# November 2012 Monthly Energy Review





Independent Statistics & Analysis U.S. Energy Information Administration

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## **Monthly Energy Review**

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

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

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

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

**Related Monthly Publications:** Other monthly EIA reports are *Petroleum Supply Monthly*, *Petroleum Marketing Monthly*, *Natural Gas Monthly*, *Electric Power Monthly*, and *International Petroleum Monthly*. For more information, contact EIA's Office of Communications via email at infoctr@eia.gov.

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

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

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## Monthly Energy Review November 2012

U.S. Energy Information Administration Office of Energy Statistics U.S. Department of Energy Washington, DC 20585

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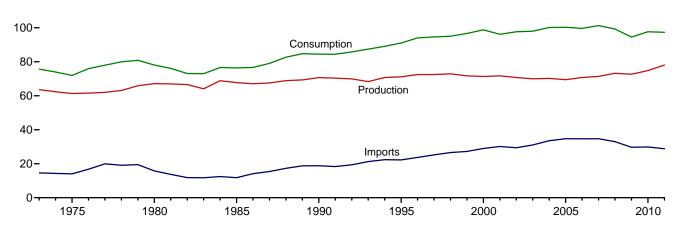
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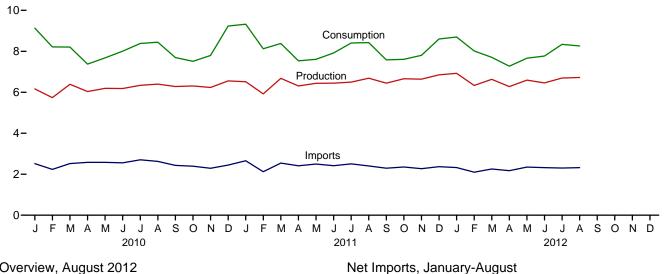
## 1. Energy Overview

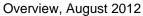
#### Figure 1.1 Primary Energy Overview (Quadrillion Btu)

Consumption, Production, and Imports, 1973-2011 120-



#### Consumption, Production, and Imports, Monthly





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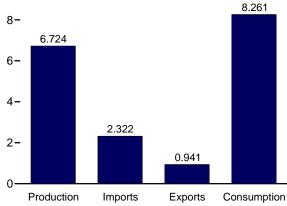
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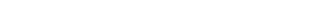
2011

10.551

2012



Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Source: Table 1.1.



#### Table 1.1 Primary Energy Overview

(Quadrillion Btu)

		Produ	uction			Trade		Steak	Consumption				
	Fossil Fuels <sup>a</sup>	Nuclear Electric Power	Renew- able Energy <sup>b</sup>	Total	Imports	Exports	Net Imports <sup>c</sup>	Stock Change and Other <sup>d</sup>	Fossil Fuels <sup>e</sup>	Nuclear Electric Power	Renew- able Energy <sup>b</sup>	Total <sup>f</sup>	
1973 Total	58.241	0.910	4.411	63.563	14.613	2.033	12.580	-0.459	70.314	0.910	4.411	75.684	
1975 Total	54.733	1.900	4.687	61.320	14.032	2.323	11.709	-1.065	65.357	1.900	4.687	71.965	
1980 Total	59.008	2.739	5.428	67.175	15.796	3.695	12.101	-1.210	69.828	2.739	5.428	78.067	
1985 Total	57.539	4.076	6.084	67.698	11.781	4.196	7.584	1.110	66.093	4.076	6.084	76.392	
1990 Total	58.560	6.104	6.041	70.705	18.817	4.752	14.065	284	72.332	6.104	6.041	84.485	
1995 Total	57.540	7.075	6.558	71.174	22.260	4.511	17.750	2.105	77.259	7.075	6.560	91.029	
1996 Total	58.387	7.087	7.012	72.486	23.702	4.633	19.069	2.468	79.785	7.087	7.014	94.022	
1997 Total	58.857	6.597	7.018	72.472	25.215	4.514	20.701	1.429	80.873	6.597	7.016	94.602	
1998 Total	59.314	7.068 7.610	6.494 6.517	72.876 71.742	26.581 27.252	4.299 3.715	22.281	140 1.372	81.369 82.427	7.068 7.610	6.493 6.516	95.018 96.652	
1999 Total 2000 Total	57.614 57.366	7.862	6.104	71.332	28.973	4.006	23.537 24.967	2.515	84.731	7.862	6.106	98.814	
2000 Total	58.541	8.029	5.164	71.735	30.157	3.771	26.386	-1.953	82.902	8.029	5.163	96.168	
2002 Total	56.834	8.145	5.734	70.713	29.408	3.669	25.739	1.193	83.699	8.145	5.729	97.645	
2003 Total	56.022	7.959	5.982	69.962	31.061	4.054	27.007	1.009	84.014	7.959	5.983	97.978	
2004 Total	55.930	8.222	6.070	70.222	33.544	4.434	29.110	.830	85.819	8.222	6.082	100.162	
2005 Total	55.053	8.161	6.229	69.443	34.709	4.560	30.149	.689	85.794	8.161	6.242	100.282	
2006 Total	55.940	8.215	6.599	70.754	34.679	4.872	29.806	930	84.702	8.215	6.649	99.629	
2007 Total	56.435	8.455	6.509	71.400	34.703	5.482	29.221	.675	86.211	8.455	6.523	101.296	
2008 Total	57.588	8.427	7.202	73.217	32.992	7.060	25.932	.125	83.549	8.427	7.186	99.275	
2009 Total	56.669	8.356	7.616	72.641	29.706	6.965	22.741	822	78.488	8.356	7.600	94.559	
2010 January	4.734	.758	.672	6.164	2.516	.590	1.926	1.042	7.697	.758	.662	9.132	
February	4.446	.682	.610	5.738	2.237	.556	1.681	.793	<sup>R</sup> 6.914	.682	.605	8.213	
March	5.032	.676	.682	6.389	2.519	.654	1.865	<sup>R</sup> 050	6.846	.676	.673	8.205	
April	4.774	.602	.661	6.036	2.580	.686	1.894	558	6.104	.602	.657	7.372	
May	4.777	.697 .714	.717 .753	6.191	2.578 2.556	.704 .684	1.874 1.872	<sup>R</sup> 388 047	6.261	.697 .714	.715 .755	<sup>R</sup> 7.677 <sup>R</sup> 8.007	
June	4.716 4.888	.714	.755	6.182 6.341	2.556	.004	1.989	047 <sup>R</sup> .052	6.530 6.920	.714	.755	R 8.382	
July August	4.000	.732	.662	6.396	2.627	.698	1.989	.119	7.030	.732	.660	R 8.444	
September	4.930	.725	.626	6.280	2.431	.675	1.757	<sup>R</sup> 344	<sup>R</sup> 6.344	.740	.622	7.694	
October	5.004	.656	.646	6.306	2.390	.714	1.676	473	<sup>R</sup> 6.208	.656	.643	7.509	
November	4.896	.655	.682	6.233	2.289	.760	1.529	.035	6.464	.655	.676	7.797	
December	5.058	.770	.726	6.554	2.447	.797	1.650	1.027	7.732	.770	.720	9.231	
Total	58.241	8.434	8.136	74.812	29.877	8.234	21.643	<sup>R</sup> 1.208	<sup>R</sup> 81.051	8.434	8.090	<sup>R</sup> 97.664	
2011 January	<sup>R</sup> 5.005	<sup>R</sup> .761	<sup>R</sup> .747	<sup>R</sup> 6.514	2.655	.841	1.814	<sup>R</sup> .993	<sup>R</sup> 7.819	<sup>R</sup> .761	<sup>R</sup> .731	<sup>R</sup> 9.321	
February	4.533	<sup>R</sup> .678	<sup>R</sup> .710	<sup>R</sup> 5.921	2.122	.759	1.363	R.840	<sup>R</sup> 6.736	<sup>R</sup> .678	<sup>R</sup> .703	8.125	
March	<sup>R</sup> 5.176	<sup>R</sup> .687	<sup>R</sup> .816	<sup>R</sup> 6.679	2.543	.880	1.663	<sup>R</sup> .039	<sup>R</sup> 6.880	R.687	<sup>R</sup> .805	8.381	
April	<sup>R</sup> 4.923	<sup>R</sup> .571	<sup>R</sup> .813	<sup>R</sup> 6.306	2.412	.878	1.534	<sup>R</sup> 308	<sup>R</sup> 6.151	R.571	<sup>R</sup> .804	<sup>R</sup> 7.533	
May	<sup>R</sup> 5.009 <sup>R</sup> 4.936	<sup>R</sup> .597 <sup>R</sup> .683	<sup>R</sup> .832 <sup>R</sup> .824	<sup>R</sup> 6.438 <sup>R</sup> 6.443	2.497	.847 .818	1.650	<sup>R</sup> 478 <sup>R</sup> 125	<sup>R</sup> 6.175 <sup>R</sup> 6.400	<sup>R</sup> .597 <sup>R</sup> .683	<sup>R</sup> .826 <sup>R</sup> .824	<sup>R</sup> 7.610 <sup>R</sup> 7.917	
June July	<sup>R</sup> 4.936	<sup>R</sup> .757	<sup>R</sup> .792	<sup>R</sup> 6.497	2.417 2.505	.854	1.599 1.651	R.259	<sup>R</sup> 6.851	<sup>R</sup> .757	<sup>R</sup> .782	<sup>R</sup> 8.407	
August	<sup>R</sup> 5.197	.746	R.742	<sup>R</sup> 6.685	2.305	.879	1.526	R.239	<sup>R</sup> 6.923	.746	R.741	<sup>R</sup> 8.426	
September	<sup>R</sup> 5.067	R.700	R.677	<sup>R</sup> 6.444	2.403	.892	1.402	R264	R 6.201	R.740	R.670	<sup>R</sup> 7.581	
October	<sup>R</sup> 5.290	<sup>R</sup> .663	<sup>R</sup> .708	<sup>R</sup> 6.660	2.351	.891	1.460	<sup>R</sup> 511	<sup>R</sup> 6.238	<sup>R</sup> .663	<sup>R</sup> .699	<sup>R</sup> 7.609	
November	5.226	<sup>R</sup> .675	<sup>R</sup> .738	<sup>R</sup> 6.638	2.272	.894	1.378	<sup>R</sup> 214	<sup>R</sup> 6.394	<sup>R</sup> .675	<sup>R</sup> .727	7.803	
December	<sup>R</sup> 5.330	<sup>R</sup> .752	<sup>R</sup> .770	<sup>R</sup> 6.852	2.370	1.026	1.344	<sup>R</sup> .404	<sup>R</sup> 7.076	<sup>R</sup> .752	<sup>R</sup> .760	<sup>R</sup> 8.599	
Total	<sup>R</sup> 60.640	<sup>R</sup> 8.269	<sup>R</sup> 9.169	<sup>R</sup> 78.077	28.842	10.458	18.384	<sup>R</sup> .850	<sup>R</sup> 79.842	<sup>R</sup> 8.269	<sup>R</sup> 9.073	<sup>R</sup> 97.311	
2012 January	<sup>R</sup> 5.382	.757	<sup>R</sup> .785	<sup>R</sup> 6.924	2.326	.864	1.462	<sup>R</sup> .312	<sup>R</sup> 7.168	.757	<sup>R</sup> .763	<sup>R</sup> 8.699	
February	<sup>R</sup> 4.964	<sup>R</sup> .668	R.701	<sup>R</sup> 6.333	2.099	.838	1.262	<sup>R</sup> .419	<sup>R</sup> 6.646	<sup>R</sup> .668	R.690	<sup>R</sup> 8.014	
March	<sup>R</sup> 5.193	<sup>R</sup> .646	<sup>R</sup> .795	<sup>R</sup> 6.633	2.255	.964	1.291	<sup>R</sup> 218	<sup>R</sup> 6.264	<sup>R</sup> .646	R.786	<sup>R</sup> 7.706	
April	R 4.923	R.585	R.770	<sup>R</sup> 6.278	2.174 R 0.050	1.000	1.174 R 4 222	<sup>R</sup> 180	<sup>R</sup> 5.908	R.585	R.767	R 7.272	
May	<sup>R</sup> 5.126 <sup>R</sup> 4.995	<sup>R</sup> .650	<sup>R</sup> .816 <sup>R</sup> .780	R 6.592	R 2.350	1.012	R 1.339	<sup>R</sup> 266 <sup>R</sup> 011	<sup>R</sup> 6.184	<sup>R</sup> .650 <sup>R</sup> .682	<sup>R</sup> .816	R 7.665	
June	<sup>R</sup> 5.222	<sup>R</sup> .682 .723	.780	<sup>R</sup> 6.457 <sup>R</sup> 6.696	2.321 2.303	.999 .982	1.322 1.320	R .323	6.293 <sup>R</sup> 6.845	.682	<sup>R</sup> .779 .753	<sup>R</sup> 7.768 <sup>R</sup> 8.340	
July August	5.282	.723	.751	6.724	2.303	.902 .941	1.320	.156	6.795	.723	.753	8.261	
8-Month Total	41.086	5.439	6.113	52.637	18.151	7.600	10.551	.536	52.104	5.439	6.071	63.724	
2011 8-Month Total	39.727	5.480	6.276	51.483	19.556	6.756	12.800	1.436	53.934	5.480	6.217	65.718	
2010 8-Month Total	38.353	5.628	5.457	49.438	20.319	5.287	15.032	.963	54.302	5.628	5.428	65.433	

<sup>a</sup> Coal, natural gas (dry), crude oil, and natural gas plant liquids.
 <sup>b</sup> See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
 <sup>c</sup> Net imports equal imports minus exports.
 <sup>d</sup> Includes petroleum stock change and adjustments; natural gas net storage withdrawals and balancing item; coal stock change, losses, and unaccounted for; fuel ethanol stock change; and biodiesel stock change and balancing item.
 <sup>e</sup> Coal, coal coke net imports, natural gas, and petroleum.

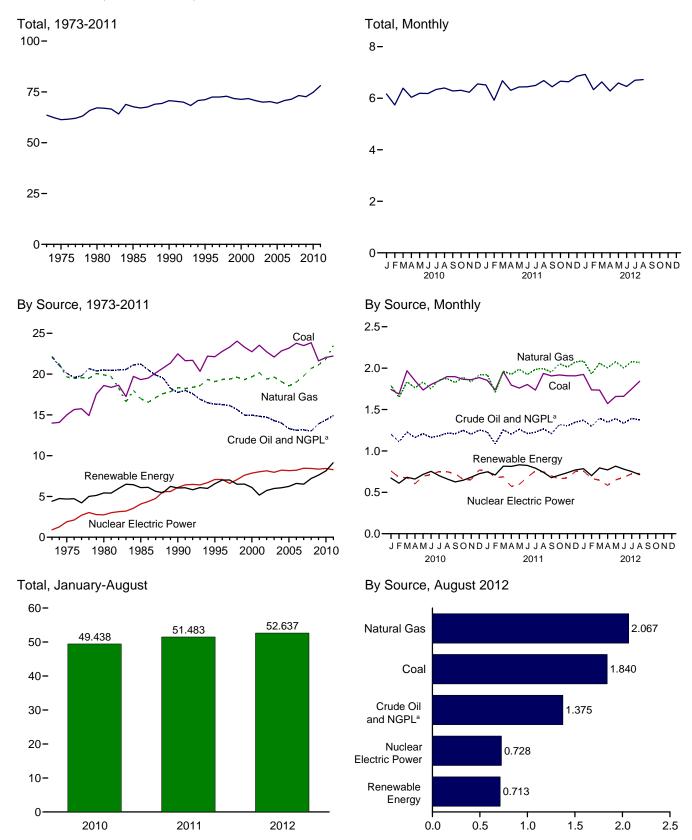
<sup>e</sup> Coal, coal coke net imports, natural gas, and petroleum.
 <sup>f</sup> Also includes electricity net imports.

R=Revised.

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1973. Sources: • Production: Table 1.2. • Trade: Tables 1.4a and 1.4b. • Stock Change and Other: Calculated as consumption minus production and net imports. • Consumption: Table 1.3.

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



<sup>&</sup>lt;sup>a</sup> Natural gas plant liquids.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Source: Table 1.2.

### Table 1.2 Primary Energy Production by Source

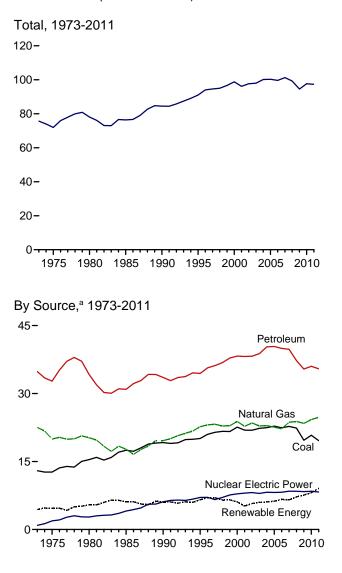
(Quadrillion Btu)

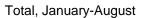
		F	ossil Fuels					Renewable Energy <sup>a</sup>					
	Coal <sup>b</sup>	Natural Gas (Dry)	Crude Oil <sup>c</sup>	NGPLd	Total	Nuclear Electric Power	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total
1973 Total           1975 Total           1980 Total           1985 Total           1990 Total           1995 Total           1995 Total           1996 Total           1997 Total           1998 Total           1998 Total           1998 Total           1998 Total           2000 Total           2000 Total           2001 Total           2002 Total           2003 Total           2004 Total           2005 Total           2006 Total           2007 Total           2008 Total           2009 Total	13.992 14.989 18.598 19.325 22.488 22.130 24.045 23.310 24.045 23.295 22.735 23.547 22.732 22.094 22.852 23.185 23.790 23.493 23.851 21.624	22.187 19.640 19.908 16.980 18.326 19.082 19.344 19.394 19.613 19.341 19.662 20.166 20.166 19.382 19.633 19.074 19.556 19.022 19.786 20.703 21.139	19.493 17.729 18.249 18.992 15.571 13.887 13.658 13.658 13.235 12.451 12.358 12.282 12.160 11.948 11.538 10.978 10.772 10.748 10.615 11.332	2.569 2.374 2.254 2.241 2.175 2.442 2.530 2.495 2.420 2.528 2.611 2.547 2.559 2.346 2.466 2.466 2.466 2.449 2.334 2.356 2.409 2.419 2.574	58.241 54.733 59.008 57.539 58.560 57.540 58.387 59.314 57.366 58.541 56.834 56.022 55.930 55.053 55.940 55.053 55.940 56.669	0.910 1.900 2.739 4.076 6.104 7.075 7.087 7.068 7.610 7.862 8.029 8.145 7.959 8.222 8.161 8.215 8.455 8.425 8.425	2.861 3.155 2.900 3.046 3.205 3.590 3.640 3.281 2.825 2.825 2.825 2.825 2.869 2.703 2.869 2.466 2.511 2.669	0.020 .034 .053 .097 .171 .152 .163 .167 .168 .171 .164 .164 .164 .175 .178 .178 .178 .181 .181 .186 .192 .200	NA NA NA (s) .059 .069 .070 .069 .066 .066 .066 .066 .062 .063 .063 .068 .076 .089 .098	NA NA (s) .029 .033 .034 .031 .046 .057 .105 .115 .142 .264 .341 .546 .721	1.529 1.499 2.475 3.016 2.735 3.099 3.155 3.108 2.929 2.965 2.624 2.624 2.624 2.805 2.805 2.805 3.3104 3.216 3.4216 3.464 3.928	4.411 4.687 5.428 6.084 6.041 6.558 7.018 6.494 6.573 6.104 5.164 5.734 5.982 6.070 6.229 6.599 6.599 7.202 7.616	63.563 61.320 67.175 67.695 70.705 71.174 72.472 72.876 71.332 71.735 70.713 69.962 70.222 69.443 70.754 71.400 73.217 72.641
2010 January February April June July August September October November December Total	1.743 1.687 1.969 1.848 1.736 1.802 1.847 1.898 1.897 1.864 1.860 1.886 <b>22.038</b>	1.790 1.648 1.835 1.763 1.832 1.751 1.859 1.874 1.826 1.892 1.833 1.920 <b>21.823</b>	.971 .901 .936 .937 .955 .979 .976 1.006 .967 1.009 <b>11.598</b>	.230 .210 .236 .227 .238 .226 .227 .236 .232 .242 .235 .242 <b>2.781</b>	4.734 4.446 5.032 4.774 4.777 4.716 4.888 4.987 4.930 5.004 4.896 5.058 <b>58.241</b>	.758 .682 .602 .697 .714 .752 .748 .725 .656 .655 .770 <b>8.434</b>	.218 .201 .204 .186 .245 .291 .239 .196 .168 .173 .191 .226 <b>2.539</b>	.018 .016 .018 .017 .018 .017 .017 .018 .017 .017 .018 .018 .028	.010 .009 .010 .011 .011 .011 .011 .011	.067 .053 .084 .095 .085 .079 .066 .065 .069 .077 .095 .088 <b>.923</b>	.359 .332 .366 .351 .358 .355 .367 .371 .360 .369 .369 .383 <b>4.341</b>	.672 .610 .682 .661 .717 .753 .701 .662 .626 .646 .646 .682 .726 <b>8.136</b>	6.164 5.738 6.389 6.036 6.191 6.182 6.341 6.396 6.280 6.280 6.233 6.554 <b>74.812</b>
2011 January February April June July August September October November December Total	1.853 1.735 R 1.957 R 1.795 1.759 1.803 R 1.736 R 1.937 1.906 R 1.918 R 1.908 R 1.908 R 1.907 R <b>22.215</b>	E 1.922 E 1.711 E 1.963 E 1.925 E 1.988 E 1.923 E 1.988 E 1.923 E 1.987 E 1.994 E 1.952 E 2.052 E 2.014 E 2.015 E 23.506	R .990 R .880 R 1.005 R .962 R 1.008 R .974 R 1.013 R .970 R 1.056 R 1.043 R 1.043 R 1.079 R <b>11.949</b>	.241 .207 .250 .241 .254 .251 .254 .239 .263 .263 .261 .268 <b>2.970</b>	R 5.005 4.533 R 5.176 R 4.923 R 5.009 R 4.936 R 4.948 R 5.197 R 5.067 R 5.290 5.226 R 5.330 R <b>60.640</b>	R.761 R.678 R.687 R.571 R.597 R.683 R.757 .746 R.700 R.663 R.663 R.675 R.752 R.752 R.8269	R.248 R.234 R.303 R.303 R.317 R.312 R.304 R.250 R.208 R.208 R.192 R.201 R.231 R.231	R.019 R.017 R.018 R.017 R.018 R.017 R.018 R.017 R.018 R.018 R.018 R.018 R.018 R.018 R.018	.012 .013 .013 .014 .014 .014 .013 R.013 R.013 .013 .013 .013	R.083 R.102 .121 .114 R.107 R.073 R.073 R.073 R.102 .121 R.104 <b>1.168</b>	R.385 R.346 R.346 R.369 R.369 R.375 R.384 R.387 R.372 R.382 R.386 R.405 R.405 R.4527	R .747 R .710 R .816 R .813 R .832 R .824 R .792 R .742 R .742 R .778 R .708 R .738 R .770 R .700	R 6.514 R 5.921 R 6.679 R 6.306 R 6.438 R 6.443 R 6.443 R 6.443 R 6.443 R 6.443 R 6.6497 R 6.6650 R 6.638 R 6.852 R <b>78.077</b>
2012 January February March April June July 8-Month Total 2011 8-Month Total 2010 8-Month Total	1.924 1.737 1.735 1.571 1.658 1.659 1.749 1.840 <b>13.875</b> <b>14.575</b> <b>14.531</b>	E 2.087 E 1.930 RE 2.060 RE 2.005 RE 2.078 RE 2.078 RE 2.079 E 2.067 E 16.309 E 15.413 14.352	RE 1.100 RE 1.042 RE 1.127 RE 1.084 RE 1.120 RE 1.076 RE 1.130 E 1.105 E <b>8.783</b> <b>7.801</b> <b>7.640</b>	.270 .254 .270 .262 .270 .257 .264 .269 <b>2.119</b> <b>1.938</b> <b>1.830</b>	R 5.382 R 4.964 R 5.193 R 4.923 R 5.126 R 4.995 R 5.222 5.282 41.086 39.727 38.353	.757 R.668 R.646 R.585 R.650 R.682 .723 .728 5.439 5.480 5.628	R.227 R.198 R.250 R.254 R.257 R.259 R.260 .225 <b>1.950</b> <b>2.271</b> <b>1.781</b>	.019 .018 .019 .018 .019 .019 .019 .019 <b>.150</b> .142 .139	.015 .015 R .017 .017 .019 .019 .019 .019 .141 .106 .085	R.134 .108 R.135 R.124 R.122 R.116 R.085 .081 .906 .774 .593	R.390 .362 R.373 R.356 R.378 R.368 R.368 .370 <b>2.966</b> <b>2.983</b> <b>2.860</b>	R.785 R.701 R.795 R.770 R.816 R.780 .751 .713 <b>6.113</b> <b>6.276</b> <b>5.457</b>	R 6.924 R 6.333 R 6.633 R 6.278 R 6.592 R 6.457 R 6.696 6.724 <b>52.637</b> <b>51.483</b> <b>49.438</b>

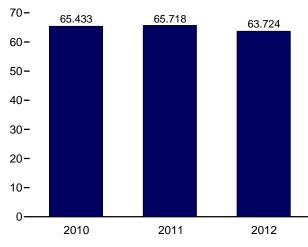
<sup>a</sup> Most data are estimates. See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
 <sup>b</sup> Beginning in 1989, includes waste coal supplied. Beginning in 2001, also includes a small amount 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.gov/totalenergy/data/monthly/#summary 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.

