986	59,653	1,322	74,006	-572	26,405	3,288	1,446	1,306	13	2,459	352,369
February .....	163,590	8,959	58,087	1,173	65,225	-447	18,648	3,046	1,320	1,193	19	2,541	324,415
March .....	159,904	5,333	56,363	1,419	64,305	-458	24,272	3,100	1,465	1,216	48	3,061	321,198
April .....	146,516	5,056	60,729	1,337	57,301	-374	23,854	3,043	1,283	1,165	54	3,194	304,309
May .....	157,841	4,882	66,469	1,341	65,025	-547	25,930	3,070	1,376	1,168	84	2,858	330,701
June .....	173,990	5,762	81,185	1,361	68,923	-523	22,860	3,204	1,449	1,250	84	2,395	363,084
July .....	185,433	5,593	97,046	1,366	72,729	-595	22,623	3,349	1,491	1,264	86	1,928	393,503
August .....	190,681	7,327	120,761	1,339	72,751	-651	20,002	3,382	1,461	1,267	75	2,446	422,053
September .....	169,839	4,904	87,741	1,266	67,582	-756	14,667	3,247	1,432	1,230	68	2,641	354,981
October .....	162,642	4,714	78,321	1,164	61,690	-786	14,826	3,223	1,261	1,278	48	3,056	332,609
November .....	159,525	3,042	60,159	1,168	64,969	-685	15,727	3,239	1,416	1,223	23	2,705	313,561
December .....	174,691	4,150	66,696	1,160	71,983	-601	18,498	3,324	1,485	1,278	3	2,859	346,731
<b>Total</b> .....	<b>2,020,572</b>	<b>65,708</b>	<b>893,211</b>	<b>15,414</b>	<b>806,487</b>	<b>-6,994</b>	<b>248,312</b>	<b>38,515</b>	<b>16,885</b>	<b>14,839</b>	<b>606</b>	<b>32,143</b>	<b>4,159,514</b>
<b>2008</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	325,906
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	2,391	336,584
<b>9-Month Total</b> .....	<b>1,516,211</b>	<b>34,654</b>	<b>674,250</b>	<b>11,795</b>	<b>606,491</b>	<b>-4,668</b>	<b>209,702</b>	<b>28,602</b>	<b>12,525</b>	<b>10,967</b>	<b>717</b>	<b>32,627</b>	<b>3,142,149</b>
<b>2007 9-Month Total</b> .....	<b>1,523,714</b>	<b>53,802</b>	<b>688,035</b>	<b>11,923</b>	<b>607,846</b>	<b>-4,922</b>	<b>199,261</b>	<b>28,729</b>	<b>12,723</b>	<b>11,060</b>	<b>532</b>	<b>23,522</b>	<b>3,166,614</b>
<b>2006 9-Month Total</b> .....	<b>1,496,473</b>	<b>50,120</b>	<b>633,703</b>	<b>12,273</b>	<b>597,827</b>	<b>-4,831</b>	<b>230,324</b>	<b>28,929</b>	<b>12,029</b>	<b>10,795</b>	<b>457</b>	<b>19,135</b>	<b>3,097,693</b>

<sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

<sup>b</sup> Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

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

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

<sup>e</sup> Pumped storage facility production minus energy used for pumping.

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

<sup>g</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).

<sup>h</sup> Solar thermal and photovoltaic energy.

<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).

<sup>j</sup> Included in "Conventional Hydroelectric Power."

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

NA=Not available.

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

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

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

**Table 7.2b Electricity Net Generation: Electric Power Sector**

(Subset of Table 7.2a; Million Kilowatthours)

	Fossil Fuels				Nuclear Electric Power	Hydro-electric Pumped Storage <sup>e</sup>	Renewable Energy					Total <sup>i</sup>	
	Coal <sup>a</sup>	Petroleum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>			Conventional Hydro-electric Power	Biomass		Geo-thermal	Solar/PV <sup>h</sup>		Wind
								Wood <sup>f</sup>	Waste <sup>g</sup>				
<b>1973 Total</b> .....	847,651	314,343	340,858	NA	83,479	(j)	272,083	130	198	1,966	NA	NA	1,860,710
<b>1975 Total</b> .....	852,786	289,095	299,778	NA	172,505	(j)	300,047	18	174	3,246	NA	NA	1,917,649
<b>1980 Total</b> .....	1,161,562	245,994	346,240	NA	251,116	(j)	276,021	275	158	5,073	NA	NA	2,286,439
<b>1985 Total</b> .....	1,402,128	100,202	291,946	NA	383,691	(j)	281,149	743	640	9,325	11	6	2,469,841
<b>1990 Total</b> <sup>k</sup> .....	1,572,109	118,864	309,486	621	576,862	-3,508	289,753	7,032	11,500	15,434	367	2,789	2,901,322
<b>1995 Total</b> .....	1,686,056	68,146	419,179	1,927	673,402	-2,725	305,410	7,597	17,986	13,378	497	3,164	3,194,230
<b>1996 Total</b> .....	1,771,973	74,783	378,757	1,341	674,729	-3,088	341,159	8,386	17,816	14,329	521	3,234	3,284,141
<b>1997 Total</b> .....	1,820,762	86,479	399,596	1,533	628,644	-4,040	350,648	8,680	18,485	14,726	511	3,288	3,329,375
<b>1998 Total</b> .....	1,850,193	122,211	449,293	2,315	673,702	-4,467	317,867	8,608	19,233	14,774	502	3,026	3,457,416
<b>1999 Total</b> .....	1,858,618	111,539	472,996	1,607	728,254	-6,097	314,663	8,961	19,493	14,827	495	4,488	3,529,982
<b>2000 Total</b> .....	1,943,111	105,192	517,978	2,028	753,893	-5,539	271,338	8,916	20,307	14,093	493	5,593	3,637,529
<b>2001 Total</b> .....	1,882,826	119,149	554,940	586	768,826	-8,823	213,749	8,294	12,944	13,741	543	6,737	3,580,053
<b>2002 Total</b> .....	1,910,613	89,733	607,683	1,970	780,064	-8,743	260,491	9,009	13,145	14,491	555	10,354	3,698,458
<b>2003 Total</b> .....	1,952,714	113,697	567,303	2,647	763,733	-8,535	271,512	9,528	13,808	14,424	534	11,187	3,721,159
<b>2004 Total</b> .....	1,957,194	114,692	627,394	3,026	788,528	-8,488	265,064	9,727	13,130	14,811	575	14,144	3,808,360
<b>2005 Total</b> .....	1,992,060	116,767	683,316	3,960	781,986	-6,558	267,040	10,568	13,039	14,692	550	17,811	3,902,192
<b>2006</b> January .....	167,478	5,706	36,940	331	71,912	-533	27,067	925	1,194	1,230	13	2,383	315,254
February .....	157,019	4,539	41,285	283	62,616	-447	24,469	862	1,095	1,111	20	1,922	295,333
March .....	159,599	3,644	48,426	335	63,721	-435	24,402	899	1,188	1,261	33	2,359	306,041
April .....	139,729	4,365	50,051	324	57,567	-587	28,361	686	1,054	1,129	52	2,472	285,788
May .....	155,291	4,094	58,671	359	62,776	-444	30,628	760	1,171	1,096	71	2,459	317,522
June .....	167,907	5,447	74,192	347	68,391	-423	29,571	841	1,155	1,199	70	2,052	351,360
July .....	185,953	6,668	100,539	285	72,186	-638	25,216	919	1,217	1,261	62	1,955	396,263
August .....	187,578	7,994	98,893	394	72,016	-695	21,546	976	1,211	1,289	83	1,655	393,589
September .....	159,906	4,305	65,905	327	66,642	-629	16,996	866	1,135	1,219	54	1,879	319,181
October .....	159,684	4,605	63,526	324	57,509	-507	16,774	844	1,150	1,275	32	2,442	308,218
November .....	157,819	4,405	46,953	315	61,392	-553	19,903	852	1,173	1,207	16	2,540	296,571
December .....	171,812	4,154	49,062	317	70,490	-667	21,320	902	1,191	1,290	3	2,472	322,957
<b>Total</b> .....	<b>1,969,776</b>	<b>59,926</b>	<b>734,445</b>	<b>3,940</b>	<b>787,219</b>	<b>-6,558</b>	<b>286,254</b>	<b>10,332</b>	<b>13,934</b>	<b>14,568</b>	<b>508</b>	<b>26,589</b>	<b>3,908,077</b>
<b>2007</b> January .....	174,363	5,581	52,809	354	74,006	-572	25,988	928	1,256	1,306	13	2,459	339,100
February .....	162,144	8,541	52,023	316	65,225	-447	18,433	891	1,153	1,193	19	2,541	312,564
March .....	158,293	4,923	50,151	338	64,305	-458	24,051	847	1,262	1,216	48	3,061	308,636
April .....	145,057	4,660	54,757	307	57,301	-374	23,645	711	1,135	1,165	54	3,194	292,179
May .....	156,280	4,493	60,109	305	65,025	-547	25,740	791	1,197	1,168	84	2,858	318,095
June .....	172,436	5,425	74,733	343	68,923	-523	22,637	888	1,252	1,250	84	2,395	350,467
July .....	183,806	5,259	90,115	331	72,729	-595	22,482	900	1,276	1,264	86	1,928	380,189
August .....	189,024	6,976	113,383	347	72,751	-651	19,783	942	1,266	1,267	75	2,446	408,235
September .....	168,307	4,636	80,961	310	67,582	-756	14,560	872	1,244	1,230	68	2,641	342,234
October .....	161,114	4,425	71,402	301	61,690	-786	14,707	838	1,065	1,278	48	3,056	319,740
November .....	158,102	2,726	53,606	315	64,969	-685	15,611	872	1,218	1,223	23	2,705	301,212
December .....	173,217	3,803	59,791	318	71,983	-601	18,335	903	1,286	1,278	3	2,859	333,830
<b>Total</b> .....	<b>2,002,141</b>	<b>61,449</b>	<b>813,840</b>	<b>3,884</b>	<b>806,487</b>	<b>-6,994</b>	<b>245,973</b>	<b>10,381</b>	<b>14,610</b>	<b>14,839</b>	<b>606</b>	<b>32,143</b>	<b>4,006,482</b>
<b>2008</b> January .....	181,028	4,167	64,786	475	70,686	-754	22,101	968	1,186	1,187	15	3,737	350,160
February .....	165,575	3,392	53,263	400	64,936	-375	19,942	881	1,043	1,075	33	3,275	313,948
March .....	159,462	2,875	54,764	540	64,683	-522	22,611	910	1,193	1,218	75	4,103	312,571
April .....	145,680	3,018	55,010	475	57,281	-98	21,857	777	1,250	1,200	87	4,487	291,818
May .....	154,468	3,084	55,083	507	64,794	-587	28,003	758	1,254	1,254	96	4,450	313,748
June .....	169,699	4,734	77,466	414	70,268	-372	30,684	851	1,241	1,241	120	4,349	361,315
July .....	185,646	3,886	92,214	447	74,266	-799	25,771	952	1,219	1,281	105	3,236	388,813
August .....	179,666	3,499	90,835	440	72,573	-648	20,554	982	1,222	1,267	99	2,599	373,684
September .....	160,600	3,855	71,985	187	67,003	-513	16,447	920	1,117	1,225	86	2,391	325,842
<b>9-Month Total</b> .....	<b>1,501,824</b>	<b>32,510</b>	<b>615,406</b>	<b>3,884</b>	<b>606,491</b>	<b>-4,668</b>	<b>207,970</b>	<b>7,999</b>	<b>10,725</b>	<b>10,967</b>	<b>717</b>	<b>32,627</b>	<b>3,031,900</b>
<b>2007 9-Month Total</b> .....	<b>1,509,708</b>	<b>50,494</b>	<b>629,041</b>	<b>2,950</b>	<b>607,846</b>	<b>-4,922</b>	<b>197,320</b>	<b>7,768</b>	<b>11,040</b>	<b>11,060</b>	<b>532</b>	<b>23,522</b>	<b>3,051,700</b>
<b>2006 9-Month Total</b> .....	<b>1,480,461</b>	<b>46,761</b>	<b>574,904</b>	<b>2,984</b>	<b>597,827</b>	<b>-4,831</b>	<b>228,257</b>	<b>7,734</b>	<b>10,420</b>	<b>10,795</b>	<b>457</b>	<b>19,135</b>	<b>2,980,331</b>

<sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

<sup>b</sup> Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

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

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

<sup>e</sup> Pumped storage facility production minus energy used for pumping.

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

<sup>g</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).

<sup>h</sup> Solar thermal and photovoltaic energy.

<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).

<sup>j</sup> Included in "Conventional Hydroelectric Power."

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

NA=Not available.

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

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

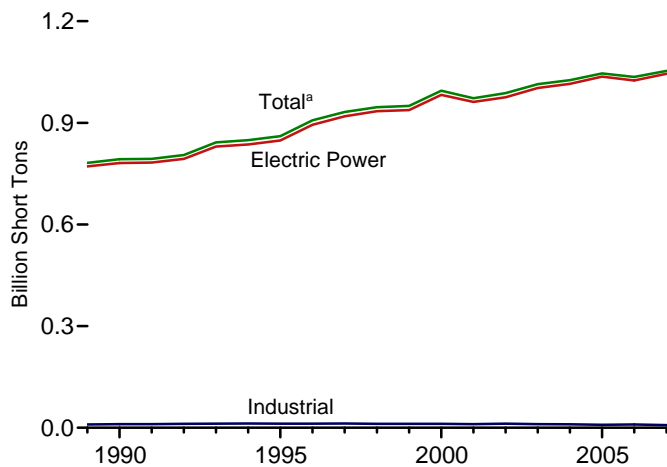
Sources: See end of section.



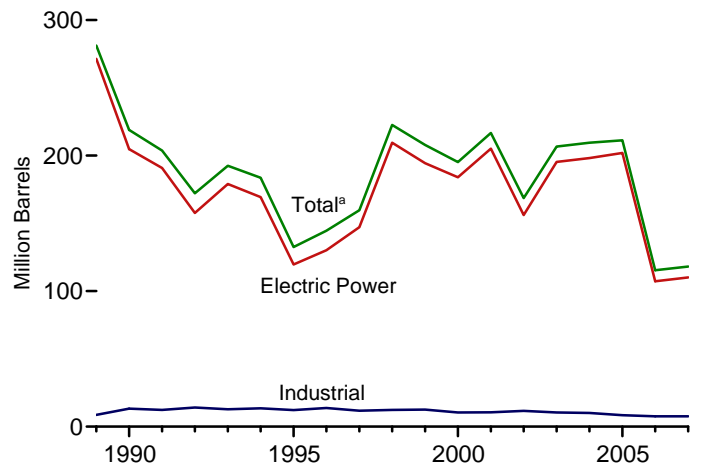


**Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation**

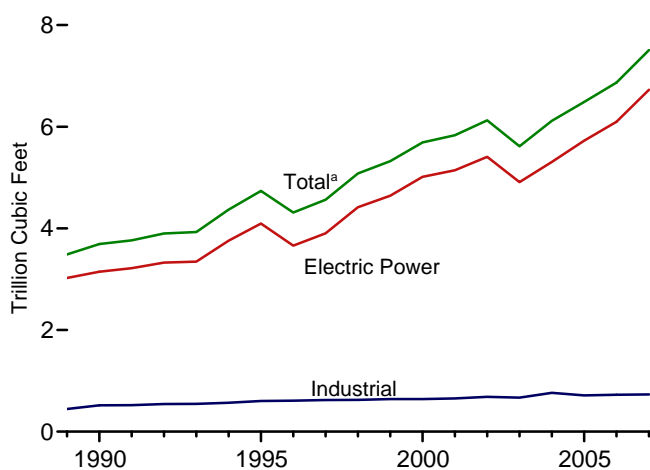
**Coal by Sector, 1989-2007**



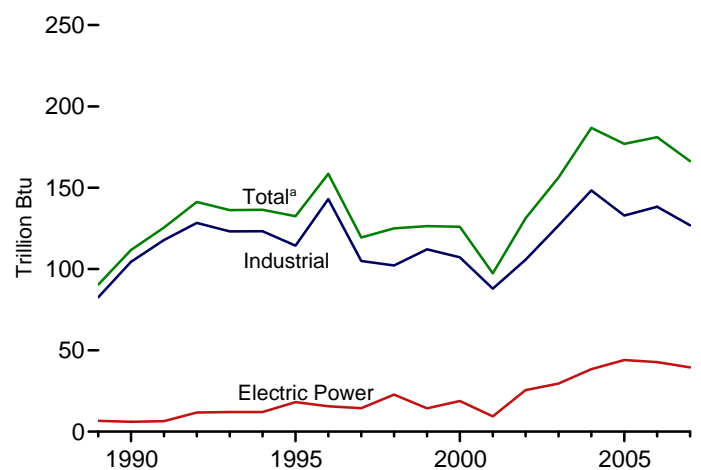
**Petroleum by Sector, 1989-2007**



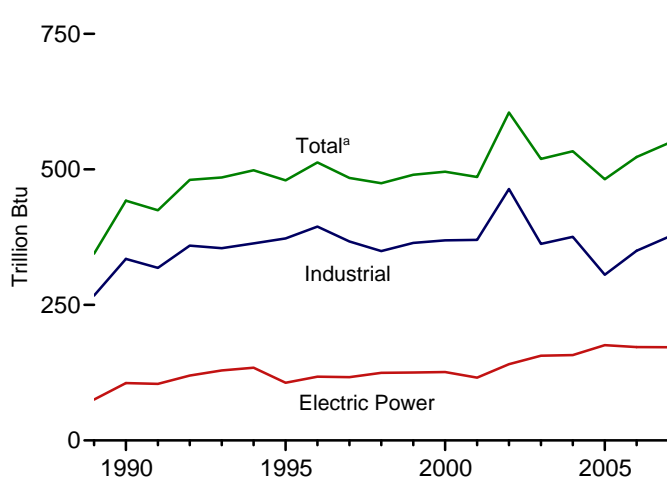
**Natural Gas by Sector, 1989-2007**



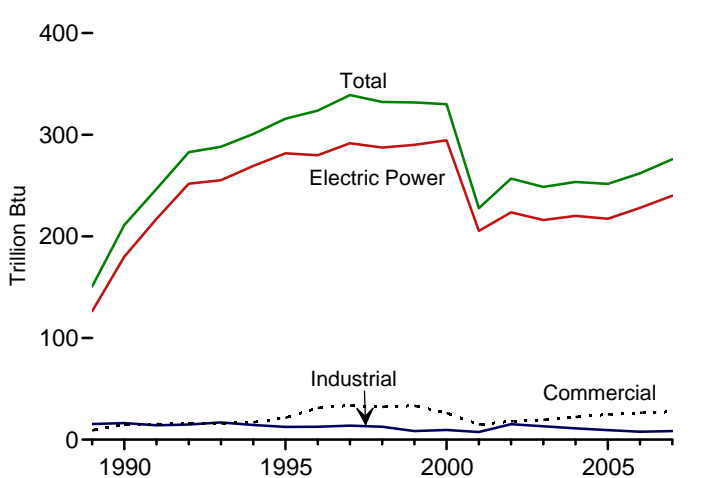
**Other Gases<sup>b</sup> by Sector, 1989-2007**



**Wood by Sector, 1989-2007**



**Waste by Sector, 1989-2007**



<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 7.3a, 7.3b, and 7.3c.

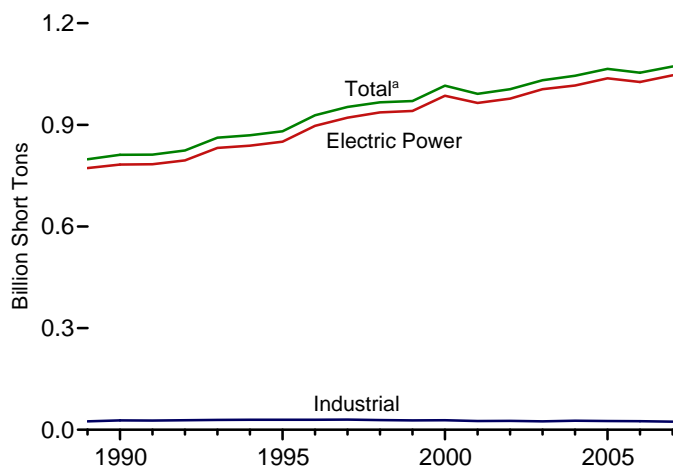




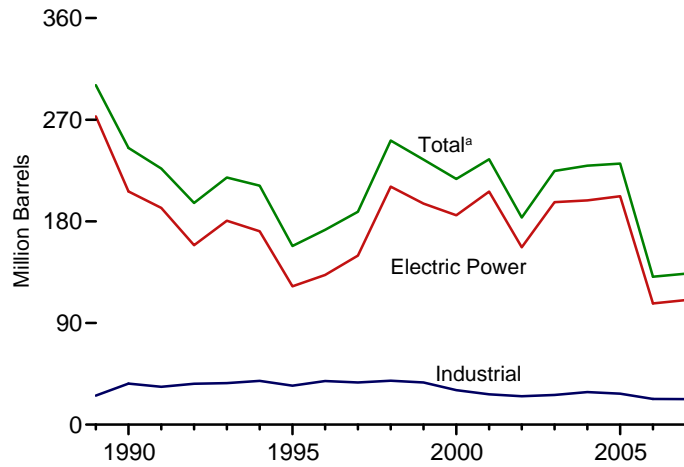


**Figure 7.4 Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output**

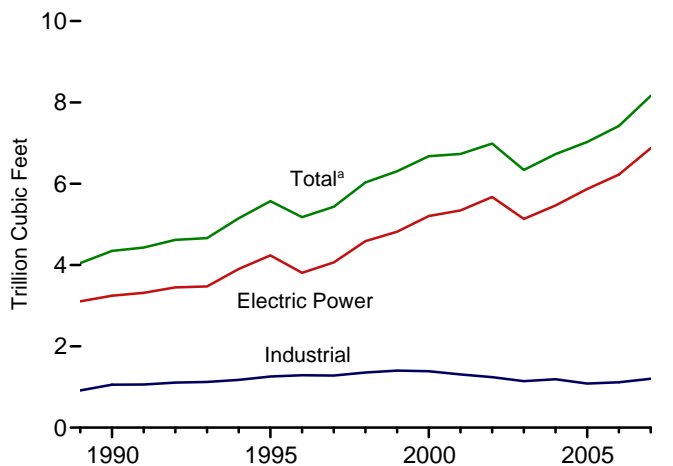
Coal by Sector, 1989-2007



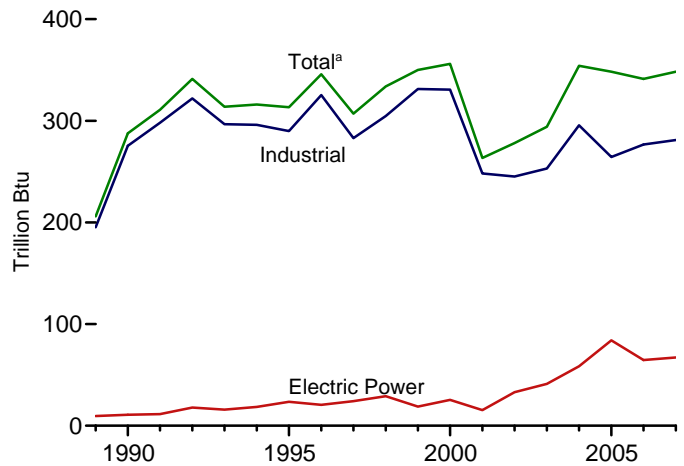
Petroleum by Sector, 1989-2007



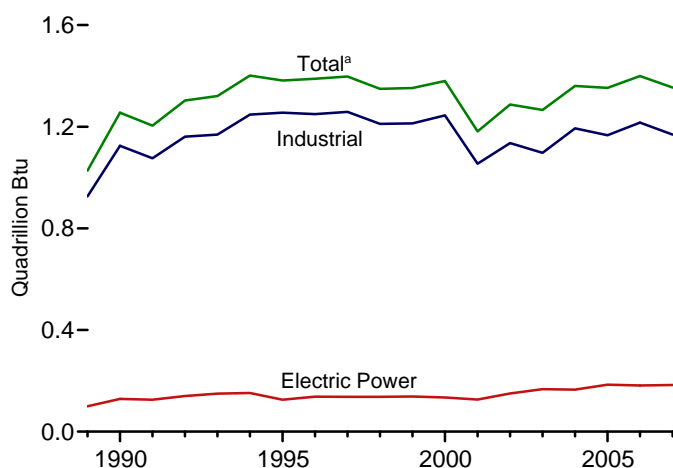
Natural Gas by Sector, 1989-2007



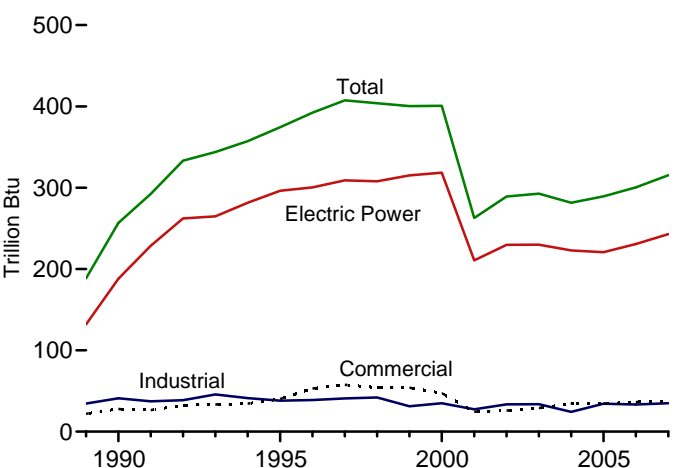
Other Gases<sup>b</sup> by Sector, 1989-2007