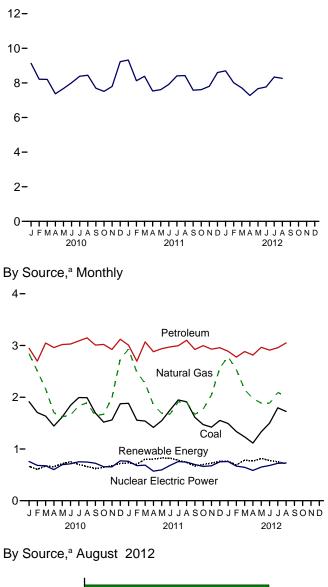
#### Figure 1.3 Primary Energy Consumption (Quadrillion Btu)



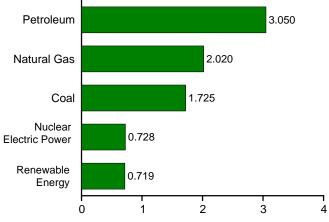




<sup>a</sup> Small quantities of net imports of coal coke and electricity are not shown. Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Source: Table 1.3.



Total, Monthly



#### Table 1.3 Primary Energy Consumption by Source

(Quadrillion Btu)

		Fossil	Fuels	r				Renewable	e Energy <sup>a</sup>			_
	Coal	Natural Gas <sup>b</sup>	Petro- leum <sup>c</sup>	Total <sup>d</sup>	Nuclear Electric Power	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total <sup>f</sup>
1973 Total	12.971	22.512	34.837	70.314	0.910	2.861	0.020	NA	NA	1.529	4.411	75.684
1975 Total	12.663	19.948	32.732	65.357	1.900	3.155	.034	NA	NA	1.499	4.687	71.965
1980 Total	15.423	20.235	34.205	69.828	2.739	2.900	.053	NA	NA	2.475	5.428	78.067
1985 Total	17.478	17.703	30.925	66.093	4.076	2.970	.097	(s)	(s)	3.016	6.084	76.392
1990 Total	19.173	19.603	33.552	72.332	6.104	3.046	.171	.059	.029	2.735	6.041	84.485
1995 Total	20.089	22.671	34.438	77.259	7.075	3.205	.152	.069	.033	3.101	6.560	91.029
1996 Total	21.002	23.085	35.675	79.785	7.087	3.590	.163	.070	.033	3.157	7.014	94.022
1997 Total	21.445	23.223	36.159	80.873	6.597	3.640	.167	.070	.034	3.105	7.016	94.602
1998 Total	21.656	22.830	36.816	81.369	7.068	3.297	.168	.069	.031	2.927	6.493	95.018
1999 Total	21.623	22.909	37.838	82.427	7.610	3.268	.171	.068	.046	2.963	6.516	96.652
2000 Total	22.580	23.824	38.262	84.731	7.862	2.811	.164	.066	.057	3.008	6.106	98.814
2001 Total	21.914	22.773	38.186	82.902	8.029	2.242	.164	.064	.070	2.622	5.163	96.168
2002 Total	21.904	23.510	38.224	83.699	8.145	2.689	.171	.063	.105	2.701	5.729	97.645
2003 Total	22.321	22.831	38.811	84.014	7.959	2.825	.175	.062	.115	2.807	5.983	97.978
2004 Total	22.466 22.797	22.923 22.565	40.292 40.388	85.819 85.794	8.222 8.161	2.690 2.703	.178 .181	.063 .063	.142 .178	3.010 3.117	6.082 6.242	100.162 100.282
2005 Total 2006 Total	22.797	22.565	40.388 39.955	85.794 84.702	8.161	2.703	.181	.063	.178	3.117	6.242	99.629
2006 Total	22.447 22.749	22.239	39.955 39.774	84.702 86.211	8.215	2.869	.181	.068	.264 .341	3.267 3.474	6.523	99.629 101.296
2007 Total	22.385	23.843	37.280	83.549	8.435	2.440	.192	.070	.546	3.849	7.186	99.275
2009 Total	19.692	23.416	35.403	78.488	8.356	2.669	.200	.098	.721	3.912	7.600	94.559
2010 January	<sup>R</sup> 1.913	2.841	2.947	7.697	.758	.218	.018	.010	.067	.349	.662	9.132
February	<sup>R</sup> 1.705	2.507	2.698	<sup>R</sup> 6.914	.682	.201	.016	.009	.053	.326	.605	8.213
March	1.635	2.160	3.048	6.846	.676	.204	.018	.010	.084	.357	.673	8.205
April	<sup>R</sup> 1.443	1.700	2.960	6.104	.602	.186	.017	.010	.095	.348	.657	7.372
May	<sup>R</sup> 1.617	1.622	3.020	6.261	.697	.245	.018	.011	.085	.356	.715	<sup>R</sup> 7.677
June	1.844	1.656	3.029	6.530	.714	.291	.017	.011	.079	.357	.755	<sup>R</sup> 8.007
July	<sup>R</sup> 1.994	1.836	3.089	6.920	.752	.239	.017	.011	.066	.368	.701	<sup>R</sup> 8.382
August	1.991	1.890	3.148	7.030	.748	.196	.018	.011	.065	.370	.660	<sup>R</sup> 8.444
September	1.693	1.644	3.008	<sup>R</sup> 6.344	.725	.168	.017	.011	.069	.357	.622	7.694
October	_ 1.519	1.671	3.020	<sup>R</sup> 6.208	.656	.173	.017	.010	.077	.366	.643	7.509
November	<sup>R</sup> 1.560	1.986	2.923	6.464	.655	.191	.017	.010	.095	.363	.676	7.797
December	<sup>R</sup> 1.875	2.741	3.120	7.732	.770	.226	.018	.010	.088	.377	.720	9.231
Total	<sup>R</sup> 20.791	24.256	36.010	<sup>R</sup> 81.051	8.434	2.539	.208	.126	.923	4.294	8.090	<sup>R</sup> 97.664
2011 January	<sup>R</sup> 1.883	<sup>R</sup> 2.930	3.006	<sup>R</sup> 7.819	<sup>R</sup> .761	<sup>R</sup> .248	<sup>R</sup> .019	.012	<sup>R</sup> .083	<sup>R</sup> .369	<sup>R</sup> .731	<sup>R</sup> 9.321
February	<sup>R</sup> 1.556	<sup>R</sup> 2.483	2.696	<sup>R</sup> 6.736	<sup>R</sup> .678	R.234	<sup>R</sup> .017	.012	<sup>R</sup> .102	R.339	<sup>R</sup> .703	8.125
March	R 1.540	<sup>R</sup> 2.268	3.070	<sup>R</sup> 6.880	R.687	R.303	<sup>R</sup> .018	.013	<sup>R</sup> .102	<sup>R</sup> .369	<sup>R</sup> .805	8.381
April	<sup>R</sup> 1.417 <sup>R</sup> 1.546	<sup>R</sup> 1.853	2.879	<sup>R</sup> 6.151	<sup>R</sup> .571 <sup>R</sup> .597	<sup>R</sup> .303 <sup>R</sup> .317	<sup>R</sup> .017	.013	.121	<sup>R</sup> .349 <sup>R</sup> .363	<sup>R</sup> .804 <sup>R</sup> .826	<sup>R</sup> 7.533
May	<sup>R</sup> 1.753	<sup>R</sup> 1.688 <sup>R</sup> 1.672	2.938 2.973	<sup>R</sup> 6.175 <sup>R</sup> 6.400	<sup>R</sup> .683	<sup>R</sup> .317	<sup>R</sup> .018 <sup>R</sup> .017	.014 .014	.114 <sup>R</sup> .107	<sup>R</sup> .363	<sup>R</sup> .826	<sup>R</sup> 7.610 <sup>R</sup> 7.917
June	<sup>R</sup> 1.948	<sup>R</sup> 1.909	2.973	<sup>R</sup> 6.851	<sup>R</sup> .757	R.304	<sup>R</sup> .017	.014	<sup>R</sup> .073	.374	<sup>R</sup> .782	<sup>R</sup> 8.407
July August	<sup>R</sup> 1.946	<sup>R</sup> 1.909	2.995	<sup>R</sup> 6.923	.746	R.250	<sup>R</sup> .018	.014	R.073	.374 <sup>R</sup> .386	<sup>R</sup> .741	<sup>R</sup> 8.426
September	<sup>R</sup> 1.610	<sup>R</sup> 1.668	2.923	<sup>R</sup> 6.201	R.700	R.208	R.017	.014	.067	R.365	R.670	<sup>R</sup> 7.581
October	R 1.471	<sup>R</sup> 1.769	2.998	<sup>R</sup> 6.238	R.663	R.192	<sup>R</sup> .018	R.013	R.102	R.373	R.699	<sup>R</sup> 7.609
November	<sup>R</sup> 1.421	2.045	2.929	<sup>R</sup> 6.394	R.675	R .201	<sup>R</sup> .018	R.013	.121	R.375	R.727	7.803
December	<sup>R</sup> 1.552	<sup>R</sup> 2.565	2.957	R 7.076	<sup>R</sup> .752	R.231	<sup>R</sup> .018	.013	R.104	R.395	R.760	<sup>R</sup> 8.599
Total	R 19.609	R 24.757	35.465	R 79.842	R 8.269	<sup>R</sup> 3.103	R .213	.158	1.168	R 4.432	<sup>R</sup> 9.073	<sup>R</sup> 97.311
2012 January	<sup>R</sup> 1.493	<sup>R</sup> 2.784	2.889	<sup>R</sup> 7.168	.757	<sup>R</sup> .227	.019	.015	<sup>R</sup> .134	.367	<sup>R</sup> .763	<sup>R</sup> 8.699
February	<sup>R</sup> 1.337	<sup>R</sup> 2.533	2.776	<sup>R</sup> 6.646	<sup>R</sup> .668	<sup>R</sup> .198	.018	.015	.108	<sup>R</sup> .351	<sup>R</sup> .690	<sup>R</sup> 8.014
March	1.233	<sup>R</sup> 2.145	2.883	<sup>R</sup> 6.264	<sup>R</sup> .646	<sup>R</sup> .250	.019	<sup>R</sup> .017	<sup>R</sup> .135	<sup>R</sup> .365	<sup>R</sup> .786	<sup>R</sup> 7.706
April	<sup>R</sup> 1.114	<sup>R</sup> 1.973	2.815	<sup>R</sup> 5.908	<sup>R</sup> .585	<sup>R</sup> .254	.018	.017	<sup>R</sup> .124	.353	<sup>R</sup> .767	<sup>R</sup> 7.272
May	<sup>R</sup> 1.333	<sup>R</sup> 1.887	2.964	<sup>R</sup> 6.184	<sup>R</sup> .650	R.277	.019	.019	R.122	<sup>R</sup> .378	<sup>R</sup> .816	<sup>R</sup> 7.665
June	<sup>R</sup> 1.499	<sup>R</sup> 1.883	2.911	_ 6.293	<sup>R</sup> .682	R.259	.019	.019	<sup>R</sup> .116	<sup>R</sup> .366	<sup>R</sup> .779	<sup>R</sup> 7.768
July	<sup>R</sup> 1.796	<sup>R</sup> 2.092	2.957	<sup>R</sup> 6.845	.723	<sup>R</sup> .260	.019	.019	<sup>R</sup> .085	<sup>R</sup> .369	.753	<sup>R</sup> 8.340
August 8-Month Total	1.725 <b>11.529</b>	2.020 <b>17.318</b>	3.050 <b>23.245</b>	6.795 <b>52.104</b>	.728 <b>5.439</b>	.225 1 <b>.950</b>	.019 <b>.150</b>	.019 <b>.141</b>	.081 <b>.906</b>	.375 <b>2.924</b>	.719 <b>6.071</b>	8.261 <b>63.724</b>
2011 8-Month Total	13.554	16.710	23.659	53.934	5.480	2.271	.142	.106	.774	2.924	6.217	65.718
2010 8-Month Total	14.143	16.214	23.938	54.302	5.628	1.781	.139	.085	.593	2.831	5.428	65.433

<sup>a</sup> Most data are estimates. See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
 <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 biofuels that have been blended with restroleums biofuels are included in "Biomase".

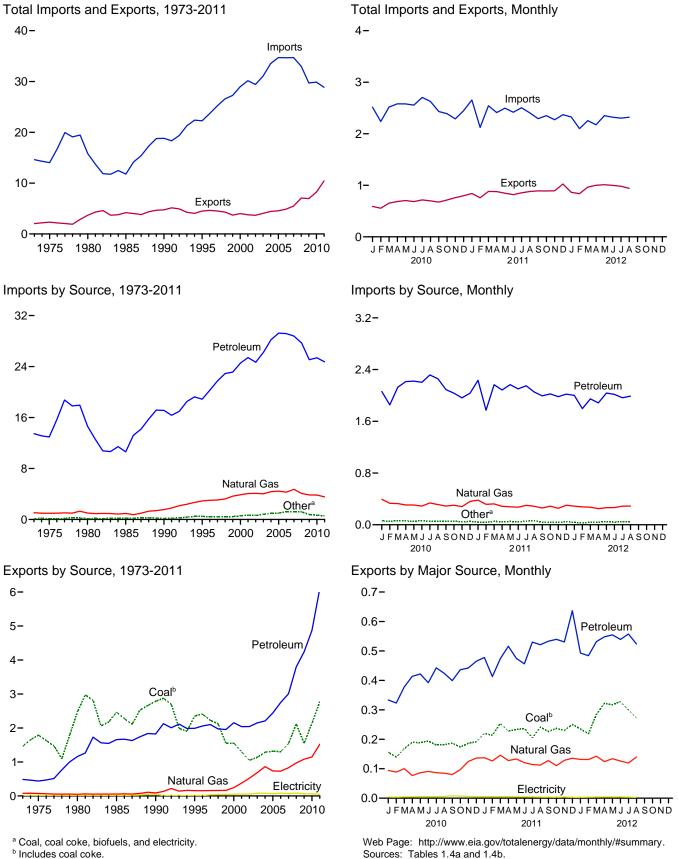
petroleum—biofuels are included in "Biomass." <sup>d</sup> Includes coal coke net imports. See Tables 1.4a and 1.4b. <sup>e</sup> Conventional hydroelectric power.

<sup>6</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.gov/totalenergy/data/monthly/#summary 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.

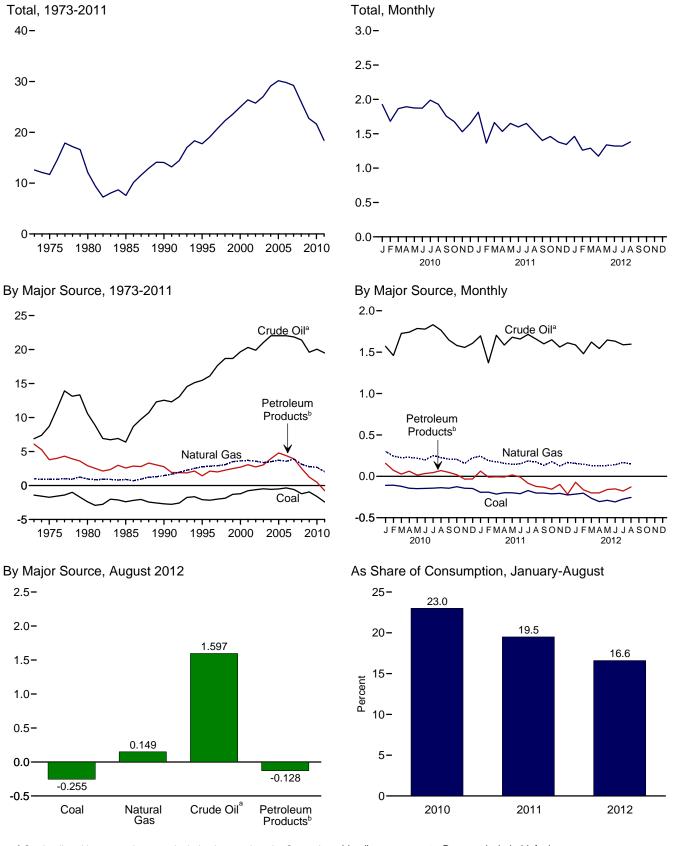
## Figure 1.4a Primary Energy Imports and Exports

(Quadrillion Btu)



#### Figure 1.4b Primary Energy Net Imports

(Quadrillion Btu, Except as noted)



<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 biofuels.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Sources: Tables 1.3, 1.4a, and 1.4b.

#### Table 1.4a Primary Energy Imports by Source

(Quadrillion Btu)

				-	Imports				
					Petroleum				
	Coal	Coal Coke	Natural Gas	Crude Oil <sup>a</sup>	Petroleum Products <sup>b</sup>	Total	Biofuels <sup>c</sup>	Electricity	Total
973 Total	0.003	0.027	1.060	6.887	6.578	13.466	NA	0.057	14.613
975 Total	.024	.045	.978	8.721	4.227	12.948	NA	.038	14.032
980 Total	.030	.016	1.006	11.195	3.463	14.658	NA	.085	15.796
985 Total	.049	.014	.952	6.814	3.796	10.609	NA	.157	11.781
90 Total	.067	.019	1.551	12.766	4.351	17.117	NA	.063	18.817
995 Total	.237	.095	2.901	15.669	3.211	18.881	.001	.146	22.260
96 Total	.203	.063	3.002	16.341	3.943	20.284	.001	.148	23.702
97 Total	.187	.078	3.063	17.876	3.864	21.740	(s)	.147	25.215
98 Total	.218	.095	3.225	18.916	3.992	22.908	(s)	.135	26.581
999 Total	.227	.080	3.664	18.935	4.198	23.133	(s)	.147	27.252
000 Total	.313	.094	3.869	19.783	4.749	24.531	(s)	.166	28.973
001 Total	.495	.063	4.068	20.348	5.051	25.398	.002	.131	30.157
02 Total	.422	.080	4.104	19.920	4.754	24.674	.002	.125	29.408
03 Total	.626	.068	4.042	21.060	5.159	26.219	.002	.104	31.061
04 Total	.682	.170	4.365	22.082	6.114	28.197	.013	.117	33.544
05 Total	.762	.088	4.450	22.091	7.157	29.248	.012	.150	34.709
006 Total	.906	.101	4.291	22.085	7.084	29.169	.066	.146	34.679
007 Total	.909	.061	4.723	21.914	6.868	28.781	.054	.175	34.703
008 Total	.855	.089	4.084	21.448	6.237	27.685	.084	.195	32.992
009 Total	.566	.009	3.845	19.699	5.383	25.082	.026	.178	29.706
10 January	.042	.001	.394	1.577	.483	2.060	.001	.018	2.516
February	.031	.005	.332	1.469	.384	1.853	(s)	.015	2.237
March	.047	.003	.327	1.734	.393	2.127	.001	.015	2.519
April	.045	.001	.306	1.747	.466	2.214	(s)	.013	2.580
Мау	.037	.005	.305	1.793	.428	2.221	.001	.010	2.578
June	.044	.005	.289	1.784	.419	2.203	(s)	.014	2.556
July	.035	.003	.337	1.844	.472	2.316	(s)	.015	2.705
August	.043	.003	.313	1.772	.484	2.256	(s)	.012	2.627
September	.040	.002	.289	1.658	.432	2.090	(s)	.010	2.431
October	.044	.001	.302	1.585	.448	2.034	(s)	.009	2.390
November	.037	(s)	.280	1.563	.400	1.963	(s)	.009	2.289
December Total	.039 <b>.484</b>	(s) .030	.361 <b>3.834</b>	1.614 <b>20.140</b>	.420 <b>5.231</b>	2.034 25.371	(s) .004	.013 <b>.154</b>	2.447 <b>29.877</b>
	.404	.050	5.054	20.140	5.251	25.571	.004	.134	25.011
11 January	.025	.001	.380	1.710	.523	2.233	(s)	.015	2.655
February	.021	.002	.316	1.377	.394	1.771	(s)	.013	2.122
March	.038	.004	.322	1.710	.455	2.166	(s)	.014	2.543
April	.028	.001	.285	1.593	.490	2.084	(s)	.013	2.412
May	.033	.004	.277	1.687	.479	2.166	(s)	.017	2.497
June	.024 .030	.004 .003	.272 .300	1.665	.436 .422	2.101 2.150	.001 .001	.015 .021	2.417 2.505
July	.030	.003	.300	1.728 1.664	.422 .389	2.150	.001	.021	2.505
August September	.039	.005	.260	1.607	.386	1.993	.002	.019	2.405
October	.021	.003	.280	1.659	.364	2.023	.003	.014	2.294
November	.023	.002	.254	1.572	.409	1.981	.002	.013	2.331
December	.020	.002	.254 .303	1.622	.409 .397	2.019	.005	.012	2.272
Total	.327	.035	3.542	19.595	5.145	24.740	.019	.178	28.842
	.020	.003	.288	1.597	.405	2.001	(c)	.014	2.326
12 January February	.020	.003	.288	1.597	.405 .304	2.001	(s) (s)	.014	2.326
March	.013	.002	.270	1.633	.304	1.946	.002	.012	2.099
April	.017	.004	.249	1.549	.336	1.885	.002	.014	2.255
May	.025	.004	R.265	1.659	.378	2.037	.002	.019	R 2.350
June	.018	.004	R .266	1.640	.375	2.037	.002	.018	2.321
July	.022	.001	.288	1.603	.361	1.964	.003	.023	2.303
August	.017	.001	.288	1.608	.380	1.988	.007	.023	2.322
8-Month Total	.148	.022	2.191	12.779	2.852	15.631	.019	.139	18.151
011 8-Month Total	.239	.024	2.439	13.134	3.589	16.723	.006	.126	19.556
10 8-Month Total	.324	.024	2.603	13.719	3.531	17.250	.003	.113	20.319

<sup>a</sup> Crude oil and lease condensate. Includes imports into the Strategic Petroleum

<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 biofuels.
 <sup>c</sup> Fuel ethanol (minus denaturant) and biodiesel.
 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 Pace: See http://www.eia.gov/totalenergv/data/monthlv/#summary for all

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all

available data beginning in 1973. Sources: • Coal: Tables 6.1 and A5. • Coal Coke: 1973-1975—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter. 1976-1980—U.S. Energy Information Administration (EIA), *Energy Data Report*, "Coke and Coal Chemicals," annual reports. 1981 forward—EIA, *Quarterly Coal Report*, quarterly reports and Table A5. • Natural Gas: Tables 4.1 and A4. • Crude Oil and Petroleum Products: Tables 3.3b, 10.3, 10.4, and A2. • Biofuels: Tables 10.3, 10.4 and A3. • Electricity: Tables 7.1 and A6.

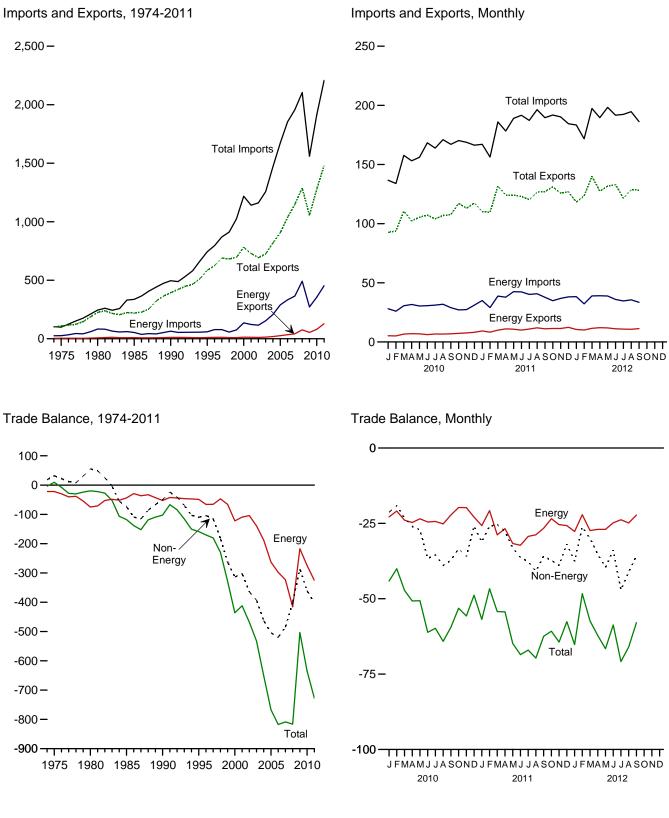
#### Table 1.4b Primary Energy Exports by Source and Total Net Imports (Quadrillion Btu)

					Exports					Net Imports <sup>a</sup>
					Petroleum					
	Coal	Coal Coke	Natural Gas	Crude Oil <sup>b</sup>	Petroleum Products <sup>c</sup>	Total	Biofuels <sup>d</sup>	Electricity	Total	Total
1973 Total	1.425	0.035	0.079	0.004	0.482	0.486	NA	0.009	2.033	12.580
1975 Total	1.761	.032	.074	.012	.427	.439	NA	.017	2.323	11.709
1980 Total	2.421	.051	.049	.609	.551	1.160	NA	.014	3.695	12.101
1985 Total	2.438	.028	.056	.432	1.225	1.657	NA	.017	4.196	7.584
1990 Total	2.772	.014	.087	.230	1.594	1.824	NA	.055	4.752	14.065
1995 Total	2.318	.034	.156	.200	1.791	1.991	NA	.012	4.511	17.750
1996 Total	2.368	.040	.155	.233	1.825	2.059	NA	.011	4.633	19.069
1997 Total	2.193	.031	.159	.228	1.872	2.100	NA	.031	4.514	20.701
1998 Total	2.092	.028	.161	.233	1.740	1.972	NA	.047	4.299	22.281
1999 Total	1.525	.022	.164	.250	1.705	1.955	NA	.049	3.715	23.537
2000 Total	1.528	.028	.245	.106	2.048	2.154	NA	.051	4.006	24.967
2001 Total	1.265	.033	.377	.043	1.996	2.039	(s)	.056	3.771	26.386
2002 Total	1.032	.020	.520	.019	2.023	2.042	(s) .001	.054	3.669	25.739
2003 Total	1.117 1.253	.018	.686	.026	2.124	2.151 2.208	.001	.082 .078	4.054 4.434	27.007 29.110
2004 Total	1.253	.033 .043	.862 .735	.057 .067	2.151 2.374	2.208	.001	.078 .065	4.434 4.560	29.110
2005 Total	1.273	.043			2.699	2.442	.004			29.806
2006 Total 2007 Total	1.204	.040	.730 .830	.052 .058	2.099	3.007	.035	.083 .069	4.872 5.482	29.800
2007 Total	2.071	.030	.830	.058	3.739	3.800	.035	.083	7.060	25.932
2009 Total	1.515	.032	1.082	.093	4.147	4.240	.034	.062	6.965	22.741
2010 January	.151	.006	.094	.006	.327	.332	.003	.004	.590	1.926
February	.138	.001	.089	.009	.312	.321	.003	.003	.556	1.681
March	.169	(s)	.100	.008	.366	.374	.006	.004	.654	1.865
April	.189	.001	.077	.006	.404	.411	.005	.004	.686	1.894
May	.186	.003	.086	.007	.414	.420	.003	.006	.704	1.874
June	.190	.004	.091	.005	.385	.391	.003	.005	.684	1.872
July	.178	.003	.087	.012	.428	.440	.003	.005	.716	1.989
August	.180	.002	.085	.006	.415	.421	.004	.006	.698	1.929
September	.184	.003	.080	.011	.385	.396	.004	.008	.675	1.757
October	.170	.003	.097	.004	.429	.433	.004	.007	.714	1.676
November	.180	.006	.125	.006	.433	.439	.004	.006	.760	1.529
December	.186	.005	.136	.007	.452	.459	.007	.005	.797	1.650
Total	2.101	.036	1.147	.088	4.750	4.838	.046	.065	8.234	21.643
2011 January	.218	.001	.137	.013	.460	.473	.006	.005	.841	1.814
February	.212	.002	.126	.005	.403	.408	.005	.005	.759	1.363
March	.252	.001	.146	.007	.461	.467	.008	.005	.880	1.663
April	.227	.001	.128	.007	.499	.506	.011	.005	.878	1.534
May	.232	.002	.133	.007	.462	.469	.007	.004	.847	1.650
June	.233 .202	.003 .003	.121 .114	.006 .013	.444 .506	.451 .520	.006 .011	.004 .004	.818 .854	1.599 1.651
July	.202	.003	.114	.013	.506	.520	.005	.004	.854 .879	1.526
August September	.241	.001	.112	.000	.518	.517	.005	.003	.892	1.402
October	.224	.003	.120	.000	.520	.524	.010	.003	.892	1.402
November	.226	.002	.129	.000	.507	.518	.013	.003	.894	1.378
December	.249	.004	.136	.010	.613	.622	.013	.004	1.026	1.344
Total	2.751	.024	1.521	.100	5.904	6.004	.108	.051	10.458	18.384
2012 January	.234	.001	.132	.010	.476	.487	.008	.003	.864	1.462
February	.217	.002	.131	.010	.468	.478	.007	.003	.838	1.262
March	.284	.002	.142	.011	.514	.525	.008	.004	.964	1.291
April	.321	.001	.124	.006	.536	.542	.007	.004	1.000	1.174
May	.314	.003	<sup>R</sup> .134	.012	.537	.550	.006	.004	1.012	R 1.339
June	.327	.001	.126	.008	.526	.534	.007	.004	.999	1.322
July	.298	.001	.119	.014	.538	.552	.007	.003	.982	1.320
August 8-Month Total	.272 <b>2.267</b>	.001 <b>.012</b>	.140 <b>1.049</b>	.011 <b>.082</b>	.509 <b>4.105</b>	.520 <b>4.187</b>	.006 <b>.057</b>	.003 .029	.941 <b>7.600</b>	1.381 10.551
2011 8-Month Total	1.817 1.381	.014 .019	1.018 .709	.064 .060	3.746 3.051	3.810 3.111	.060 .029	.038 .039	6.756 5.287	12.800 15.032

<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. Does not include biofuels.
 <sup>d</sup> Through 2010, data are for biodiesel only. Beginning in 2011, data are for fuel ethanol (minus denaturant) and biodiesel.
 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.gov/totalenergy/data/monthly/#summary for all available data beginning in 1973.
Sources: • Coal: Tables 6.1 and A5. • Coal Coke: 1973-1975—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter. 1976-1980—U.S. Energy Information Administration (EIA), *Energy Data Report*, "Coke and Coal Chemicals," annual reports. 1981 forward—EIA, *Quarterly Coal Report*, quarterly reports and Table A5.
Natural Gas: Tables 4.1 and A4. • Crude Oil and Petroleum Products: Tables 3.3b, 10.4, and A2. • Biofuels: Tables 10.3, 10.4 and A3. • Electricity: Tables 7.1 and A6.

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



<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary. http://www.eia.gov/totalenergy/data/monthly/#summary. Source: Table 1.5.

#### Table 1.5 Merchandise Trade Value

(Million Dollars<sup>a</sup>)

F		Petroleum <sup>b</sup>			Energy <sup>c</sup>	I	Non- Energy	Total Merchandise			
	Exports	Imports	Balance	Exports	Imports	Balance	Balance	Exports	Imports	Balance	
974 Total	792	24,668	-23,876	3,444	25,454	-22,010	18,126	99.437	103,321	-3.884	
975 Total	907	25,197	-24,289	4,470	26,476	-22,006	31,557	108,856	99,305	9,551	
980 Total	2,833	78,637	-75,803	7,982	82,924	-74,942	55,246	225,566	245,262	-19,696	
985 Total	4,707	50,475	-45,768	9,971	53,917	-43,946	-73,765	218,815	336,526	-117,712	
990 Total	6,901	61,583	-54,682	12,233	64,661	-52,428	-50,068	393,592	496,088	-102,496	
995 Total	6,321	54,368	-48,047	10,358	59,109	-48,751	-110,050	584,742	743,543	-158,801	
	7,984	72,022	-64,038	12,181	78,086	-65,905	-104,309	625,075		-170,214	
96 Total									795,289		
997 Total	8,592	71,152	-62,560	12,682	78,277	-65,595	-114,927	689,182	869,704	-180,522	
998 Total	6,574	50,264	-43,690	10,251	57,323	-47,072	-182,686	682,138	911,896	-229,758	
999 Total	7,118	67,173	-60,055	9,880	75,803	-65,923	-262,898	695,797	1,024,618	-328,821	
000 Total	10,192	119,251	-109,059	13,179	135,367	-122,188	-313,916	781,918	1,218,022	-436,104	
001 Total	8,868	102,747	-93,879	12,494	121,923	-109,429	-302,470	729,100	1,140,999	-411,899	
002 Total	8,569	102,663	-94,094	11,541	115,748	-104,207	-364,056	693,103	1,161,366	-468,263	
003 Total	10,209	132,433	-122,224	13,768	153,298	-139,530	-392,820	724,771	1,257,121	-532,350	
004 Total	13,130	179,266	-166,136	18,642	206,660	-188,018	-462,912	818,775	1,469,704	-650,930	
005 Total	19,155	250,068	-230,913	26,488	289,723	-263,235	-504,242	905,978	1,673,455	-767,477	
006 Total	28,171	299,714	-271,543	34,711	332,500	-297,789	-519,515	1,036,635	1,853,938	-817,304	
007 Total	33,293	327,620	-294,327	41,725	364,987	-323,262	-485,501	1,148,199	1,956,962	-808,763	
008 Total	61.695	449.847	-388,152	76.075	491.885	-415,810	-400.389	1.287.442	2.103.641	-816,199	
009 Total	44,509	251,833	-207,324	54,536	271,739	-217,203	-286,379	1,056,043	1,559,625	-503,582	
010 January	4,083	25,234	-21,151	5,236	28,075	-22,839	-21,285	92,601	136,725	-44,124	
February	4,003	23,666	-19,663	5,115	26,018	-20,903	-19,141	93,854	133,898	-40,044	
March	5,348	28,549	-23,201	6,667	30,613	-23,946	-23,271	110,511	157,728	-47,217	
April	5,680	30,016	-24,336	6,970	31,657	-24,687	-26,034	102,443	153,163	-50,721	
May	5,484	28,733	-23,249	6,887	30,369	-23,482	-27,165	105,477	156,124	-50,647	
June	4,798	29.011	-24,213	6,170	30,698	-24,528	-36.592	107,202	168,321	-61,120	
July	5,505	29,218	-23,713	6,760	31,113	-24,353	-35,451	104,057	163,861	-59,804	
August	5,346	30,130	-24,784	6,744	31,907	-25,163	-38,957	106,846	170,966	-64,120	
	5,482	27,479	-21,997	6,802	28,992	-22,190	-37,244	107,644	167,078	-59,434	
September											
October	6,084	25,556	-19,472	7,318	27,056	-19,738	-33,397	117,104	170,239	-53,135	
November	6,272	25,982	-19,710	7,610	27,363	-19,753	-35,966	113,046	168,765	-55,719	
December Total	6,694 <b>64,778</b>	29,892 333,465	-23,198 <b>-268,687</b>	8,182 <b>80,460</b>	31,107 <b>354,968</b>	-22,925 <b>-274,508</b>	-25,888 <b>-360,389</b>	117,480 <b>1,278,263</b>	166,293 <b>1,913,160</b>	-48,813 <b>-634,897</b>	
011 January	7,446	33,050	-25,604	9,275	35,010	-25,735	-31,134	110,179	167,048	-56,869	
February	6,604	27,551	-20,947	8,291	29,062	-20,771	-25,897	109,647	156,315	-46,668	
March	7,841	37,096	-29,255	9,958	38,763	-28,805	-25,442	131,728	185,975	-54,247	
April	9,016	36,457	-27,441	11,059	37,803	-26,744	-27,589	123,959	178,293	-54,333	
May	8,767	41,002	-32,235	10,795	42,470	-31,675	-33,171	124,107	188,953	-64,846	
June	8,032	40,872	-32,840	10,039	42,305	-32,266	-36,274	123,039	191,579	-68,540	
July	9,069	38,622	-29,553	10,902	40,224	-29,322	-37,702	120,239	187,263	-67,024	
August	9,912	39,063	-29,151	11,940	40,732	-28,792	-40,896	126,633	196,321	-69,688	
September	9,202	36,467	-27,265	11,141	37,741	-26,600	-35,855	127,107	189,562	-62,455	
October	9,573	33,467	-23,894	11,410	34,857	-23,447	-37,306	131,058	191,811	-60,753	
November	9,533	35,665	-26,132	11,401	36,821	-25,420	-38,944	125,899	190,263	-64,364	
December	10.501	36.831	-26,330	12,353	38.083	-25,730	-31.876	126.837	184,443	-57.606	
Total	105,499	436,145	-330,646	128,564	453,872	-325,308	-402,084	1,480,432	2,207,824	-727,392	
012 January	8,730	37,044	-28,314	10,606	38,290	-27,684	-37,519	118,209	183,411	-65,203	
February	8,605	31,171	-22,566	10,124	32,250	-22,126	-26,181	123,428	171,735	-48,307	
March	9,709	37,933	-28,224	11,552	38,937	-27,385	-29,974	139,965	197,324	-57,359	
April	10,152	38,129	-27,977	12,057	39,043	-26,986	-35,179	127,411	189,577	-62,165	
May	10,056	37,835	-27,779	11,858	38,829	-26,971	-39.590	131,735	198,296	-66.561	
June	9,228	35,043	-25,815	11,100	35,910	-24,810	-33,876	133,018	191,704	-58,686	
	9,228 9,154	33,604	-24,450	10,887	34,683	-24,810	-47,011	121,558	192,366	-70,807	
July		33,604 34,640	-24,450 -25,550		34,663 35,594	-23,796	<sup>R</sup> -41,178	<sup>R</sup> 128,632	<sup>R</sup> 194,656	<sup>R</sup> -66,024	
August	9,090			10,748						-00,024	
September 9-Month Total	9,772 <b>84,496</b>	32,562 <b>317,961</b>	-22,790 <b>-233,465</b>	11,263 <b>100,196</b>	33,497 <b>327,034</b>	-22,234 <b>-226,838</b>	-35,681 <b>-326,189</b>	128,338 <b>1,152,293</b>	186,253 <b>1,705,322</b>	-57,915 <b>-553,028</b>	
011 9-Month Total	75,889	330,180	-254,291	93,401	344,110	-250,710	-293,960	1,096,638	1,641,307	-544,669	
	45,729	252,036	-206,307	57,351	269,442	-212,091	-265,140	930,634	1,407,864	-477,230	

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

Pfices are not adjusted to minator. See Normina points in clossary.
 b Crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels.
 <sup>c</sup> Petroleum, coal, natural gas, and electricity.

R=Revised.

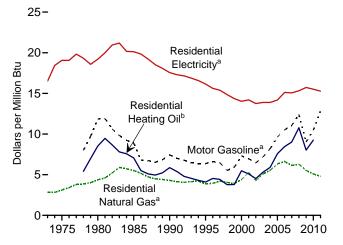
Notes: • Monthly data are not adjusted for seasonal variations. • See Note, "Merchandise Trade Value," at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1974.

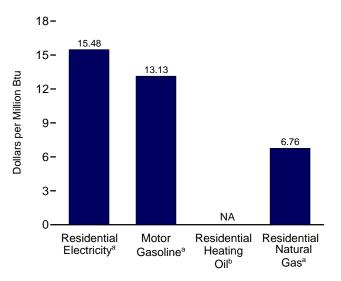
Sources: See end of section.



Costs, 1973-2011

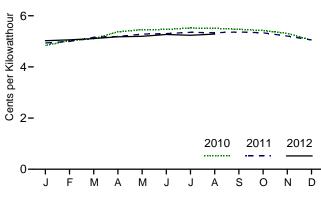


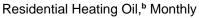
Costs, August 2012



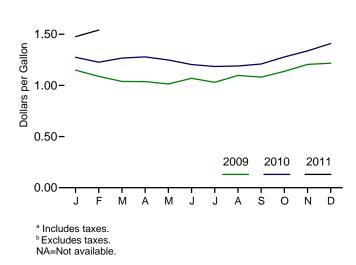
Residential Electricity,<sup>a</sup> Monthly

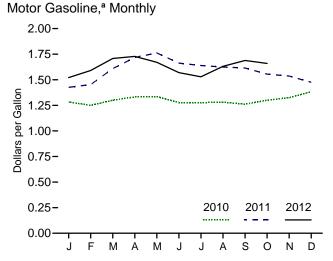
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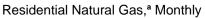


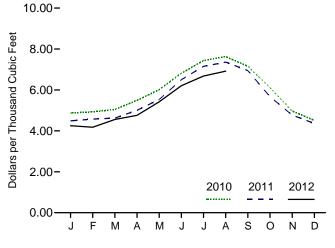


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Note: See "Real Dollars" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Source: Table 1.6.