Wood by Sector, 1989-2007



Waste by Sector, 1989-2007



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

	Commercial Sector <sup>a</sup>				Industrial Sector <sup>b</sup>						
	Coal <sup>c</sup>	Petroleum <sup>d</sup>	Natural Gas <sup>e</sup>	Biomass	Coal <sup>c</sup>	Petroleum <sup>d</sup>	Natural Gas <sup>e</sup>	Other Gases <sup>g</sup>	Biomass		Other <sup>i</sup>
				Waste <sup>f</sup>					Wood <sup>h</sup>	Waste <sup>f</sup>	
Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu				
<b>1989 Total</b> .....	1,125	1,967	30	22	24,867	25,685	914	195	926	35	85
<b>1990 Total</b> .....	1,191	2,056	46	28	27,781	36,392	1,055	275	1,125	41	86
<b>1995 Total</b> .....	1,419	1,245	78	40	29,363	34,448	1,258	290	1,255	38	95
<b>1996 Total</b> .....	1,660	1,246	82	53	29,434	38,661	1,289	325	1,249	39	89
<b>1997 Total</b> .....	1,738	1,584	87	58	29,853	37,265	1,282	283	1,259	41	102
<b>1998 Total</b> .....	1,443	1,807	87	54	28,553	38,910	1,355	305	1,211	42	93
<b>1999 Total</b> .....	1,490	1,613	84	54	27,763	37,312	1,401	331	1,213	31	99
<b>2000 Total</b> .....	1,547	1,615	85	47	28,031	30,520	1,386	331	1,244	35	108
<b>2001 Total</b> .....	1,448	1,832	79	25	25,755	26,817	1,310	248	1,054	27	101
<b>2002 Total</b> .....	1,405	1,250	74	26	26,232	25,163	1,240	245	1,136	34	92
<b>2003 Total</b> .....	1,816	1,449	58	29	24,846	26,212	1,144	253	1,097	34	103
<b>2004 Total</b> .....	1,917	2,009	72	34	26,613	28,857	1,191	296	1,193	24	67
<b>2005 Total</b> .....	1,922	1,630	75	34	25,875	27,380	1,084	264	1,166	34	70
<b>2006</b> January .....	186	121	5	3	2,217	2,411	91	23	112	3	6
February .....	169	137	5	3	2,024	2,098	83	22	96	3	6
March .....	170	126	5	3	2,115	2,070	91	25	100	3	7
April .....	134	77	5	3	2,050	1,802	84	24	97	3	6
May .....	139	51	5	3	2,059	1,762	92	24	98	3	7
June .....	147	51	20	3	2,104	1,677	94	23	98	2	6
July .....	163	55	7	3	2,202	1,717	103	25	105	3	7
August .....	163	58	7	3	2,202	1,791	104	25	103	3	7
September .....	138	49	6	3	2,061	1,722	91	23	100	3	7
October .....	136	44	6	3	2,074	1,545	97	24	103	3	7
November .....	159	64	5	3	2,020	1,863	89	21	100	3	7
December .....	183	102	6	3	2,136	2,249	95	20	105	3	7
<b>Total</b> .....	<b>1,886</b>	<b>935</b>	<b>82</b>	<b>36</b>	<b>25,262</b>	<b>22,706</b>	<b>1,115</b>	<b>277</b>	<b>1,216</b>	<b>33</b>	<b>79</b>
<b>2007</b> January .....	192	126	6	3	2,030	2,262	97	24	100	3	7
February .....	185	132	7	3	1,895	2,347	88	18	92	3	6
March .....	171	111	6	3	1,968	2,192	89	24	97	3	7
April .....	145	81	5	3	1,832	2,078	86	26	99	2	7
May .....	144	41	5	3	1,889	1,960	90	25	97	3	7
June .....	137	33	7	3	1,906	1,770	99	24	95	3	6
July .....	149	31	9	3	1,942	1,641	109	24	100	3	6
August .....	160	44	10	3	1,999	1,793	135	24	97	3	7
September .....	143	37	8	3	1,839	1,481	109	23	95	3	6
October .....	146	37	8	3	1,910	1,582	107	25	99	3	7
November .....	170	45	6	3	1,790	1,590	91	23	97	3	6
December .....	183	56	7	3	3,081	1,886	103	23	101	3	7
<b>Total</b> .....	<b>1,924</b>	<b>774</b>	<b>83</b>	<b>37</b>	<b>24,082</b>	<b>22,580</b>	<b>1,202</b>	<b>281</b>	<b>1,169</b>	<b>35</b>	<b>78</b>
<b>2008</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	21	5	3	2,020	1,094	84	21	88	2	3
June .....	187	41	5	3	1,951	1,225	88	20	88	3	3
July .....	182	42	5	3	2,041	1,226	89	23	92	3	3
August .....	188	26	5	3	1,967	1,035	92	23	91	3	3
September .....	175	26	5	3	1,987	1,087	72	18	88	3	3
<b>9-Month Total</b> .....	<b>1,622</b>	<b>338</b>	<b>47</b>	<b>26</b>	<b>17,681</b>	<b>10,807</b>	<b>764</b>	<b>196</b>	<b>788</b>	<b>24</b>	<b>29</b>
<b>2007 9-Month Total</b> .....	<b>1,425</b>	<b>636</b>	<b>63</b>	<b>28</b>	<b>17,301</b>	<b>17,523</b>	<b>901</b>	<b>211</b>	<b>871</b>	<b>26</b>	<b>58</b>
<b>2006 9-Month Total</b> .....	<b>1,407</b>	<b>725</b>	<b>65</b>	<b>27</b>	<b>19,033</b>	<b>17,048</b>	<b>833</b>	<b>212</b>	<b>908</b>	<b>25</b>	<b>58</b>

<sup>a</sup> Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

<sup>b</sup> 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.

<sup>d</sup> Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

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

<sup>f</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).

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

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

<sup>i</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).

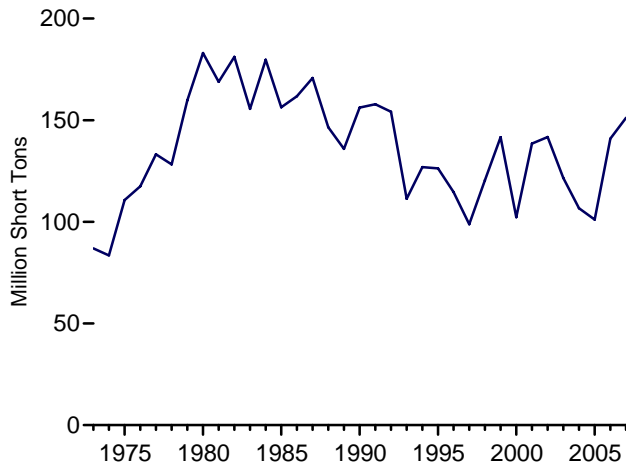
Notes: • Data are for fuels consumed to produce electricity and useful thermal output. Through 1988, data are not available. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage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

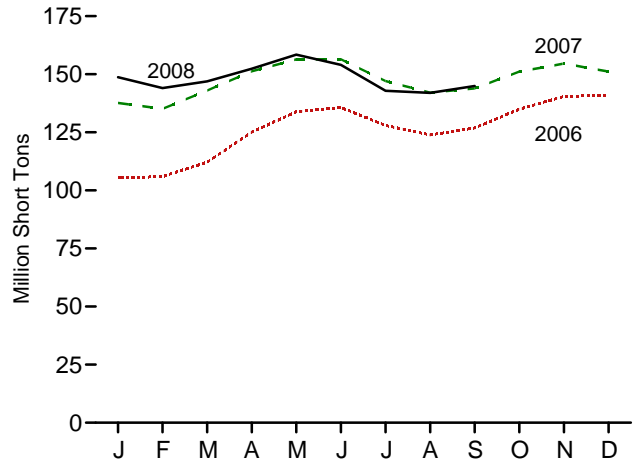
Sources: • **1989-1997:** Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906,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

**Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector**

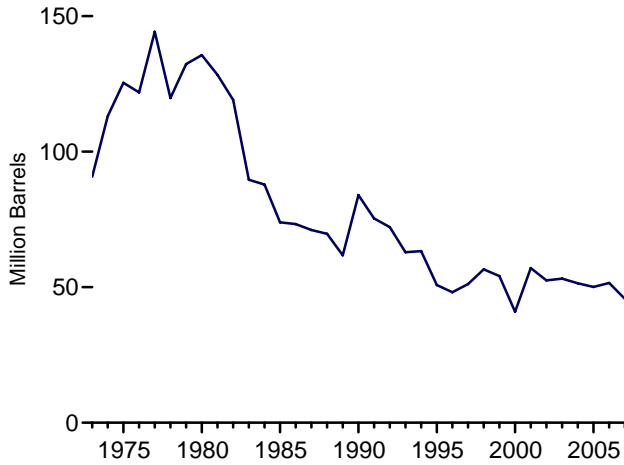
Coal, 1973-2007



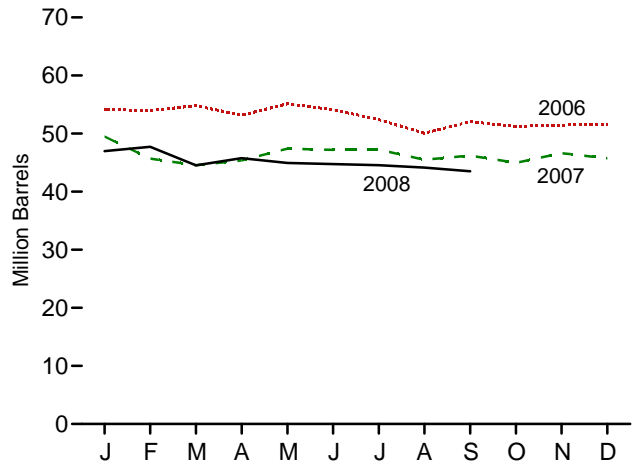
Coal, Monthly



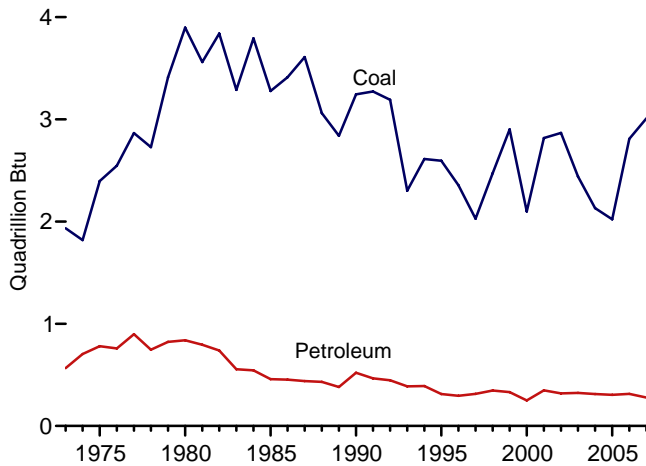
Total Petroleum, 1973-2007



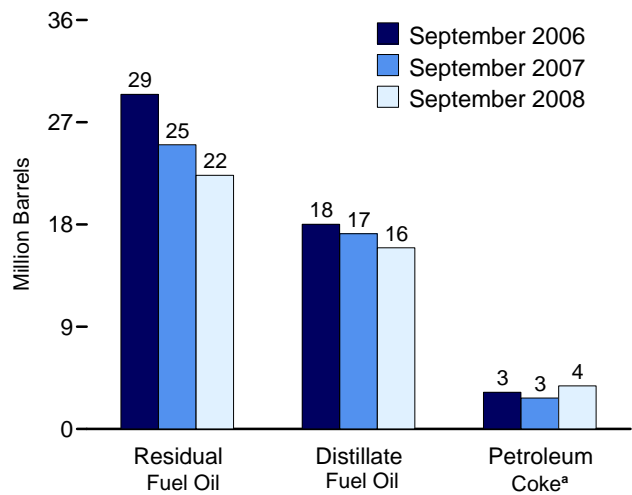
Total Petroleum, Monthly



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**

	Coal <sup>a</sup>	Petroleum				
		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>
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels
<b>1973 Year</b> .....	<b>86,967</b>	<b>10,095</b>	<b>79,121</b>	<b>NA</b>	<b>312</b>	<b>90,776</b>
<b>1975 Year</b> .....	<b>110,724</b>	<b>16,432</b>	<b>108,825</b>	<b>NA</b>	<b>31</b>	<b>125,413</b>
<b>1980 Year</b> .....	<b>183,010</b>	<b>30,023</b>	<b>105,351</b>	<b>NA</b>	<b>52</b>	<b>135,635</b>
<b>1985 Year</b> .....	<b>156,376</b>	<b>16,386</b>	<b>57,304</b>	<b>NA</b>	<b>49</b>	<b>73,933</b>
<b>1990 Year</b> .....	<b>156,166</b>	<b>16,471</b>	<b>67,030</b>	<b>NA</b>	<b>94</b>	<b>83,970</b>
<b>1995 Year</b> .....	<b>126,304</b>	<b>15,392</b>	<b>35,102</b>	<b>NA</b>	<b>65</b>	<b>50,821</b>
<b>1996 Year</b> .....	<b>114,623</b>	<b>15,216</b>	<b>32,473</b>	<b>NA</b>	<b>91</b>	<b>48,146</b>
<b>1997 Year</b> .....	<b>98,826</b>	<b>15,456</b>	<b>33,336</b>	<b>NA</b>	<b>469</b>	<b>51,138</b>
<b>1998 Year</b> .....	<b>120,501</b>	<b>16,343</b>	<b>37,451</b>	<b>NA</b>	<b>559</b>	<b>56,591</b>
<b>1999 Year</b> <sup>f</sup> .....	<b>141,604</b>	<b>17,995</b>	<b>34,256</b>	<b>NA</b>	<b>372</b>	<b>54,109</b>
<b>2000 Year</b> .....	<b>102,296</b>	<b>15,127</b>	<b>24,748</b>	<b>NA</b>	<b>211</b>	<b>40,932</b>
<b>2001 Year</b> .....	<b>138,496</b>	<b>20,486</b>	<b>34,594</b>	<b>NA</b>	<b>390</b>	<b>57,031</b>
<b>2002 Year</b> .....	<b>141,714</b>	<b>17,413</b>	<b>25,723</b>	<b>800</b>	<b>1,711</b>	<b>52,490</b>
<b>2003 Year</b> .....	<b>121,567</b>	<b>19,153</b>	<b>25,820</b>	<b>779</b>	<b>1,484</b>	<b>53,170</b>
<b>2004 Year</b> .....	<b>106,669</b>	<b>19,275</b>	<b>26,596</b>	<b>879</b>	<b>937</b>	<b>51,434</b>
<b>2005 Year</b> .....	<b>101,137</b>	<b>18,778</b>	<b>27,624</b>	<b>1,012</b>	<b>530</b>	<b>50,062</b>
<b>2006</b>						
January .....	105,401	18,413	31,748	1,058	587	54,151
February .....	105,986	18,393	31,335	1,075	633	53,966
March .....	112,141	18,346	31,881	1,087	700	54,813
April .....	125,097	18,156	30,641	1,101	650	53,148
May .....	133,841	18,156	32,462	1,094	684	55,132
June .....	135,734	18,199	31,503	1,082	665	54,110
July .....	127,894	18,044	30,198	1,081	615	52,401
August .....	123,884	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 .....	<b>140,964</b>	<b>18,013</b>	<b>28,823</b>	<b>1,380</b>	<b>674</b>	<b>51,583</b>
<b>2007</b>						
January .....	137,606	17,465	27,107	1,390	703	49,477
February .....	135,096	17,137	23,569	1,342	730	45,697
March .....	142,986	16,875	23,145	1,303	649	44,569
April .....	151,296	16,721	23,935	1,309	683	45,381
May .....	156,354	16,739	25,980	1,327	668	47,385
June .....	156,412	16,943	26,178	1,322	552	47,201
July .....	147,047	17,020	25,503	1,316	677	47,223
August .....	142,067	16,944	24,342	1,302	582	45,496
September .....	143,890	17,184	25,024	1,288	546	46,224
October .....	151,141	17,673	23,274	1,308	545	44,981
November .....	154,551	17,629	24,632	1,305	610	46,619
December .....	<b>151,127</b>	<b>17,579</b>	<b>24,081</b>	<b>1,325</b>	<b>550</b>	<b>45,733</b>
<b>2008</b>						
January .....	148,707	18,927	23,674	1,422	590	46,973
February .....	144,011	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 .....	158,422	16,229	23,336	1,446	787	44,945
June .....	154,041	15,663	23,866	1,449	755	44,754
July .....	142,863	15,955	23,068	1,445	818	44,558
August .....	141,957	15,851	22,917	1,445	786	44,145
September .....	144,948	15,949	22,325	1,436	760	43,509

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

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

<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 waste oil.

<sup>e</sup> Petroleum coke is converted from short tons to barrels by multiplying by 5.

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

NA=Not available.

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

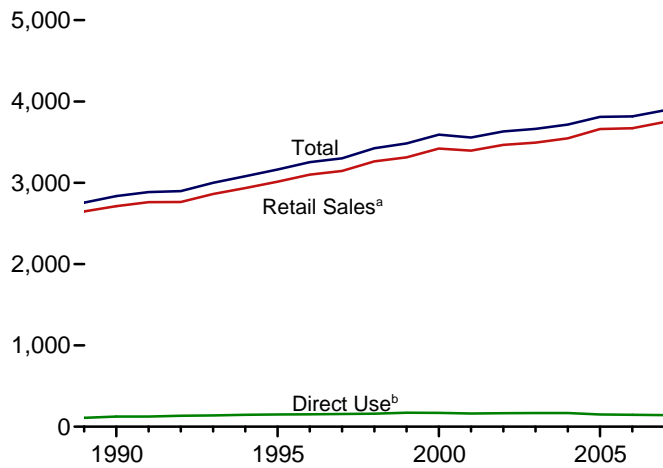
are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

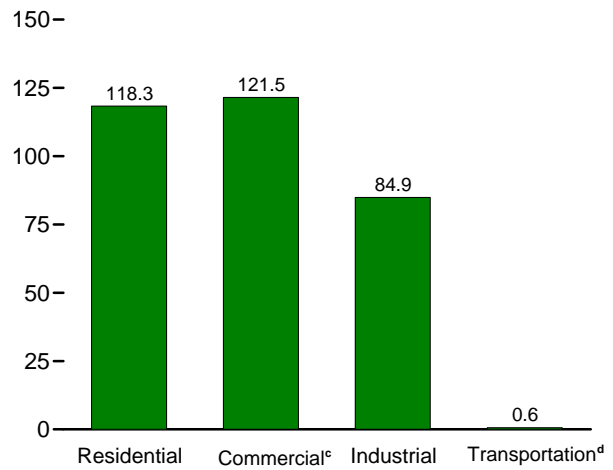
Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977-1981:** Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982-1988:** Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant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

**Figure 7.6 Electricity End Use**  
(Billion Kilowatthours)

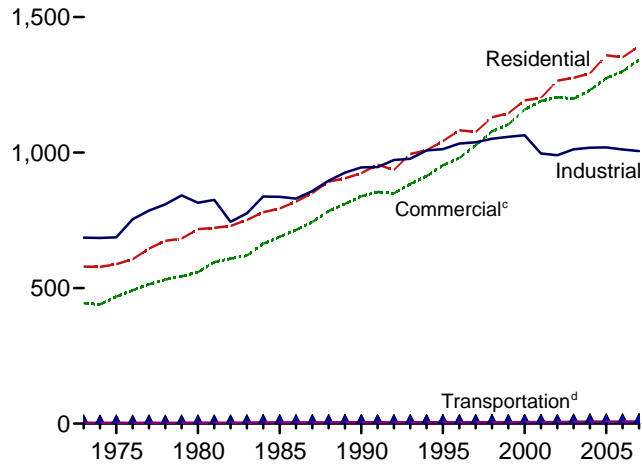
Electricity End Use Overview, 1989-2007



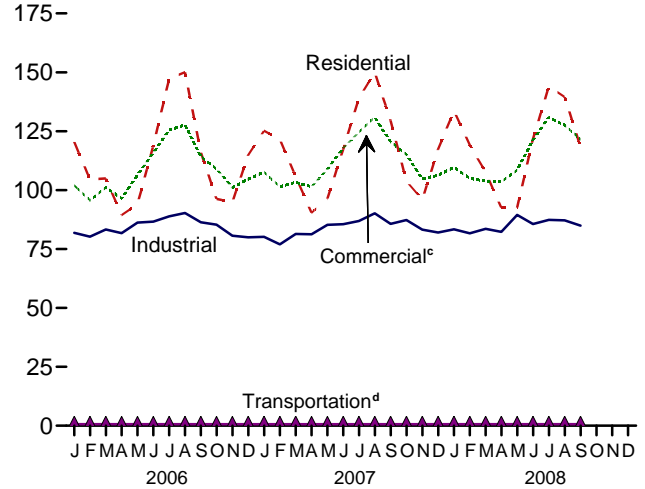
Retail Sales<sup>a</sup> by Sector, September 2008



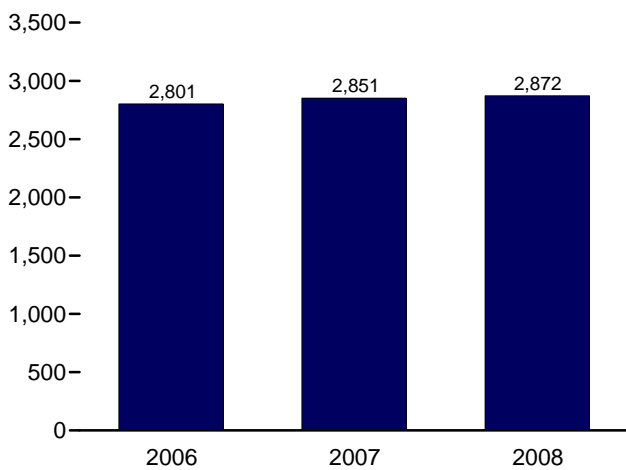
Retail Sales<sup>a</sup> by Sector, 1973-2007



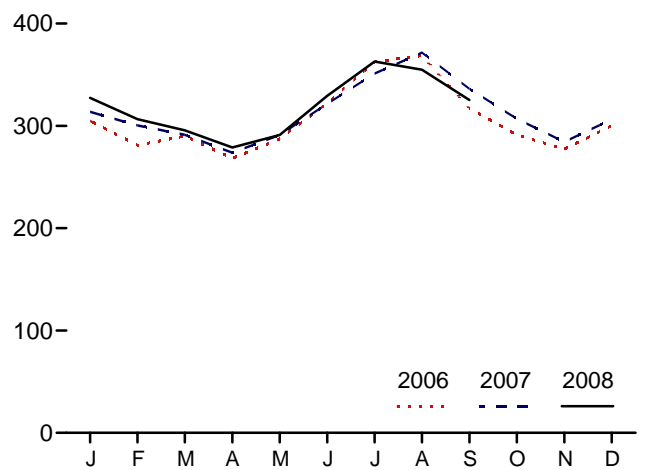
Retail Sales<sup>a</sup> by Sector, Monthly



Retail Sales<sup>a</sup> Total, January-September



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



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

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

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

<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.