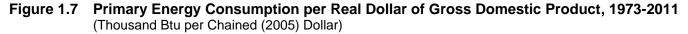
	Consumer Price Index, All Urban Consumers <sup>a</sup>	Motor G	asoline <sup>b</sup>		dential ng Oil <sup>c</sup>		ential I Gas <sup>b</sup>		lential ricity <sup>b</sup>
	Index 1982-1984=100	Dollars per Gallon	Dollars per Million Btu	Dollars per Gallon	Dollars per Million Btu	Dollars per Thousand Cubic Feet	Dollars per Million Btu	Cents per Kilowatthour	Dollars pe Million Bt
973 Average	44.4	NA	NA	NA	NA	2.91	2.85	5.6	16.50
975 Average		NA	NA	NA	NA	3.18	3.12	6.5	19.07
980 Average	82.4	1.482	11.85	1.182	8.52	4.47	4.36	6.6	19.21
985 Average	107.6	1.112	8.89	0.979	7.06	5.69	5.52	6.87	20.13
990 Average	130.7	0.931	7.44	0.813	5.86	4.44	4.31	5.99	17.56
995 Average	152.4	0.791	6.37	0.569	4.10	3.98	3.87	5.51	16.15
996 Average	156.9	0.821	6.61	0.630	4.54	4.04	3.94	5.33	15.62
997 Average	160.5	0.804	6.48	0.613	4.42	4.32	4.21	5.25	15.39
998 Average	163.0	0.684	5.51	0.523	3.77	4.18	4.05	5.07	14.85
999 Average	166.6	0.733	5.91	0.526	3.79	4.02	3.91	4.90	14.36
000 Average	172.2	0.908	7.32	0.761	5.49	4.51	4.39	4.79	14.02
001 Average	177.1	0.864	6.97	0.706	5.09	5.44	5.28	4.84	14.20
002 Average	179.9	0.801	6.46	0.628	4.52	4.39	4.28	4.69	13.75
003 Average		0.890	7.18	0.736	5.31	5.23	5.09	4.74	13.89
004 Average		1.018	8.20	0.819	5.91	5.69	5.55	4.74	13.89
005 Average		1.197	9.64	1.051	7.58	6.50	6.33	4.84	14.18
006 Average		1.307	10.52	1.173	8.46	6.81	6.63	5.16	15.12
007 Average		1.374	11.06	1.250	9.01	6.31	6.14	5.14	15.05
008 Average		1.541	12.40	1.495	10.78	6.45	6.28	5.23	15.33
009 Average	214.537	1.119	9.01	1.112	8.02	5.66	5.52	5.37	15.72
10 January		1.282	10.32	1.275	9.19	4.87	4.76	4.84	14.19
February		1.250	10.06	1.226	8.84	4.93	4.82	5.02	14.73
March		1.300	10.46	1.267	9.13	5.05	4.93	5.10	14.96
April		1.333	10.73	1.278	9.22	5.49	5.37	5.37	15.74
Мау		1.336	10.75	1.248	9.00	6.01	5.88	5.46	16.00
June		1.277	10.28	1.203	8.68	6.82	6.66	5.46	16.01
July		1.277	10.27	1.185	8.55	7.44	7.27	5.52	16.19
August	218.312	1.280	10.31	1.190	8.58	7.63	7.46	5.51	16.15
September		1.261	10.15	1.209	8.72	7.16	7.00	5.47	16.03
October	218.711	1.300	10.46	1.278	9.21	6.11	5.98	5.42	15.89
November		1.325	10.66	1.337	9.64	4.97	4.86	5.31	15.56
December Average		1.383 <b>1.301</b>	11.13 <b>10.47</b>	1.409 <b>1.283</b>	10.16 <b>9.25</b>	4.51 <b>5.22</b>	4.41 <b>5.11</b>	5.05 <b>5.29</b>	14.79 <b>15.51</b>
011 January	220.223	1.425	11.47	1.476	10.64	4.49	4.39	<sup>R</sup> 4.94	<sup>R</sup> 14.47
		1.453	11.69	1.540	11.11	4.58	4.47	<sup>R</sup> 5.00	<sup>R</sup> 14.65
February March		1.608	12.95	NA	NA	4.50	4.47	<sup>R</sup> 5.16	<sup>R</sup> 15.11
April		1.718	13.83	NA	NA	5.01	4.89	<sup>R</sup> 5.19	<sup>R</sup> 15.21
May		1.762	14.18	NA	NA	5.53	5.41	<sup>R</sup> 5.28	<sup>R</sup> 15.47
June		1.663	13.38	NA	NA	6.50	6.35	<sup>R</sup> 5.30	<sup>R</sup> 15.54
July		1.639	13.19	NA	NA	7.15	6.99	<sup>R</sup> 5.35	<sup>R</sup> 15.68
August		1.624	13.07	NA	NA	7.36	7.19	<sup>R</sup> 5.34	<sup>R</sup> 15.64
September		1.615	13.00	NA	NA	6.95	6.79	<sup>R</sup> 5.36	<sup>R</sup> 15.72
October		1.555	12.52	NA	NA	5.67	5.54	<sup>R</sup> 5.34	<sup>R</sup> 15.64
November		1.536	12.36	NA	NA	4.77	4.66	<sup>R</sup> 5.21	<sup>R</sup> 15.26
December		1.475	11.87	NA	NA	4.36	4.00	<sup>R</sup> 5.05	<sup>R</sup> 14.81
Average	224.939	1.590	12.80	NA	NA	4.90	4.79	R 5.21	R 15.27
012 January	226.665	1.521	12.24	NA	NA	4.25	4.16	<sup>R</sup> 5.03	<sup>R</sup> 14.73
February		1.591	12.81	NA	NA	4.18	4.08	<sup>R</sup> 5.06	<sup>R</sup> 14.83
March		1.708	13.75	NA	NA	4.56	4.45	<sup>R</sup> 5.11	<sup>R</sup> 14.97
April		1.728	13.91	NA	NA	4.76	4.65	<sup>R</sup> 5.18	<sup>R</sup> 15.17
May	229.815	1.670	13.45	NA	NA	5.42	5.30	<sup>R</sup> 5.20	<sup>R</sup> 15.23
June		1.570	12.63	NA	NA	R 6.21	<sup>R</sup> 6.07	R 5.27	R 15.44
July		1.529	12.30	NA	NA	R 6.68	<sup>R</sup> 6.53	<sup>R</sup> 5.24	<sup>R</sup> 15.35
August		1.632	13.13	NA	NA	<sup>R</sup> 6.92	<sup>R</sup> 6.76	<sup>R</sup> 5.28	<sup>R</sup> 15.48
September		1.689	13.59	NA	NA	NA	NA	NA	NA
October		1.660	13.36	NA	NA	NA	NA	NA	NA

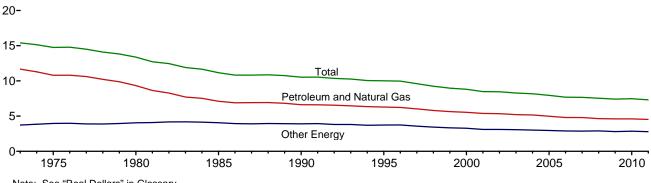
#### Table 1.6 Cost of Fuels to End Users in Real (1982-1984) Dollars

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

Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all

vved Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1973. Sources: • Fuel Prices: Tables 9.4 (All Types), 9.8, and 9.10, adjusted by the CPI; and *Monthy Energy Review*, October 2012, Table 9.8c. • 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.





Note: See "Real Dollars" in Glossary. Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.

Source: Table 1.7.

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

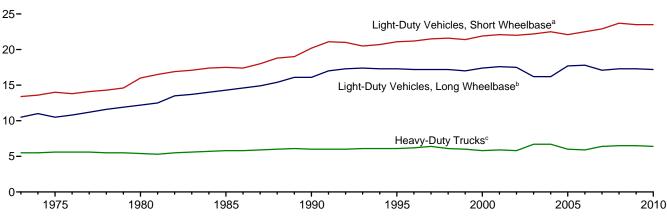
	Ene	rgy Consumption	1	Gross	Energy Consum	ption per Real Do	llar of GDP
	Petroleum and Natural Gas	Other Energy <sup>a</sup>	Total	Domestic Product (GDP)	Petroleum and Natural Gas	Other Energy <sup>a</sup>	Total
	(	Quadrillion Btu		Billion Chained (2005) Dollars	Thousand Btu	per Chained (200	5) Dollar
I				. ,			,
973 Year	57.350	18.334	75.684	4.912.8	11.67	3.73	15.41
974 Year	55.186	18.776	73.962	4,885.7	11.30	3.84	15.14
75 Year	52.680	19.284	71.965	4.875.4	10.81	3.96	14.76
76 Year	55.523	20.452	75.975	5.136.9	10.81	3.98	14.79
977 Year	57.054	20.907	77.961	5.373.1	10.62	3.89	14.51
978 Year	57.963	21.987	79.950	5.672.8	10.02	3.88	14.09
979 Year	57.788	23.070	80.859	5,850.1	9.88	3.94	13.82
980 Year	54.440	23.627	78.067	5,834.0	9.33	4.05	13.38
981 Year	51.680	24.426	76.106	5,982.1	8.64	4.08	12.72
982 Year	48.588	24.511	73.099	5,865.9	8.28	4.18	12.46
983 Year	47.273	25.698	72.971	6,130.9	7.71	4.19	11.90
984 Year	49.447	27.185	76.632	6,571.5	7.52	4.14	11.66
985 Year	48.628	27.764	76.392	6,843.4	7.11	4.06	11.16
986 Year	48.790	27.857	76.647	7,080.5	6.89	3.93	10.83
987 Year	50.504	28.551	79.054	7,307.0	6.91	3.91	10.82
988 Year	52.671	30.038	82.709	7,607.4	6.92	3.95	10.87
989 Year	53.811	30.975	84.786	7,879.2	6.83	3.93	10.76
990 Year	53.155	31.330	84.485	8,027.1	6.62	3.90	10.52
991 Year	52.879	31.559	84.438	8,008.3	6.60	3.94	10.54
992 Year	54.239	31.544	85.783	8,280.0	6.55	3.81	10.36
993 Year	54.973	32.450	87.424	8,516.2	6.46	3.81	10.27
994 Year	56.289	32.803	89.091	8,863.1	6.35	3.70	10.05
995 Year	57.110	33,920	91.029	9,086.0	6.29	3.73	10.02
996 Year	58.760	35.262	94.022	9,425.8	6.23	3.74	9.97
997 Year	59.382	35.221	94.602	9,845.9	6.03	3.58	9.61
998 Year	59.646	35.372	95.018	10,274.7	5.81	3.44	9.25
999 Year	60.747	35.905	96.652	10,770.7	5.64	3.33	8.97
000 Year	62.086	36.729	98.814	11,216.4	5.54	3.27	8.81
001 Year	60.958	35.210	96.168	11,337.5	5.38	3.11	8.48
002 Year	61.734	35.911	97.645	11,543.1	5.35	3.11	8.46
003 Year	61.642	36.336	97.978	11,836.4	5.21	3.07	8.28
004 Year	63.215	36.947	100.162	12,246.9	5.16	3.02	8.18
005 Year	62.953	37.328	100.282	12,623.0	4.99	2.96	7.94
06 Year	62.194	37.435	99.629		4.99	2.89	7.94
				12,958.5			
07 Year	63.437	37.859	101.296	13,206.4	4.80	2.87	7.67
008 Year	61.123	38.152	99.275	13,161.9	4.64	2.90	7.54
009 Year	58.819	35.740	94.559	12,757.9	4.61	2.80	7.41
010 Year	60.266	<sup>R</sup> 37.398	<sup>R</sup> 97.664	13,063.0	4.61	2.86	7.48
011 Year	<sup>R</sup> 60.222	<sup>R</sup> 37.089	<sup>R</sup> 97.311	13,299.1	4.53	2.79	7.32

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

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

Columbia.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Sources: • Energy Consumption: Table 1.3. • Gross Domestic Product: U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts (October 26, 2012), Table 1.1.6.



#### Figure 1.8 Motor Vehicle Fuel Economy, 1973-2010 (Miles per Gallon)

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Source: Table 1.8

		ght-Duty Vehicl Short Wheelbas			ght-Duty Vehicle ₋ong Wheelbase		Н	eavy-Duty Truck	(s <sup>c</sup>	А	Il Motor Vehicle	sd
	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)									
1973	9,884	737	13.4	9,779	931	10.5	15,370	2,775	5.5	10,099	850	11.9
1974	9,221	677	13.6	9,452	862	11.0	14,995	2,708	5.5	9,493	788	12.0
1975	9,309	665	14.0	9.829	934	10.5	15,167	2,722	5.6	9,627	790	12.2
1976	9,418	681	13.8	10,127	934	10.8	15,438	2,764	5.6	9,774	806	12.1
1977	9,517	676	14.1	10.607	947	11.2	16,700	3.002	5.6	9,978	814	12.3
1978	9,500	665	14.3	10,968	948	11.6	18,045	3,263	5.5	10,077	816	12.4
1979	9,062	620	14.6	10,802	905	11.9	18,502	3,380	5.5	9,722	776	12.5
1980	8,813	551	16.0	10,437	854	12.2	18,736	3,447	5.4	9,458	712	13.3
1981	8,873	538	16.5	10,244	819	12.5	19,016	3,565	5.3	9,477	697	13.6
1982	9,050	535	16.9	10,276	762	13.5	19,931	3,647	5.5	9,644	686	14.1
1983	9,118	534	17.1	10,497	767	13.7	21,083	3,769	5.6	9,760	686	14.2
1984	9,248	530	17.4	11,151	797	14.0	22,550	3,967	5.7	10,017	691	14.5
1985	9,419	538	17.5	10,506	735	14.3	20,597	3,570	5.8	10,020	685	14.6
1986	9,464	543	17.4	10,764	738	14.6	22,143	3,821	5.8	10,143	692	14.7
1987	9,720	539	18.0	11,114	744	14.9	23,349	3,937	5.9	10,453	694	15.1
1988	9,972	531	18.8	11,465	745	15.4	22,485	3,736	6.0	10,721	688	15.6
1989	10,157	533	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 2000	11,848	553 547	21.4	11,957	701 669	17.0	26,014	4,352	6.0	12,206	732	16.7 16.9
	11,976 11,831	534	21.9 22.1	11,672 11,204	636	17.4	25,617 26,602	4,391 4,477	5.8 5.9	12,164 11,887	720 695	16.9
2001 2002	12,202	555	22.1	11,204	650	17.6			5.9 5.8	12,171	719	16.9
2002	12,202	556	22.0	11,364	697	17.5 16.2	27,071 28,093	4,642 4,215	5.8 6.7	12,171	719	17.0
2003	12,325	553	22.2	11,287	690	16.2	20,093	4,215	6.7	12,200	718	17.0
2004	12,400	567	22.5	10,920	617	17.7	26,235	4,037	6.0	12,200	706	17.1
2005	12,310	554	22.5	10,920	612	17.8	25,231	4,303	5.9	12,002	698	17.2
2000	a10.710	a468	a22.9	<sup>b</sup> 14,970	b877	<sup>b</sup> 17.1	°28,290	<sup>-4,304</sup>	6.4	11,915	693	17.2
2007	10,290	435	23.7	15,256	880	17.3	28,573	4,387	6.5	11,631	667	17.4
2009	10,391	433	23.5	15,252	882	17.3	26,274	4,037	6.5	11,631	661	17.6
2000 2010 <sup>P</sup>	10,649	453	23.5	15,463	898	17.2	26,609	4,174	6.4	11,853	678	17.5
_0.0	10,040		20.0	.0,400	000		_0,000	-,	V. <del>1</del>	. 1,000	0.0	

<sup>a</sup> Through 2006, data are for passenger cars (and, through 1989, for motorcycles). Beginning in 2007, data are for passenger cars, light trucks, vans, and sport utility vehicles with a wheelbase equal to or less than 121 inches. <sup>b</sup> Through 2006, data are for vans, pickup trucks, sport utility vehicles, and a small number of trucks with 2 axles and 4 tires, such as step vans. Beginning in 2007

2007, data are for large passenger cars, vans, pickup trucks, and sport utility

2007, data alle for large passenger cars, valis, pickup trucks, and sport utility vehicles with a wheelbase larger than 121 inches.
<sup>c</sup> Through 2006, data are for single-unit trucks with 2 axles and 6 or more tires, and combination trucks. Beginning in 2007, data are for single-unit trucks with 2 axles and 6 or more tires or a gross vehicle weight rating exceeding 10,000 nounder and earth for the trucks. pounds, 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.

Note: Geographic coverage is the 50 States and the District of Columbia. Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Sources: • Light-Duty Vehicles, Short Wheelbase, 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.

			October					Cumulative through Oc		
				Percent	Change				Percent	Change
Census Divisions	Normal <sup>a</sup>	2011	2012	Normal to 2012	2011 to 2012	Normala	2011	2012	Normal to 2012	2011 to 2012
New England Connecticut, Maine, Massachusetts, New Hampshire,	407	000	055	24	10	057	400	500		
Rhode Island, Vermont	467	393	355	-24	-10	657	499	509	-23	2
New Jersey, New York,										
Pennsylvania	399	351	319	-20	-9	526	418	408	-22	-2
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	424	391	451	6	15	580	573	636	10	11
West North Central Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	424	368	493	16	34	607	568	671	11	18
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	164	177	154	-6	-13	189	195	180	-5	-8
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	213	247	237	11	-4	246	292	278	13	-5
West South Central Arkansas, Louisiana, Oklahoma, Texas	83	92	115	NM	NM	92	100	119	NM	NM
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	360	308	324	-10	5	543	377	398	-27	6
Pacific <sup>b</sup> California, Oregon, Washington	186	151	149	-20	-1	294	202	193	-34	-4
U.S. Average <sup>b</sup>	282	260	270	-4	4	383	336	351	-8	4
U.S. Average <sup>v</sup>	282	260	270	-4	4	383	330	351	-ŏ	4

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

<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. 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 is the mean of the maximum and minimum temperatures in a 24-hour period. For example, a weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days). If a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree days).

Web Pages: • See http://www.eia.gov/totalenergy/data/monthly/#summary

for current data.  $\bullet\,$  See http://www.eia.gov/totalenergy/data/annual/#summary 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.

			October					Cumulative y through C		
				Percent	Change				Percent	Change
Census Divisions	Normal <sup>a</sup>	2011	2012	Normal to 2012	2011 to 2012	Normal <sup>a</sup>	2011	2012	Normal to 2012	2011 to 2012
New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	0	0	0	NM	NM	417	607	611	47	1
Middle Atlantic New Jersey, New York,	0	0	0				007	011		
Pennsylvania	5	1	4	NM	NM	656	886	895	36	1
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	8	2	3	NM	NM	709	897	999	41	11
West North Central Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	12	14	7	NM	NM	927	1,118	1,218	31	9
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	120	89	125	4	40	1.877	2,239	2,142	14	-4
East South Central Alabama, Kentucky, Mississippi, Tennessee	53	14	21	NM	NM	1,539	1,811	1,783	16	-2
West South Central Arkansas, Louisiana, Oklahoma, Texas	134	145	150	12	3	2,409	3,117	2,850	18	-9
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	55	70	68	NM	NM	1,239	1,385	1,507	22	9
Pacific <sup>b</sup> California, Oregon, Washington	36	41	55	NM	NM	699	717	899	29	25
U.S. Average <sup>b</sup>	53	46	56	NM	NM	1,195	1,454	1,465	23	1

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

<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.gov/totalenergy/data/monthly/#summary

for current data.  $\bullet\,$  See http://www.eia.gov/totalenergy/data/annual/#summary 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. Imports data presented are based on the customs values. Those values do not include insurance and freight and are consequently lower than the cost, insurance, and freight (CIF) values, which are also reported by the Bureau of the Census. All exports data, and imports data prior to 1981, are on a free alongside ship (f.a.s.) basis.

"Balance" is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. "Energy" includes mineral fuels, lubricants, and related material. "Non-Energy Balance" and "Total Merchandise" include foreign exports (i.e., re-exports) and nonmonetary gold and U.S. Department of Defense Grant-Aid shipments. The "Non-Energy Balance" is calculated by subtracting the "Energy" from the "Total Merchandise Balance."

"Imports" consist of government and nongovernment shipments of merchandise into the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Foreign Trade Zones. They reflect the total arrival from foreign countries of merchandise that immediately entered consumption channels, warehouses, the Foreign Trade Zones, or the Strategic Petroleum Reserve. They exclude shipments between the United States, Puerto Rico, and U.S. possessions, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use, U.S. goods returned to the United States by its Armed Forces, and in-transit shipments.

#### **Table 1.5 Sources**

U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division:

#### **Petroleum Exports**

1974–1987: "U.S. Exports," FT-410, December issues. 1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.

1990–1992: "U.S. Merchandise Trade," Final Report.

1993–2007: "U.S. International Trade in Goods and Services," Annual Revision.

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

#### **Petroleum Imports**

1974–1987: "U.S. Merchandise Trade," FT-900, December issues, 1975-1988.

1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.

1990–1993: "U.S. Merchandise Trade," Final Report.

1994–2007: "U.S. International Trade in Goods and Services," Annual Revision.

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

#### **Energy Exports and Imports**

1974–1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: January-July, monthly FT-900 supplement, 1989 issues. August-December, monthly FT-900, 1989 issues.

1989: Monthly FT-900, 1990 issues.

1990-1992: "U.S. Merchandise Trade," Final Report.

1993–2007: "U.S. International Trade in Goods and Services," Annual Revision.

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

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

Calculated by the U.S. Energy Information Administration.

#### **Total Merchandise**

1974–1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions," August 18, 1989.

1989: "Report on U.S. Merchandise Trade, 1989 Revisions," July 10, 1990.

1990: "U.S. Merchandise Trade, 1990 Final Report," May 10, 1991, and "U.S. Merchandise Trade, December 1992," February 18, 1993, page 3.

1991: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1993.

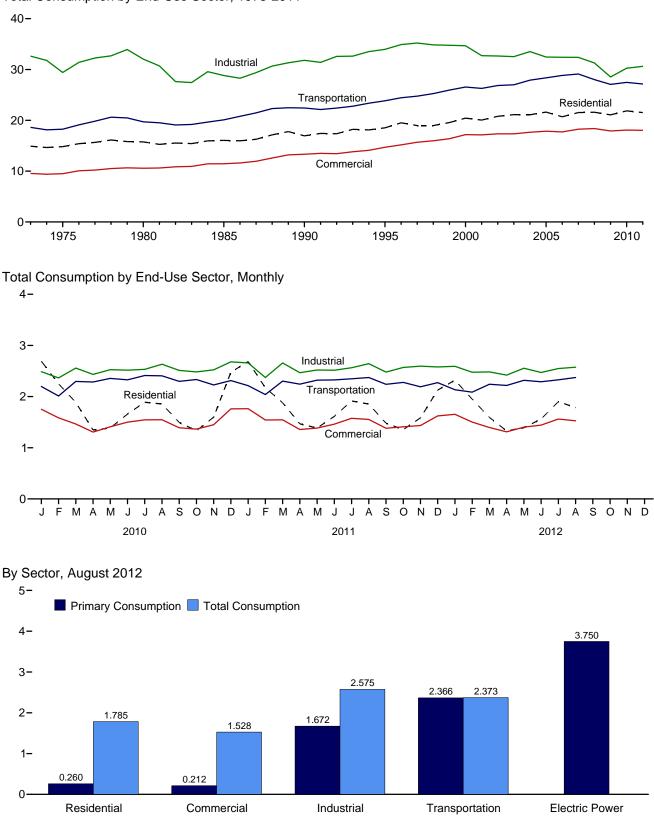
1992–2007: "U.S. International Trade in Goods and Services," Annual Revision.

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

## 2. Energy Consumption by Sector

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

Total Consumption by End-Use Sector, 1973-2011



Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption. Source: Table 2.1.

### Table 2.1 Energy Consumption by Sector

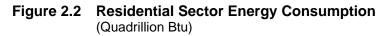
(Trillion Btu)

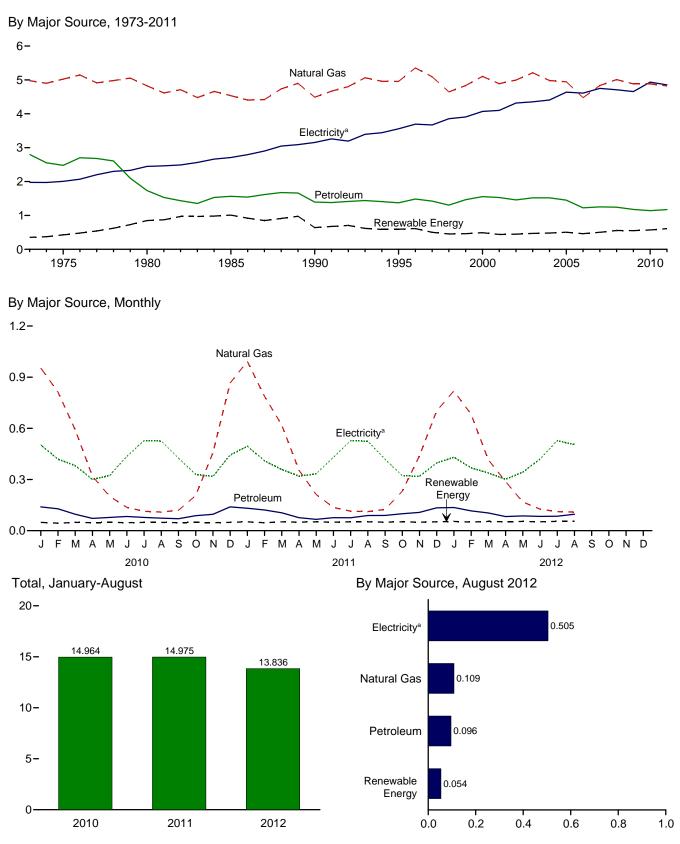
				End-Use	e Sectors				Electric		
	Resid	ential	Comm	erciala	Indus	trial <sup>b</sup>	Transpo	ortation	Power Sector <sup>c,d</sup>	Beleneirr	Drimor
	Primary <sup>e</sup>	Total <sup>f</sup>	<b>Primary</b> <sup>e</sup>	Total <sup>f</sup>	<b>Primary</b> <sup>e</sup>	Total <sup>f</sup>	<b>Primary</b> <sup>e</sup>	Total <sup>f</sup>	Primary <sup>e</sup>	Balancing Item <sup>g</sup>	Primary Total <sup>h</sup>
1973 Total 1975 Total	8,225 7,990 7,439	14,897 14,813	4,423 4,059	9,543 9,492	24,720 21,434 22,595	32,623 29,413 32,039	18,577 18,210	18,613 18,245	19,731 20,270	7 1 -1	75,684 71,965 78,067
1980 Total 1985 Total 1990 Total	7,439 7,148 6,557 6,936	15,753 16,041 16,945 18,519	4,105 3,732 3,896 4,101	10,578 11,451 13,320	19,443 21,180	28,816 31,810 33,971	19,659 20,041 22,366 23,791	19,697 20,088 22,420	24,269 26,032 30,495 33,479	-1 -4 -9 3	76,392 84,485 91,029
1995 Total 1996 Total 1997 Total	7,467 7,033	19,504 18,965	4,273 4,295	14,690 15,172 15,681	22,719 23,410 23,686	34,904 35,200	24,383 24,695	23,846 24,437 24,750	34,485 34,886	4	94,022 94,602
1998 Total           1999 Total           2000 Total           2001 Total	6,413 6,775 7,159 6,868	18,955 19,557 20,425 20.042	4,005 4,053 4,278 4,084	15,968 16,376 17,175 17,137	23,177 22,950 22,824 21,794	34,843 34,764 34,664 32,720	25,201 25,891 26,489 26,213	25,256 25,949 26,548 26,275	36,225 36,976 38,062 37,215	-3 6 2 -6	95,018 96,652 98,814 96,168
2002 Total 2003 Total 2004 Total	6,912 7,211 6,993	20,791 21,110 21,093	4,132 4,283 4,232	17,345 17,343 17,659	21,799 21,503 22,412	32,662 32,532 33,520	26,781 26,920 27,817	26,842 26,994 27,895	38,016 38,062 38,713	5 -1 -6	97,645 97,978 100,162
2005 Total 2006 Total 2007 Total 2008 Total	6,909 6,168 6,598 6,817	21,626 20,688 21,531 21,596	4,051 3,747 3,922 4,073	17,857 17,711 18,255 18,381	21,411 21,536 21,370 20,480	32,446 32,401 32,394 31,290	28,272 28,751 29,029 27,925	28,353 28,830 29,117 28,008	39,638 39,428 40,377 39,978	(s) (s) -1 (s)	100,282 99,629 101,296 99,275
2009 Total 2010 January	<b>6,619</b> 1,142	<b>21,064</b> 2,691	<b>4,061</b> 617	<b>17,899</b> 1,752	<b>18,813</b> 1,695	<b>28,525</b> 2,487	<b>26,989</b> 2,190	<b>27,071</b> 2,198	<b>38,077</b> 3,484	(s) 4	<b>94,559</b> 9,132
February March	985 737 439	2,250 1,887 1,347	548 419 277	1,585 1,465 1,307	1,601 1,752 1.624	2,365 2,557 2,435	2,004 2,290 2,280	2,012 2,297 2,286	3,073 3,008 2,755	1 -1 -2	8,213 8,205 7,372
April May June July	439 328 268 240	1,347 1,386 1,659 1,889	226 198 182	1,307 1,410 1,501 1,546	1,612 1,608 1,618	2,435 2,527 2,517 2,532	2,280 2,349 2,320 2,404	2,280 2,356 2,328 2,411	2,755 3,163 3,611 3,934		<sup>R</sup> 7,677 <sup>R</sup> 8,007 <sup>R</sup> 8,382
August September October	232 237 343	1,855 1,494 1,331	186 189 256	1,547 1,390 1,364	1,707 1,671 1,644	2,633 2,512 2,482	2,399 2,291 2,327	2,406 2,298 2,333	3,917 3,306 2,942	<sup>R</sup> 3 (s) -1	<sup>R</sup> 8,444 7,694 7,509
November December Total	599 1,054 <b>6,603</b>	1,597 2,476 <b>21,862</b>	364 579 <b>4,039</b>	1,451 1,761 <b>18,078</b>	1,671 1,802 <b>20,003</b>	2,523 2,679 <b>30,250</b>	2,221 2,307 <b>27,384</b>	2,228 2,314 <b>27,466</b>	2,944 3,488 <b>39,626</b>	-1 1 <sup>R</sup> 8	7,797 9,231 <sup>R</sup> <b>97,664</b>
2011 January February	1,177 956	<sup>R</sup> 2,686 <sup>R</sup> 2,172	637 532	<sup>R</sup> 1,764 <sup>R</sup> 1,542	<sup>R</sup> 1,824 <sup>R</sup> 1,600	<sup>R</sup> 2,657 <sup>R</sup> 2,373	R 2,205 2,033	2,213 2,039	<sup>R</sup> 3,477 <sup>R</sup> 3,005	1 <sup>R</sup> -2	<sup>R</sup> 9,321 8,125
March April May	777 482 331 263	<sup>R</sup> 1,879 <sup>R</sup> 1,468 <sup>R</sup> 1,386 <sup>R</sup> 1,614	<sup>R</sup> 450 <sup>R</sup> 299 222 <sup>R</sup> 194	1,545 <sup>R</sup> 1,357 <sup>R</sup> 1,385 1,461	<sup>R</sup> 1,793 <sup>R</sup> 1,622 <sup>R</sup> 1,633 <sup>R</sup> 1,633	<sup>R</sup> 2,657 <sup>R</sup> 2,468 <sup>R</sup> 2,520 <sup>R</sup> 2,515	2,296 2,236 2,314	2,303 2,243 2,321	<sup>R</sup> 3,069 <sup>R</sup> 2,895 <sup>R</sup> 3,111 <sup>R</sup> 3,524	-3 -2 <sup>R</sup> -2	8,381 <sup>R</sup> 7,533 <sup>R</sup> 7,610 <sup>R</sup> 7,917
June July August September	263 242 253 264	<sup>R</sup> 1,914 <sup>R</sup> 1,915 <sup>R</sup> 1,854 <sup>R</sup> 1,481	<sup>R</sup> 194 205 <sup>R</sup> 212	<sup>R</sup> 1,575 <sup>R</sup> 1,553 <sup>R</sup> 1,381	<sup>R</sup> 1,616 <sup>R</sup> 1,620 1,716 <sup>R</sup> 1,637	<sup>R</sup> 2,515 <sup>R</sup> 2,564 <sup>R</sup> 2,643 <sup>R</sup> 2,479	2,320 2,341 2,366 2,234	2,327 2,348 2,373 2,240	<sup>R</sup> 4,008 <sup>R</sup> 3,883 <sup>R</sup> 3,234	1 <sup>R</sup> 4 3 -1	<sup>R</sup> 8,407 <sup>R</sup> 8,426 <sup>R</sup> 7,581
October November December	382 596 888 <b>6,612</b>	<sup>R</sup> 1,355 <sup>R</sup> 1,584 <sup>R</sup> 2,127 <sup>R</sup> <b>21,523</b>	292 369 505 <sup>R</sup> <b>4,109</b>	1,410 <sup>R</sup> 1,435 1,622 <sup>R</sup> <b>18,028</b>	<sup>R</sup> 1,703 <sup>R</sup> 1,738 <sup>R</sup> 1,728 <sup>R</sup> <b>20,231</b>	<sup>R</sup> 2,570 <sup>R</sup> 2,595 <sup>R</sup> 2,579 <sup>R</sup> <b>30,620</b>	2,234 2,271 2,186 <sup>R</sup> 2,266 <sup>R</sup> <b>27,068</b>	2,240 2,277 2,192 <sup>R</sup> 2,273 <sup>R</sup> <b>27,149</b>	<sup>R</sup> 2,964 <sup>R</sup> 2,916 <sup>R</sup> 3,214 <sup>R</sup> <b>39,301</b>	-2 -3 -3 <sup>R</sup> <b>-9</b>	<sup>R</sup> 7,609 7,803 <sup>R</sup> 8,599 <sup>R</sup> <b>97,311</b>
Total 2012 January	1,010	<sup>R</sup> 2,322	<sup>R</sup> 561	<sup>R</sup> 1,654	1,773	<sup>R</sup> 2,592	2,127	2,134	R 3,230	-2	<sup>R</sup> 8,699
February March April May	849 575 424 309	<sup>R</sup> 1,951 <sup>R</sup> 1,593 <sup>R</sup> 1,329 <sup>R</sup> 1,391	<sup>R</sup> 484 <sup>R</sup> 348 277 218	<sup>R</sup> 1,502 <sup>R</sup> 1,395 <sup>R</sup> 1,310 1,403	<sup>R</sup> 1,681 <sup>R</sup> 1,651 1,593 <sup>R</sup> 1,647	<sup>R</sup> 2,477 <sup>R</sup> 2,482 2,419 <sup>R</sup> 2,555	2,080 2,235 <sup>R</sup> 2,212 2,312	2,087 2,241 2,219 <sup>R</sup> 2,318	<sup>R</sup> 2,922 <sup>R</sup> 2,903 <sup>R</sup> 2,770 <sup>R</sup> 3,181	<sup>R</sup> -4 <sup>R</sup> -6 -5 -3	<sup>R</sup> 8,014 <sup>R</sup> 7,706 <sup>R</sup> 7,272 <sup>R</sup> 7,665
June July August	264 251 260	<sup>R</sup> 1,564 <sup>R</sup> 1,901 1,785	<sup>R</sup> 199 <sup>R</sup> 194 212	<sup>R</sup> 1,442 1,561 1,528	1,592 <sup>R</sup> 1,622 1,672	<sup>R</sup> 2,471 <sup>R</sup> 2,548 2,575	2,284 2,320 2,366	<sup>R</sup> 2,290 2,327 2,373	<sup>R</sup> 3,429 <sup>R</sup> 3,951 3,750	<sup>R</sup> (s) <sup>R</sup> 2 2	<sup>R</sup> 7,768 <sup>R</sup> 8,340 8,261
8-Month Total 2011 8-Month Total 2010 8-Month Total	3,942 4,481 4,371	13,836 14,975 14,964	2,493 2,730 2,652	11,796 12,181 12,112	13,232 13,425 13,216	20,119 20,397 20,054	17,936 18,111 18,237	17,989 18,166 18,293	26,137 26,972 26,946	-15 (s) 10	63,724 65,718 65,433

<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

<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>9</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.gov/totalenergy/data/monthly/#consumption for all available data beginning in 1973. Sources: Tables 1.3 and 2.2–2.6.





<sup>a</sup> Electricity retail sales. Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption. Source: Table 2.2.

#### Table 2.2 Residential Sector Energy Consumption

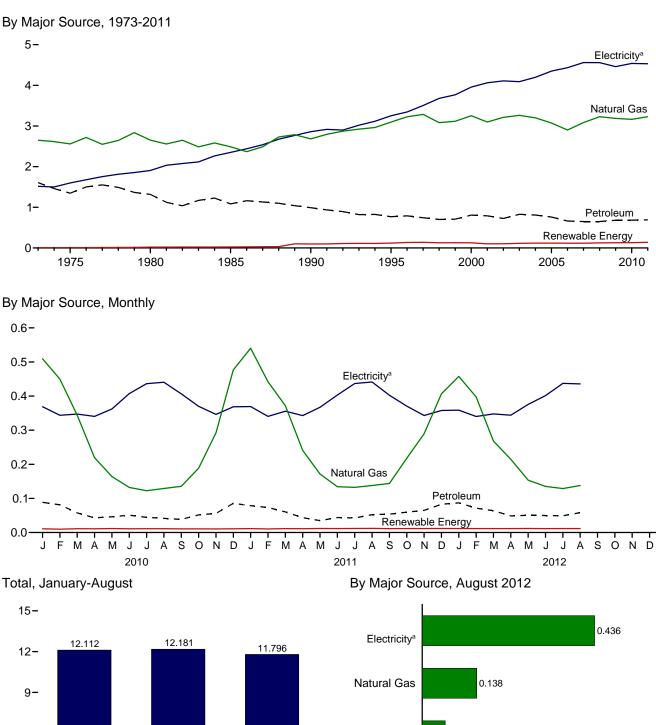
(Trillion Btu)

				Prima	ry Consum	otiona						
		Fossil	Fuels			Renewat	ole Energy <sup>b</sup>			Flootricity	Electrical System	
	Coal	Natural Gas <sup>c</sup>	Petro- leum	Total	Geo- thermal	Solar/ PV	Bio- mass	Total	Total Primary	Electricity Retail Sales <sup>d</sup>	Energy Losses <sup>e</sup>	Total
1973 Total 1975 Total	94 63	4,977 5,023	2,800 2,479	7,871 7,564	NA NA	NA NA	354 425 850	354 425	8,225 7,990	1,976 2,007	4,696 4,817	14,897 14,813
1980 Total 1985 Total 1990 Total	31 39 31	4,825 4,534 4,491	1,734 1,565 1,394	6,589 6,138 5,916	NA NA 6	NA NA 56	1,010 580	850 1,010 641	7,439 7,148 6,557	2,448 2,709 3,153	5,866 6,184 7,235	15,753 16,041 16,945
1995 Total 1996 Total 1997 Total	17 17 16	4,954 5,354 5,093	1,374 1,484 1,422	6,345 6,854 6,531	7 7 8	64 65 64	520 540 430	591 612 502	6,936 7,467 7,033	3,557 3,694 3,671	8,026 8,344 8,261	18,519 19,504 18,965
1998 Total 1999 Total	12 14	4,646 4,835	1,304 1,465	5,962 6,314	8 9 9	64 63	380 390	452 461	6,413 6,775	3,856 3,906	8,686 8,875	18,955 19,557
2000 Total 2001 Total 2002 Total	11 12 12	5,105 4,889 4,995	1,554 1,529 1,457	6,670 6,430 6,464	9 10	61 59 57	420 370 380	489 438 448	7,159 6,868 6,912	4,069 4,100 4,317	9,197 9,074 9,562	20,425 20,042 20,791
2003 Total 2004 Total 2005 Total	12 11 8	5,209 4,981 4,946	1,519 1,520 1,451	6,741 6,513 6,406	13 14 16	57 57 58	400 410 430	470 481 504	7,211 6,993 6,909	4,353 4,408 4,638	9,546 9,691 10,079	21,110 21,093 21,626
2006 Total 2007 Total 2008 Total	6 8 8	4,476 4,835 5,010	1,224 1,254 1,243	5,706 6,097 6,261	18 22 26	63 70 80	380 410 450	462 502 557	6,168 6,598 6,817	4,611 4,750 4,708	9,909 10,182 10,071	20,688 21,531 21,596
2009 Total	8	4,883	1,176	6,067	33	89	430	552	6,619	4,656	9,789	21,064
2010 January February March	1 1 1	953 812 592	140 128 96	1,094 941 689	3 3 3	10 9 10	36 32 36	48 44 48	1,142 985 737	503 419 381	1,045 846 768	2,691 2,250 1,887
April May June	(s) (s)	320 201 137	72 78 83	392 280 221	3 3 3	9 10 9	35 36 35	47 48 47	439 328 268	300 324 435	608 734 956	1,347 1,386 1.659
July August September	1	114 109 120	78 74 70	192 183 190	3 3 3	10 10 9	36 36 35	48 48 47	240 232 237	528 526 425	1,121 1,098 832	1,889 1,855 1,494
October November	(s) 1 1	206 456	88 96	294 552	3	10 9	36 35	48 47	343 599	330 318	658 680	1,331 1,597
December Total	1 7	865 <b>4,883</b>	140 <b>1,142</b>	1,006 <b>6,032</b>	3 37	10 <b>114</b>	36 <b>420</b>	48 571	1,054 <b>6,603</b>	444 <b>4,933</b>	978 <b>10,326</b>	2,476 <b>21,862</b>
2011 January February	1 1 1	993 787 620	132 121 105	1,125 909 725	3 3 3	12 11 12	37 33 37	52 47 52	1,177 956 777	<sup>R</sup> 495 <sup>R</sup> 410 358	<sup>R</sup> 1,015 <sup>R</sup> 806 <sup>R</sup> 744	<sup>R</sup> 2,686 <sup>R</sup> 2,172 <sup>R</sup> 1,879
March April May	(s) (s) <sup>R</sup> 1	355 212	76 67	432 279	3	12 12	35 37	50 52	482 331	<sup>R</sup> 320 <sup>R</sup> 333	<sup>R</sup> 666 <sup>R</sup> 722	<sup>R</sup> 1,468 <sup>R</sup> 1,386
June July August	(s) (s)	136 114 112	76 76 89	213 190 201	3 3 3	12 12 12	35 37 37	50 52 52	263 242 253	430 528 <sup>R</sup> 525	<sup>R</sup> 921 <sup>R</sup> 1,145 <sup>R</sup> 1,077	<sup>R</sup> 1,614 <sup>R</sup> 1,915 <sup>R</sup> 1,854
September October November	(s) (s) (s)	124 231 439	89 99 107	214 331 546	3 3 3	12 12 12	35 37 35	50 52 50	264 382 596	419 323 318	<sup>R</sup> 798 <sup>R</sup> 650 <sup>R</sup> 670	<sup>R</sup> 1,481 <sup>R</sup> 1,355 <sup>R</sup> 1,584
December Total	1 6	702 4,824	134 1,171	836 6,002	3 40	12 <b>140</b>	37 <b>430</b>	52 610	888 6,612	<sup>R</sup> 397 <sup>R</sup> 4,855	<sup>R</sup> 842 R <b>10,057</b>	<sup>R</sup> 2,127 <sup>R</sup> <b>21,523</b>
2012 January February March	1 1 (s)	820 682 416	136 116 104	956 798 520	3 3 3	14 13 14	36 34 36	54 51 54	1,010 849 575	<sup>R</sup> 431 <sup>R</sup> 368 <sup>R</sup> 338	<sup>R</sup> 881 <sup>R</sup> 734 <sup>R</sup> 680	<sup>R</sup> 2,322 <sup>R</sup> 1,951 <sup>R</sup> 1,593
April May	(s) (s)	289 168	83 87	372 255	3	14 14	35 36	52 54	424 309	<sup>R</sup> 301 343	<sup>R</sup> 603 <sup>R</sup> 739	<sup>R</sup> 1,329 <sup>R</sup> 1,391
June July August	(s) (s) 1	127 <sup>R</sup> 112 109	84 85 96	211 197 206	3 3 3	14 14 14	35 36 36	52 54 54	264 251 260	<sup>R</sup> 420 528 505	<sup>R</sup> 880 <sup>R</sup> 1,123 1,020	<sup>R</sup> 1,564 <sup>R</sup> 1,901 1,785
8-Month Total 2011 8-Month Total	3 5	2,722 3,329	791 742	3,516 4,075	26 26	113 94	287 286	426 406	3,942 4,481	3,234 3,398	6,661 7,096	13,836 14,975
2010 8-Month Total	5	3,329 3,238	742	4,075 3,991	20	94 76	280	380	4,481 4,371	3,398	7,090	14,964

<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 electricity retail sales. See Note 2, "Electrical System Energy Losses, at end of section.
 R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.
 Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding.
 Geographic coverage is the 50 States and the District of Columbia.
 Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption 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)



<sup>a</sup> Electricity retail sales. Web Page: http://www.eia.doe.gov/emeu/mer/consump.html. Source: Table 2.3.