**Table 7.6 Electricity End Use**  
(Million Kilowatthours)

	Retail Sales <sup>a</sup>					Direct Use <sup>f</sup>	Total End Use <sup>g</sup>	Discontinued Retail Sales Series	
	Residential	Commercial <sup>b</sup>	Industrial <sup>c</sup>	Transportation <sup>d</sup>	Total Retail Sales <sup>e</sup>			Commercial (Old) <sup>h</sup>	Other (Old) <sup>i</sup>
<b>1973 Total</b>	579,231	E 444,505	686,085	E 3,087	1,712,909	NA	1,712,909	388,266	59,326
<b>1975 Total</b>	588,140	E 468,296	687,680	E 2,974	1,747,091	NA	1,747,091	403,049	68,222
<b>1980 Total</b>	717,495	558,643	815,067	3,244	2,094,449	NA	2,094,449	488,155	73,732
<b>1985 Total</b>	793,934	689,121	836,772	4,147	2,323,974	NA	2,323,974	605,989	87,279
<b>1990 Total</b>	924,019	838,263	945,522	4,751	2,712,555	124,529	2,837,084	751,027	91,988
<b>1995 Total</b>	1,042,501	953,117	1,012,693	4,975	3,013,287	150,677	3,163,963	862,685	95,407
<b>1996 Total</b>	1,082,512	980,061	1,033,631	4,923	3,101,127	152,638	3,253,765	887,445	97,539
<b>1997 Total</b>	1,075,880	1,026,626	1,038,197	4,907	3,145,610	156,239	3,301,849	928,633	102,901
<b>1998 Total</b>	1,130,109	1,077,957	1,051,203	4,962	3,264,231	160,866	3,425,097	979,401	103,518
<b>1999 Total</b>	1,144,923	1,103,821	1,058,217	5,126	3,312,087	171,629	3,483,716	1,001,996	106,952
<b>2000 Total</b>	1,192,446	1,159,347	1,064,239	5,382	3,421,414	170,943	3,592,357	1,055,232	109,496
<b>2001 Total</b>	1,201,607	1,190,518	996,609	5,724	3,394,458	162,649	3,557,107	1,083,069	113,174
<b>2002 Total</b>	1,265,180	1,204,531	990,238	5,517	3,465,466	166,184	3,631,650	1,104,497	105,552
<b>2003 Total</b>	1,275,824	1,198,728	1,012,373	6,810	3,493,734	168,295	3,662,029	--	--
<b>2004 Total</b>	1,291,982	1,230,425	1,017,850	7,224	3,547,479	168,470	3,715,949	--	--
<b>2005 Total</b>	1,359,227	1,275,079	1,019,156	7,506	3,660,969	150,016	3,810,984	--	--
<b>2006</b>									
January	120,419	101,933	81,865	649	304,866	R 12,339	R 317,205	--	--
February	104,511	95,713	80,207	615	281,046	R 11,042	R 292,088	--	--
March	104,955	101,115	83,264	636	289,970	R 11,638	R 301,608	--	--
April	89,374	96,551	81,696	587	268,208	R 11,060	R 279,268	--	--
May	94,000	106,442	86,179	577	287,198	R 12,006	R 299,204	--	--
June	118,815	115,785	86,630	609	321,840	R 11,860	R 333,700	--	--
July	147,338	125,541	88,880	627	362,387	R 13,013	R 375,399	--	--
August	150,064	127,655	90,285	630	368,634	R 13,044	R 381,678	--	--
September	116,072	114,231	86,364	615	317,282	R 11,850	R 329,133	--	--
October	96,246	109,000	85,337	602	291,186	R 12,285	R 303,471	--	--
November	94,843	101,104	80,653	582	277,182	R 11,560	R 288,742	--	--
December	114,882	104,673	79,937	627	300,119	E 12,252	R 312,371	--	--
<b>Total</b>	<b>1,351,520</b>	<b>1,299,744</b>	<b>1,011,298</b>	<b>7,358</b>	<b>3,669,919</b>	<b>143,949</b>	<b>R 3,813,868</b>	<b>--</b>	<b>--</b>
<b>2007</b>									
January	125,172	107,699	80,139	724	313,735	E 12,447	326,182	--	--
February	121,440	101,435	77,001	663	300,539	E 11,118	311,657	--	--
March	105,785	103,342	81,385	717	291,229	E 11,784	303,013	--	--
April	90,362	101,429	81,283	602	273,677	E 11,379	285,056	--	--
May	96,368	108,873	85,280	597	291,118	E 11,825	302,943	--	--
June	117,340	117,878	85,514	631	321,363	E 11,835	333,198	--	--
July	138,960	124,611	86,870	638	351,079	E 12,490	363,569	--	--
August	149,978	130,920	90,145	643	371,686	E 12,962	384,648	--	--
September	129,475	120,415	85,675	648	336,214	E 11,957	348,171	--	--
October	103,770	115,095	87,330	617	306,812	E 12,072	318,884	--	--
November	95,892	104,651	83,188	637	284,368	E 11,584	295,953	--	--
December	117,367	106,325	82,019	619	306,330	E 12,102	318,432	--	--
<b>Total</b>	<b>1,391,911</b>	<b>1,342,673</b>	<b>1,005,828</b>	<b>7,738</b>	<b>3,748,149</b>	<b>E 143,556</b>	<b>3,891,705</b>	<b>--</b>	<b>--</b>
<b>2008</b>									
January	133,623	109,646	83,368	693	327,330	E 12,296	339,626	--	--
February	119,138	105,045	81,678	668	306,528	E 11,218	317,747	--	--
March	107,602	103,826	83,585	634	295,647	E 11,383	307,030	--	--
April	92,513	103,506	82,281	614	278,913	E 10,916	289,829	--	--
May	92,559	108,472	89,497	596	291,124	E 11,210	302,333	--	--
June	121,758	121,321	85,618	622	329,319	E 11,554	340,873	--	--
July	144,003	130,907	87,370	644	362,925	E 12,501	375,426	--	--
August	139,511	127,484	87,189	640	354,824	E 12,267	367,091	--	--
September	118,343	121,521	84,899	625	325,388	E 10,077	335,465	--	--
<b>9-Month Total</b>	<b>1,069,051</b>	<b>1,031,729</b>	<b>765,484</b>	<b>5,734</b>	<b>2,871,998</b>	<b>E 103,423</b>	<b>2,975,420</b>	<b>--</b>	<b>--</b>
<b>2007 9-Month Total</b>	<b>1,074,882</b>	<b>1,016,602</b>	<b>753,291</b>	<b>5,865</b>	<b>2,850,639</b>	<b>E 107,798</b>	<b>2,958,437</b>	<b>--</b>	<b>--</b>
<b>2006 9-Month Total</b>	<b>1,045,549</b>	<b>984,967</b>	<b>765,370</b>	<b>5,545</b>	<b>2,801,432</b>	<b>E 110,095</b>	<b>2,911,527</b>	<b>--</b>	<b>--</b>

<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."

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

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

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

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

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

Sources: See end of section.

## Electricity

**Note. Classification of Power Plants Into Energy-Use Sectors.** The 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*, December 2008, Table 5.1.

#### Retail Sales, Commercial

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

[http://www.eia.doe.gov/emeu/states/sep\\_use/notes/use\\_elec.pdf](http://www.eia.doe.gov/emeu/states/sep_use/notes/use_elec.pdf).

2003 forward: EIA, *Electric Power Monthly*, December 2008, Table 5.1.

#### Retail Sales, Transportation

1973–2002: Estimated by EIA as the transportation portion of “Other (Old).” See estimation methodology at

[http://www.eia.doe.gov/emeu/states/sep\\_use/notes/use\\_elec.pdf](http://www.eia.doe.gov/emeu/states/sep_use/notes/use_elec.pdf).

2003 forward: EIA, *Electric Power Monthly*, December 2008, Table 5.1.

#### Direct Use, Annual

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

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

2007: Sum of monthly estimates.

#### Direct Use, Monthly

Annual shares are calculated as annual direct use divided by annual commercial and industrial net generation (on Table 7.1). Then monthly direct use estimates are calculated as the annual share multiplied by the monthly commercial and industrial net generation values. For 2007 and 2008, the 2006 annual share is used.

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





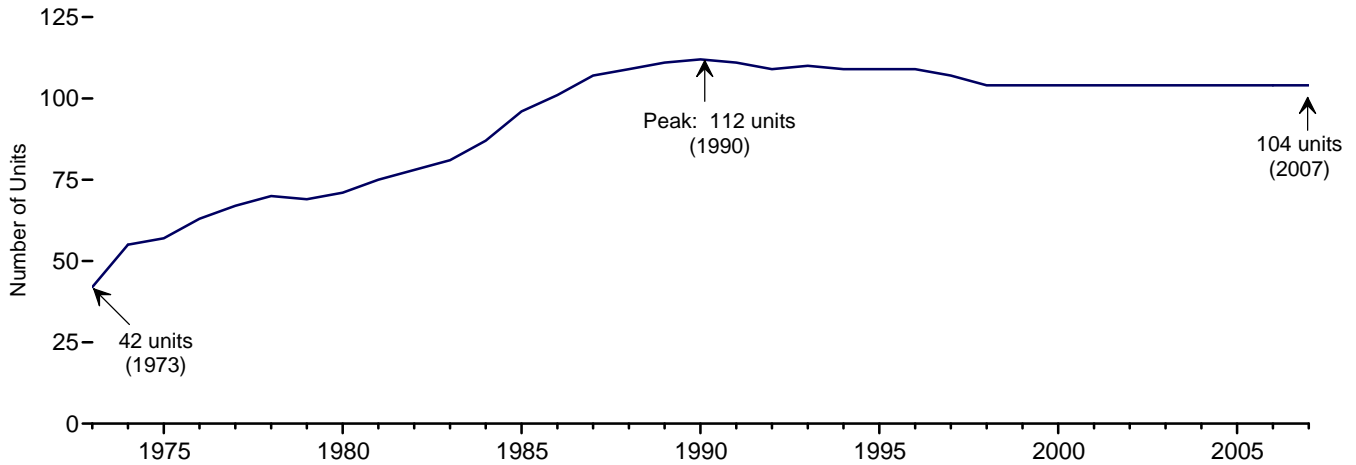
# Nuclear Energy



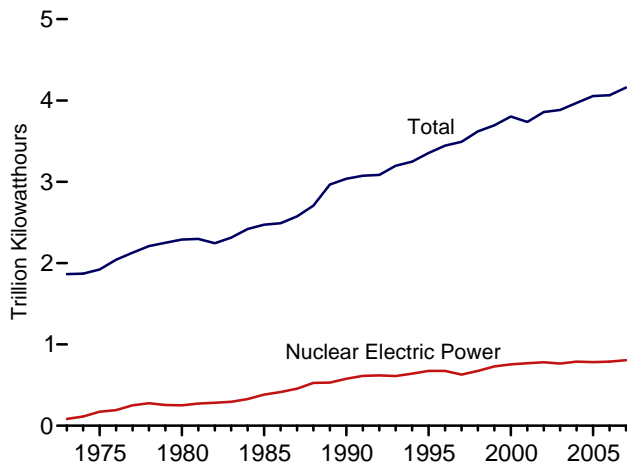
Site of Shippingport atomic power station, the first commercial nuclear power plant in the United States (rectangular reactor building and foreground); background, Beaver Valley 1 and 2 nuclear power plants and Bruce Mansfield coal-fired power plant (southwestern Pennsylvania). Source: U.S. Department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

### Figure 8.1 Nuclear Energy Overview

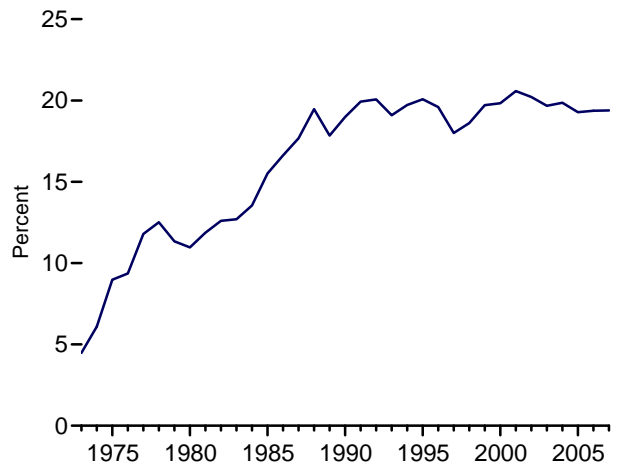
Operable Units, End of Year, 1973-2007



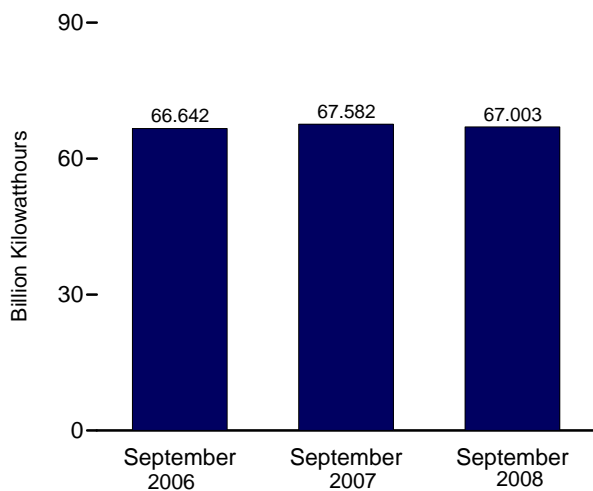
Electricity Net Generation, 1973-2007



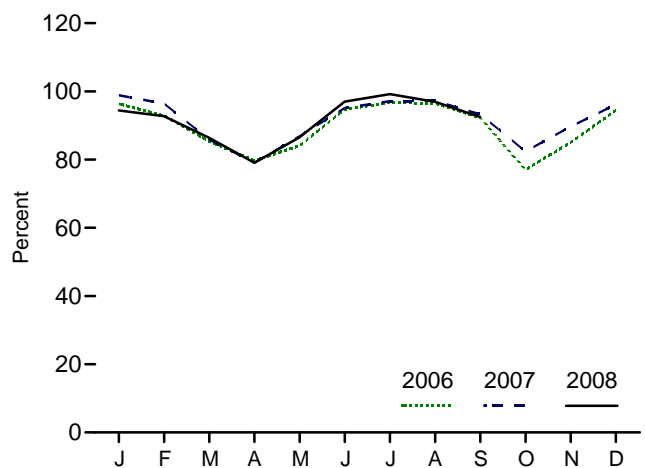
Nuclear Share of Electricity Net Generation, 1973-2007



Nuclear Electricity Net Generation



Capacity Factor, Monthly



Web Page: <http://www.eia.doe.gov/emeu/mer/nuclear.html>.  
Sources: Tables 7.1 and 8.1.

**Table 8.1 Nuclear Energy Overview**

	Total Operable Units <sup>a,b</sup>	Net Summer Capacity of Operable Units <sup>b,c</sup>	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Capacity Factor <sup>d</sup>
	Number	Million Kilowatts	Million Kilowatthours	Percent	
<b>1973 Total</b> .....	<b>42</b>	<b>22.683</b>	<b>83,479</b>	<b>4.5</b>	<b>53.5</b>
<b>1975 Total</b> .....	<b>57</b>	<b>37.267</b>	<b>172,505</b>	<b>9.0</b>	<b>55.9</b>
<b>1980 Total</b> .....	<b>71</b>	<b>51.810</b>	<b>251,116</b>	<b>11.0</b>	<b>56.3</b>
<b>1985 Total</b> .....	<b>96</b>	<b>79.397</b>	<b>383,691</b>	<b>15.5</b>	<b>58.0</b>
<b>1990 Total</b> .....	<b>112</b>	<b>99.624</b>	<b>576,862</b>	<b>19.0</b>	<b>66.0</b>
<b>1995 Total</b> .....	<b>109</b>	<b>99.515</b>	<b>673,402</b>	<b>20.1</b>	<b>77.4</b>
<b>1996 Total</b> .....	<b>109</b>	<b>100.784</b>	<b>674,729</b>	<b>19.6</b>	<b>76.2</b>
<b>1997 Total</b> .....	<b>107</b>	<b>99.716</b>	<b>628,644</b>	<b>18.0</b>	<b>71.1</b>
<b>1998 Total</b> .....	<b>104</b>	<b>97.070</b>	<b>673,702</b>	<b>18.6</b>	<b>78.2</b>
<b>1999 Total</b> .....	<b>104</b>	<b>97.411</b>	<b>728,254</b>	<b>19.7</b>	<b>85.3</b>
<b>2000 Total</b> .....	<b>104</b>	<b>97.860</b>	<b>753,893</b>	<b>19.8</b>	<b>88.1</b>
<b>2001 Total</b> .....	<b>104</b>	<b>98.159</b>	<b>768,826</b>	<b>20.6</b>	<b>89.4</b>
<b>2002 Total</b> .....	<b>104</b>	<b>98.657</b>	<b>780,064</b>	<b>20.2</b>	<b>90.3</b>
<b>2003 Total</b> .....	<b>104</b>	<b>99.209</b>	<b>763,733</b>	<b>19.7</b>	<b>87.9</b>
<b>2004 Total</b> .....	<b>104</b>	<b>99.628</b>	<b>788,528</b>	<b>19.9</b>	<b>90.1</b>
<b>2005 Total</b> .....	<b>104</b>	<b>99.988</b>	<b>781,986</b>	<b>19.3</b>	<b>89.3</b>
<b>2006</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
December .....	104	100.334	70,490	21.0	94.4
<b>Total</b> .....	<b>104</b>	<b>100.334</b>	<b>787,219</b>	<b>19.4</b>	<b>89.6</b>
<b>2007</b> January .....	104	100.635	74,006	21.0	98.8
February .....	104	100.635	65,225	20.1	96.4
March .....	104	100.635	64,305	20.0	85.9
April .....	104	100.635	57,301	18.8	79.1
May .....	104	100.635	65,025	19.7	86.8
June .....	104	100.635	68,923	19.0	95.1
July .....	104	100.635	72,729	18.5	97.1
August .....	104	100.635	72,751	17.2	97.2
September .....	104	100.635	67,582	19.0	93.3
October .....	104	100.635	61,690	18.5	82.4
November .....	104	100.635	64,969	20.7	89.7
December .....	104	100.635	71,983	20.8	96.1
<b>Total</b> .....	<b>104</b>	<b>100.635</b>	<b>806,487</b>	<b>19.4</b>	<b>91.5</b>
<b>2008</b> January .....	104	100.635	70,686	19.5	94.4
February .....	104	100.635	64,936	19.9	92.7
March .....	104	100.635	64,683	19.9	86.4
April .....	104	100.635	57,281	18.9	79.1
May .....	104	100.635	64,794	19.9	86.5
June .....	104	100.635	70,268	18.8	97.0
July .....	104	100.635	74,266	18.5	99.2
August .....	104	100.635	72,573	18.8	96.9
September .....	104	100.635	67,003	19.9	92.5
<b>9-Month Total</b> .....	<b>104</b>	<b>100.635</b>	<b>606,491</b>	<b>19.3</b>	<b>91.6</b>
<b>2007 9-Month Total</b> .....	<b>104</b>	<b>100.635</b>	<b>607,846</b>	<b>19.2</b>	<b>92.2</b>
<b>2006 9-Month Total</b> .....	<b>104</b>	<b>100.334</b>	<b>597,827</b>	<b>19.3</b>	<b>90.9</b>

<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

2, "Nuclear Capacity," at end of section.

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

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

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

Sources: See end of section.

## Nuclear Energy

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

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

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

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

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

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

(a) Net Summer Capacity—The steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power, as demonstrated by test at the

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

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

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

### Table 8.1 Sources

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

1973-1982: Compiled from various sources, primarily 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](http://www.eia.doe.gov/cneaf/nuclear/page/nuc_reactors/operational.xls).

#### Nuclear Electricity Net Generation and Nuclear Share of Electricity Net Generation

See Table 7.2a.

#### Capacity Factor

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

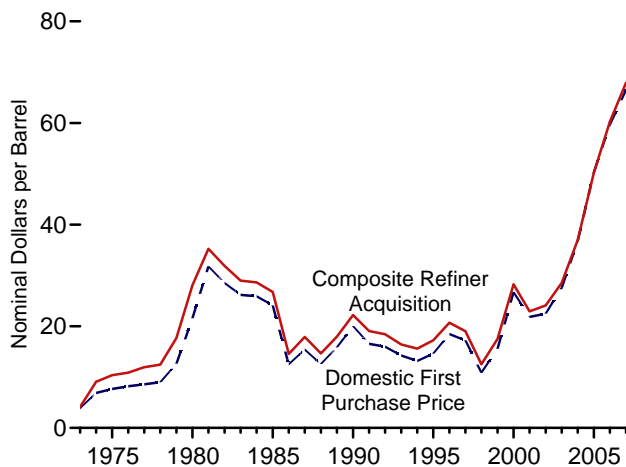
9

# Energy Prices

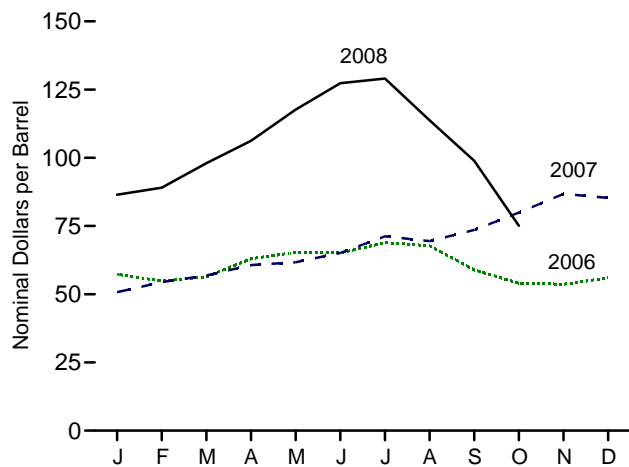


**Figure 9.1 Petroleum Prices**

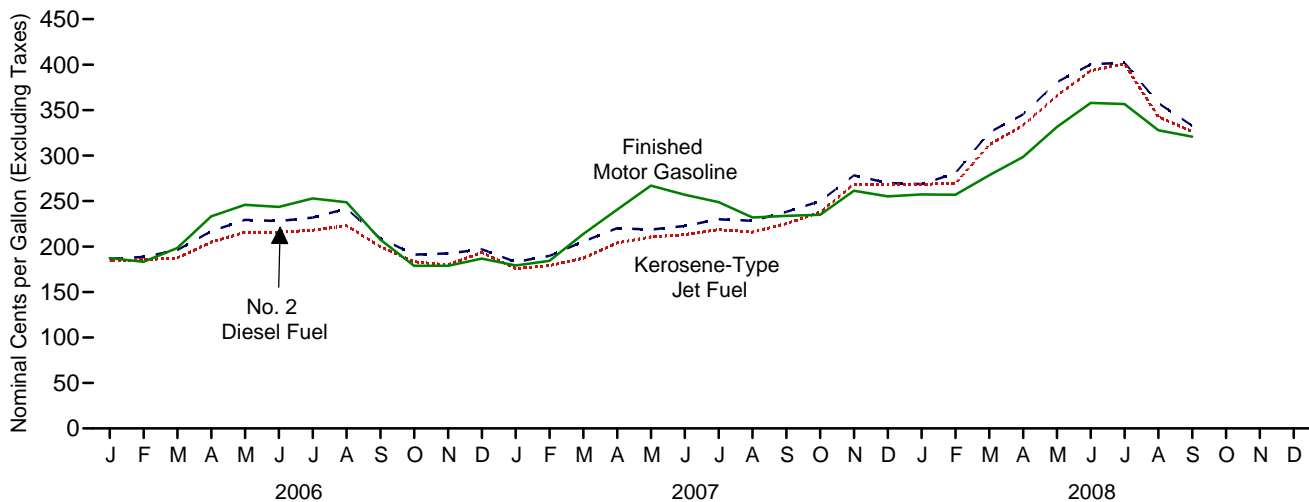
Crude Oil Prices, 1973-2007



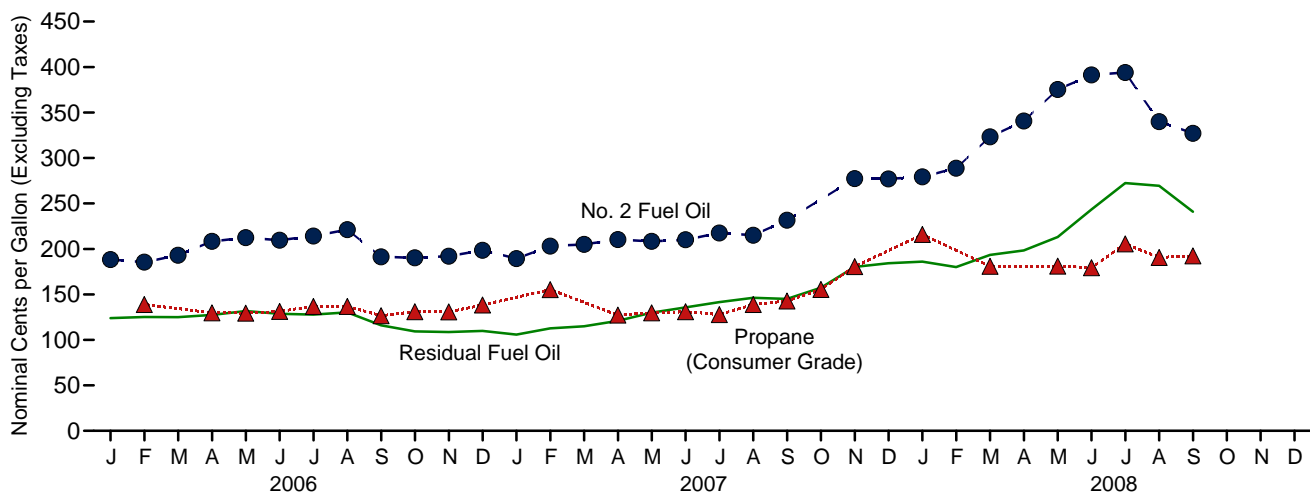
Composite Refiner Acquisition Cost, Monthly



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



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



Notes: • See "Nominal Price" in Glossary. • Because vertical scales differ, graphs should not be compared.  
 Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.  
 Sources: Tables 9.1, 9.5, and 9.7.