2011

2012

0.058

0.1

0.2

0.3

0.4

0.5

0.6

0.012

0.0

Petroleum

Renewable

Energy

6-

3-

0

2010

## Table 2.3 Commercial Sector Energy Consumption

(Trillion Btu)

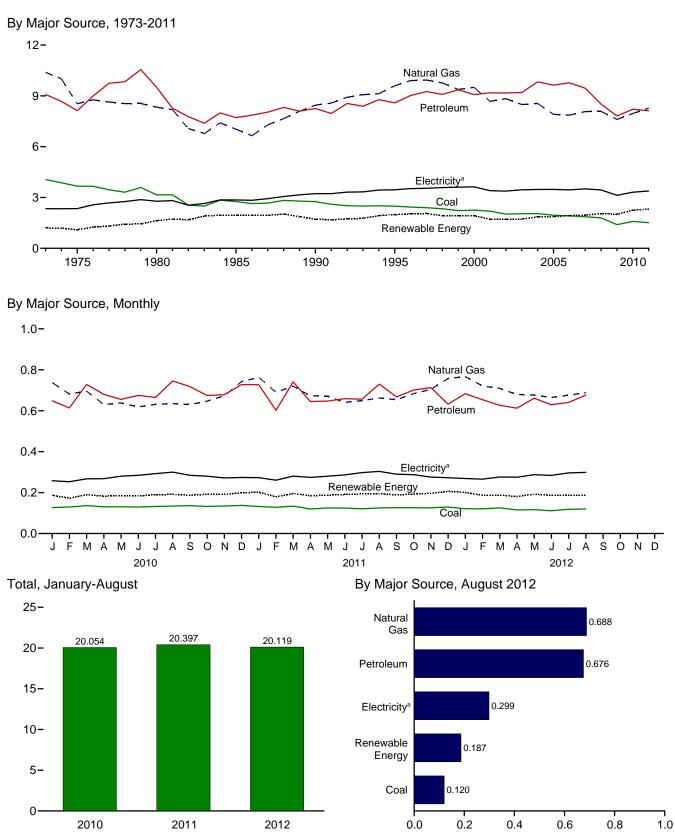
					Primary (	Consump	tiona							
		Fossi	I Fuels			R	enewabl	e Energy	<b>y</b> b			Elec-	Electrical	
	Coal	Natural Gas <sup>c</sup>	Petro- leum <sup>d</sup>	Total	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total Primary	tricity Retail Sales <sup>f</sup>	System Energy Losses <sup>g</sup>	Total
1973 Total         1975 Total         1980 Total         1985 Total         1990 Total         1995 Total         1995 Total         1996 Total         1997 Total         1998 Total         1997 Total         1997 Total         2000 Total         2000 Total         2000 Total         2000 Total         2001 Total         2003 Total         2004 Total         2005 Total         2006 Total         2007 Total         2008 Total         2008 Total         2009 Total	160 147 115 137 124 117 129 93 103 92 97 90 82 103 97 90 82 103 97 65 700 69 63	2,649 2,558 2,651 2,488 3,226 3,225 3,225 3,225 3,225 3,255 3,252 3,251 3,212 3,211 3,211 3,211 3,201 3,201 3,201 3,202 3,025 3,228 3,282 3,282 3,287	1,607 1,346 1,318 1,083 991 769 790 700 743 707 807 707 807 726 827 807 726 827 807 726 827 809 761 663 643 651 682	4,416 4,051 4,084 3,798 3,982 4,138 4,157 3,878 3,982 4,157 3,982 4,157 3,982 4,157 3,982 4,150 3,982 4,170 4,113 3,932 3,805 3,948 3,932	NA NA NA NA NA 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NA NA NA 3 5 5 6 7 7 8 8 9 11 14 14 14 15 17	NA NA NA 	NA NA NA 	7 8 21 24 94 113 129 131 111 119 92 95 101 105 103 103 109 112	7 8 21 24 98 135 138 135 129 128 101 104 113 118 120 118 120 118 125 129	4,423 4,059 3,732 3,896 4,101 4,273 4,295 4,005 4,053 4,278 4,053 4,278 4,083 4,283 4,283 4,132 4,283 4,283 4,283 4,2651 3,747 3,922 4,051	1,517 1,598 1,906 2,351 3,252 3,344 3,503 3,678 3,956 4,062 4,110 4,090 4,198 4,351 4,435 4,558 4,460	3,604 3,835 4,567 5,368 6,564 7,338 7,555 7,883 8,557 8,942 8,990 9,104 8,969 9,229 9,529 9,529 9,529 9,773 9,749 9,378	9,543 9,492 10,578 11,451 13,320 14,690 15,172 15,681 16,376 17,175 17,343 17,659 17,857 17,341 18,255 18,381 17,899
2010 January February April May June July August September October November December Total	8 7 6 4 4 4 4 4 5 5 6 <b>60</b>	509 450 344 220 164 132 123 129 135 189 292 477 <b>3,164</b>	89 81 58 43 46 51 44 41 39 52 56 85 <b>685</b>	606 538 407 266 214 187 171 175 178 245 353 568 <b>3,908</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	2 1 2 2 2 2 2 2 2 2 2 2 2 2 1 9	(s)	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	9 9 9 10 9 10 9 9 9 9 9 111	11 10 11 11 11 11 11 11 11 10 11 <b>130</b>	617 548 419 277 226 198 182 186 189 256 364 579 <b>4,039</b>	369 344 347 362 407 436 441 406 370 346 369 <b>4,539</b>	766 694 689 822 896 927 920 795 738 741 813 <b>9,501</b>	1,752 1,585 1,465 1,307 1,410 1,501 1,546 1,547 1,390 1,364 1,451 1,761 <b>18,078</b>
2011 January February April May June July August September October November December Total	7 6 6 4 4 4 3 3 3 4 4 52	540 442 372 241 R 172 134 132 138 144 218 289 R 407 <b>3,228</b>	79 73 60 43 35 44 42 52 54 60 65 83 <b>691</b>	626 522 438 288 210 182 178 <sup>R</sup> 193 201 281 358 494 <b>3,971</b>	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	R 10 9 R 10 R 10 R 10 R 10 R 10 R 10 R 10 R 10	11 10 11 R 12 R 12 R 12 R 12 R 12 R 12 R 12 R	637 532 R 450 R 299 222 R 194 R 190 205 R 212 292 369 505 R <b>4,109</b>	R 369 R 340 R 356 R 343 R 443 R 403 R 441 R 441 R 343 R 358 R <b>4,531</b>	R 757 670 R 740 R 714 R 795 R 863 R 948 R 906 R 767 R 747 R 747 R 722 R 759 R <b>9,387</b>	R 1,764 R 1,542 1,545 R 1,357 R 1,385 1,461 R 1,575 R 1,553 R 1,381 1,410 R 1,435 1,622 R <b>18,028</b>
2012 January February April May June July August 8-Month Total	5 4 3 3 2 4 4 <b>28</b>	458 398 268 215 153 135 129 138 <b>1,893</b>	87 71 64 49 51 50 <sup>R</sup> 49 58 <b>479</b>	549 473 336 266 207 187 182 200 <b>2,400</b>	(S) (S) (S) (S) (S) (S) (S) (S)	2 2 2 2 2 2 2 2 2 2 3 13	(s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) (s) (s) (s) (s) (s) (s)	<sup>R</sup> 10 <sup>R</sup> 10 <sup>R</sup> 10 <sup>R</sup> 10 <sup>R</sup> 9 <sup>R</sup> 10 10 <b>78</b>	R 12 R 11 R 12 I1 R 12 R 11 R 12 I2 <b>93</b>	<sup>R</sup> 561 R 484 R 348 277 218 R 199 R 199 R 194 212 <b>2,493</b>	359 R 340 R 348 344 R 376 R 401 437 436 <b>3,041</b>	734 R 678 R 699 R 689 R 809 R 842 931 880 <b>6,262</b>	R 1,654 R 1,502 R 1,395 R 1,310 1,403 R 1,442 1,561 1,528 <b>11,796</b>
2011 8-Month Total 2010 8-Month Total	37 41	2,171 2,071	430 453	2,638 2,564	(s) 1	13 12	1 (s)	(s) (s)	77 75	92 88	2,730 2,652	3,057 3,047	6,394 6,413	12,181 12,112

<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 biofuels that have been blended with petroleum—biofuels are 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. - =No data reported. (s)=Less than 0.5 trillion Btu. Notes:

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

<sup>a</sup> Electricity retail sales.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption. Source: Table 2.4.

## Table 2.4 Industrial Sector Energy Consumption

(Trillion Btu)

1973 Total 1975 Total 1980 Total 1985 Total	Coal 4,057 3,667 3,155 2,760	Fossi Natural Gas <sup>c</sup> 10,388 8,532	Petro- leum <sup>d</sup>	Total <sup>e</sup>	Hydro- electriç	F	Renewabl	e Energy	b			Elec-	Electrical	
1975 Total 1980 Total 1985 Total	4,057 3,667 3,155	Gas <sup>c</sup> 10,388	leum <sup>d</sup>	Total <sup>e</sup>	electric									
1975 Total 1980 Total 1985 Total	3,667 3,155				Power <sup>f</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total Primary	tricity Retail Sales <sup>g</sup>	System Energy Losses <sup>h</sup>	Total <sup>e</sup>
1995 Total           1995 Total           1997 Total           1997 Total           1998 Total           1999 Total           2000 Total           2001 Total           2002 Total           2003 Total           2004 Total           2005 Total           2005 Total           2006 Total           2006 Total           2007 Total           2008 Total           2009 Total	2,192 2,019 2,041	8,333 7,032 8,451 9,591 9,901 9,933 9,375 9,500 8,676 8,832 8,488 8,550 7,907 7,861 8,074 8,074 8,074	9,083 8,127 9,509 7,714 8,251 8,255 9,019 9,255 9,075 9,168 9,075 9,168 9,107 9,825 9,107 9,825 9,197 9,825 9,197 9,825 9,197 9,825 9,197 9,825 9,509 9,197 9,825 9,509 9,109 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255 9,107 9,255	23,521 20,339 20,962 17,492 19,463 20,727 21,629 21,248 21,016 20,075 20,079 19,777 20,559 19,538 19,606 19,414 18,431 16,797	35 32 33 33 31 55 61 55 55 61 55 55 49 49 42 23 33 33 33 22 9 29 9 16 17 18	NA NA NA 2 3 3 3 3 4 4 5 5 5 3 4 4 5 5 5 4 4 5 5 4	NA NA NA - - - - - - - - - - - - - - - -	NA NA NA - - - - - - - - - - - - - - - -	1,165 1,063 1,600 1,918 1,934 1,959 1,972 1,882 1,872 1,882 1,872 1,882 1,877 1,887 1,676 1,676 1,677 1,837 1,936 2,028 1,994	1,200 1,963 1,633 1,951 1,717 1,992 2,033 2,057 1,929 1,934 1,929 1,934 1,929 1,934 1,719 1,720 1,720 1,720 1,853 1,873 1,853 1,956 2,049 2,049	24,720 21,434 22,595 19,443 21,180 22,719 23,410 23,686 23,177 22,950 22,824 21,794 21,799 21,503 22,412 21,411 21,536 21,370 20,480 18,813	2,341 2,346 2,781 2,855 3,226 3,527 3,547 3,547 3,611 3,611 3,400 3,379 3,454 3,473 3,473 3,473 3,473 3,457 3,451 3,507 3,444 3,130	5,562 5,632 6,664 6,518 7,404 7,796 7,968 8,079 8,203 8,203 8,203 7,526 7,525 7,525 7,635 7,517 7,415 7,517 7,365 6,582	32,623 29,413 32,039 28,816 31,810 33,971 34,904 35,200 34,843 34,764 32,720 32,662 32,532 32,532 32,520 32,446 32,294 32,294 31,290 28,525
2010 January February March April June July August September October November December Total	126 130 136 130 131 130 132 132 134 136 132	737 681 695 630 638 619 631 635 630 647 672 742 7,959	648 614 728 680 655 675 665 745 718 675 679 728 <b>8,210</b>	1,508 1,429 1,562 1,441 1,427 1,424 1,429 1,515 1,484 1,452 1,479 1,602 <b>17,753</b>	2 2 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)		185 170 188 181 183 182 188 190 185 190 190 198 <b>2,230</b>	187 172 190 183 185 183 190 191 187 192 191 199 <b>2,250</b>	1,695 1,601 1,752 1,624 1,612 1,608 1,618 1,707 1,671 1,671 1,802 <b>20,003</b>	258 253 267 268 280 284 292 300 284 280 284 280 272 274 <b>3,313</b>	535 511 538 543 635 625 621 626 557 559 581 604 <b>6,934</b>	2,487 2,365 2,557 2,435 2,527 2,517 2,532 2,633 2,512 2,482 2,542 2,482 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,523 2,525 2,535 2,535 2,535 2,535 2,557
2011 January February April June July August September October November December Total	132 128 134 120 125 124 120 125 126 126 126 125 130 <b>1,516</b>	763 690 720 673 8640 650 8662 654 683 705 757 8 <b>8,270</b>	R 727 R 602 R 741 R 645 R 647 R 657 R 657 R 657 R 657 R 668 R 701 713 R 632 R 632 R <b>8,121</b>	R 1,622 R 1,420 R 1,597 R 1,437 R 1,446 R 1,445 R 1,425 R 1,427 R 1,521 R 1,542 R 1,542 R 1,522 R 1,522 R 17,918	1 2 2 1 1 1 1 1 2 R <b>17</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	R 200 R 178 R 193 R 183 R 185 R 189 I 92 R 193 R 193 R 193 R 191 R 195 R 204 R <b>2,291</b>	R 202 R 180 R 196 R 185 187 R 191 R 194 R 195 R 189 R 193 R 193 R 197 R 206 R 2,313	R 1,824 R 1,600 R 1,793 R 1,622 R 1,633 R 1,616 R 1,620 1,716 R 1,637 R 1,703 R 1,738 R 1,728 R 20,231	R 273 R 261 R 280 R 274 R 280 R 286 R 298 R 304 R 290 R 288 R 276 R 273 R <b>3,382</b>	R 560 R 512 R 583 R 571 R 607 R 613 R 646 R 623 R 546 R 552 R 579 R 581 R 579 R 579 R <b>7,007</b>	R 2,657 R 2,373 R 2,657 R 2,468 R 2,520 R 2,515 R 2,564 R 2,643 R 2,643 R 2,643 R 2,570 R 2,595 R 2,579 R <b>30,620</b>
2012 January February April May June July August 8-Month Total 2011 8-Month Total	121 125 115 117 111 118 120 <b>948</b> 1.009	766 721 709 679 677 665 <sup>R</sup> 676 688 <b>5,582</b> 5,470	R 683 R 654 613 661 R 630 640 676 <b>5,183</b> <b>5,407</b>	<sup>R</sup> 1,572 <sup>R</sup> 1,496 1,463 1,413 1,455 <sup>R</sup> 1,406 <sup>R</sup> 1,434 1,484 1,484 11,723 11.896	2 2 2 2 1 1 1 <b>1</b> <b>12</b> <b>12</b>	(s) (s) (s) (s) (s) (s) (s) (s) 3	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) (s) (s) (s) (s) (s) (s)	R 199 R 184 R 185 R 179 R 190 R 185 R 186 186 <b>1,494</b> <b>1,514</b>	R 201 R 186 R 187 R 181 R 192 R 186 R 188 187 <b>1,508</b>	1,773 <sup>R</sup> 1,681 <sup>R</sup> 1,651 1,593 <sup>R</sup> 1,647 1,592 <sup>R</sup> 1,622 1,672 <b>13,232</b> <b>13,425</b>	R 269 266 R 276 R 275 288 R 284 R 296 299 <b>2,252</b> <b>2,256</b>	R 550 R 530 R 555 R 551 R 620 R 630 604 <b>4,635</b> <b>4,716</b>	R 2,592 R 2,477 R 2,482 2,419 R 2,555 R 2,471 R 2,548 2,575 <b>20,119</b> <b>20,397</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

 <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 biofuels that have been blended with petroleum--biofuels

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

Tables 1.4a and 1.4b. f Conventional hydroelectric power.

<sup>1</sup> Conventional nydroelectric power.
 <sup>9</sup> Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
 <sup>h</sup> Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are

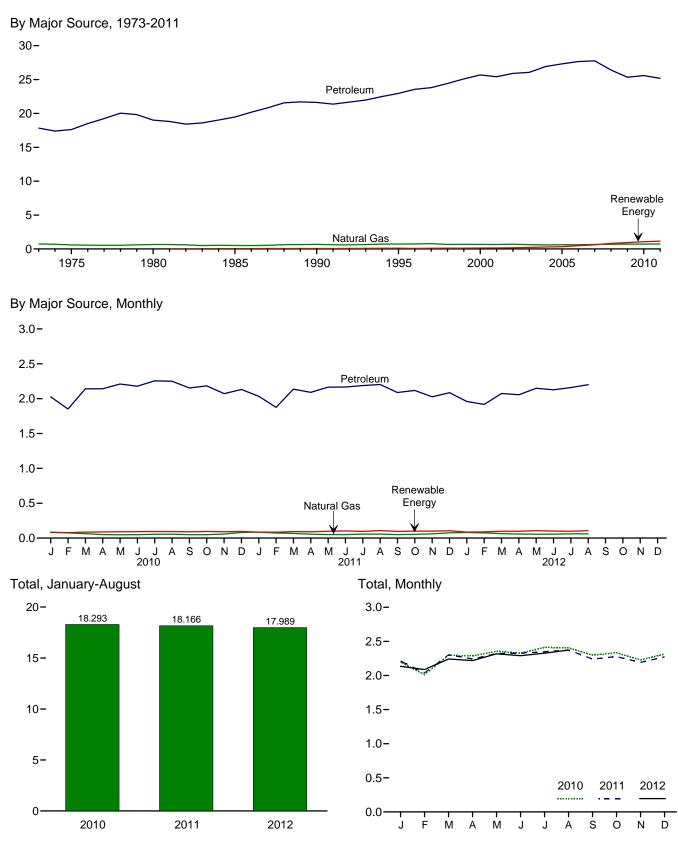
allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.

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

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

 Web Page:
 See http://www.eia.gov/totalenergy/data/monthly/#consumption

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)

Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption. Source: Table 2.5.

## Table 2.5 Transportation Sector Energy Consumption

(Trillion Btu)

			Primary Con	sumptiona			_		
		Fossi	Fuels		Renewable Energy <sup>b</sup>	Total	Electricity Retail	Electrical System	
	Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Total	Biomass	Total Primary	Sales <sup>e</sup>	Energy Losses <sup>f</sup>	Total
973 Total	3	743	17,832	18,577	NA	18,577	11	25	18,613
975 Total	1	595	17,615	18,210	NA	18,210	10	24	18,245
980 Total	( <sup>g</sup> )	650	19,009	19,659	NA	19,659	11	27	19,697
985 Total	(g)	519	19,472	19,992	50	20,041	14	32	20,088
990 Total	( <sup>g</sup> )	680	21,626	22,306	60	22,366	16	37	22,420
995 Total	(g)	724	22,955	23,679	112	23,791	17	38	23,846
996 Total	(g)	737	23,565	24,302	81	24,383	17	38	24,437
997 Total	(g)	780	23,813	24,593	102	24,695	17	38	24,750
998 Total	(g)	666	24,422	25,088	113	25,201	17	38	25,256
99 Total	(g)	675	25,098	25,774	118	25,891	17	40	25,949
00 Total	(g)	672	25,682	26,354	135	26,489	18	42	26,548
001 Total	(g)	658	25,412	26,070	142	26,213	20	43	26,275
02 Total	(g)	699	25,913	26,612	170	26,781	19	42	26,842
03 Total	(g)	627	26,063	26,690	230	26,920	23	51	26,994
04 Total	(g)	602	26,925	27,527	290	27,817	25	54	27,895
005 Total	(g)	624	27,309	27,933	339	28,272	26	56	28,353
006 Total	(g)	625	27,651	28,276	475	28,751	25	54	28,830
007 Total	(g)	663	27,763	28,427	602	29,029	28	60	29,117
008 Total	(g)	692	26,407	27,099	826	27,925	26	56	28,008
009 Total	(g)	715	25,339	26,054	935	26,989	27	56	27,071
10 January	( <sup>g</sup> )	84	2,025	2,109	81	2,190	2	5	2,198
February	(g)	74	1,851	1,926	79	2,004	2	5	2,012
March	(g)	64	2,141	2,205	85	2,290	2	5	2,297
April	(9)	50	2,142	2,193	87	2,280	2	4	2,286
May	(9)	48	2,209	2,257	92	2,349	2	5	2,356
June	(g)	49	2,179	2,228	93	2,320	2	5	2,328
July	(9)	54	2,256	2,310	94	2,404	2	5	2,411
August	(9)	56	2,250	2,306	94	2,399	2	4	2,406
September	(g)	48	2,153	2,202	90	2,291	2	4	2,298
October	(g)	49	2,184	2,233	94	2,327	2	4	2,333
November	(g)	59	2,072	2,131	91	2,221	2	4	2,228
December	(g)	81	2,132	2,213	94	2,307	2	5	2,314
Total	(g)	716	25,595	26,310	1,074	27,384	26	55	27,466
11 January	(g)	86	R 2,034	2,120	86	R 2,205	2	5	2,213
February	(g) (g)	73	1,876	1,949	84	2,033	2	4	2,039
March		67	2,136	2,203	93	2,296	2	5	2,303
April	(g) (g)	55 8 50	2,091	2,146	90	2,236	2	4	2,243
May	(9)	R 50	R 2,165	2,216	98	2,314	2	5	2,321
	(9)	50	2,167	R 2,217	102	2,320	2	5	2,327
July	(9)	57	2,188	2,245	96	2,341	2	5 4	2,348
August	(9)	57	2,203	2,260	107	2,366	2 2	4	2,373
September	(9)	50 53	2,088	2,138	96	2,234	2		2,240
October	(9)	53 <sup>R</sup> 60	2,118	2,171 B 2,086	100	2,271		4	2,277
November	(9)		2,026	R 2,086	99	2,186 <sup>R</sup> 2,266	2 2	4 5	2,192 B 2 272
December Total	(g)	75 <b>733</b>	2,086 <sup>R</sup> <b>25,179</b>	2,161 <sup>R</sup> <b>25,911</b>	105 <b>1,157</b>	R 2,266	2 26	5 54	<sup>R</sup> 2,273 <sup>R</sup> <b>27,149</b>
12 January	(9)	<sup>R</sup> 81	1.960	<sup>R</sup> 2.041	86	2.127	2	5	2.134
February	(9)	74	1,917	1,991	89	2,080	2	4	2.087
March	(9)	<sup>R</sup> 63	2.074	2,137	98	2,235	2	4	2,001
April	(9)	<sup>R</sup> 58	2,056	<sup>R</sup> 2,114	98	R 2,212	2	4	2,219
May	(g)	56	2,149	2,205	107	2,312	2	R 4	R 2,318
June	(9)	56	2,127	2 183	101	2,284	2	4	R 2,290
July	(g)	62	2,160	R 2,222	98	2,204	2	5	2,200
August	(g)	60	2,200	2,260	106	2,366	2	4	2,373
8-Month Total	(g)	511	16,643	17,154	782	17,936	17	35	17,989
11 8-Month Total	( <sup>g</sup> )	494	16,861	17,355	756	18,111	18	37	18,166
10 8-Month Total	(g)	479	17,054	17,533	705	18,237	18	37	18,293

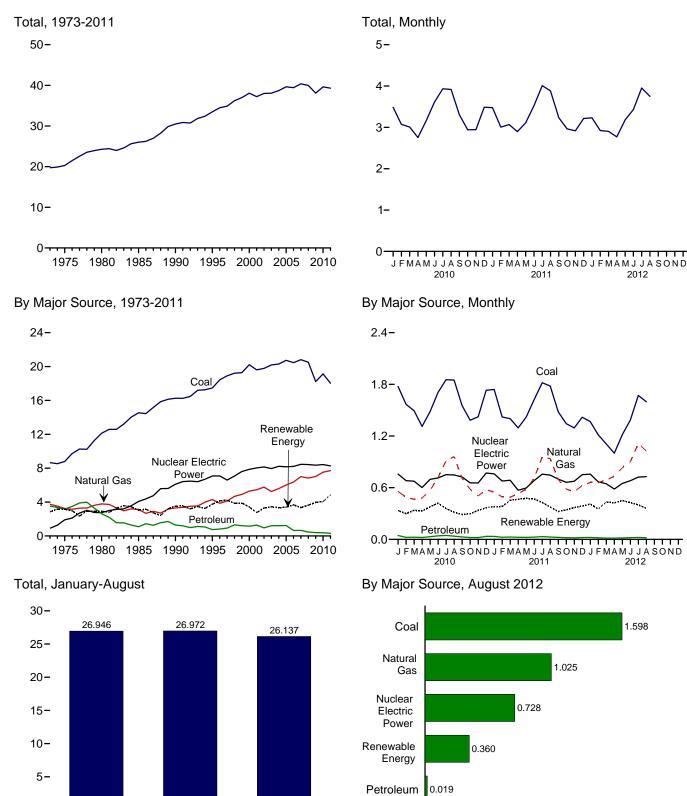
<sup>a</sup> See "Primary Energy Consumption" in Glossary.
 <sup>b</sup> Data are estimates. See Table 10.2b for notes on series components.
 <sup>c</sup> Natural gas only; does not include supplemental gaseous fuels. See Note 3,
 "Supplemental Gaseous Fuels," at end of Section 4.
 <sup>d</sup> Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."
 <sup>e</sup> Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1906. other aperative services.