**Table 9.1 Crude Oil Price Summary**  
(Nominal Dollars per Barrel)

	Domestic First Purchase Price <sup>b</sup>	F.O.B. Cost of Imports <sup>c</sup>	Landed Cost of Imports <sup>d</sup>	Refiner Acquisition Cost <sup>a</sup>		
				Domestic	Imported	Composite
<b>1973 Average</b> .....	3.89	<sup>e</sup> 5.21	<sup>e</sup> 6.41	<sup>E</sup> 4.17	<sup>E</sup> 4.08	<sup>E</sup> 4.15
<b>1975 Average</b> .....	7.67	11.18	12.70	8.39	13.93	10.38
<b>1980 Average</b> .....	21.59	32.37	33.67	24.23	33.89	28.07
<b>1985 Average</b> .....	24.09	25.84	26.67	26.66	26.99	26.75
<b>1990 Average</b> .....	20.03	20.37	21.13	22.59	21.76	22.22
<b>1995 Average</b> .....	14.62	15.69	16.78	17.33	17.14	17.23
<b>1996 Average</b> .....	18.46	19.32	20.31	20.77	20.64	20.71
<b>1997 Average</b> .....	17.23	16.94	18.11	19.61	18.53	19.04
<b>1998 Average</b> .....	10.87	10.76	11.84	13.18	12.04	12.52
<b>1999 Average</b> .....	15.56	16.47	17.23	17.90	17.26	17.51
<b>2000 Average</b> .....	26.72	26.27	27.53	29.11	27.70	28.26
<b>2001 Average</b> .....	21.84	20.46	21.82	24.33	22.00	22.95
<b>2002 Average</b> .....	22.51	22.63	23.91	24.65	23.71	24.10
<b>2003 Average</b> .....	27.56	25.86	27.69	29.82	27.71	28.53
<b>2004 Average</b> .....	36.77	33.75	36.07	38.97	35.90	36.98
<b>2005 Average</b> .....	50.28	47.60	49.29	52.94	48.86	50.24
<b>2006</b> January .....	57.85	53.93	55.49	60.22	55.85	57.33
February .....	55.69	51.34	53.25	58.97	52.80	54.82
March .....	55.64	54.67	56.59	58.48	55.31	56.38
April .....	62.52	62.09	63.40	64.06	62.41	62.98
May .....	64.40	62.95	64.64	67.11	64.39	65.34
June .....	64.65	61.44	64.42	67.76	63.79	65.13
July .....	67.71	65.67	67.88	70.55	67.99	68.86
August .....	67.21	62.68	65.14	70.48	66.45	67.77
September .....	59.37	54.63	57.20	62.51	57.29	58.92
October .....	53.26	50.64	52.83	56.67	52.70	54.04
November .....	52.42	51.48	53.01	55.36	52.70	53.61
December .....	55.03	52.82	54.53	57.81	54.97	55.98
<b>Average</b> .....	<b>59.69</b>	<b>57.03</b>	<b>59.11</b>	<b>62.62</b>	<b>59.02</b>	<b>60.24</b>
<b>2007</b> January .....	49.32	48.11	50.53	53.10	49.57	50.77
February .....	52.94	51.97	54.04	55.72	53.77	54.45
March .....	54.95	55.46	57.42	57.86	56.31	56.84
April .....	58.20	59.53	60.99	61.13	60.45	60.68
May .....	58.90	60.72	62.92	62.04	61.55	61.71
June .....	62.35	64.38	66.26	64.95	65.24	65.14
July .....	69.23	69.30	70.51	72.08	70.75	71.24
August .....	67.77	66.69	69.07	71.57	68.28	69.46
September .....	73.27	72.21	73.92	75.84	72.34	73.54
October .....	79.32	78.51	79.45	82.20	78.61	79.87
November .....	87.16	83.75	84.89	89.25	85.53	86.78
December .....	85.28	82.85	84.28	88.98	83.21	85.29
<b>Average</b> .....	<b>66.52</b>	<b>66.36</b>	<b>67.97</b>	<b>69.65</b>	<b>67.04</b>	<b>67.94</b>
<b>2008</b> January .....	87.06	83.43	86.61	89.57	84.82	86.48
February .....	89.41	87.81	90.67	92.25	87.41	89.07
March .....	98.44	96.42	100.03	99.87	97.03	98.01
April .....	106.64	104.20	108.47	108.46	104.94	106.21
May .....	118.55	115.02	119.55	119.75	116.55	117.64
June .....	127.47	123.62	125.93	129.45	126.22	127.32
July .....	128.08	<sup>R</sup> 122.12	<sup>R</sup> 124.30	131.47	127.77	129.03
August .....	112.83	<sup>R</sup> 108.20	<sup>R</sup> 111.00	118.32	111.21	113.71
September .....	<sup>R</sup> 98.50	<sup>R</sup> 92.62	<sup>R</sup> 96.08	<sup>R</sup> 103.33	<sup>R</sup> 96.55	<sup>R</sup> 98.90
October .....	NA	NA	NA	<sup>E</sup> 81.16	<sup>E</sup> 69.13	<sup>E</sup> 75.08

<sup>a</sup> See Note 4, "Crude Oil Refinery Acquisition Costs," at end of section.

<sup>b</sup> See Note 1, "Crude Oil Domestic First Purchase Prices," at end of section.

<sup>c</sup> See Note 2, "Crude Oil F.O.B. Costs," at end of section.

<sup>d</sup> See Note 3, "Crude Oil Landed Costs," at end of section.

<sup>e</sup> Based on October, November, and December data only.

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

Notes: • Values for Domestic First Purchase Price and Refiner Acquisition Cost for the current two months and for F.O.B. and Landed Costs of Imports for the current three months are preliminary. • F.O.B. and landed costs through 1980

reflect the period of reporting; prices since then reflect the period of loading.

• Annual averages are the averages of the monthly prices, weighted by volume.

• Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions. • See "Nominal Price" in Glossary.

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

Sources: See end of section.







**Table 9.4 Motor Gasoline Retail Prices, U.S. City Average**  
(Nominal Cents per Gallon, Including Taxes)

	Leaded Regular	Unleaded Regular	Unleaded Premium <sup>a</sup>	All Types <sup>b</sup>
1973 Average .....	38.8	NA	NA	NA
1975 Average .....	56.7	NA	NA	NA
1980 Average .....	119.1	124.5	NA	122.1
1985 Average .....	111.5	120.2	134.0	119.6
1990 Average .....	114.9	116.4	134.9	121.7
1995 Average .....	NA	114.7	133.6	120.5
1996 Average .....	NA	123.1	141.3	128.8
1997 Average .....	NA	123.4	141.6	129.1
1998 Average .....	NA	105.9	125.0	111.5
1999 Average .....	NA	116.5	135.7	122.1
2000 Average .....	NA	151.0	169.3	156.3
2001 Average .....	NA	146.1	165.7	153.1
2002 Average .....	NA	135.8	155.6	144.1
2003 Average .....	NA	159.1	177.7	163.8
2004 Average .....	NA	188.0	206.8	192.3
2005 Average .....	NA	229.5	249.1	233.8
<b>2006</b> January .....	NA	231.5	252.1	235.9
February .....	NA	231.0	251.9	235.4
March .....	NA	240.1	260.3	244.4
April .....	NA	275.7	296.7	280.1
May .....	NA	294.7	316.9	299.3
June .....	NA	291.7	313.9	296.3
July .....	NA	299.9	321.9	304.6
August .....	NA	298.5	320.7	303.3
September .....	NA	258.9	281.9	263.7
October .....	NA	227.2	249.3	231.9
November .....	NA	224.1	245.9	228.7
December .....	NA	233.4	255.0	238.0
<b>Average .....</b>	<b>NA</b>	<b>258.9</b>	<b>280.5</b>	<b>263.5</b>
<b>2007</b> January .....	NA	227.4	250.1	232.1
February .....	NA	228.5	250.9	233.3
March .....	NA	259.2	281.8	263.9
April .....	NA	286.0	309.3	290.9
May .....	NA	313.0	334.8	317.6
June .....	NA	305.2	328.1	310.0
July .....	NA	296.1	320.0	301.3
August .....	NA	278.2	301.8	283.3
September .....	NA	278.9	302.1	283.9
October .....	NA	279.3	303.7	284.3
November .....	NA	306.9	330.7	311.8
December .....	NA	302.0	326.4	306.9
<b>Average .....</b>	<b>NA</b>	<b>280.1</b>	<b>303.3</b>	<b>284.9</b>
<b>2008</b> January .....	NA	304.7	329.1	309.6
February .....	NA	303.3	327.2	308.3
March .....	NA	325.8	350.2	330.7
April .....	NA	344.1	369.0	349.1
May .....	NA	376.4	400.3	381.3
June .....	NA	406.5	431.9	411.5
July .....	NA	409.0	435.0	414.2
August .....	NA	378.6	404.5	383.8
September .....	NA	369.8	394.0	374.9
October .....	NA	315.5	340.4	320.5
November .....	NA	215.1	243.3	220.8

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

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

NA=Not available.

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

	Residual Fuel Oil Sulfur Content Less Than or Equal to 1 Percent		Residual Fuel Oil Sulfur Content Greater Than 1 Percent		Average	
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
<b>1978 Average</b> .....	29.3	31.4	24.5	27.5	26.3	29.8
<b>1980 Average</b> .....	60.8	67.5	47.9	52.3	52.8	60.7
<b>1985 Average</b> .....	61.0	64.4	56.0	58.2	57.7	61.0
<b>1990 Average</b> .....	47.2	50.5	37.2	40.0	41.3	44.4
<b>1995 Average</b> .....	38.3	43.6	33.8	37.7	36.3	39.2
<b>1996 Average</b> .....	45.6	52.6	38.9	43.3	42.0	45.5
<b>1997 Average</b> .....	41.5	48.8	36.6	40.3	38.7	42.3
<b>1998 Average</b> .....	29.9	35.4	26.9	28.7	28.0	30.5
<b>1999 Average</b> .....	38.2	40.5	32.9	36.2	35.4	37.4
<b>2000 Average</b> .....	62.7	70.8	51.2	56.6	56.6	60.2
<b>2001 Average</b> .....	52.3	64.2	42.8	49.2	47.6	53.1
<b>2002 Average</b> .....	54.6	64.0	50.8	54.4	53.0	56.9
<b>2003 Average</b> .....	72.8	80.4	58.8	65.1	66.1	69.8
<b>2004 Average</b> .....	76.4	83.5	60.1	69.2	68.1	73.9
<b>2005 Average</b> .....	111.5	116.8	84.2	97.4	97.1	104.8
<b>2006</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	123.3	119.5	127.8
August .....	130.9	145.1	119.2	125.5	124.6	130.3
September .....	111.8	132.4	104.1	111.8	107.3	116.0
October .....	107.7	120.1	98.5	105.9	102.5	109.3
November .....	115.9	117.6	95.9	105.3	102.5	108.7
December .....	113.3	119.9	96.3	105.3	104.3	109.9
<b>Average</b> .....	<b>120.2</b>	<b>134.2</b>	<b>108.5</b>	<b>117.3</b>	<b>113.6</b>	<b>121.8</b>
<b>2007</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
<b>Average</b> .....	<b>140.6</b>	<b>143.6</b>	<b>131.4</b>	<b>135.0</b>	<b>135.0</b>	<b>137.4</b>
<b>2008</b> 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	NA	244.5	255.4	248.6	269.4
September .....	219.4	266.6	222.6	230.3	221.7	240.9

NA=Not available.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at

end of section. • See "Nominal Price" in Glossary. • Geographic coverage is the 50 States and the District of Columbia.

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

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

**Table 9.6 Refiner Prices of Petroleum Products for Resale**  
(Nominal Cents per Gallon, Excluding Taxes)

	Finished Motor Gasoline <sup>a</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
<b>1978 Average</b> .....	43.4	53.7	38.6	40.4	36.9	36.5	23.7
<b>1980 Average</b> .....	94.1	112.8	86.8	86.4	80.3	80.1	41.5
<b>1985 Average</b> .....	83.5	113.0	79.4	87.4	77.6	77.2	39.8
<b>1990 Average</b> .....	78.6	106.3	77.3	83.9	69.7	69.4	38.6
<b>1995 Average</b> .....	62.6	97.5	53.9	58.0	51.1	53.8	34.4
<b>1996 Average</b> .....	71.3	105.5	64.6	71.4	63.9	65.9	46.1
<b>1997 Average</b> .....	70.0	106.5	61.3	65.3	59.0	60.6	41.6
<b>1998 Average</b> .....	52.6	91.2	45.0	46.5	42.2	44.4	28.8
<b>1999 Average</b> .....	64.5	100.7	53.3	55.0	49.3	54.6	34.2
<b>2000 Average</b> .....	96.3	133.0	88.0	96.9	88.6	89.8	59.5
<b>2001 Average</b> .....	88.6	125.6	76.3	82.1	75.6	78.4	54.0
<b>2002 Average</b> .....	82.8	114.6	71.6	75.2	69.4	72.4	43.1
<b>2003 Average</b> .....	100.2	128.8	87.1	95.5	88.1	88.3	60.7
<b>2004 Average</b> .....	128.8	162.7	120.8	127.1	112.5	118.7	75.1
<b>2005 Average</b> .....	167.0	207.6	172.3	175.7	162.3	173.7	93.3
<b>2006</b> 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
September .....	180.0	231.9	194.7	203.7	179.7	191.1	103.2
October .....	164.1	212.0	181.3	193.5	171.6	182.7	100.3
November .....	166.7	213.9	177.4	194.4	169.9	186.7	101.3
December .....	172.8	217.2	190.6	200.7	175.3	188.6	103.3
<b>Average</b> .....	<b>196.9</b>	<b>249.0</b>	<b>196.1</b>	<b>200.7</b>	<b>183.4</b>	<b>201.2</b>	<b>103.1</b>
<b>2007</b> 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
<b>Average</b> .....	<b>218.2</b>	<b>275.8</b>	<b>217.1</b>	<b>224.9</b>	<b>207.2</b>	<b>220.3</b>	<b>119.4</b>
<b>2008</b> 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 .....	<sup>R</sup> 307.9	373.7	339.3	345.6	328.7	333.9	<sup>R</sup> 166.5
September .....	300.4	374.6	327.7	337.8	299.9	316.1	156.9

<sup>a</sup> See Note 5, "Motor Gasoline Prices", at end of section.

R=Revised. NA=Not available.

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. • See "Nominal Price" in Glossary. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: • 1978-2007: EIA, *Petroleum Marketing Annual 2007*, Table 4. • 2008: EIA, *Petroleum Marketing Monthly*, December 2008, Table 4.

**Table 9.7 Refiner Prices of Petroleum Products to End Users**  
(Nominal Cents per Gallon, Excluding Taxes)

	Finished Motor Gasoline <sup>a</sup>	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
<b>1978 Average</b> .....	48.4	51.6	38.7	42.1	40.0	37.7	33.5
<b>1980 Average</b> .....	103.5	108.4	86.8	90.2	78.8	81.8	48.2
<b>1985 Average</b> .....	91.2	120.1	79.6	103.0	84.9	78.9	71.7
<b>1990 Average</b> .....	88.3	112.0	76.6	92.3	73.4	72.5	74.5
<b>1995 Average</b> .....	76.5	100.5	54.0	58.9	56.2	56.0	49.2
<b>1996 Average</b> .....	84.7	111.6	65.1	74.0	67.3	68.1	60.5
<b>1997 Average</b> .....	83.9	112.8	61.3	74.5	63.6	64.2	55.2
<b>1998 Average</b> .....	67.3	97.5	45.2	50.1	48.2	49.4	40.5
<b>1999 Average</b> .....	78.1	105.9	54.3	60.5	55.8	58.4	45.8
<b>2000 Average</b> .....	110.6	130.6	89.9	112.3	92.7	93.5	60.3
<b>2001 Average</b> .....	103.2	132.3	77.5	104.5	82.9	84.2	50.6
<b>2002 Average</b> .....	94.7	128.8	72.1	99.0	73.7	76.2	41.9
<b>2003 Average</b> .....	115.6	149.3	87.2	122.4	93.3	94.4	57.7
<b>2004 Average</b> .....	143.5	181.9	120.7	116.0	117.3	124.3	83.9
<b>2005 Average</b> .....	182.9	223.1	173.5	195.7	170.5	178.6	108.9
<b>2006 January</b> .....	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
<b>Average</b> .....	<b>212.8</b>	<b>268.2</b>	<b>199.8</b>	<b>224.4</b>	<b>198.2</b>	<b>209.6</b>	<b>135.8</b>
<b>2007 January</b> .....	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
<b>Average</b> .....	<b>234.5</b>	<b>284.9</b>	<b>216.5</b>	<b>226.3</b>	<b>224.1</b>	<b>226.7</b>	<b>148.9</b>
<b>2008 January</b> .....	257.3	304.5	268.6	331.3	279.2	268.8	216.0
February .....	256.9	307.0	269.4	334.6	288.8	280.5	NA
March .....	278.4	337.0	311.9	358.2	323.2	325.5	180.9
April .....	298.4	359.7	333.3	376.5	340.6	345.3	NA
May .....	331.6	382.7	365.9	393.4	375.4	380.8	181.1
June .....	357.9	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	<sup>R</sup> 357.7	<sup>R</sup> 190.6
September .....	320.7	384.2	326.4	399.2	327.1	332.7	192.4

<sup>a</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.

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. • See "Nominal Price" in Glossary. • Geographic coverage is the 50 States and the District of Columbia.

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

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





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

	Idaho	Washington	Oregon	Alaska	U.S. Average
<b>1978 Average</b> .....	43.6	48.6	45.8	53.2	49.0
<b>1980 Average</b> .....	91.6	100.8	97.3	97.8	97.4
<b>1985 Average</b> .....	97.2	101.1	97.1	108.3	105.3
<b>1990 Average</b> .....	97.4	102.9	97.0	110.1	106.3
<b>1995 Average</b> .....	83.9	96.2	89.4	83.4	86.7
<b>1996 Average</b> .....	93.3	108.0	98.9	90.9	98.9
<b>1997 Average</b> .....	95.3	113.9	103.1	97.3	98.4
<b>1998 Average</b> .....	78.4	97.8	86.1	85.2	85.2
<b>1999 Average</b> .....	76.2	106.5	93.8	96.6	87.6
<b>2000 Average</b> .....	117.0	144.5	136.8	133.7	131.1
<b>2001 Average</b> .....	103.8	133.6	121.1	137.7	125.0
<b>2002 Average</b> .....	91.9	120.4	106.0	108.7	112.9
<b>2003 Average</b> .....	118.8	148.7	130.3	124.3	135.5
<b>2004 Average</b> .....	149.5	174.9	159.4	152.4	154.8
<b>2005 Average</b> .....	212.3	238.5	214.6	206.1	205.2
<b>2006</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
<b>Average</b> .....	<b>239.1</b>	<b>268.1</b>	<b>241.1</b>	<b>239.5</b>	<b>236.5</b>
<b>2007</b> January .....	228.4	262.7	230.9	226.0	231.1
February .....	224.9	262.7	224.3	220.9	239.1
March .....	241.7	270.0	228.2	224.0	244.9
April .....	254.1	281.2	231.5	238.1	248.0
May .....	NA	282.4	237.4	244.9	248.0
June .....	253.0	274.4	NA	247.7	249.2
July .....	257.9	275.3	NA	252.7	254.9
August .....	257.3	276.2	NA	256.3	250.9
September .....	263.6	284.6	250.7	255.8	260.9
October .....	287.0	321.5	298.0	276.3	275.9
November .....	321.3	345.9	319.5	303.2	304.0
December .....	302.5	335.7	304.5	301.1	309.8
<b>Average</b> .....	<b>259.8</b>	<b>290.9</b>	<b>250.0</b>	<b>251.8</b>	<b>259.2</b>
<b>2008</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	<sup>R</sup> 412.4	<sup>R</sup> 383.7	422.1	<sup>R</sup> 386.5
September .....	<sup>R</sup> 358.3	<sup>R</sup> 382.5	<sup>R</sup> 353.5	<sup>R</sup> 387.6	<sup>R</sup> 366.6
October .....	NA	NA	NA	NA	<sup>E</sup> 318.5

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

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

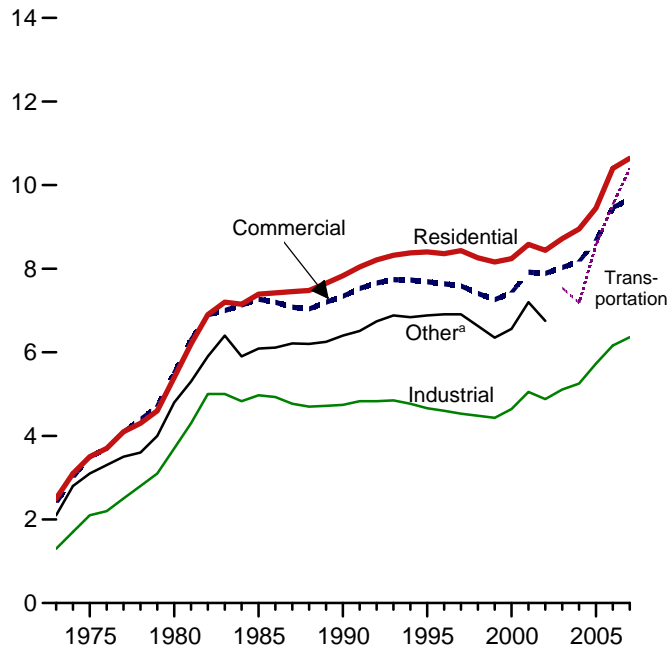
Web Page: See <http://www.eia.doe.gov/emeu/mer/prices.html> for all available data beginning in 1978.

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



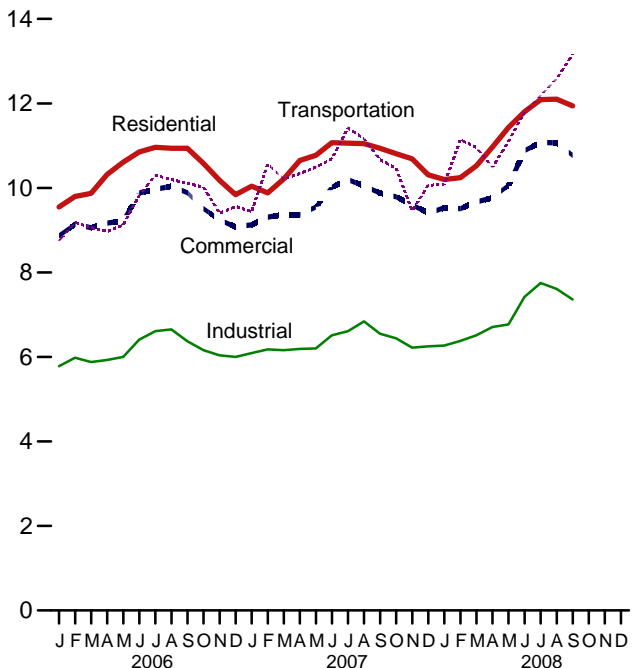
**Figure 9.2 Average Retail Prices of Electricity**  
(Nominal Cents per Kilowatt-hour)

By Sector, 1973-2007



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

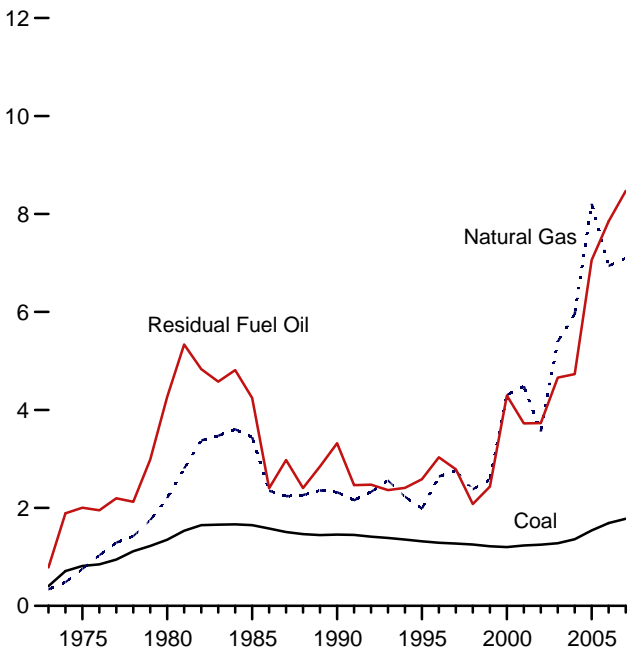
By Sector, Monthly



Notes: • Includes taxes. • See "Nominal Price" in Glossary.  
Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.  
Source: Table 9.9.

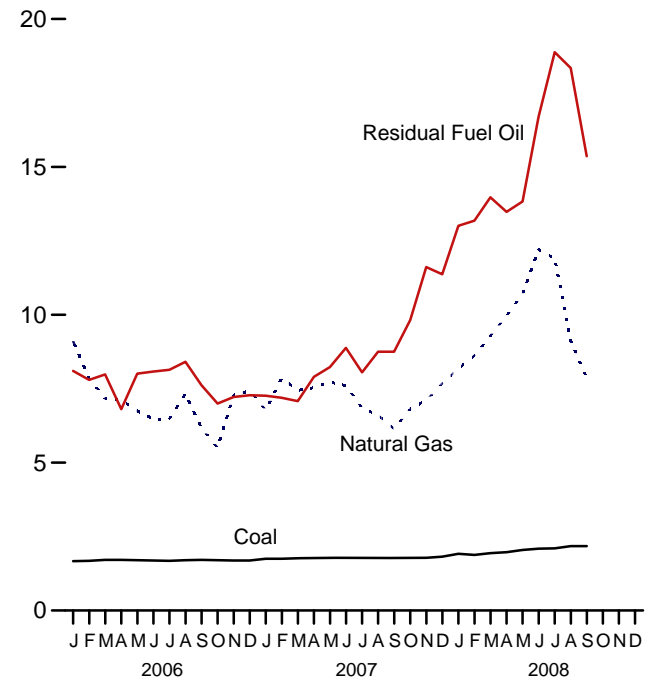
**Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants**  
(Nominal Dollars per Million Btu, Including Taxes)

Costs, 1973-2007



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

Costs, Monthly



Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.  
Source: Table 9.10.

**Table 9.9 Average Retail Prices of Electricity**  
(Nominal Cents per Kilowatt-hour, Including Taxes)

	Residential	Commercial <sup>a</sup>	Industrial <sup>b</sup>	Transportation <sup>c</sup>	Other <sup>d</sup>	Total
<b>1973 Average</b> .....	2.5	2.4	1.3	NA	2.1	2.0
<b>1975 Average</b> .....	3.5	3.5	2.1	NA	3.1	2.9
<b>1980 Average</b> .....	5.4	5.5	3.7	NA	4.8	4.7
<b>1985 Average</b> .....	7.39	7.27	4.97	NA	6.09	6.44
<b>1990 Average</b> .....	7.83	7.34	4.74	NA	6.40	6.57
<b>1995 Average</b> .....	8.40	7.69	4.66	NA	6.88	6.89
<b>1996 Average</b> .....	8.36	7.64	4.60	NA	6.91	6.86
<b>1997 Average</b> .....	8.43	7.59	4.53	NA	6.91	6.85
<b>1998 Average</b> .....	8.26	7.41	4.48	NA	6.63	6.74
<b>1999 Average</b> .....	8.16	7.26	4.43	NA	6.35	6.64
<b>2000 Average</b> .....	8.24	7.43	4.64	NA	6.56	6.81
<b>2001 Average</b> .....	8.58	7.92	5.05	NA	7.20	7.29
<b>2002 Average</b> .....	8.44	7.89	4.88	NA	6.75	7.20
<b>2003 Average</b> .....	8.72	8.03	5.11	7.54	--	7.44
<b>2004 Average</b> .....	8.95	8.17	5.25	7.18	--	7.61
<b>2005 Average</b> .....	9.45	8.67	5.73	8.57	--	8.14
<b>2006</b> January .....	9.55	8.87	5.78	8.75	--	8.31
February .....	9.80	9.14	5.98	9.18	--	8.49
March .....	9.87	9.06	5.88	9.06	--	8.44
April .....	10.32	9.17	5.93	8.97	--	8.56
May .....	10.61	9.22	6.00	9.12	--	8.71
June .....	10.85	9.88	6.41	9.82	--	9.30
July .....	10.96	9.97	6.61	10.30	--	9.55
August .....	10.94	10.04	6.65	10.20	--	9.58
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
<b>Average</b> .....	<b>10.40</b>	<b>9.46</b>	<b>6.16</b>	<b>9.54</b>	--	<b>8.90</b>
<b>2007</b> January .....	10.04	9.13	6.09	9.44	--	8.72
February .....	9.88	9.31	6.18	10.56	--	8.74
March .....	10.21	9.37	6.16	10.21	--	8.78
April .....	10.65	9.37	6.19	10.34	--	8.85
May .....	10.77	9.55	6.20	10.49	--	8.97
June .....	11.07	10.02	6.51	10.69	--	9.47
July .....	11.06	10.20	6.61	11.42	--	9.65
August .....	11.05	10.05	6.84	11.16	--	9.68
September .....	10.94	9.88	6.55	10.67	--	9.44
October .....	10.81	9.79	6.44	10.46	--	9.18
November .....	10.69	9.60	6.22	9.46	--	8.98
December .....	10.31	9.41	6.25	10.06	--	8.91
<b>Average</b> .....	<b>10.64</b>	<b>9.67</b>	<b>6.36</b>	<b>10.40</b>	--	<b>9.14</b>
<b>2008</b> January .....	10.20	9.53	6.27	10.09	--	8.98
February .....	10.24	9.51	6.38	11.14	--	8.96
March .....	10.52	9.67	6.51	10.96	--	9.09
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
<b>9-Month Average</b> .....	<b>11.29</b>	<b>10.31</b>	<b>6.99</b>	<b>11.49</b>	--	<b>9.79</b>
<b>2007 9-Month Average</b> .....	<b>10.65</b>	<b>9.68</b>	<b>6.38</b>	<b>10.54</b>	--	<b>9.18</b>
<b>2006 9-Month Average</b> .....	<b>10.47</b>	<b>9.51</b>	<b>6.19</b>	<b>9.50</b>	--	<b>8.96</b>

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

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

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

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

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. • See "Nominal Price" in Glossary.

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

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

Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **October 1977-February 1980:** Federal Energy Regulatory Commission (FERC), Form 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-861, "Annual Electric Utility Report." • **1993 forward:** EIA, *Electric Power Monthly*, December 2008, Table 5.3.

**Table 9.10 Cost of Fossil-Fuel Receipts at Electric Generating Plants**  
(Nominal Dollars per Million Btu, Including Taxes)

	Coal	Petroleum				Natural Gas <sup>d</sup>	All Fossil Fuels <sup>e</sup>
		Residual Fuel Oil <sup>a</sup>	Distillate Fuel Oil <sup>b</sup>	Petroleum Coke	Total <sup>c</sup>		
<b>1973 Average</b> .....	0.41	0.79	NA	NA	0.80	0.34	0.48
<b>1975 Average</b> .....	.81	2.01	NA	NA	2.02	.75	1.04
<b>1980 Average</b> .....	1.35	4.27	NA	NA	4.35	2.20	1.93
<b>1985 Average</b> .....	1.65	4.24	NA	NA	4.32	3.44	2.09
<b>1990 Average</b> .....	1.45	3.32	5.38	.80	3.35	2.32	1.69
<b>1995 Average</b> .....	1.32	2.59	3.99	.65	2.57	1.98	1.45
<b>1996 Average</b> .....	1.29	3.03	4.87	.78	3.03	2.64	1.52
<b>1997 Average</b> .....	1.27	2.79	4.49	.91	2.73	2.76	1.52
<b>1998 Average</b> .....	1.25	2.08	3.30	.71	2.02	2.38	1.44
<b>1999 Average</b> .....	1.22	2.44	4.03	.65	2.36	2.57	1.44
<b>2000 Average</b> .....	1.20	4.29	6.65	.58	4.18	4.30	1.74
<b>2001 Average</b> .....	1.23	3.73	6.30	.78	3.69	4.49	1.73
<b>2002 Average<sup>f</sup></b> .....	1.25	3.73	5.34	.78	3.34	3.56	1.86
<b>2003 Average</b> .....	1.28	4.66	6.82	.72	4.33	5.39	2.28
<b>2004 Average</b> .....	1.36	4.73	8.02	.83	4.29	5.96	2.48
<b>2005 Average</b> .....	1.54	7.06	11.72	1.11	6.44	8.21	3.25
<b>2006</b> January .....	1.67	8.10	13.68	1.10	7.03	9.11	3.10
February .....	1.68	7.80	11.69	1.17	5.44	7.84	2.95
March .....	1.71	7.98	12.39	1.20	5.11	7.17	2.86
April .....	1.71	6.81	14.48	1.26	4.91	7.13	2.90
May .....	1.70	8.01	14.77	1.33	6.43	6.75	2.94
June .....	1.69	8.08	14.45	1.32	6.41	6.47	3.05
July .....	1.68	8.14	13.23	1.39	6.68	6.48	3.36
August .....	1.70	8.41	15.52	1.47	7.38	7.33	3.54
September .....	1.71	7.62	10.86	1.49	5.95	6.17	2.90
October .....	1.70	7.00	12.06	1.34	5.05	5.51	2.65
November .....	1.69	7.22	12.33	1.51	5.90	7.28	2.89
December .....	1.69	7.28	12.90	1.42	6.20	7.43	2.95
<b>Average</b> .....	1.69	7.85	13.28	1.33	6.23	6.94	3.02
<b>2007</b> January .....	1.75	7.26	12.00	1.54	5.89	6.78	2.93
February .....	1.75	7.19	12.10	1.65	6.59	7.86	3.22
March .....	1.77	7.08	13.19	1.51	6.54	7.44	3.00
April .....	1.78	7.90	14.29	1.54	6.79	7.54	3.16
May .....	1.78	8.23	14.44	1.58	7.28	7.73	3.31
June .....	1.77	8.88	14.71	1.58	8.01	7.60	3.45
July .....	1.77	8.05	14.88	1.44	6.69	6.85	3.42
August .....	1.78	8.75	14.90	1.63	7.80	6.60	3.51
September .....	1.78	8.75	14.47	1.59	7.52	6.14	3.13
October .....	1.78	9.82	17.94	1.44	8.36	6.82	3.18
November .....	1.78	11.61	18.75	1.51	9.03	7.11	3.09
December .....	1.82	11.37	20.17	1.47	9.56	7.68	3.32
<b>Average</b> .....	1.78	8.47	15.22	1.54	7.40	7.10	3.24
<b>2008</b> January .....	1.92	13.01	18.56	1.48	10.24	8.18	3.67
February .....	1.88	13.18	18.96	1.61	10.97	8.62	3.63
March .....	1.94	13.97	19.15	1.54	9.53	9.29	3.80
April .....	1.97	13.48	21.94	1.61	10.83	9.96	4.06
May .....	2.05	13.83	24.84	1.78	11.76	10.70	4.28
June .....	2.09	16.69	25.74	1.82	14.37	12.21	5.46
July .....	2.10	18.88	27.42	1.77	14.38	11.90	5.52
August .....	2.18	18.34	24.84	2.42	14.14	9.11	4.51
September .....	2.18	15.36	23.00	2.17	12.30	7.87	3.91
<b>9-Month Average</b> .....	2.04	15.44	22.72	1.79	12.22	9.88	4.35
<b>2007 9-Month Average</b> .....	1.77	8.07	13.85	1.56	7.05	7.08	3.25
<b>2006 9-Month Average</b> .....	1.69	8.01	13.54	1.30	6.36	7.02	3.08

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

<sup>c</sup> Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil. For 1973-1982, data do not include refined motor oil, bunker oil, and liquefied petroleum gases. For 1973-1989, data do not include petroleum coke.

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

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

Gas."

<sup>f</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 at end of section for plant coverage.

NA=Not available.

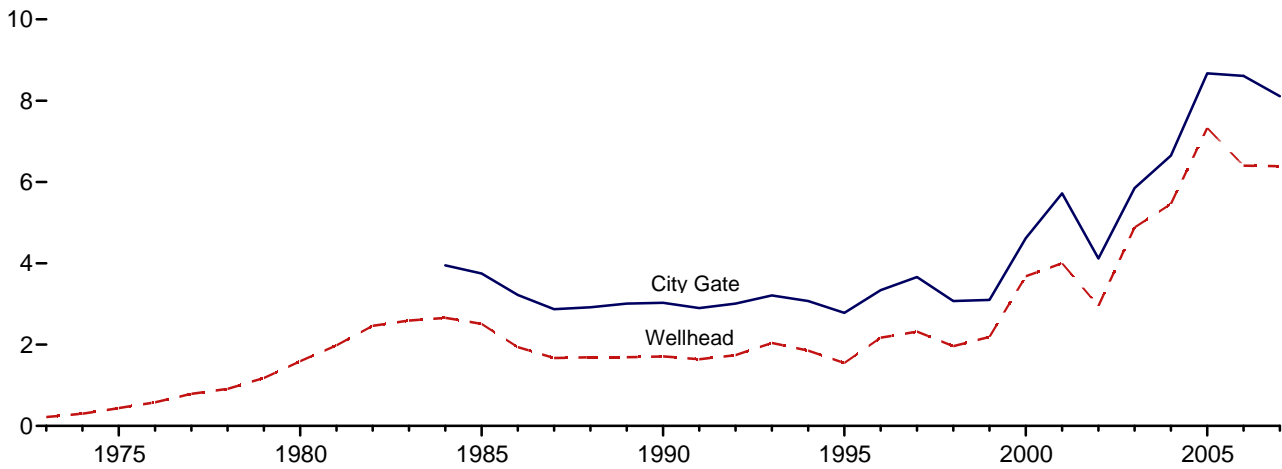
Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • Geographic coverage is the 50 States and the District of Columbia. • See "Nominal Price" in Glossary.

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

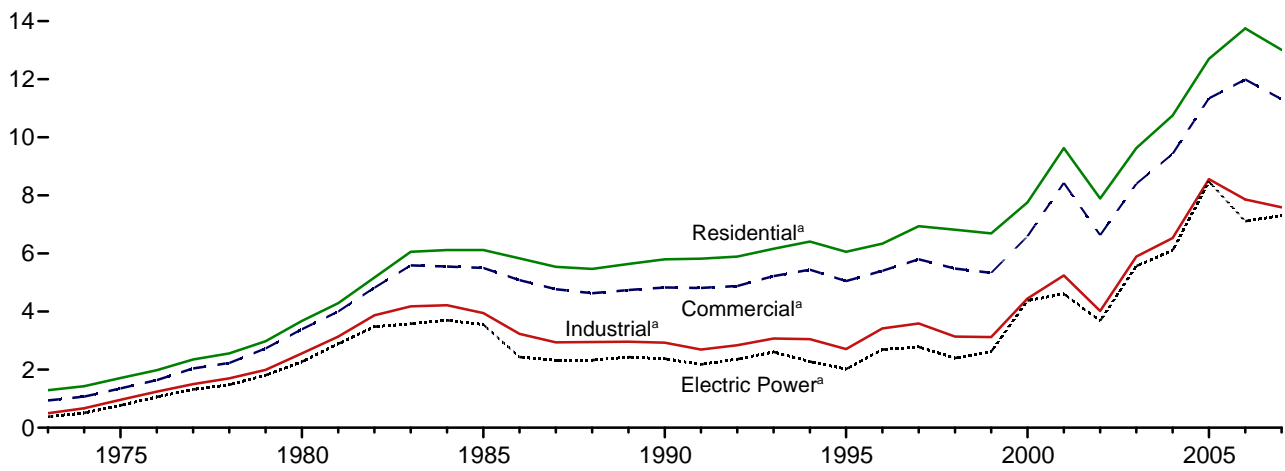
Sources: See end of section.

**Figure 9.4 Natural Gas Prices**  
(Nominal Dollars per Thousand Cubic Feet)

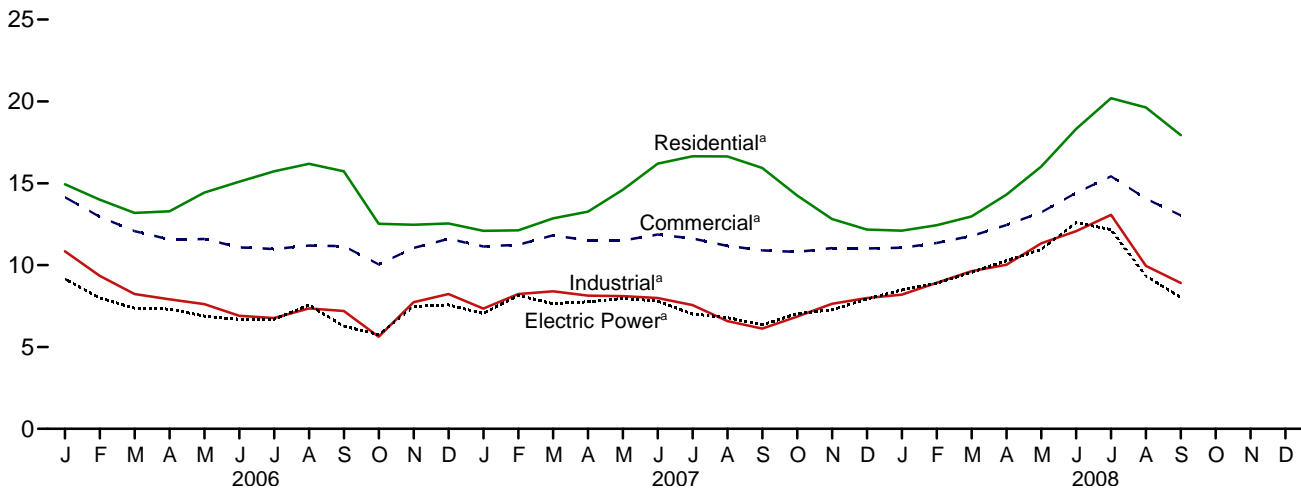
Selected Prices, 1973-2007



Consuming Sectors, 1973-2007



Consuming Sectors, Monthly



<sup>a</sup>Includes taxes.

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

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

**Table 9.11 Natural Gas Prices**  
(Nominal Dollars per Thousand Cubic Feet)

	Wellhead Price	City Gate Price	Consuming Sectors <sup>a</sup>							
			Residential		Commercial <sup>b</sup>		Industrial <sup>c</sup>		Electric Power <sup>d</sup>	
			Price <sup>e</sup>	Percentage of Sector <sup>f</sup>	Price <sup>e</sup>	Percentage of Sector <sup>f</sup>	Price <sup>e</sup>	Percentage of Sector <sup>f</sup>	Price <sup>e</sup>	Percentage of Sector <sup>f</sup>
<b>1973 Average</b> .....	0.22	NA	1.29	NA	0.94	NA	0.50	NA	0.38	92.1
<b>1975 Average</b> .....	.44	NA	1.71	NA	1.35	NA	.96	NA	.77	96.1
<b>1980 Average</b> .....	1.59	NA	3.68	NA	3.39	NA	2.56	NA	2.27	96.9
<b>1985 Average</b> .....	2.51	3.75	6.12	NA	5.50	NA	3.95	68.8	3.55	94.0
<b>1990 Average</b> .....	1.71	3.03	5.80	99.2	4.83	86.6	2.93	35.2	2.38	76.8
<b>1995 Average</b> .....	1.55	2.78	6.06	99.0	5.05	76.7	2.71	24.5	2.02	71.4
<b>1996 Average</b> .....	2.17	3.34	6.34	99.0	5.40	77.6	3.42	19.4	2.69	68.4
<b>1997 Average</b> .....	2.32	3.66	6.94	98.8	5.80	70.8	3.59	18.1	2.78	68.0
<b>1998 Average</b> .....	1.96	3.07	6.82	97.7	5.48	67.0	3.14	16.1	2.40	63.7
<b>1999 Average</b> .....	2.19	3.10	6.69	95.2	5.33	66.1	3.12	18.8	2.62	58.3
<b>2000 Average</b> .....	3.68	4.62	7.76	92.6	6.59	63.9	4.45	19.8	4.38	50.5
<b>2001 Average</b> .....	4.00	5.72	9.63	92.4	8.43	66.0	5.24	20.8	4.61	40.2
<b>2002 Average</b> .....	2.95	4.12	7.89	97.9	6.63	77.4	4.02	22.7	3.68	83.9
<b>2003 Average</b> .....	4.88	5.85	9.63	97.5	8.40	78.2	5.89	22.1	5.57	91.2
<b>2004 Average</b> .....	5.46	6.65	10.75	97.7	9.43	78.0	6.53	23.7	6.11	89.8
<b>2005 Average</b> .....	7.33	8.67	12.70	98.2	11.34	82.1	8.56	24.1	8.47	91.3
<b>2006</b> January .....	8.02	10.80	14.94	NA	14.15	84.0	10.84	23.8	9.15	93.9
February .....	6.86	9.34	14.00	NA	12.95	84.2	9.35	23.9	8.00	95.5
March .....	6.44	8.81	13.19	NA	12.07	83.9	8.23	24.0	7.36	94.7
April .....	6.38	8.29	13.29	NA	11.57	80.8	7.91	23.6	7.32	94.7
May .....	6.24	7.99	14.43	NA	11.60	78.4	7.62	23.9	6.89	93.0
June .....	5.78	7.39	15.09	NA	11.09	75.7	6.90	23.5	6.69	93.8
July .....	5.92	7.40	15.73	NA	10.98	74.3	6.77	23.8	6.69	92.9
August .....	6.56	8.10	16.19	NA	11.20	72.4	7.35	23.8	7.56	91.9
September .....	6.06	7.68	15.73	NA	11.16	74.5	7.20	22.2	6.27	93.6
October .....	5.09	6.42	12.52	NA	10.04	77.2	5.62	23.0	5.76	92.0
November .....	6.72	8.47	12.47	NA	11.05	80.2	7.74	23.1	7.48	93.9
December .....	6.76	8.66	12.54	NA	11.61	82.6	8.23	23.5	7.57	93.7
<b>Average</b> .....	<b>6.40</b>	<b>8.61</b>	<b>13.75</b>	<b>98.1</b>	<b>11.99</b>	<b>80.7</b>	<b>7.86</b>	<b>23.5</b>	<b>7.11</b>	<b>93.4</b>
<b>2007</b> January .....	E 5.92	7.89	12.09	NA	11.14	83.0	7.34	22.0	7.05	95.7
February .....	E 6.66	8.59	12.12	NA	11.24	83.7	8.23	22.1	8.16	92.5
March .....	E 6.56	8.81	12.86	NA	11.82	83.3	8.40	21.7	7.64	93.7
April .....	E 6.84	8.19	13.27	NA	11.51	80.9	8.14	21.9	7.76	94.6
May .....	E 6.98	8.35	14.61	NA	11.51	77.9	8.11	22.6	7.96	94.1
June .....	E 6.86	8.40	16.20	NA	11.87	73.7	7.99	23.2	7.80	94.1
July .....	E 6.19	7.95	16.65	NA	11.63	73.9	7.56	22.5	7.01	93.0
August .....	E 5.90	7.46	16.64	NA	11.18	72.0	6.58	22.2	6.80	88.1
September .....	E 5.61	6.90	15.94	NA	10.90	72.1	6.12	22.0	6.35	94.7
October .....	E 6.25	7.36	14.25	NA	10.80	69.2	6.86	22.4	7.04	94.7
November .....	E 6.37	8.05	12.82	NA	11.04	74.4	7.64	21.4	7.27	94.1
December .....	E 6.53	8.13	12.17	NA	11.02	78.3	7.99	22.0	7.93	94.1
<b>Average</b> .....	<b>E 6.39</b>	<b>8.11</b>	<b>13.01</b>	<b>E 97.9</b>	<b>11.31</b>	<b>79.1</b>	<b>7.59</b>	<b>22.2</b>	<b>7.31</b>	<b>93.2</b>
<b>2008</b> January .....	E 6.99	R 8.34	R 12.10	NA	11.06	79.0	8.19	20.5	8.48	99.6
February .....	E 7.55	8.87	R 12.44	NA	R 11.35	R 78.7	8.92	20.4	8.90	101.9
March .....	E 8.29	9.45	R 12.97	NA	R 11.78	R 78.4	9.63	21.3	9.56	99.7
April .....	E 8.94	R 9.86	14.30	NA	12.45	75.5	10.02	21.8	10.27	100.8
May .....	E 9.81	10.97	16.02	NA	13.23	71.5	11.33	21.3	10.96	99.3
June .....	E 10.82	11.73	18.32	NA	14.41	70.8	12.07	20.9	12.60	98.3
July .....	E 10.62	12.39	R 20.20	NA	15.43	66.9	13.07	20.7	12.16	97.1
August .....	E 8.32	10.16	R 19.63	NA	14.06	65.4	9.95	20.3	9.33	97.8
September .....	E 7.27	8.96	17.94	NA	13.04	65.3	8.91	18.5	8.03	99.5
<b>9-Month Average</b> .....	<b>E 8.73</b>	<b>9.63</b>	<b>13.84</b>	<b>NA</b>	<b>12.21</b>	<b>75.2</b>	<b>10.18</b>	<b>20.7</b>	<b>10.15</b>	<b>99.0</b>
<b>2007 9-Month Average</b> .....	<b>E 6.39</b>	<b>8.18</b>	<b>13.14</b>	<b>NA</b>	<b>11.40</b>	<b>80.2</b>	<b>7.62</b>	<b>22.2</b>	<b>7.28</b>	<b>92.9</b>
<b>2006 9-Month Average</b> .....	<b>6.47</b>	<b>8.84</b>	<b>14.26</b>	<b>NA</b>	<b>12.35</b>	<b>80.8</b>	<b>8.08</b>	<b>23.6</b>	<b>7.18</b>	<b>93.5</b>

<sup>a</sup> See Note 9, "Natural Gas Prices," at end of section.

<sup>b</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.