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

electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.
<sup>9</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.gov/totalenergy/data/monthly/#consumption 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)



Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption. Source: Table 2.6.

2011

0.0

0.5

1.0

1.5

2.0

2012

0-

2010

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

Primary Consumptiona Fossil Fuels Renewable Energy<sup>b</sup> Electricity Net Nuclear Hydroelectric Natural Petro Geo-Bio-Electric Solar/ Total Coal Gasc leum Total Power Powerd thermal ΡV Wind mass Total Imports Primary 8,658 8,786 3,748 3,240 3,515 3,166 15,921 15,191 2,827 3,122 20 34 53 NA NA NA NA 2,851 3,158 1973 Total ..... 910 19.731 3 2 49 20,270 1975 Total ..... 1,900 21 1980 Total 12,123 3,778 2,634 18,534 2,739 2,867 NA NA 4 2,925 71 24,269 1985 Total 14,542 16,261 3,135 3,309 1,090 1,289 18,767 20,859 4,076 2,937 3,014 <u>97</u> 161 (s) <u>(s)</u> 29 <u>14</u> 317 3,049 3,524 140 26,032 30,495 1990 Total<sup>e</sup> ..... 4,302 3,862 755 817 22,523 23,109 3,149 3,528 3,747 4,153 134 33,479 34,485 1995 Total ..... 17,466 7,075 138 5 5 33 422 1996 Total ..... 18,429 148 33 137 7.087 438 34 31 46 1997 Total ..... 18,905 4,126 927 23,957 6,597 3,581 150 5 446 4,216 34,886 116 1998 Total 19,216 19,279 4.675 1,306 1,211 25,197 7,068 3,241 3,218 151 5 5 444 3,872 3,874 88 36.225 453 99 1999 Total ..... 4.902 25.393 152 36.976 2,768 57 70 3,427 2,763 20,220 5,293 5,458 26,658 7,862 38,062 37,215 2000 Total ..... 1,144 144 453 115 2001 Total ..... 26,348 26,511 75 72 19.614 1,277 8.029 142 6 337 19,783 8,145 105 3,288 38,016 2002 Total ..... 2,650 147 380 6 5.767 961 2003 Total ..... 3,445 3,340 3,406 20,185 5,246 1,205 26,636 7,959 2,781 148 5 115 397 22 38,062 2,656 2004 Total 20,305 20,737 5,595 1,212 1,235 27,112 27,986 8,222 8,161 148 6 6 142 388 39 38,713 39,638 2005 Total ..... 6,015 2,670 147 178 406 85 8,215 8,455 8,427 2006 Total ..... 20,462 6,375 648 27,485 2,839 145 5 264 412 3,665 63 39,428 2,430 2,494 3,345 2007 Total ..... 20.808 7,005 657 28,470 27,810 145 6 9 341 423 107 40,377 6,829 20,513 468 546 435 3,630 112 39,978 2008 Total ..... 146 2009 Total ..... 18,225 7,022 390 25,638 8,356 2,650 146 9 721 441 3,967 116 38,077 45 2,377 758 217 2010 January ..... 1,775 557 13 (s) 67 39 335 14 3,484 February ..... 1 568 489 23 25 2,080 1,984 682 199 11 13 (s) 1 53 84 36 39 300 12 10 3,073 3,008 466 676 338 1,494 202 March 23 31 1,815 95 36 9 2,755 April ..... 1,312 480 602 184 12 1 329 85 36 5 9 May .. 1,483 570 2.084 697 243 13 1 378 3,163 1,708 41 2,468 714 12 79 39 3,611 June ..... 290 2 421 719 July ..... 1.855 914 46 2,815 752 238 12 2 66 40 358 10 3,934 1,849 37 28 August ..... 2.847 41 315 961 748 195 13 2 65 6 2 3.917 69 77 95 September ..... 1,554 709 2,291 725 12 38 37 288 3,306 168 1 October ..... 22 21 2,942 2,944 1.383 581 1,986 656 171 12 12 1 298 1 1,423 1,731 November ..... 506 1,950 655 190 39 337 3 1 December ..... 36 2.34 13 88 41 ĝ 3,488 575 367 (s) Total ..... 19,133 7.527 378 27.039 8.434 2.521 148 Ì2 923 459 4.064 89 39,626 <sup>R</sup> 37 <sup>R</sup> 247 <sup>R</sup> 381 <sup>R</sup> 1,741 <sup>R</sup> 550 <sup>R</sup> 35 R 2,326 <sup>R</sup> 761 <sup>R</sup>13 <sup>R</sup> 83 9 <sup>R</sup> 3,477 2011 January ..... (s) <sup>R</sup> 1,421 <sup>R</sup> 1,401 R 3,005 R 3,069 <sup>R</sup> 493 <sup>R</sup> 678 <sup>R</sup> 12 <sup>R</sup> 102 <sup>R</sup> 382 R 24 R 1,938 R 233 February ..... 1 35 8 8 <sup>R</sup> 687 <sup>R</sup> 571 <sup>R</sup> 597 491 R 1,920 R 301 R 13 R 102 <sup>R</sup> 36 R 453 March ..... <sup>R</sup> 28 1 <sup>R</sup> 531 <sup>R</sup> 583 R 301 R 315 R 32 R 34 R 2,895 R 3,111 <sup>R</sup> 1,294 R 24 R 24 <sup>R</sup> 12 R 467 R 477 R 1,850 121 <sup>R</sup>114 April ..... 2 2 <sup>R</sup> 1,418 R 2,025 R 13 May ..... 12 11 <sup>R</sup> 683 <sup>R</sup> 12 R R 712 <sup>R</sup> 26 R 2,361 R 311 2 <sup>R</sup> 107 R 37 <sup>R</sup> 469 <sup>R</sup> 3,524 June ..... 1,623 <sup>R</sup> 1,819 R 32 R 27 <sup>R</sup>757 746 <sup>R</sup> 303 <sup>R</sup> 249 R 12 R 12 <sup>R</sup>73 <sup>R</sup>73 <sup>R</sup> 39 <sup>R</sup> 4,008 July ..... <sup>R</sup> 955 <sup>R</sup> 938 <sup>R</sup> 2,806 <sup>R</sup> 2,745 2 2 <sup>R</sup> 429 <sup>R</sup> 376 16 <sup>R</sup> 3,883 August ..... R 39 1.78016 <sup>R</sup>700 R 2,201 <sup>R</sup> 12 September ..... R 1,481 <sup>R</sup> 696 <sup>R</sup>24 R 207 67 37 R 323 10 <sup>R</sup> 3,234 <sup>R</sup> 102 R 191 October ..... R 1,343 R 585 R 20 R 663 <sup>R</sup> 12 R 343 R 2.964 R 1.949 R 1 36 10 8 <sup>R</sup> 199 <sup>R</sup> 12 <sup>R</sup> 121 <sup>R</sup> 1,294 R 552 R 18 R 1,864 R 675 36 R 369 R 2,916 November ..... 1 R 1,419 <sup>R</sup> 22 <sup>R</sup>752 R 229 <sup>R</sup> 103 R 3,214 <sup>R</sup> 625 R 2,066 <sup>R</sup>13 39 R 386 12 December ..... <sup>R</sup> 149 <sup>R</sup> 17 <sup>R</sup> 437 <sup>R</sup> 39,301 <sup>R</sup> 18,035 <sup>R</sup> 7,712 <sup>R</sup> 303 <sup>R</sup> 3,085 <sup>R</sup> 1,167 <sup>R</sup> 4,855 Total ..... R 26,050 <sup>R</sup> 8,269 127 <sup>R</sup> 37 <sup>R</sup> 410 2012 January ..... R 1,368 <sup>R</sup> 660 <sup>R</sup> 23 <sup>R</sup> 2,051 757 <sup>R</sup> 225 14 1 <sup>R</sup> 134 11 <sup>R</sup> 3,230 <sup>R</sup> 353 <sup>R</sup> 1,214 <sup>R</sup> 660 <sup>R</sup> 18 <sup>R</sup> 1,892 R 668 R 196 R 34 R 2.922 108 <sup>R</sup> 135 February ..... 13 14 1 9 R 1,812 R 249 R 35 R 435 R 2,903 March ..... 1,108 <sup>R</sup> 689 15 <sup>R</sup> 646 2 10 R 15 R 17 <sup>R</sup> 124 R 31 R 35 <sup>R</sup> 1,001 <sup>R</sup> 585 R 424 R 451 R 2,770 R 3,181 April ..... <sup>R</sup> 733 <sup>R</sup> 832 <sup>R</sup> 1,748 <sup>R</sup> 2,065 <sup>R</sup> 252 <sup>R</sup> 276 13 3 R5 13 15 <sup>R</sup> 122 <sup>R</sup> 1,216 R 650 May ..... 14 <sup>R</sup> 116 <sup>R</sup> 85 <sup>R</sup> 36 <sup>R</sup> 901 <sup>R</sup> 20 R 2,306 <sup>R</sup> 682 <sup>R</sup> 257 <sup>R</sup> 13 <sup>R</sup> 428 <sup>R</sup> 3,429 June ..... 1,385 5 14 R 259 224 R 1,672 <sup>R</sup> 5 <sup>R</sup> 38 R 401 360 R 3,951 3,750 <sup>R</sup> 1,113 23 19 R 2,808 2,643 723 728 14 13 July ..... 19 38 1,598 1.025 80 19 August ..... 4 8-Month Total ..... 10,561 6,614 150 17,325 5,439 1,938 108 27 905 284 3,262 110 26,137 2011 8-Month Total ...... 17,970 5,480 774 593 3,434 2,774 12,498 5,252 220 2,259 100 11 290 88 26,972 2010 8-Month Total ..... 13,043 5,155 272 18,469 5,628 1,768 99 9 305 74 26,946

See "Primary Energy Consumption" in Glossary

b

 <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. Conventional hydroelectric power.

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available data beginning in 1973.

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

## **Energy Consumption by Sector**

**Note 1. Energy Consumption Data and Surveys.** Most of the data in this section of the Monthly Energy Review (MER) are developed from a group of energy-related surveys, typically called "supply surveys," conducted by the U.S. Energy Information Administration (EIA). Supply surveys are directed to suppliers and marketers of specific energy sources. They measure the quantities of specific energy sources produced, or the quantities supplied to the market, or both. The data obtained from EIA's supply surveys are integrated to yield the summary consumption statistics published in this section (and in Section 1) of the MER.

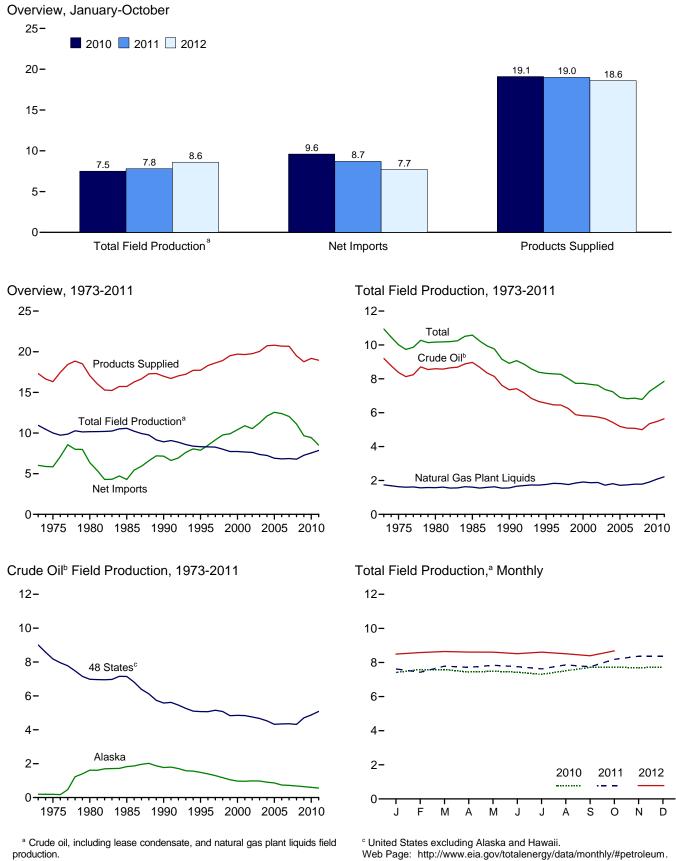
Users of EIA's energy consumption statistics should be aware of a second group of energy-related surveys, typically called "consumption surveys." Consumption surveys gather information on the types of energy consumed by end users of energy, along with the characteristics of those end users that can be associated with energy use. For example, the Manufacturing Energy Consumption Survey belongs to the consumption survey group because it collects information directly from end users (the manufacturing establishments). There are important differences between the supply and consumption surveys that need to be taken into account in any analysis that uses both data sources. For information on those differences, see Energy Consumption by End-Use Sector, A Comparison of Measures by Consumption and Supply Surveys, DOE/EIA-0533, U.S. Energy Information Administration, Washington, DC, April 6, 1990.

Note 2. Electrical System Energy Losses. Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector (see Table 2.6) and the total energy content of electricity retail sales (see Tables 7.6 and A6). Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. The loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring those thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, about two thirds of total energy input is lost in conversion. Currently, of electricity generated, approximately 5 percent is lost in plant use and 7 percent is lost in transmission and distribution.

# 3. Petroleum

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



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

Source: Table 3.1.

#### Table 3.1 **Petroleum Overview**

(Thousand Barrels per Day)

		Fie	eld Produc	tion <sup>a</sup>		Demons			Trade				
	48 States <sup>d</sup>	Crude Oil <sup>t</sup> Alaska	o,c Total	NGPL <sup>e,f</sup>	Total <sup>c</sup>	Renew- able Fuels and Oxy- genates <sup>g</sup>	Process- ing Gain <sup>h</sup>	lm- ports <sup>i</sup>	Ex- ports <sup>f</sup>	Net Imports <sup>j</sup>	Stock Change <sup>k</sup>	Adjust- ments <sup>c,l</sup>	Petroleum Products Supplied
1973 Average         1975 Average         1980 Average         1980 Average         1985 Average         1996 Average         1997 Average         1998 Average         1999 Average         1997 Average         2000 Average         2001 Average         2003 Average         2004 Average         2005 Average         2006 Average         2006 Average         2007 Average         2008 Average         2009 Average	8,183 6,980 7,146 5,582 5,076 5,077 4,832 4,851 4,839 4,759 4,670 4,527 4,322 4,348 4,355 4,318	198 191 1,617 1,825 1,773 1,484 1,393 1,296 1,175 1,050 970 963 985 974 908 864 741 722 683 645	9,208 8,375 8,971 7,355 6,560 6,452 6,252 5,801 5,822 5,801 5,744 5,435 5,186 5,089 5,077 5,000 5,353	1,738 1,633 1,573 1,609 1,559 1,762 1,830 1,817 1,759 1,850 1,911 1,868 1,880 1,719 1,719 1,719 1,739 1,783 1,784 1,910	10,946 10,007 10,1781 8,914 8,295 8,269 8,011 7,731 7,624 7,363 7,670 7,624 7,363 7,624 7,363 7,624 7,363 7,624 7,363 7,624 7,263	NA NA NA NA NA NA NA NA NA NA NA NA NA 746	453 460 597 557 683 774 837 850 886 886 886 886 948 903 957 974 1,051 989 994 994 993 979	6,256 6,056 6,909 5,067 8,018 8,835 9,478 10,162 10,708 11,459 11,459 11,459 11,459 12,264 13,714 13,707 13,468 12,915 11,691	231 209 544 781 1,003 949 981 1,040 971 984 1,040 971 1,048 1,165 1,317 1,802 2,024	6,025 5,846 6,365 4,286 7,161 7,898 9,158 9,764 9,912 10,419 10,900 10,546 11,238 12,097 12,549 12,390 12,390 12,114 9,667	135 32 140 -103 107 -246 -151 143 239 -422 -69 325 -105 56 209 145 60 -148 195 109	18 41 64 2000 338 496 528 487 532 501 529 514 548 506 536 641 802 226	17,308 16,322 17,056 15,726 16,988 17,725 18,309 18,620 18,917 19,519 19,701 20,034 20,731 20,680 19,498 18,771
2010 January February April May June July August September October November December Average	4,911 4,867 4,738 4,827 4,849 4,849 4,769 4,906 4,994 4,978 4,952 4,982	640 635 646 640 571 534 538 614 618 606 632 <b>601</b>	5,399 5,546 5,513 5,377 5,398 5,384 5,313 5,445 5,608 5,568 5,558 5,614 <b>5,479</b>	2,017 2,043 2,061 2,061 2,046 1,994 2,071 2,104 2,125 2,136 2,124 <b>2,074</b>	7,416 7,589 7,589 7,438 7,430 7,307 7,515 7,712 7,721 7,694 7,739 <b>7,553</b>	846 874 895 878 893 905 906 911 915 924 967 961 <b>907</b>	961 1,060 1,064 1,028 1,069 1,109 1,123 1,062 1,012 1,051 1,187 <b>1,068</b>	11,300 11,230 11,621 12,526 12,141 12,444 12,675 12,356 11,823 11,142 11,096 11,132 <b>11,793</b>	1,897 2,034 2,149 2,432 2,399 2,304 2,516 2,410 2,345 2,480 2,598 2,644 <b>2,353</b>	9,404 9,197 9,472 10,093 9,742 10,140 10,159 9,946 9,478 8,662 8,498 8,488 <b>9,441</b>	309 -46 77 762 661 373 440 214 -23 -451 -667 -1,068 <b>49</b>	334 85 156 368 334 350 279 380 249 203 100 279 <b>261</b>	18,652 18,850 19,099 19,044 18,866 19,537 19,319 19,662 19,438 18,974 18,977 19,722 <b>19,180</b>
2011 January February April May July August September October November December Average	R 4,810 4,980 R 4,921 5,022 5,017 R 4,966 5,108 R 4,991 R 5,306 R 5,399 R 5,408	R 464 611 R 611 606 R 582 553 R 453 R 526 585 R 566 593 R 592 R 592 R 561	R 5,506 5,422 R 5,591 R 5,527 R 5,604 5,570 R 5,634 R 5,634 R 5,575 R 5,634 R 5,575 R 5,872 R 6,000 R <b>5,644</b>	2,114 2,009 2,195 2,186 2,234 2,188 2,206 2,227 2,171 2,313 2,373 2,358 <b>2,216</b>	R 7,620 R 7,430 R 7,785 R 7,714 R 7,837 7,758 R 7,625 R 7,861 R 7,746 R 8,185 R 8,365 R 8,359 R <b>7,860</b>	982 972 1,002 996 992 1,015 1,004 1,027 1,011 1,023 1,076 1,085 <b>1,016</b>	1,019 954 1,013 1,013 1,085 1,106 1,122 1,133 1,123 1,123 1,123 1,134 1,113	12,248 10,738 11,850 11,808 11,866 11,877 11,757 11,227 11,277 11,217 11,053 11,217 11,064 <b>11,504</b>	2,750 2,634 2,733 3,071 2,735 2,716 3,053 3,002 3,174 3,107 3,159 3,667 <b>2,986</b>	9,497 8,104 9,117 8,736 9,131 9,161 8,704 8,224 8,095 7,946 8,059 7,397 <b>8,518</b>	484 -1,033 -139 105 884 59 231 -644 -492 -371 23 -646 -121	R 359 380 R 266 R 297 R 318 272 R 553 R 525 R 424 R 246 R 489 R 181 R <b>358</b>	18,993 18,873 19,329 18,650 18,479 19,253 18,778 19,415 18,892 18,844 19,080 18,803 <b>18,949</b>
2012 January February April May July August September October 10-Month Average 2011 10-Month Average	RE 5,612 RE 5,701 RE 5,675 RE 5,684 RE 5,688 RE 5,867 RE 5,742 E 5,770	RE 593 E 582 E 567 E 553 E 546 E 493 E 415 RE 404 E 500 E 546 E 520 555	RE 6,119 RE 6,194 RE 6,268 RE 6,229 RE 6,220 RE 6,181 RE 6,282 RE 6,181 RE 6,270 E 6,634 E 6,256 5,574	2,376 2,388 2,375 2,382 2,376 2,335 2,323 R 2,367 E 2,123 E 2,045 E <b>2,309</b> <b>2,186</b>	RE 8,494 RE 8,582 RE 8,643 RE 8,610 RE 8,606 RE 8,517 RE 8,605 RE 8,514 E 8,393 E 8,679 E 8,565 7,760	1,021 1,012 994 1,001 1,018 1,004 929 R 957 E 887 E 886 E <b>971</b> 1,003	1,053 1,068 1,023 1,047 1,089 1,069 R 1,102 E 1,072 E 1,073 E 1,069 1,067	10,944 10,464 10,610 10,634 11,132 11,393 10,748 E 10,748 E 10,295 E 10,767 11,577	2,839 2,980 3,064 3,263 3,194 3,209 3,211 R 3,017 E 2,904 E 2,795 E <b>3,047</b> <b>2,899</b>	8,104 7,484 7,547 7,370 7,939 8,184 7,537 R 7,881 E 7,640 E 7,500 E 7,720 8,677	655 -228 409 -18 524 493 33 R-272 E 215 E -22 E 181 -82	R 262 R 386 R 414 R 283 R 580 R 605 R 503 R 501 E 614 E 678 E <b>483</b> <b>363</b>	18,280 18,760 18,213 18,330 18,707 18,915 18,601 8,9915 18,601 E 18,391 E 18,838 E <b>18,626</b> <b>18,952</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.