<sup>c</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>d</sup> The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 2001, data are for electric utilities only; beginning in 2002, data also include independent power producers. See Note 8 at end of section for plant coverage.

<sup>e</sup> Includes taxes.

<sup>f</sup> 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.

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. • See "Nominal Price" in Glossary.

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

Sources: See end of section.

## 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. Delivered-to-consumers prices for 1987 forward represent natural gas delivered and sold to residential, commercial, industrial, and electric power consumers. They do not include the price of natural gas delivered to industrial and commercial consumers on behalf of third parties. Volumes of natural gas delivered on behalf of third parties are included in the consumption data shown in Table 4.3. Additional information is available in the EIA *Natural Gas Monthly*, Appendix C.

## Table 9.1 Sources

### Domestic First Purchase Price

1973-1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.

1977: Federal Energy Administration, based on Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report."

1978-2007: Energy Information Administration (EIA), *Petroleum Marketing Annual 2007*, Table 1.

2008: EIA, *Petroleum Marketing Monthly*, December 2008, Table 1.

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

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

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

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

2008: EIA, *Petroleum Marketing Monthly*, December 2008, Table 1.

### Refiner Acquisition Cost

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

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

1977: January–September, FEA, based on Form FEA-P110-M-1, “Refiners’ Monthly Cost Allocation Report.” October–December, EIA, based on Form FEA-P110-M-1, “Refiners’ Monthly Cost Allocation Report.”  
1978–2007: EIA, *Petroleum Marketing Annual 2007*, Table 1.  
2008: EIA, *Petroleum Marketing Monthly*, December 2008, Table 1.

## Table 9.2 Sources

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, “Transfer Pricing Report.”  
October 1977–December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, “Transfer Pricing Report.”  
1978–2007: EIA, *Petroleum Marketing Annual 2007*, Table 24.  
2008: EIA, *Petroleum Marketing Monthly*, December 2008, Table 24.

## Table 9.10 Sources

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

## Table 9.11 Sources

### All Prices Except Electric Power

1973–2002: Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports.  
2003 forward: EIA, *Natural Gas Monthly (NGM)*, November 2008, Table 3.

### Electric Power Sector Price

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

### Percentage of Residential Sector

1989–2006: EIA, Form EIA-176, “Annual Report of Natural and Supplemental Gas Supply and Disposition.”  
2007: Estimated by EIA as the average of the three previous annual values.

### Percentage of Commercial Sector

1987–2002: EIA, *NGA*, annual reports. Calculated as the total amount of natural gas delivered to commercial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to commercial consumers.  
2003 forward: EIA, *NGM*, November 2008, Table 3.

### Percentage of Industrial Sector

1982–2002: EIA, *NGA*, annual reports. Calculated as the total amount of natural gas delivered to industrial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to industrial consumers.  
2003 forward: EIA, *NGM*, November 2008, Table 3.

### Percentage of Electric Power Sector

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



# 10

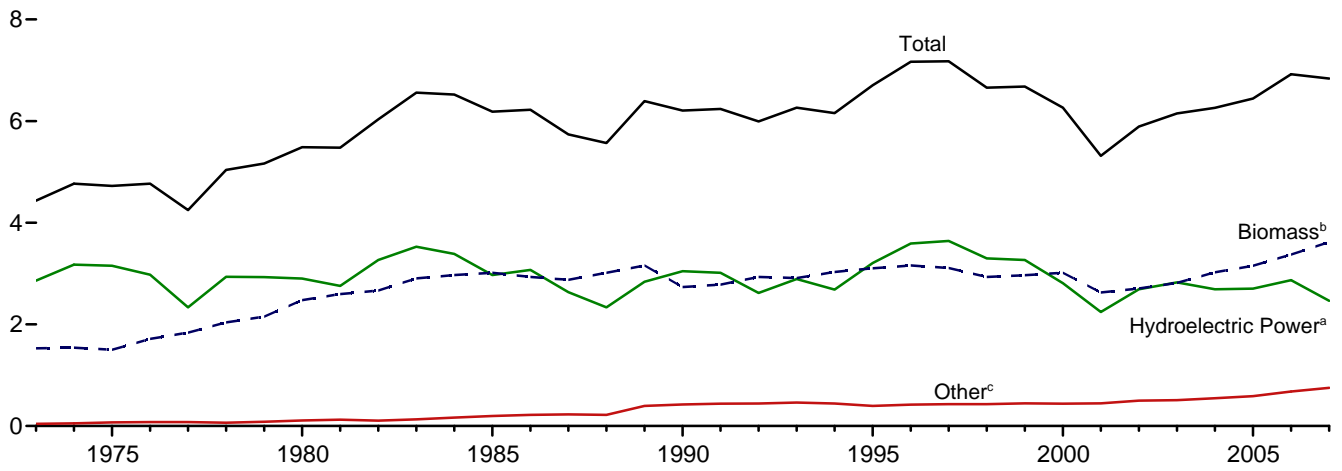
# Renewable Energy



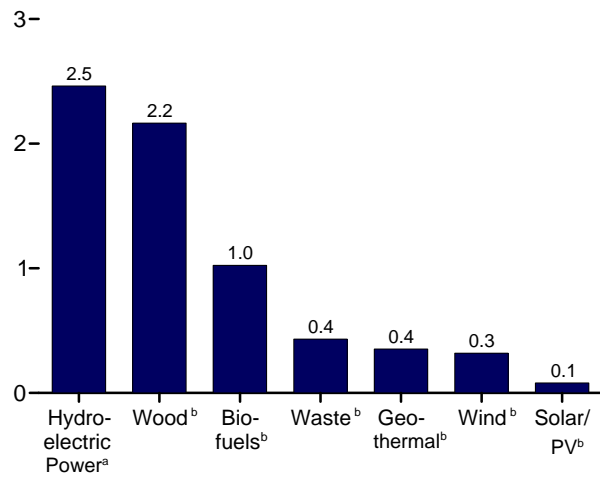
Grand Coulee Dam, Washington State. Source: U.S. Bureau of Reclamation.

**Figure 10.1 Renewable Energy Consumption**  
(Quadrillion Btu)

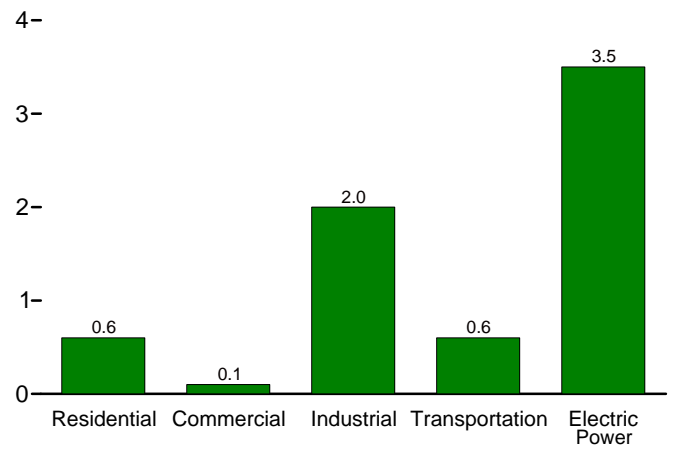
Total and Major Sources, 1973-2007



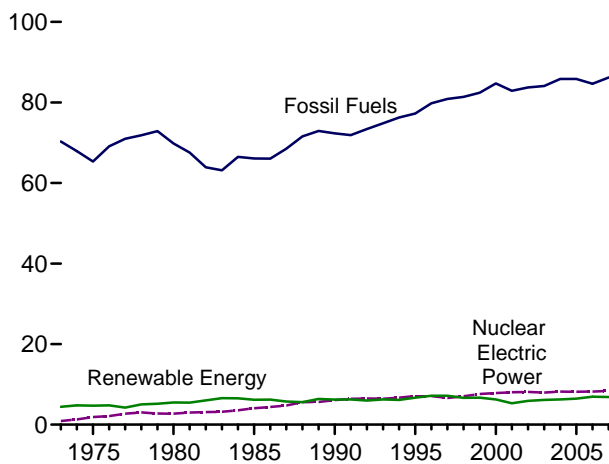
By Source, 2007



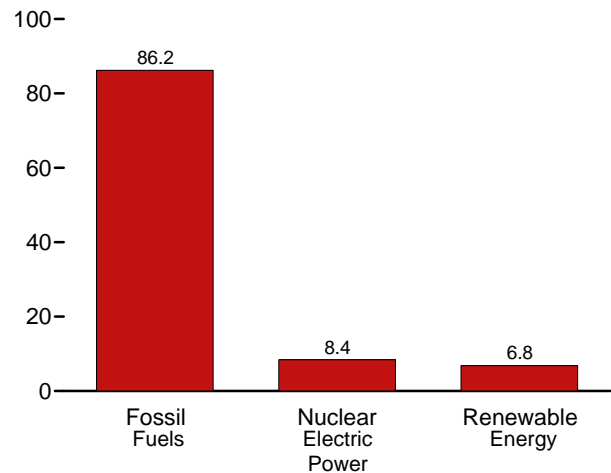
By Sector, 2007



Compared With Other Resources, 1973-2007



Compared With Other Resources, 2007



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

<sup>b</sup>See Table 10.1 for definition.

<sup>c</sup>Geothermal, solar/PV, and wind.

Web Page: <http://www.eia.doe.gov/emeu/mer/renew.html>.

Sources: Tables 1.3, 10.1, and 10.2a-c.







**Table 10.2c Renewable Energy Consumption: Electric Power Sector**

(Trillion Btu)

	Hydro-electric Power <sup>a</sup>	Geo-thermal <sup>b</sup>	Solar/PV <sup>c</sup>	Wind <sup>d</sup>	Biomass			Total
					Wood <sup>e</sup>	Waste <sup>f</sup>	Total	
<b>1973 Total</b> .....	<b>2,827</b>	<b>43</b>	<b>NA</b>	<b>NA</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2,873</b>
<b>1975 Total</b> .....	<b>3,122</b>	<b>70</b>	<b>NA</b>	<b>NA</b>	<b>(s)</b>	<b>2</b>	<b>2</b>	<b>3,194</b>
<b>1980 Total</b> .....	<b>2,867</b>	<b>110</b>	<b>NA</b>	<b>NA</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>2,982</b>
<b>1985 Total</b> .....	<b>2,937</b>	<b>198</b>	<b>(s)</b>	<b>(s)</b>	<b>8</b>	<b>7</b>	<b>14</b>	<b>3,150</b>
<b>1990 Total</b> <sup>g</sup> .....	<b>3,014</b>	<b>326</b>	<b>4</b>	<b>29</b>	<b>129</b>	<b>188</b>	<b>317</b>	<b>3,689</b>
<b>1995 Total</b> .....	<b>3,149</b>	<b>280</b>	<b>5</b>	<b>33</b>	<b>125</b>	<b>296</b>	<b>422</b>	<b>3,889</b>
<b>1996 Total</b> .....	<b>3,528</b>	<b>300</b>	<b>5</b>	<b>33</b>	<b>138</b>	<b>300</b>	<b>438</b>	<b>4,305</b>
<b>1997 Total</b> .....	<b>3,581</b>	<b>309</b>	<b>5</b>	<b>34</b>	<b>137</b>	<b>309</b>	<b>446</b>	<b>4,375</b>
<b>1998 Total</b> .....	<b>3,241</b>	<b>311</b>	<b>5</b>	<b>31</b>	<b>137</b>	<b>308</b>	<b>444</b>	<b>4,032</b>
<b>1999 Total</b> .....	<b>3,218</b>	<b>312</b>	<b>5</b>	<b>46</b>	<b>138</b>	<b>315</b>	<b>453</b>	<b>4,034</b>
<b>2000 Total</b> .....	<b>2,768</b>	<b>296</b>	<b>5</b>	<b>57</b>	<b>134</b>	<b>318</b>	<b>453</b>	<b>3,579</b>
<b>2001 Total</b> .....	<b>2,209</b>	<b>289</b>	<b>6</b>	<b>70</b>	<b>126</b>	<b>211</b>	<b>337</b>	<b>2,910</b>
<b>2002 Total</b> .....	<b>2,650</b>	<b>305</b>	<b>6</b>	<b>105</b>	<b>150</b>	<b>230</b>	<b>380</b>	<b>3,445</b>
<b>2003 Total</b> .....	<b>2,781</b>	<b>303</b>	<b>5</b>	<b>115</b>	<b>167</b>	<b>230</b>	<b>397</b>	<b>3,601</b>
<b>2004 Total</b> .....	<b>2,656</b>	<b>311</b>	<b>6</b>	<b>142</b>	<b>165</b>	<b>223</b>	<b>388</b>	<b>3,503</b>
<b>2005 Total</b> .....	<b>2,670</b>	<b>309</b>	<b>6</b>	<b>178</b>	<b>185</b>	<b>221</b>	<b>406</b>	<b>3,568</b>
<b>2006</b> 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
<b>Total</b> .....	<b>2,839</b>	<b>306</b>	<b>5</b>	<b>264</b>	<b>182</b>	<b>231</b>	<b>412</b>	<b>3,827</b>
<b>2007</b> January .....	258	27	(s)	24	16	21	38	347
February .....	183	25	(s)	25	17	19	36	269
March .....	239	26	(s)	30	15	21	36	331
April .....	235	24	1	32	15	19	33	325
May .....	255	25	1	28	14	20	34	343
June .....	225	26	1	24	15	21	36	311
July .....	223	27	1	19	15	21	36	306
August .....	196	27	1	24	16	21	37	285
September .....	144	26	1	26	15	20	35	232
October .....	146	27	(s)	30	14	18	32	236
November .....	155	26	(s)	27	15	21	36	243
December .....	182	27	(s)	28	16	22	37	275
<b>Total</b> .....	<b>2,440</b>	<b>312</b>	<b>6</b>	<b>319</b>	<b>184</b>	<b>243</b>	<b>427</b>	<b>3,503</b>
<b>2008</b> 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
<b>9-Month Total</b> .....	<b>2,063</b>	<b>230</b>	<b>7</b>	<b>324</b>	<b>137</b>	<b>174</b>	<b>311</b>	<b>2,935</b>
<b>2007 9-Month Total</b> .....	<b>1,957</b>	<b>232</b>	<b>5</b>	<b>233</b>	<b>138</b>	<b>183</b>	<b>321</b>	<b>2,749</b>
<b>2006 9-Month Total</b> .....	<b>2,264</b>	<b>227</b>	<b>5</b>	<b>190</b>	<b>136</b>	<b>172</b>	<b>308</b>	<b>2,994</b>

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

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

<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).

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

<sup>f</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).

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

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

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

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

Sources: • Biomass: Table 7.4b. • All Other Data: Tables 7.2b and A6.



**Table 10.4 Biodiesel Overview**

	<b>Feedstock<sup>a</sup></b>	<b>Losses and Co-products<sup>b</sup></b>	<b>Production<sup>c</sup></b>		
	Trillion Btu	Trillion Btu	Thousand Barrels	Million Gallons	Trillion Btu
<b>2001 Total</b> .....	<b>1</b>	<b>(s)</b>	<b>204</b>	<b>9</b>	<b>1</b>
<b>2002 Total</b> .....	<b>1</b>	<b>(s)</b>	<b>250</b>	<b>10</b>	<b>1</b>
<b>2003 Total</b> .....	<b>2</b>	<b>(s)</b>	<b>338</b>	<b>14</b>	<b>2</b>
<b>2004 Total</b> .....	<b>4</b>	<b>(s)</b>	<b>666</b>	<b>28</b>	<b>4</b>
<b>2005 Total</b> .....	<b>12</b>	<b>(s)</b>	<b>2,162</b>	<b>91</b>	<b>12</b>
<b>2006</b> January .....	2	(s)	312	13	2
February .....	1	(s)	269	11	1
March .....	2	(s)	368	15	2
April .....	2	(s)	385	16	2
May .....	3	(s)	531	22	3
June .....	3	(s)	612	26	3
July .....	3	(s)	540	23	3
August .....	4	(s)	689	29	4
September .....	3	(s)	598	25	3
October .....	3	(s)	549	23	3
November .....	3	(s)	520	22	3
December .....	3	(s)	590	25	3
<b>Total</b> .....	<b>32</b>	<b>(s)</b>	<b>5,963</b>	<b>250</b>	<b>32</b>
<b>2007</b> 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
<b>Total</b> .....	<b>63</b>	<b>1</b>	<b>11,662</b>	<b>490</b>	<b>62</b>
<b>2008</b> January .....	7	(s)	1,208	51	6
February .....	6	(s)	1,030	43	6
March .....	6	(s)	1,168	49	6
April .....	7	(s)	1,258	53	7
May .....	7	(s)	1,250	52	7
June .....	8	(s)	1,509	63	8
July .....	9	(s)	1,605	67	9
August .....	9	(s)	1,588	67	9
September .....	8	(s)	1,527	64	8
<b>9-Month Total</b> .....	<b>66</b>	<b>1</b>	<b>12,143</b>	<b>510</b>	<b>65</b>
<b>2007 9-Month Total</b> .....	<b>46</b>	<b>1</b>	<b>8,456</b>	<b>355</b>	<b>45</b>
<b>2006 9-Month Total</b> .....	<b>23</b>	<b>(s)</b>	<b>4,304</b>	<b>181</b>	<b>23</b>

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

<sup>b</sup> 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.

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

(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.)



## Renewable Energy

**Note. Renewable Energy Production and Consumption.** In Table 10.1, renewable energy consumption consists of: conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate); geothermal electricity net generation (converted to Btu using the geothermal plants heat rate), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and wood-derived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; fuel ethanol and biodiesel consumption; and losses and co-products from the production of fuel ethanol and biodiesel. Production is assumed to equal consumption for all renewable energy sources except biofuels (biofuels production comprises biomass inputs to the production of fuel ethanol and biodiesel).

### Table 10.2a Sources

#### Residential Sector, Geothermal

Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

#### Residential Sector, Solar/PV

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.

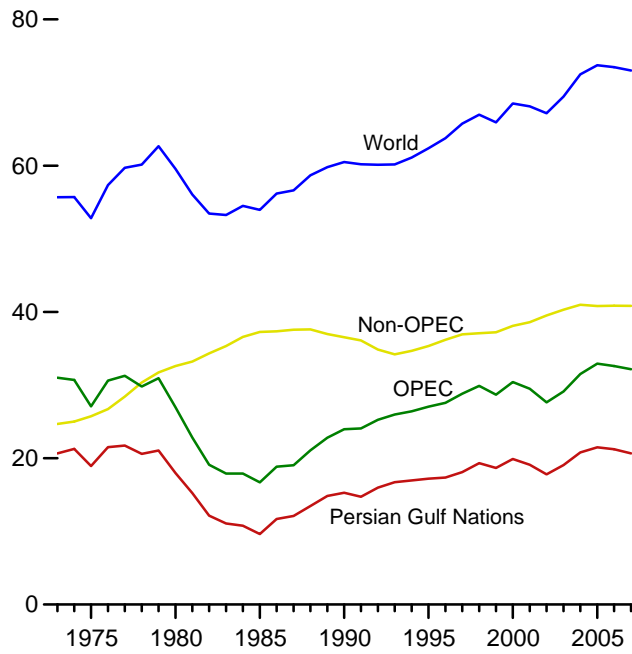
# International Petroleum



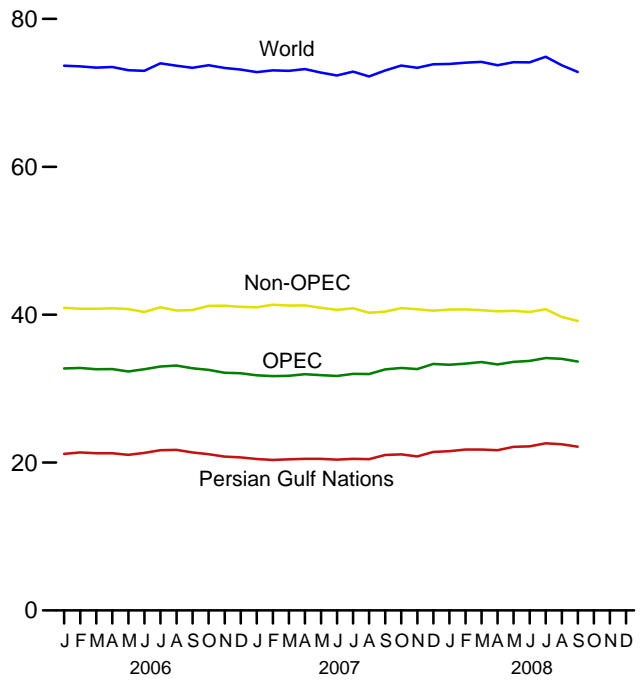
Drilling rig, Gansu Province, People's Republic of China. Source: U.S. Department of Energy.

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

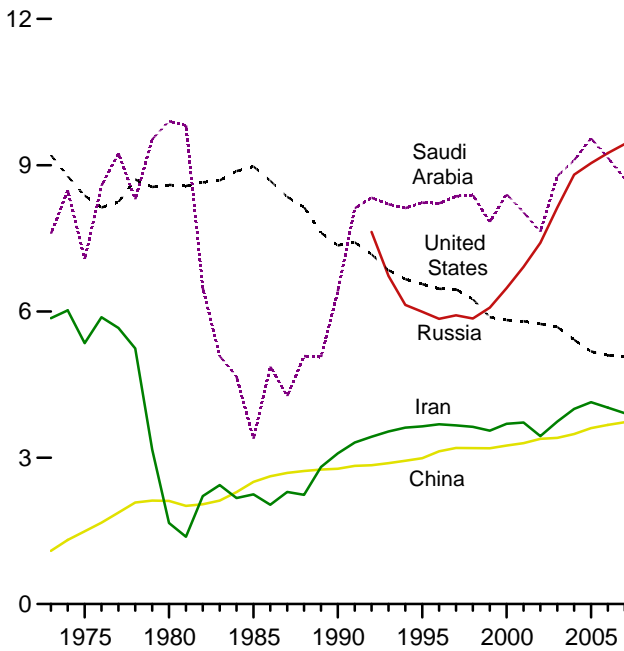
World Production, 1973-2007



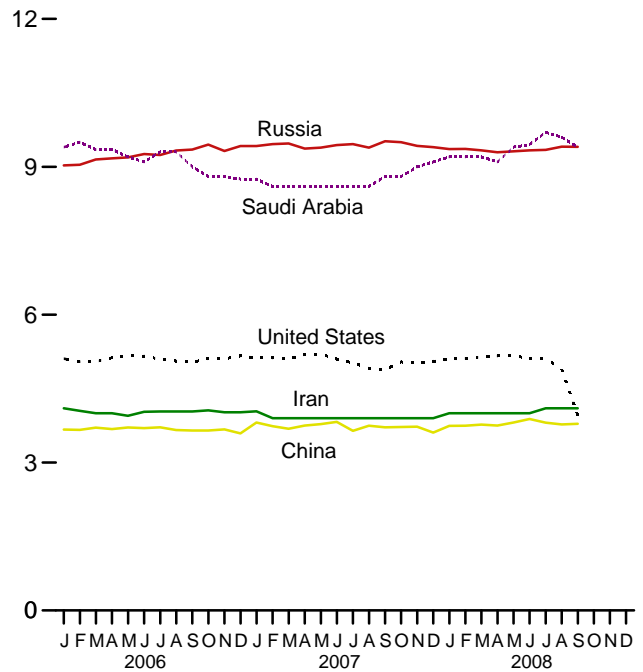
World Production, Monthly



Selected Producers, 1973-2007



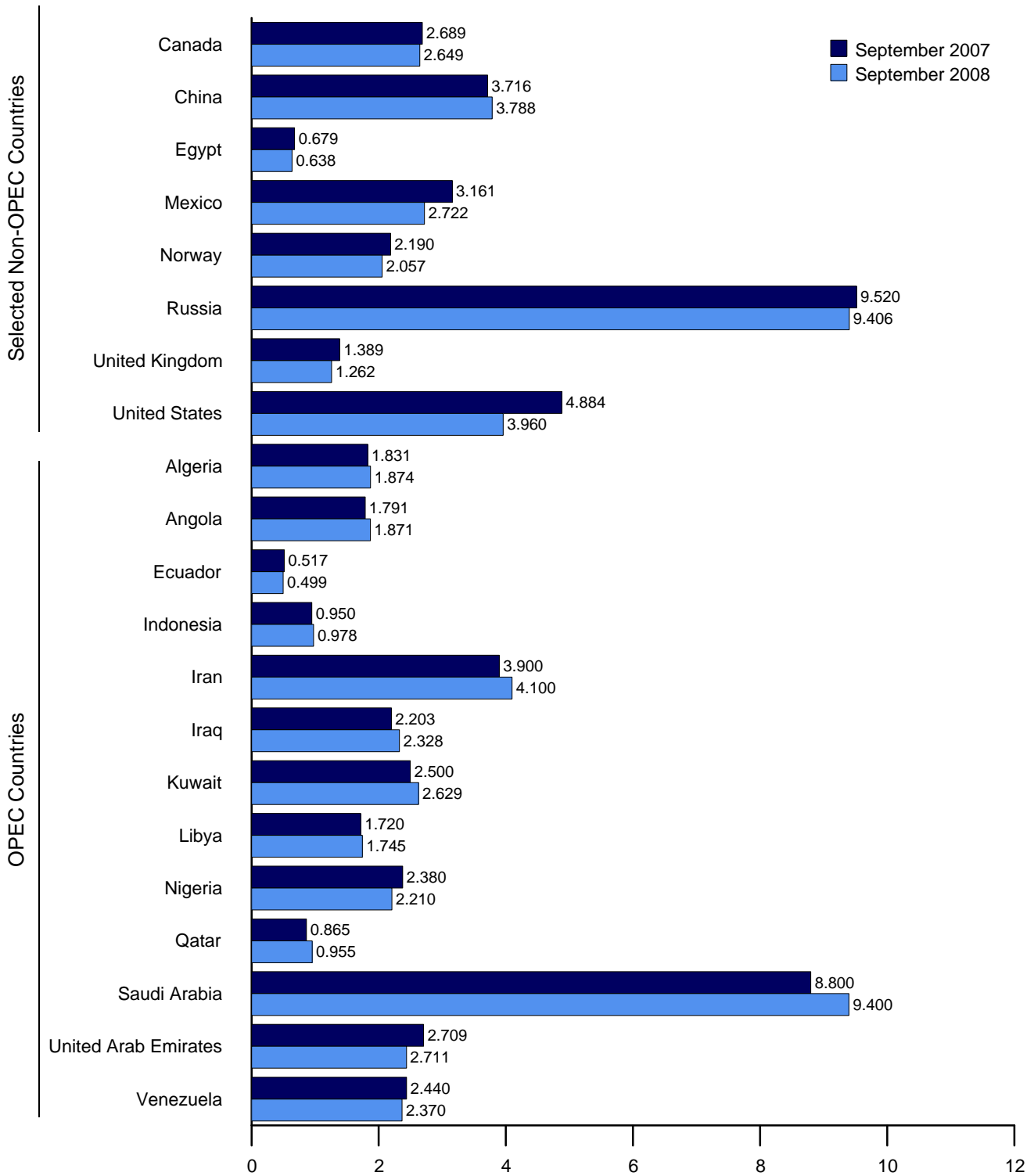
Selected Producers, Monthly



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

• 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	Indonesia	Iran	Iraq	Kuwait <sup>a</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>a</sup>	United Arab Emirates	Venezuela	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
<b>2006</b> January	1,825	1,420	553	1,045	4,100	1,603	2,600	1,650	2,560	835	9,400	2,602	2,540	32,733
February	1,825	1,420	551	1,050	4,050	1,803	2,550	1,650	2,410	835	9,500	2,602	2,540	32,786
March	1,825	1,420	528	1,043	4,000	1,903	2,525	1,680	2,370	835	9,350	2,602	2,540	32,621
April	1,825	1,420	546	1,035	4,000	1,903	2,525	1,690	2,370	835	9,350	2,602	2,540	32,641
May	1,785	1,320	547	1,038	3,950	1,903	2,525	1,700	2,370	835	9,200	2,602	2,540	32,315
June	1,795	1,285	536	1,027	4,030	2,153	2,550	1,700	2,465	835	9,100	2,602	2,540	32,618
July	1,805	1,460	543	1,020	4,035	2,203	2,550	1,700	2,380	855	9,300	2,702	2,440	32,992
August	1,805	1,460	544	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
<b>Average</b>	<b>1,814</b>	<b>1,413</b>	<b>536</b>	<b>1,019</b>	<b>4,028</b>	<b>1,996</b>	<b>2,535</b>	<b>1,681</b>	<b>2,440</b>	<b>850</b>	<b>9,152</b>	<b>2,636</b>	<b>2,511</b>	<b>32,610</b>
<b>2007</b> January	1,838	1,584	517	988	4,040	1,753	2,450	1,680	2,365	835	8,750	2,613	2,380	31,794
February	1,833	1,600	507	984	3,900	2,003	2,420	1,680	2,390	825	8,600	2,573	2,383	31,698
March	1,829	1,640	482	969	3,900	2,053	2,420	1,680	2,275	825	8,600	2,612	2,445	31,730
April	1,825	1,679	502	965	3,900	2,103	2,420	1,680	2,400	825	8,600	2,611	2,445	31,954
May	1,821	1,695	512	965	3,900	2,103	2,420	1,680	2,240	825	8,600	2,611	2,444	31,816
June	1,828	1,680	515	958	3,900	2,003	2,420	1,680	2,230	835	8,600	2,610	2,444	31,704
July	1,828	1,710	510	953	3,900	2,053	2,445	1,700	2,380	865	8,600	2,610	2,444	31,998
August	1,824	1,730	508	952	3,900	1,903	2,500	1,700	2,380	865	8,600	2,659	2,444	31,965
September	1,831	1,791	517	950	3,900	2,203	2,500	1,720	2,380	865	8,800	2,709	2,440	32,606
October	1,842	1,889	514	960	3,900	2,303	2,500	1,740	2,330	869	8,800	2,711	2,440	32,798
November	1,852	1,940	518	960	3,900	2,253	2,520	1,740	2,400	883	9,000	2,242	2,440	32,648
December	1,852	1,986	532	960	3,900	2,303	2,550	1,740	2,430	888	9,100	2,659	2,440	33,339
<b>Average</b>	<b>1,834</b>	<b>1,744</b>	<b>511</b>	<b>964</b>	<b>3,912</b>	<b>2,086</b>	<b>2,464</b>	<b>1,702</b>	<b>2,350</b>	<b>851</b>	<b>8,722</b>	<b>2,603</b>	<b>2,433</b>	<b>32,174</b>
<b>2008</b> 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	R 2,430	R 33,584
April	R 1,875	2,009	R 510	964	4,000	2,303	2,600	1,718	2,130	934	9,100	2,710	R 2,420	R 33,274
May	R 1,875	2,015	499	965	R 4,000	2,453	R 2,600	1,700	2,060	938	9,400	2,710	R 2,410	R 33,625
June	R 1,874	2,013	495	965	R 4,000	2,453	R 2,607	1,700	2,140	942	9,450	2,710	R 2,400	R 33,750
July	R 1,874	2,009	498	978	R 4,100	2,505	R 2,614	1,700	2,120	947	9,700	2,710	R 2,390	R 34,146
August	R 1,874	1,937	R 500	978	R 4,100	2,456	R 2,622	1,700	2,216	951	9,600	2,711	R 2,380	R 34,025
September	1,874	1,871	499	978	4,100	2,328	2,629	1,745	2,210	955	9,400	2,711	2,370	33,668
<b>9-Mo. Avg.</b>	<b>1,872</b>	<b>1,983</b>	<b>505</b>	<b>968</b>	<b>4,034</b>	<b>2,362</b>	<b>2,602</b>	<b>1,720</b>	<b>2,171</b>	<b>933</b>	<b>9,363</b>	<b>2,710</b>	<b>2,409</b>	<b>33,632</b>
<b>2007 9-Mo. Avg.</b>	<b>1,829</b>	<b>1,679</b>	<b>508</b>	<b>965</b>	<b>3,916</b>	<b>2,019</b>	<b>2,444</b>	<b>1,689</b>	<b>2,337</b>	<b>841</b>	<b>8,639</b>	<b>2,623</b>	<b>2,430</b>	<b>31,919</b>
<b>2006 9-Mo. Avg.</b>	<b>1,814</b>	<b>1,405</b>	<b>542</b>	<b>1,031</b>	<b>4,026</b>	<b>1,982</b>	<b>2,547</b>	<b>1,686</b>	<b>2,421</b>	<b>848</b>	<b>9,277</b>	<b>2,636</b>	<b>2,517</b>	<b>32,732</b>

<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 September 2008, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 545 thousand barrels per day.

<sup>b</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.  
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.

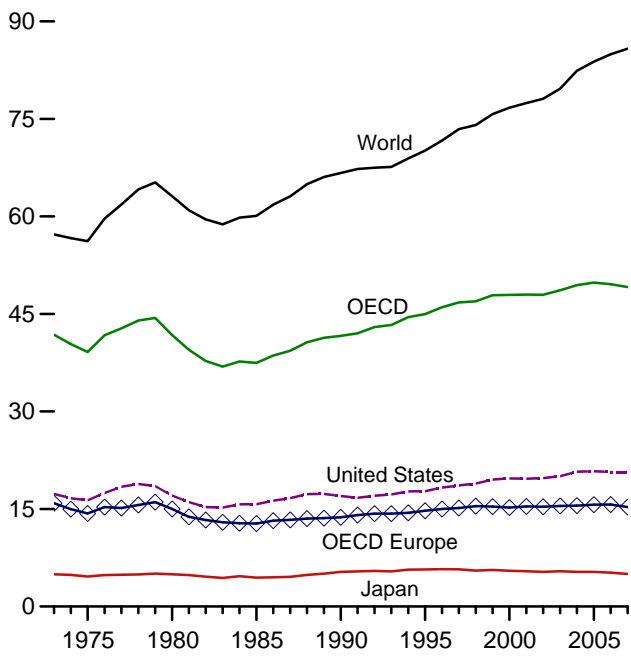
Web Page: See <http://www.eia.doe.gov/emeu/mer/inter.html> for all available data beginning in 1973.

Sources: See end of section.

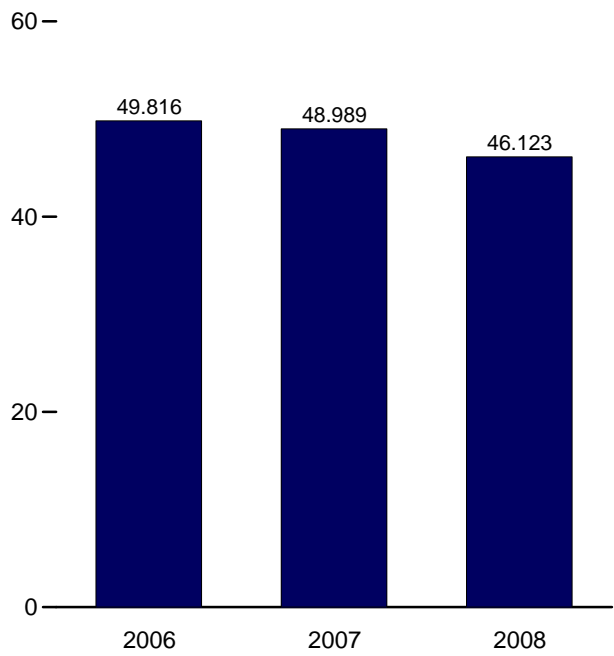


**Figure 11.2 Petroleum Consumption in OECD Countries**  
(Million Barrels per Day)

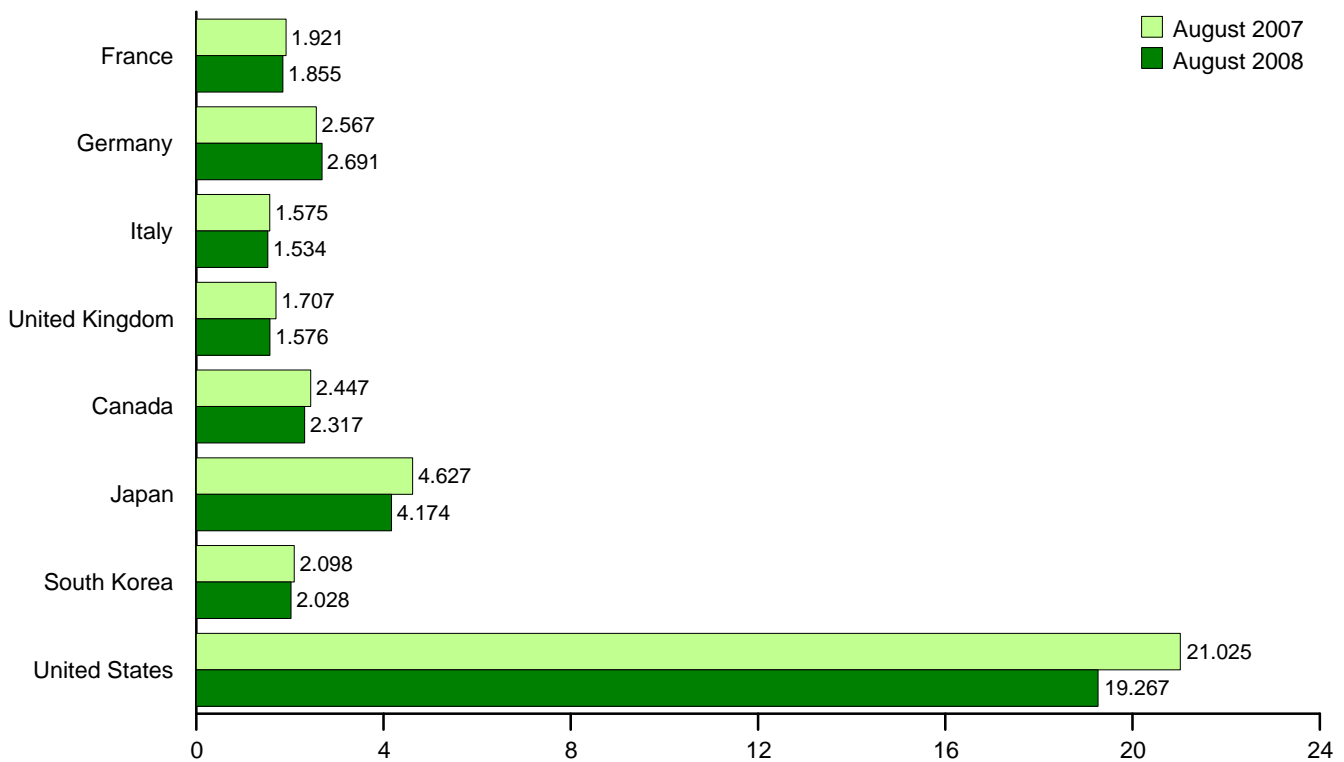
Overview, 1973-2007



OECD Total, August



By Selected OECD Country



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

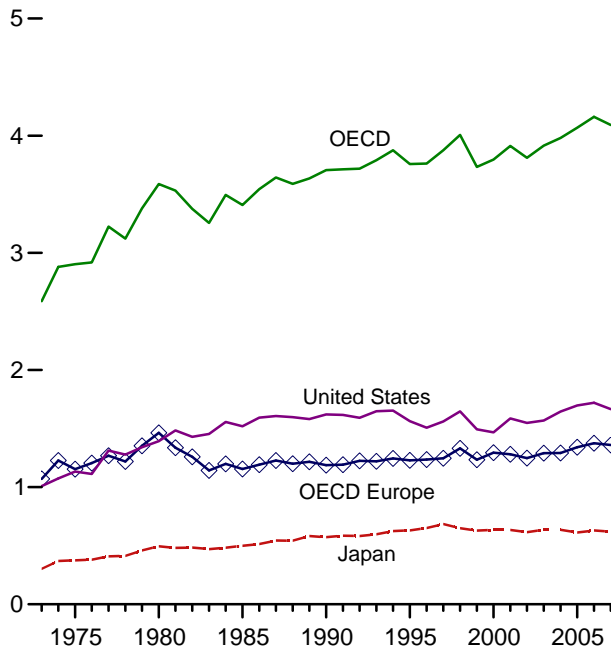
Web Page: <http://www.eia.doe.gov/emeu/mer/inter.html>.  
Source: Table 11.2.



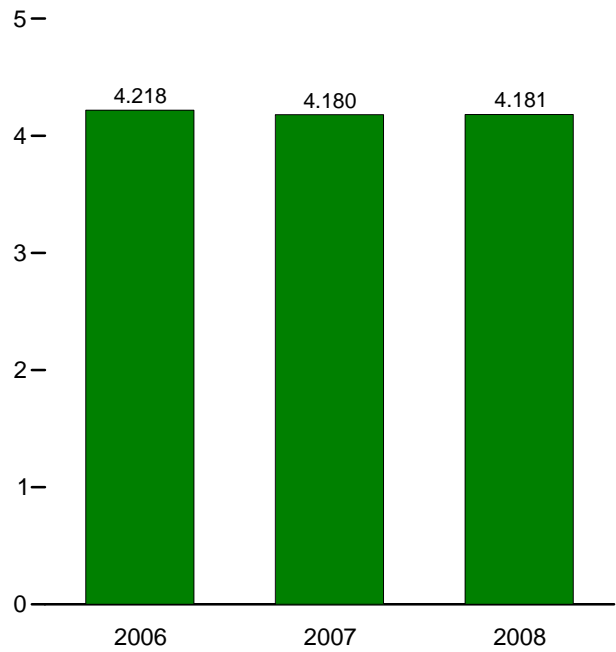


**Figure 11.3 Petroleum Stocks in OECD Countries**  
(Billion Barrels)

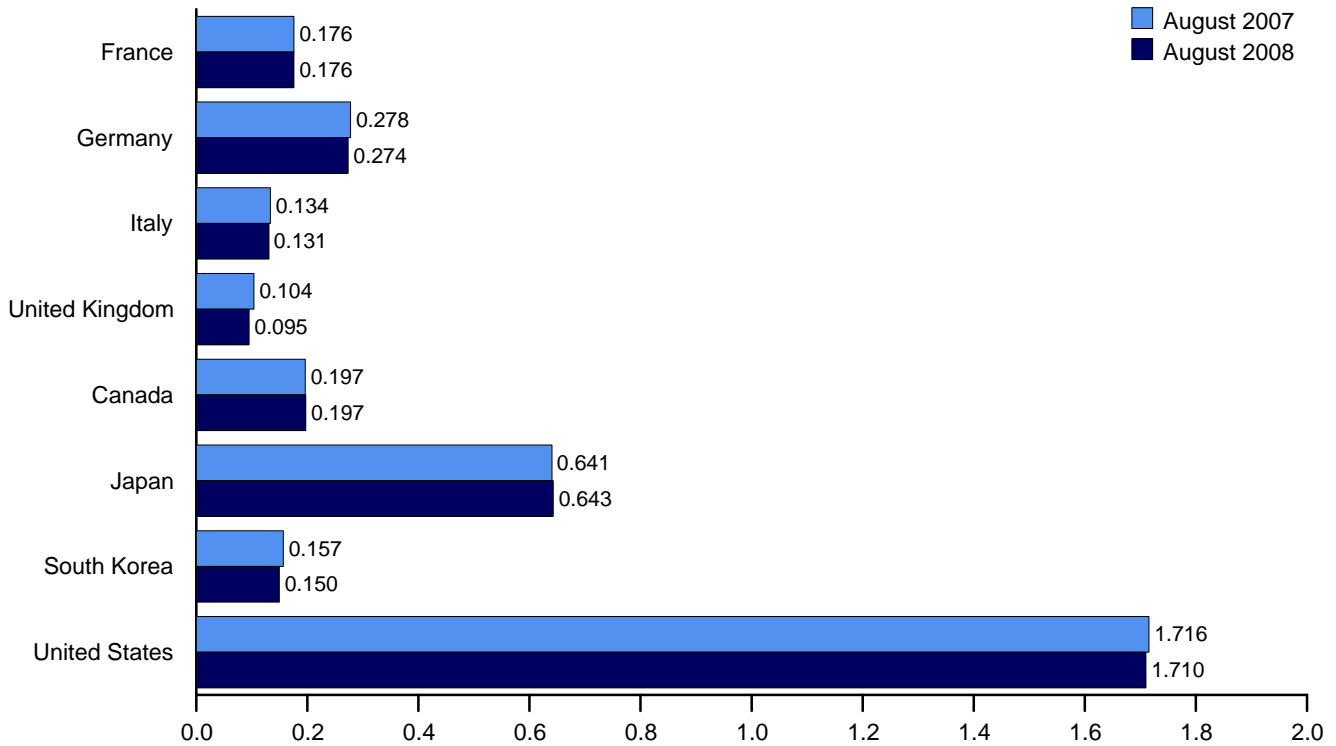
Overview, End of Year, 1973-2007



OECD Stocks, End of Month, August



By Selected OECD Country, End of Month



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



# 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, December 2008.

### All Other Countries and World, Annual Data

1973-1979: Energy Information Administration (EIA), *International Energy Annual 1981*, Table 8.

1980-2007: EIA, Office of Energy Markets and End Use (EMEU), International Energy Database, December 2008.

## 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, Naptha 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 Ethanol <sup>d</sup>	3.539	Miscellaneous	5.796

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

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

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

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

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

Web Page: [http://www.eia.doe.gov/emeu/mer/append\\_a.html](http://www.eia.doe.gov/emeu/mer/append_a.html).

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

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

	Production		Imports			Exports		
	Crude Oil <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 .....	5.800	4.011	5.827	5.959	5.884	5.800	5.773	5.774
1975 .....	5.800	3.984	5.821	5.935	5.858	5.800	5.747	5.748
1976 .....	5.800	3.964	5.808	5.980	5.856	5.800	5.743	5.745
1977 .....	5.800	3.941	5.810	5.908	5.834	5.800	5.796	5.797
1978 .....	5.800	3.925	5.802	5.955	5.839	5.800	5.814	5.808
1979 .....	5.800	3.955	5.810	5.811	5.810	5.800	5.864	5.832
1980 .....	5.800	3.914	5.812	5.748	5.796	5.800	5.841	5.820
1981 .....	5.800	3.930	5.818	5.659	5.775	5.800	5.837	5.821
1982 .....	5.800	3.872	5.826	5.664	5.775	5.800	5.829	5.820
1983 .....	5.800	3.839	5.825	5.677	5.774	5.800	5.800	5.800
1984 .....	5.800	3.812	5.823	5.613	5.745	5.800	5.867	5.850
1985 .....	5.800	3.815	5.832	5.572	5.736	5.800	5.819	5.814
1986 .....	5.800	3.797	5.903	5.624	5.808	5.800	5.839	5.832
1987 .....	5.800	3.804	5.901	5.599	5.820	5.800	5.860	5.858
1988 .....	5.800	3.800	5.900	5.618	5.820	5.800	5.842	5.840
1989 .....	5.800	3.826	5.906	5.641	5.833	5.800	5.869	5.857
1990 .....	5.800	3.822	5.934	5.614	5.849	5.800	5.838	5.833
1991 .....	5.800	3.807	5.948	5.636	5.873	5.800	5.827	5.823
1992 .....	5.800	3.804	5.953	5.623	5.877	5.800	5.774	5.777
1993 .....	5.800	3.801	5.954	5.620	5.883	5.800	5.777	5.779
1994 .....	5.800	3.794	5.950	5.534	5.861	5.800	5.777	5.779
1995 .....	5.800	3.796	5.938	5.483	5.855	5.800	5.740	5.746
1996 .....	5.800	3.777	5.947	5.468	5.847	5.800	5.728	5.736
1997 .....	5.800	3.762	5.954	5.469	5.862	5.800	5.726	5.734
1998 .....	5.800	3.769	5.953	5.462	5.861	5.800	5.710	5.720
1999 .....	5.800	3.744	5.942	5.421	5.840	5.800	5.684	5.699
2000 .....	5.800	3.733	5.959	5.432	5.849	5.800	5.651	5.658
2001 .....	5.800	3.735	5.976	5.443	5.862	5.800	5.751	5.752
2002 .....	5.800	3.729	5.971	5.451	5.863	5.800	5.687	5.688
2003 .....	5.800	3.739	5.970	5.438	5.857	5.800	5.739	5.740
2004 .....	5.800	3.724	5.981	5.475	5.863	5.800	5.753	5.754
2005 .....	5.800	3.724	5.977	5.474	5.845	5.800	5.741	5.743
2006 .....	5.800	3.712	5.980	5.454	5.842	5.800	5.723	5.724
2007 .....	5.800	3.701	5.985	5.503	5.862	5.800	5.749	5.750
2008 <sup>E</sup> .....	5.800	3.701	5.985	5.503	5.862	5.800	5.749	5.750

<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](http://www.eia.doe.gov/emeu/mer/append_a.html).

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

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

	Total Petroleum <sup>a</sup> Consumption by Sector						Liquefied Petroleum Gases Consumption <sup>e</sup>	Motor Gasoline Consumption <sup>f</sup>	Fuel Ethanol	Fuel Ethanol Feed-stock <sup>g</sup>	Biodiesel	Biodiesel Feed-stock <sup>h</sup>
	Residential	Commercial <sup>b</sup>	Industrial <sup>b</sup>	Transportation <sup>b</sup>	Electric Power <sup>c,d</sup>	Total <sup>b</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
1975	5.192	5.704	5.527	5.392	6.250	5.494	3.715	5.253	3.539	NA	NA	NA
1976	5.215	5.726	5.536	5.395	6.251	5.504	3.711	5.253	3.539	NA	NA	NA
1977	5.213	5.733	5.554	5.400	6.249	5.518	3.677	5.253	3.539	NA	NA	NA
1978	5.213	5.716	5.554	5.404	6.251	5.519	3.669	5.253	3.539	NA	NA	NA
1979	5.298	5.769	5.419	5.428	6.258	5.494	3.680	5.253	3.539	NA	NA	NA
1980	5.245	5.803	5.374	5.440	6.254	5.479	3.674	5.253	3.539	6.586	NA	NA
1981	5.191	5.751	5.312	5.432	6.258	5.448	3.643	5.253	3.539	6.486	NA	NA
1982	5.167	5.751	5.263	5.422	6.258	5.415	3.615	5.253	3.539	6.428	NA	NA
1983	5.022	5.642	5.275	5.415	6.255	5.406	3.614	5.253	3.539	6.388	NA	NA
1984	5.184	5.705	5.223	5.418	6.251	5.395	3.599	5.253	3.539	6.356	NA	NA
1985	5.153	5.661	5.215	5.422	6.247	5.387	3.603	5.253	3.539	6.331	NA	NA
1986	5.169	5.694	5.283	5.425	6.257	5.418	3.640	5.253	3.539	6.310	NA	NA
1987	5.144	5.661	5.248	5.429	6.249	5.403	3.659	5.253	3.539	6.291	NA	NA
1988	5.165	5.661	5.241	5.433	6.250	5.410	3.652	5.253	3.539	6.275	NA	NA
1989	5.105	5.621	5.234	5.438	<sup>c</sup> 6.240	5.410	3.683	5.253	3.539	6.260	NA	NA
1990	5.027	5.621	5.270	5.442	6.244	5.411	3.625	5.253	3.539	6.247	NA	NA
1991	4.968	5.599	5.186	5.440	6.246	5.384	3.614	5.253	3.539	6.235	NA	NA
1992	5.004	5.589	5.185	5.442	6.238	5.378	3.624	5.253	3.539	6.224	NA	NA
1993	4.975	<sup>b</sup> 5.580	<sup>b</sup> 5.196	<sup>b</sup> 5.436	6.230	<sup>b</sup> 5.379	3.606	5.253	3.539	6.214	NA	NA
1994	4.983	5.592	5.166	5.424	6.213	5.361	3.635	<sup>f</sup> 5.230	3.539	6.204	NA	NA
1995	4.940	5.554	5.137	5.417	6.188	5.341	3.623	5.215	3.539	6.196	NA	NA
1996	4.869	5.498	5.133	5.420	6.195	5.336	3.613	5.216	3.539	6.187	NA	NA
1997	4.859	5.459	5.138	5.416	6.199	5.336	3.616	5.213	3.539	6.180	NA	NA
1998	4.837	5.446	5.155	5.413	6.210	5.349	3.614	5.212	3.539	6.172	NA	NA
1999	4.761	5.369	5.113	5.413	6.205	5.328	3.616	5.211	3.539	6.165	NA	NA
2000	4.761	5.394	5.082	5.421	6.189	5.326	3.607	5.210	3.539	6.159	NA	NA
2001	4.796	5.403	5.164	5.412	6.199	5.345	3.614	5.210	3.539	6.152	5.359	5.433
2002	4.742	5.364	5.116	5.410	6.173	5.324	3.613	5.208	3.539	6.146	5.359	5.433
2003	4.763	5.407	5.161	5.408	6.182	5.340	3.629	5.207	3.539	6.141	5.359	5.433
2004	4.807	5.434	5.164	5.420	6.192	5.350	3.618	5.215	3.539	6.135	5.359	5.433
2005	4.783	5.427	5.200	5.426	6.188	5.365	3.620	5.218	3.539	6.130	5.359	5.433
2006	<sup>E</sup> 4.667	<sup>E</sup> 5.343	<sup>E</sup> 5.197	<sup>E</sup> 5.430	6.143	5.353	3.605	5.218	3.539	6.125	5.359	5.433
2007	<sup>E</sup> 4.640	<sup>E</sup> 5.340	<sup>E</sup> 5.167	<sup>E</sup> 5.432	<sup>P</sup> 6.150	5.346	3.591	5.219	3.539	5.987	5.359	5.433
2008	<sup>E</sup> 4.640	<sup>E</sup> 5.340	<sup>E</sup> 5.167	<sup>E</sup> 5.432	<sup>E</sup> 6.150	<sup>E</sup> 5.346	<sup>E</sup> 3.591	<sup>E</sup> 5.219	3.539	<sup>E</sup> 5.986	5.359	5.433

<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.

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

<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.

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

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

<sup>f</sup> 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>g</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.

<sup>h</sup> 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.

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](http://www.eia.doe.gov/emeu/mer/append_a.html).

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

**Table A4. Approximate Heat Content of Natural Gas**  
(Btu per Cubic Foot)

	Production		Consumption <sup>a</sup>			Imports	Exports
	Marketed	Dry	End-Use Sectors <sup>b</sup>	Electric Power Sector <sup>c</sup>	Total		
1973 .....	1,093	1,021	1,020	1,024	1,021	1,026	1,023
1974 .....	1,097	1,024	1,024	1,022	1,024	1,027	1,016
1975 .....	1,095	1,021	1,020	1,026	1,021	1,026	1,014
1976 .....	1,093	1,020	1,019	1,023	1,020	1,025	1,013
1977 .....	1,093	1,021	1,019	1,029	1,021	1,026	1,013
1978 .....	1,088	1,019	1,016	1,034	1,019	1,030	1,013
1979 .....	1,092	1,021	1,018	1,035	1,021	1,037	1,013
1980 .....	1,098	1,026	1,024	1,035	1,026	1,022	1,013
1981 .....	1,103	1,027	1,025	1,035	1,027	1,014	1,011
1982 .....	1,107	1,028	1,026	1,036	1,028	1,018	1,011
1983 .....	1,115	1,031	1,031	1,030	1,031	1,024	1,010
1984 .....	1,109	1,031	1,030	1,035	1,031	1,005	1,010
1985 .....	1,112	1,032	1,031	1,038	1,032	1,002	1,011
1986 .....	1,110	1,030	1,029	1,034	1,030	997	1,008
1987 .....	1,112	1,031	1,031	1,032	1,031	999	1,011
1988 .....	1,109	1,029	1,029	1,028	1,029	1,002	1,018
1989 .....	1,107	1,031	1,031	<sup>c</sup> 1,028	1,031	1,004	1,019
1990 .....	1,105	1,029	1,030	1,027	1,029	1,012	1,018
1991 .....	1,108	1,030	1,031	1,025	1,030	1,014	1,022
1992 .....	1,110	1,030	1,031	1,025	1,030	1,011	1,018
1993 .....	1,106	1,027	1,028	1,025	1,027	1,020	1,016
1994 .....	1,105	1,028	1,029	1,025	1,028	1,022	1,011
1995 .....	1,106	1,026	1,027	1,021	1,026	1,021	1,011
1996 .....	1,109	1,026	1,027	1,020	1,026	1,022	1,011
1997 .....	1,107	1,026	1,027	1,020	1,026	1,023	1,011
1998 .....	1,109	1,031	1,033	1,024	1,031	1,023	1,011
1999 .....	1,107	1,027	1,028	1,022	1,027	1,022	1,006
2000 .....	1,107	1,025	1,026	1,021	1,025	1,023	1,006
2001 .....	1,105	1,028	1,029	1,026	1,028	1,023	1,010
2002 .....	1,106	1,027	1,029	1,020	1,027	1,022	1,008
2003 .....	1,106	1,031	1,033	1,025	1,031	1,025	1,009
2004 .....	1,105	1,027	1,027	1,027	1,027	1,025	1,009
2005 .....	1,105	1,029	1,029	1,028	1,029	1,025	1,009
2006 .....	1,103	1,028	1,028	1,028	1,028	1,025	1,009
2007 .....	<sup>E</sup> 1,103	<sup>E</sup> 1,028	<sup>E</sup> 1,028	<sup>P</sup> 1,028	<sup>E</sup> 1,028	<sup>E</sup> 1,025	<sup>E</sup> 1,009
2008 .....	<sup>E</sup> 1,103	<sup>E</sup> 1,028	<sup>E</sup> 1,028	<sup>E</sup> 1,028	<sup>E</sup> 1,028	<sup>E</sup> 1,025	<sup>E</sup> 1,009

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

<sup>b</sup> Residential, commercial, industrial, and transportation sectors.

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

P=Preliminary. E=Estimate.

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

Web Page: [http://www.eia.doe.gov/emeu/mer/append\\_a.html](http://www.eia.doe.gov/emeu/mer/append_a.html).

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



**Table A5. Approximate Heat Content of Coal and Coal Coke**  
(Million Btu per Short Ton)

	Coal									Coal Coke
	Production <sup>a</sup>	Waste Coal Supplied <sup>b</sup>	Consumption					Imports	Exports	Imports and Exports
			Residential and Commercial Sectors	Industrial Sector		Electric Power Sector <sup>d,e</sup>	Total			
Coke Plants	Other <sup>c</sup>									
1973	23.376	NA	22.831	26.780	22.586	22.246	23.057	25.000	26.596	24.800
1974	23.072	NA	22.479	26.778	22.419	21.781	22.677	25.000	26.700	24.800
1975	22.897	NA	22.261	26.782	22.436	21.642	22.506	25.000	26.562	24.800
1976	22.855	NA	22.774	26.781	22.530	21.679	22.498	25.000	26.601	24.800
1977	22.597	NA	22.919	26.787	22.322	21.508	22.265	25.000	26.548	24.800
1978	22.248	NA	22.466	26.789	22.207	21.275	22.017	25.000	26.478	24.800
1979	22.454	NA	22.242	26.788	22.452	21.364	22.100	25.000	26.548	24.800
1980	22.415	NA	22.543	26.790	22.690	21.295	21.947	25.000	26.384	24.800
1981	22.308	NA	22.474	26.794	22.585	21.085	21.713	25.000	26.160	24.800
1982	22.239	NA	22.695	26.797	22.712	21.194	21.674	25.000	26.223	24.800
1983	22.052	NA	22.775	26.798	22.691	21.133	21.576	25.000	26.291	24.800
1984	22.010	NA	22.844	26.799	22.543	21.101	21.573	25.000	26.402	24.800
1985	21.870	NA	22.646	26.798	22.020	20.959	21.366	25.000	26.307	24.800
1986	21.913	NA	22.947	26.798	22.198	21.084	21.462	25.000	26.292	24.800
1987	21.922	NA	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
1988	21.823	NA	23.571	26.799	22.360	20.900	21.328	25.000	26.299	24.800
1989	21.765	<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	21.822	9.303	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
1991	21.681	10.758	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
1992	21.682	10.396	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
1993	21.418	10.638	22.994	26.800	22.123	20.677	21.010	25.000	26.335	24.800
1994	21.394	11.097	23.112	26.800	22.068	20.589	20.929	25.000	26.329	24.800
1995	21.326	11.722	23.118	26.800	21.950	20.543	20.880	25.000	26.180	24.800
1996	21.322	12.147	23.011	26.800	22.105	20.547	20.870	25.000	26.174	24.800
1997	21.296	12.158	22.494	26.800	22.172	20.518	20.830	25.000	26.251	24.800
1998	21.418	12.639	21.620	27.426	23.164	20.516	20.881	25.000	26.800	24.800
1999	21.070	12.552	23.880	27.426	22.489	20.490	20.818	25.000	26.081	24.800
2000	21.072	12.360	25.020	27.426	22.433	20.511	20.828	25.000	26.117	24.800
2001	<sup>a</sup> 20.772	12.169	24.909	27.426	22.622	20.337	20.671	25.000	25.998	24.800
2002	20.673	12.165	22.962	27.426	22.562	20.238	20.541	25.000	26.062	24.800
2003	20.499	12.360	22.242	27.425	22.468	20.082	20.387	25.000	25.972	24.800
2004	20.424	12.266	22.324	27.426	22.473	19.980	20.290	25.000	26.108	24.800
2005	20.348	12.093	22.342	26.279	22.178	19.988	20.246	25.000	25.494	24.800
2006	20.310	12.080	22.066	26.271	22.050	19.931	20.181	25.000	25.453	24.800
2007 <sup>P</sup>	20.341	12.616	22.034	26.329	22.371	19.911	20.169	25.000	25.466	24.800
2008 <sup>E</sup>	20.341	12.616	22.034	26.329	22.371	19.911	20.169	25.000	25.466	24.800

<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).

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

<sup>c</sup> Includes transportation. Excludes coal synfuel plants.

<sup>d</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>e</sup> 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.

Web Page: [http://www.eia.doe.gov/emeu/mer/append\\_a.html](http://www.eia.doe.gov/emeu/mer/append_a.html).

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

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

	Approximate Heat Rates for Electricity Net Generation <sup>a</sup>			Heat Content of Electricity <sup>f,g</sup>
	Fossil-Fueled Plants <sup>b,c</sup>	Nuclear Plants <sup>d</sup>	Geothermal Energy Plants <sup>e</sup>	
1973 .....	10,389	10,903	21,674	3,412
1974 .....	10,442	11,161	21,674	3,412
1975 .....	10,406	11,013	21,611	3,412
1976 .....	10,373	11,047	21,611	3,412
1977 .....	10,435	10,769	21,611	3,412
1978 .....	10,361	10,941	21,611	3,412
1979 .....	10,353	10,879	21,545	3,412
1980 .....	10,388	10,908	21,639	3,412
1981 .....	10,453	11,030	21,639	3,412
1982 .....	10,454	11,073	21,629	3,412
1983 .....	10,520	10,905	21,290	3,412
1984 .....	10,440	10,843	21,303	3,412
1985 .....	10,447	10,622	21,263	3,412
1986 .....	10,446	10,579	21,263	3,412
1987 .....	10,419	10,442	21,263	3,412
1988 .....	10,324	10,602	21,096	3,412
1989 .....	10,432	10,583	21,096	3,412
1990 .....	10,402	10,582	21,096	3,412
1991 .....	10,436	10,484	20,997	3,412
1992 .....	10,342	10,471	20,914	3,412
1993 .....	10,309	10,504	20,914	3,412
1994 .....	10,316	10,452	20,914	3,412
1995 .....	10,312	10,507	20,914	3,412
1996 .....	10,340	10,503	20,960	3,412
1997 .....	10,213	10,494	20,960	3,412
1998 .....	10,197	10,491	21,017	3,412
1999 .....	10,226	10,450	21,017	3,412
2000 .....	10,201	10,429	21,017	3,412
2001 .....	<sup>c</sup> 10,333	10,448	21,017	3,412
2002 .....	10,173	10,439	21,017	3,412
2003 .....	10,241	10,421	21,017	3,412
2004 .....	10,022	10,427	21,017	3,412
2005 .....	9,999	10,435	21,017	3,412
2006 .....	9,919	10,434	21,017	3,412
2007 .....	<sup>E</sup> 9,919	<sup>E</sup> 10,434	<sup>E</sup> 21,017	3,412
2008 .....	<sup>E</sup> 9,919	<sup>E</sup> 10,434	<sup>E</sup> 21,017	3,412

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

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

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

<sup>f</sup> 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.

<sup>g</sup> See "Heat Content" in Glossary.

<sup>E</sup>=Estimate.

Web Page: [http://www.eia.doe.gov/emeu/mer/append\\_a.html](http://www.eia.doe.gov/emeu/mer/append_a.html).

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

# Thermal Conversion Factor Source Documentation

## Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

**Asphalt.** The 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 State-ment, 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](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](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](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](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 fossil-fueled power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu. 1973–1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published in EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9. 1989–2000: Calculated annually by EIA by using the heat rate reported on Form EIA-860, “Annual Electric Generator Report” (and predecessor forms); and the generation on Form EIA-759, “Monthly Power Plant Report.” The computation includes data for all electric utility steam-electric plants using fossil fuels. 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-923, “Power Plant Operations Report,” and predecessor forms. The computation includes data for all electric utilities and electricity-only independent power producers using fossil fuels.

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

**Electricity Net Generation, Nuclear Plants.** 1973–1984: Calculated annually by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation were reported on Form FERC-1, “Annual Report of Major Electric Utilities, Licenses, 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.”

# B

## Appendix

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

Data presented in the *Monthly Energy Review* and in other Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table B1 can be used to calculate the metric-unit equivalents of values expressed in U.S. Customary units. For example, 500 short

tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

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

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

**Table B1. Metric Conversion Factors**

Type of Unit	U.S. Unit		Equivalent in	Metric Units
<b>Mass</b>	1 short ton (2,000 lb)	=	0.907 184 7	metric tons (t)
	1 long ton	=	1.016 047	metric tons (t)
	1 pound (lb)	=	0.453 592 37 <sup>a</sup>	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)
<b>Volume</b>	1 barrel of oil (bbl)	=	0.158 987 3	cubic meters (m <sup>3</sup> )
	1 cubic yard (yd <sup>3</sup> )	=	0.764 555	cubic meters (m <sup>3</sup> )
	1 cubic foot (ft <sup>3</sup> )	=	0.028 316 85	cubic meters (m <sup>3</sup> )
	1 U.S. gallon (gal)	=	3.785 412	liters (L)
	1 ounce, fluid (fl oz)	=	29.573 53	milliliters (mL)
	1 cubic inch (in <sup>3</sup> )	=	16.387 06	milliliters (mL)
<b>Length</b>	1 mile (mi)	=	1.609 344 <sup>a</sup>	kilometers (km)
	1 yard (yd)	=	0.914 4 <sup>a</sup>	meters (m)
	1 foot (ft)	=	0.304 8 <sup>a</sup>	meters (m)
	1 inch (in)	=	2.54 <sup>a</sup>	centimeters (cm)
<b>Area</b>	1 acre	=	0.404 69	hectares (ha)
	1 square mile (mi <sup>2</sup> )	=	2.589 988	square kilometers (km <sup>2</sup> )
	1 square yard (yd <sup>2</sup> )	=	0.836 127 4	square meters (m <sup>2</sup> )
	1 square foot (ft <sup>2</sup> )	=	0.092 903 04 <sup>a</sup>	square meters (m <sup>2</sup> )
	1 square inch (in <sup>2</sup> )	=	6.451 6 <sup>a</sup>	square centimeters (cm <sup>2</sup> )
<b>Energy</b>	1 British thermal unit (Btu) <sup>c</sup>	=	1,055.055 852 62 <sup>a</sup>	joules (J)
	1 calorie (cal)	=	4.186 8 <sup>a</sup>	joules (J)
	1 kilowatthour (kWh)	=	3.6 <sup>a</sup>	megajoules (MJ)
<b>Temperature<sup>d</sup></b>	32 degrees Fahrenheit (°F)	=	0 <sup>a</sup>	degrees Celsius (°C)
	212 degrees Fahrenheit (°F)	=	100 <sup>a</sup>	degrees Celsius (°C)

<sup>a</sup>Exact conversion.

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

<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](http://www.eia.doe.gov/emeu/mer/append_b.html).

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



**Table B2. Metric Prefixes**

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10 <sup>1</sup>	deka	da	10 <sup>-1</sup>	deci	d
10 <sup>2</sup>	hecto	h	10 <sup>-2</sup>	centi	c
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	T	10 <sup>-12</sup>	pico	p
10 <sup>15</sup>	peta	P	10 <sup>-15</sup>	femto	f
10 <sup>18</sup>	exa	E	10 <sup>-18</sup>	atto	a
10 <sup>21</sup>	zetta	Z	10 <sup>-21</sup>	zepto	z
10 <sup>24</sup>	yotta	Y	10 <sup>-24</sup>	yocto	y

Web Page: [http://www.eia.doe.gov/emeu/mer/append\\_b.html](http://www.eia.doe.gov/emeu/mer/append_b.html).

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI)*, NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p.10.

**Table B3. Other Physical Conversion Factors**

Energy Source	Original Unit		Equivalent in Final Units
<b>Petroleum</b>	1 barrel (bbl)	=	42 <sup>a</sup> U.S. gallons (gal)
<b>Coal</b>	1 short ton	=	2,000 <sup>a</sup> pounds (lb)
	1 long ton	=	2,240 <sup>a</sup> pounds (lb)
	1 metric ton (t)	=	1,000 <sup>a</sup> kilograms (kg)
<b>Wood</b>	1 cord (cd)	=	1.25 <sup>b</sup> shorts tons
	1 cord (cd)	=	128 <sup>a</sup> cubic feet (ft <sup>3</sup> )

<sup>a</sup>Exact conversion.

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

Web Page: [http://www.eia.doe.gov/emeu/mer/append\\_b.html](http://www.eia.doe.gov/emeu/mer/append_b.html).

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, NIST Handbook 44, 1994 Edition (Washington, DC, October 1993), pp. B-10, C-17 and C-21.



# Glossary

**Alcohol:** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a **hydrocarbon** plus a hydroxyl group;  $\text{CH}_3\text{-(CH}_2\text{)}_n\text{-OH}$  (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 steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make **coke**. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million **Btu per short ton** on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Black Liquor:** A byproduct of the paper production process, alkaline spent liquor, that can be used as a source of energy. Alkaline spent liquor is removed from the digesters in the process of chemically pulping wood. After evaporation, the residual "black" liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.

**British Thermal Unit (Btu):** The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit). See **Heat Content**.

**Btu:** See **British Thermal Unit**.

**Btu Conversion Factor:** A factor for converting energy data between one unit of measurement and **British thermal units (Btu)**. Btu conversion factors are generally used to convert energy data from physical units of measure (such as **barrels, cubic feet, or short tons**) into the energy-equivalent measure of Btu. (See [http://www.eia.doe.gov/emeu/mer/append\\_a.html](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<sub>4</sub>H<sub>10</sub>). 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<sub>4</sub>H<sub>8</sub>) 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 chained-dollar measure is that it is more closely related to any given period and is therefore subject to less distortion over time.

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

**City Gate:** A point or measuring station at which a distribution gas utility receives gas from a natural gas pipeline company or transmission system.

**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](http://www.eia.doe.gov/emeu/mer/append_a.html) and [http://www.eia.doe.gov/emeu/mer/append\\_b.html](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<sub>2</sub>H<sub>6</sub>). 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 (C<sub>2</sub>H<sub>4</sub>) 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 consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service).

**Motor Gasoline (Total):** For stock level data, a sum including finished motor gasoline stocks plus stocks of motor

gasoline blending components but excluding stocks of oxygenates.

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

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

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

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

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

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

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

**Natural Gas Plant Liquids (NGPL):** Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the published

specifications of the Gas Processors Association and the American Society for Testing and Material as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

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

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

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

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

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

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

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

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

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

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

**Nuclear Reactor:** An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

**OECD:** See **Organization for Economic Cooperation and Development**.

**Offshore:** That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water.

**Oil:** See **Crude Oil**.

**OPEC:** See **Organization of the Petroleum Exporting Countries**.

**Operable Unit (Nuclear):** In the United States, a nuclear generating unit that has completed low-power testing and been issued a full-power operating license by the Nuclear Regulatory Commission, or equivalent permission to operate.

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

**Organization of the Petroleum Exporting Countries (OPEC):** An intergovernmental organization whose stated objective is to coordinate and unify 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 kilowatt-hour).

**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<sub>3</sub>H<sub>8</sub>). 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<sub>3</sub>H<sub>6</sub>) 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 hydroelectric power, biomass, geothermal, solar, and wind**.

**Repressuring:** The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.

**Residential Sector:** An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. *Note:* Various EIA programs differ in sectoral coverage for more information see <http://www.eia.doe.gov/neic/datadefinitions/Guideforwebres.htm>. See **End-Use Sectors** and **Energy-Use Sectors**.

**Residual Fuel Oil:** The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, for

electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

**Road Oil:** Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

**Rotary Rig:** A machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

**Short Ton (Coal):** A unit of weight equal to 2,000 pounds.

**SIC (Standard Industrial Classification):** A set of codes developed by the U.S. Office of Management and Budget which categorizes industries into groups with similar economic activities. Replaced by **NAICS (North American Industry Classification System)**.

**Solar Energy:** See **Solar Thermal Energy** and **Photovoltaic Energy**.

**Solar Thermal Energy:** The radiant energy of the sun that can be converted into other forms of energy, such as heat or **electricity**.

**Special Naphthas:** All finished products within the naphtha boiling ranges that are used as paint thinner, cleaners or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

**Station Use:** Energy that is used to operate an **electric power plant**. It includes energy consumed for plant lighting, power, and auxiliary facilities, regardless of whether the energy is produced at the plant or comes from another source.

**Steam Coal:** All nonmetallurgical coal.

**Steam-Electric Power Plant:** A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

**Still Gas (Refinery Gas):** Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and, petrochemical feedstock.

**Stocks:** See **Coal Stocks**, **Crude Oil Stocks**, or **Petroleum Stocks, Primary**.

**Strategic Petroleum Reserve (SPR):** Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

**Subbituminous Coal:** A coal whose properties range from those of lignite to those of bituminous coal and used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million Btu per short ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Supplemental Gaseous Fuels:** Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

**Synthetic Natural Gas (SNG):** (Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to natural gas, resulting from the conversion or reforming of hydrocarbons that may easily be substituted for or interchanged with pipeline-quality natural gas.

**Thermal Conversion Factor:** A factor for converting data between physical units of measure (such as barrels, cubic feet, or short tons) and thermal units of measure (such as British thermal units, calories, or joules); or for converting data between different thermal units of measure. See Btu Conversion Factor.

**Transportation Sector:** An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. Note: Various EIA programs differ in sectoral coverage-for more information see <http://www.eia.doe.gov/neic/datadefinitions/Guideforwebtrans.htm>. See End-Use Sectors and Energy-Use Sectors.

**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.