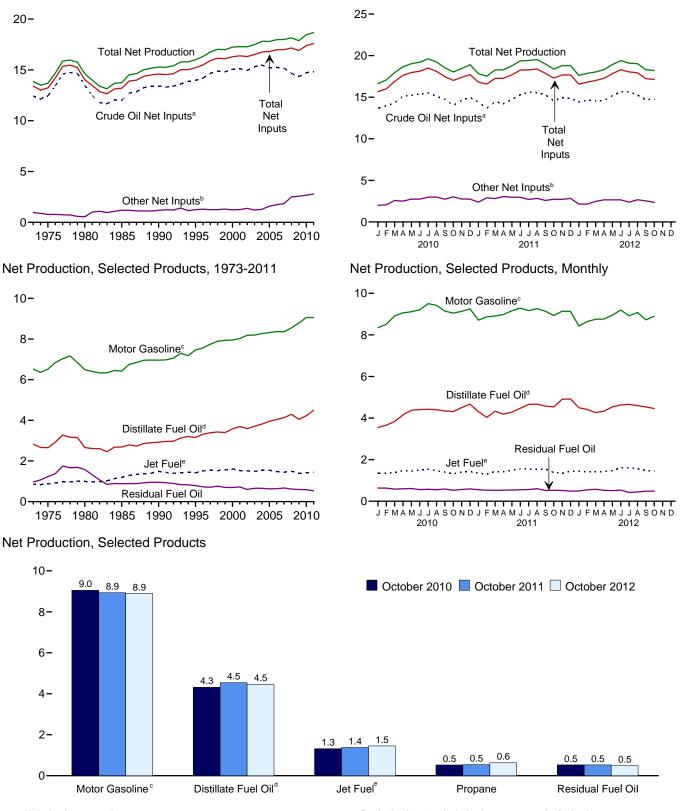
<sup>b</sup> Includes lease condensate.
 <sup>c</sup> Data for crude oil production, total field production, and adjustments are revised monthly going back as far as the data year of the U.S. Energy Information Administration's (EIA) last published *Petroleum Supply Annual (PSA)*—these revisions are released at the same time as EIA's *Petroleum Supply Monthly*. Once a year, data for these series are revised going back as far as to years—these revisions are released at the same time as the PSA.
 <sup>d</sup> United States excluding Alaska and Hawaii.
 <sup>e</sup> Natural gas plant liquids.
 <sup>f</sup> See Note 6, "Petroleum Data Discrepancies," at end of section.
 <sup>g</sup> Renewable fuels and oxygenate plant net production.
 <sup>h</sup> Refinery and blender net production minus refinery and blender net inputs. See Table 3.2.

<sup>i</sup> Includes Strategic Petroleum Reserve imports. See Table 3.3b.
 <sup>j</sup> Net imports equal imports minus exports.
 <sup>k</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>i</sup> An adjustment for crude oil, hydrogen, oxygenates, renewable fuels, other hydrocarbons, motor gasoline blending components, finished motor gasoline, and distillate fuel oil. See EIA, *Petroleum Supply Monthly*, Appendix B, "PSM Explanatory Notes," for further information.
 R=Revised. E=Estimate. NA=Not available.
 Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
 Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

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

#### Net Inputs and Net Production, 1973-2011

Net Inputs and Net Production, Monthly



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

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

°Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil. <sup>e</sup> Beginning in 2005, includes kerosene-type jet fuel only.

<sup>f</sup> Includes propylene.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum. Source: Table 3.2.

#### Table 3.2 Refinery and Blender Net Inputs and Net Production

(Thousand Barrels per Day)

	Refin	ery and Ble	ender Net li	nputs <sup>a</sup>			Refinery	and Blen	der Net Proc	luction <sup>b</sup>		
							LPG	c				
	Crude Oil <sup>d</sup>	NGPL <sup>e</sup>	Other Liquids <sup>f</sup>	Total	Distillate Fuel Oil <sup>g</sup>	Jet Fuel <sup>h</sup>	Propane <sup>i</sup>	Total	Motor Gasoline <sup>j</sup>	Residual Fuel Oil	Other Products <sup>k</sup>	Total
1973 Average	12,431	815	155	13,401	2,820	859	271	375	6,527	971	2,301	13,854
1975 Average	12,442	710	72	13,225	2,653	871	234	311	6,518	1,235	2,097	13,685
1980 Average	13,481	462	81	14,025	2,661	999	269	330	6,492	1,580	2,559	14,622
1985 Average	12,002	509	681	13,192	2,686	1,189	295	391	6,419	882	2,183	13,750
1990 Average	13,409 13,973	467 471	713 775	14,589	2,925 3,155	1,488 1,416	404 503	499 654	6,959 7,459	950 788	2,452 2,522	15,272 15,994
1995 Average	14,195	471	843	15,220 15,487	3,316	1,416	503	662	7,459	700	2,522	16,324
1996 Average 1997 Average	14,155	416	832	15,909	3,392	1,515	565	691	7,743	708	2,671	16,759
1998 Average	14,889	403	853	16,144	3,424	1,526	550	674	7,892	762	2,753	17,030
1999 Average	14,804	372	927	16,103	3,399	1,565	569	684	7,934	698	2,709	16,989
2000 Average	15,067	380	849	16,295	3,580	1.606	583	705	7,951	696	2,705	17,243
2001 Average	15,128	429	825	16,382	3,695	1,530	556	667	8,022	721	2,651	17,285
2002 Average	14,947	429	941	16,316	3,592	1,514	572	671	8,183	601	2,712	17,273
2003 Average	15,304	419	791	16,513	3,707	1,488	570	658	8,194	660	2,780	17,487
2004 Average	15,475	422	866	16,762	3,814	1,547	584	645	8,265	655	2,887	17,814
2005 Average	15,220	441	1,149	16,811	3,954	1,546	540	573	8,318	628	2,782	17,800
2006 Average	15,242	501 505	1,238 1.337	16,981 16.999	4,040 4.133	1,481 1.448	543 562	627 655	8,364 8.358	635 673	2,827 2.728	17,975 17,994
2007 Average	15,156 14,648	505 485	2,019	17,153	4,133	1,440	519	630	8,548	620	2,720	18,146
2008 Average 2009 Average	14,336	485	2,019	16,904	4,048	1,396	537	623	8,786	598	2,431	17,882
2010 January	13,666	503	1,501	15,670	3,551	1,338	531	480	8,348	633	2,281	16,631
February	13,950	402	1,654	16,005	3,658	1,340	562	540	8,510	632	2,385	17,065
March	14,314	413	2,166	16,893	3,835	1,379	575	726	8,913	581	2,523	17,957
April	15,131	374	2,135	17,640	4,156	1,470	585	850	9,062	598	2,531	18,668
May	15,215	399	2,348	17,963	4,375	1,449	571	857	9,113	615	2,622	19,031
June	15,382	397 384	2,349 2,595	18,127 18,498	4,408 4,425	1,495 1,542	572	870 860	9,211 9,500	559 576	2,670 2,704	19,212 19,607
July	15,519 15,110	304	2,595	18,107	4,425	1,342	574 552	778	9,300	576	2,704	19,007
August September	14,740	443	2,007	17,477	4,404	1,403	551	614	9,420	588	2,003	18,539
October	14.000	504	2,517	17.021	4,315	1,317	526	501	9.049	528	2,323	18.033
November	14,637	531	2,223	17,391	4,503	1,394	543	390	9,134	564	2,457	18,442
December	14,976	563	2,185	17,724	4,670	1,417	572	430	9,252	595	2,547	18,911
Average	14,724	442	2,219	17,385	4,223	1,418	560	659	9,059	585	2,509	18,452
2011 January	14,423	549	1,835	16,807	4,303	1,362	561	431	8,714	552	2,464	17,826
February	13,676 14,451	515 460	2,388 2,350	16,579	4,033 4,326	1,298 1,431	512 528	472 636	8,866 8,908	529 526	2,335 2,454	17,533 18,280
March	14,451	460	2,350	17,261 17,285	4,320	1,431	528 542	781	8,908 8,978	526 534	2,454 2,394	18,298
May	14,718	440	2,535	17,685	4,109	1,479	563	815	9,157	538	2,394	18,770
June	15,294	444	2,522	18,260	4,471	1,568	567	847	9,289	553	2,638	19,366
July	15,589	417	2,288	18,294	4,656	1,550	557	820	9,166	563	2,661	19,416
August	15,556	437	2,396	18,388	4,668	1,543	553	791	9,264	604	2,652	19,522
September	15,275	494	2,100	17,870	4,576	1,553	569	603	9,140	516	2,605	18,993
October	14,570	524	2,205	17,298	4,539	1,378	540	480	8,932	530	2,525	18,382
November	14,960	599	2,118	17,677	4,902	1,341	564	377	9,141	516	2,513	18,790
December Average	14,842 <b>14,806</b>	566 <b>490</b>	2,270 <b>2,300</b>	17,678 <b>17,596</b>	4,919 <b>4,492</b>	1,449 <b>1,449</b>	566 <b>552</b>	368 <b>619</b>	9,128 <b>9,058</b>	486 <b>537</b>	2,462 <b>2,518</b>	18,812 <b>18,673</b>
2012 January	14,415	513	1,633	16,561	4,498	1,437	518	414	8,427	495	2,343	17,613
February	14,659	531	1,618	16,809	4,416	1,401	532	492	8,645	547	2,375	17,876
March	14,545	445	2,022	17,012	4,262	1,412	545	685	8,753	577	2,347	18,035
April	14,614	443	2,215	17,272	4,330	1,433	558	833	8,763	525	2,436	18,319
May	15,177	429	2,228	17,833	4,537	1,468	569	856	8,952	509	2,601	18,922
June	15,632	442	2,222	18,297	4,632	1,609	585	841	9,193	538	2,582	19,396
July	15,656 <sup>R</sup> 15,259	435 <sup>R</sup> 435	1,944 <sup>R</sup> 2,239	18,036 <sup>R</sup> 17,932	4,659 <sup>R</sup> 4,599	1,611 <sup>R</sup> 1,559	565 <sup>R</sup> 543	841 <sup>R</sup> 777	8,921 <sup>R</sup> 9,079	420 <sup>R</sup> 443	2,644 <sup>R</sup> 2,577	19,096 <sup>R</sup> 19,034
August	E 14,696	F 503	RE 2,035	<sup>RF</sup> 17,234	E 4,536	E 1,485	RE 628	F 596	E 8,723	E 482	RE 2,485	RE 18,306
September October	<sup>E</sup> 14,090	F 549	E 1.807	F 17,140	E 4,462	<sup>E</sup> 1,463	E 630	F 466	E 8.898	E 486	E 2,445	E 18,213
10-Month Average	E 14,945	E 472	E 1,997	E 17,415	E 4,494	<sup>E</sup> 1,487	E 567	E 680	E 8,836	E <b>502</b>	E 2,484	E 18,483
2011 10-Month Average	14,788	472	2,321	17,580	4,408	1,459	549	669	9,042	545	2,524	18,647
2010 10-Month Average	14,706	421	2,222	17,349	4,150	1,420	560	709	9,031	586	2,510	18,406

See "Refinery and Blender Net Inputs," in Glossary. See "Refinery and Blender Net Production," in Glossary. Liquefied petroleum gases. b

с

<sup>d</sup> Includes lease condensate.
 <sup>e</sup> Natural gas plant liquids (liquefied petroleum gases and pentanes plus).
 <sup>f</sup> Unfinished oils (net), other hydrocarbons, and hydrogen. Beginning in 1981, also includes aviation and motor gasoline blending components (net). Beginning in 1993, also includes coxygenates (net), including fuel ethanol. Beginning in 2009, also includes renewable diesel fuel (including biodiesel).
 <sup>g</sup> Beginning in 2009, includes renewable diesel fuel (including biodiesel)
 <sup>h</sup> Through 2004, includes kerosene-type and past.

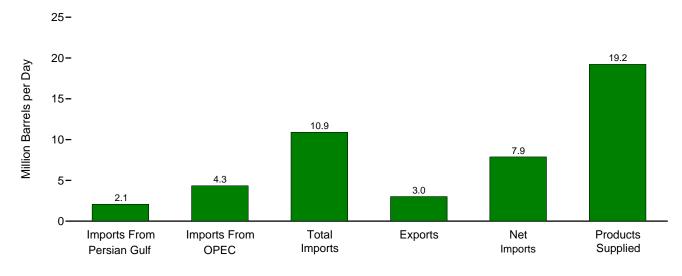
<sup>h</sup> Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other Products."
 <sup>i</sup> Includes propylene.
 <sup>j</sup> Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

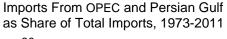
<sup>k</sup> Asphalt and road oil, finished aviation gasoline, kerosene, lubricants, petrochemical feedstocks, petroleum coke, special naphthas, still gas, waxes, and miscellaneous products. Beginning in 2005, also includes naphtha-type jet fuel. R=Revised. E=Estimate. F=Forecast. Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/totalenergy/data/monthly/#petroleum.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: U.S. Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2011: EIA, Petroleum Supply Annual, annual reports. • 2012: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system, Short-Term Integrated Forecasting System, and Monthly Energy Review data system calculations.

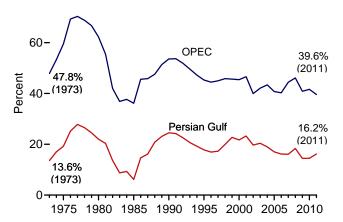
### Figure 3.3a Petroleum Trade: Overview

Overview, August 2012

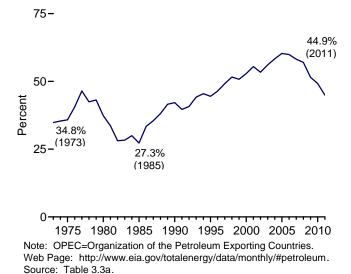




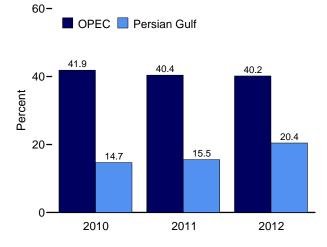




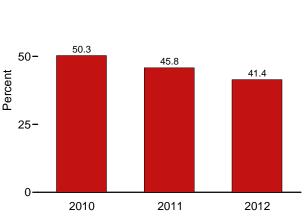
Net Imports as Share of Products Supplied, 1973-2011



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



Net Imports as Share of Products Supplied, January-October



75-

### Table 3.3a Petroleum Trade: Overview

									are of Supplied			nare of mports
	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>	Imports	Exports	Net Imports	Products Supplied	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>	Imports	Net Imports	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>
			Thousand Ba	arrels per Day	/				Pe	rcent		
1973 Average	848	2,993	6,256	231	6,025	17,308	4.9	17.3	36.1	34.8	13.6	47.8
1975 Average	1,165	3,601	6,056	209	5,846	16,322	7.1	22.1	37.1	35.8	19.2	59.5
1980 Average	1,519	4,300	6,909	544	6,365	17,056	8.9	25.2	40.5	37.3	22.0	62.2
1985 Average	311	1,830	5,067	781	4,286	15,726	2.0	11.6	32.2	27.3	6.1	36.1
1990 Average	1,966 1,573	4,296 4,002	8,018 8,835	857 949	7,161 7,886	16,988	11.6 8.9	25.3 22.6	47.2 49.8	42.2 44.5	24.5 17.8	53.6 45.3
995 Average	1,604	4,002	9,478	949	8,498	17,725 18,309	8.8	22.0	49.8 51.8	44.5	16.9	45.5
1997 Average	1,755	4,569	10,162	1,003	9,158	18,620	9.4	24.5	54.6	49.2	17.3	45.0
998 Average	2,136	4,905	10,708	945	9,764	18,917	11.3	25.9	56.6	51.6	19.9	45.8
1999 Average	2,464	4,953	10,852	940	9,912	19,519	12.6	25.4	55.6	50.8	22.7	45.6
2000 Average	2,488	5,203	11,459	1,040	10,419	19,701	12.6	26.4	58.2	52.9	21.7	45.4
2001 Average	2,761	5,528	11,871	971	10,900	19,649	14.1	28.1	60.4	55.5	23.3	46.6
2002 Average	2,269	4,605	11,530	984	10,546	19,761	11.5	23.3	58.3	53.4	19.7	39.9
2003 Average	2,501 2,493	5,162 5,701	12,264 13,145	1,027 1,048	11,238 12,097	20,034 20,731	12.5 12.0	25.8 27.5	61.2 63.4	56.1 58.4	20.4 19.0	42.1 43.4
2004 Average 2005 Average	2,493	5,587	13,145	1,046	12,097	20,731	12.0	27.5	65.9	56.4 60.3	19.0	43.4 40.7
2006 Average	2,211	5,517	13,707	1,317	12,390	20,687	10.7	26.7	66.3	59.9	16.1	40.2
2007 Average	2,163	5,980	13,468	1,433	12,036	20,680	10.5	28.9	65.1	58.2	16.1	44.4
2008 Average	2,370	5,954	12,915	1,802	11,114	19,498	12.2	30.5	66.2	57.0	18.4	46.1
2009 Average	1,689	4,776	11,691	2,024	9,667	18,771	9.0	25.4	62.3	51.5	14.4	40.9
010 January	1,563	4,554	11,300	1,897	9,404	18,652	8.4	24.4	60.6	50.4	13.8	40.3
February	1,666	4,659	11,230	2,034	9,197	18,850	8.8	24.7	59.6	48.8	14.8	41.5
March	1,842	5,084	11,621	2,149	9,472	19,099	9.6	26.6	60.8	49.6	15.9	43.7
April	2,026	5,376	12,526	2,432	10,093	19,044	10.6	28.2	65.8	53.0	16.2	42.9
May	1,724 1,972	5,055 5,297	12,141 12,444	2,399 2,304	9,742 10,140	18,866 19,537	9.1 10.1	26.8 27.1	64.4 63.7	51.6 51.9	14.2 15.8	41.6 42.6
June July	1,679	5,178	12,444	2,516	10,140	19,319	8.7	26.8	65.6	52.6	13.2	40.8
August	1,663	5,117	12,356	2,410	9,946	19,662	8.5	26.0	62.8	50.6	13.5	41.4
September	1,698	5,111	11,823	2,345	9,478	19,438	8.7	26.3	60.8	48.8	14.4	43.2
October	1,490	4,305	11,142	2,480	8,662	18,974	7.9	22.7	58.7	45.7	13.4	38.6
November	1,662	4,525	11,096	2,598	8,498	18,977	8.8	23.8	58.5	44.8	15.0	40.8
December Average	1,564 <b>1,711</b>	4,614 <b>4,906</b>	11,132 <b>11,793</b>	2,644 <b>2,353</b>	8,488 <b>9,441</b>	19,722 <b>19,180</b>	7.9 <b>8.9</b>	23.4 <b>25.6</b>	56.4 <b>61.5</b>	43.0 <b>49.2</b>	14.0 <b>14.5</b>	41.4 <b>41.6</b>
-												
011 January	1,681	4,909	12,248	2,750	9,497 8 104	18,993	8.8	25.8	64.5	50.0	13.7	40.1
February March	1,495 1,667	4,530 4,638	10,738 11,850	2,634 2,733	8,104 9,117	18,873 19,329	7.9 8.6	24.0 24.0	56.9 61.3	42.9 47.2	13.9 14.1	42.2 39.1
April	1,704	4,548	11,808	3,071	8,736	18,650	9.1	24.0	63.3	46.8	14.1	38.5
May	1,844	4,619	11,866	2,735	9,131	18,479	10.0	25.0	64.2	49.4	15.5	38.9
June	2,033	4,894	11,877	2,716	9,161	19,253	10.6	25.4	61.7	47.6	17.1	41.2
July	2,167	4,939	11,757	3,053	8,704	18,778	11.5	26.3	62.6	46.4	18.4	42.0
August	1,910	4,656	11,227	3,002	8,224	19,415	9.8	24.0	57.8	42.4	17.0	41.5
September	2,039	4,326	11,270	3,174	8,095	18,892	10.8	22.9	59.7	42.9	18.1	38.4
October November		4,296 4,206	11,053 11,217	3,107 3,159	7,946 8.059	18,844 19,080	10.1 10.2	22.8 22.0	58.7 58.8	42.2 42.2	17.2 17.3	38.9 37.5
December		4,200	11.064	3,159	7.397	18,803	10.2	22.0	58.8	39.3	17.3	37.0
Average	1,861	4,055	11,504	2,986	8,518	18,949	9.8	24.0	60.7	<b>44.9</b>	16.2	<b>39.6</b>
2012 January	2,208	4,203	10,944	2,839	8,104	18,280	12.1	23.0	59.9	44.3	20.2	38.4
February	1,948	3,986	10,464	2,980	7,484	18,760	10.4	21.2	55.8	39.9	18.6	38.1
March	2,222	4,314	10,610	3,064	7,547	18,213	12.2	23.7	58.3	41.4	20.9	40.7
April	2,228	4,394	10,634	3,263	7,370	18,330	12.2	24.0	58.0	40.2	21.0	41.3
May	2,560	4,672	11,132	3,194	7,939	18,707	13.7	25.0	59.5	42.4	23.0	42.0
	2,376	4,618	11,393	3,209	8,184	18,915	12.6	24.4	60.2	43.3	20.9	40.5
July	2,131 <sup>R</sup> 2,071	4,331 <sup>R</sup> 4,344	10,748 <sup>R</sup> 10,898	3,211 <sup>R</sup> 3,017	7,537 <sup>R</sup> 7,881	18,601 <sup>R</sup> 19,226	11.5 <sup>R</sup> 10.8	23.3 <sup>R</sup> 22.6	57.8 <sup>R</sup> 56.7	40.5 <sup>R</sup> 41.0	19.8 <sup>R</sup> 19.0	40.3 <sup>R</sup> 39.9
August September	NA	NA	E 10,544	E 2,904	E 7,640	E 18,391	NA	NA	E 57.3	E 41.5	NA	NA
October	NA	NA	E 10,295	E 2,795	E 7,500	E 18,838	NA	NA	E 54.7	E 39.8	NA	NA
10-Month Average	NA	NA	E 10,767	E 3,047	E 7,720	E 18,626	NA	NA	E 57.8	E 41.4	NA	NA
2011 10-Month Average	1,847	4,637	11,577	2,899	8,677	18,952	9.7	24.5	61.1	45.8	16.0	40.1
2010 10-Month Average	1,731	4,974	11,929	2,299	9,631	19,145	9.0	26.0	62.3	50.3	14.5	41.7

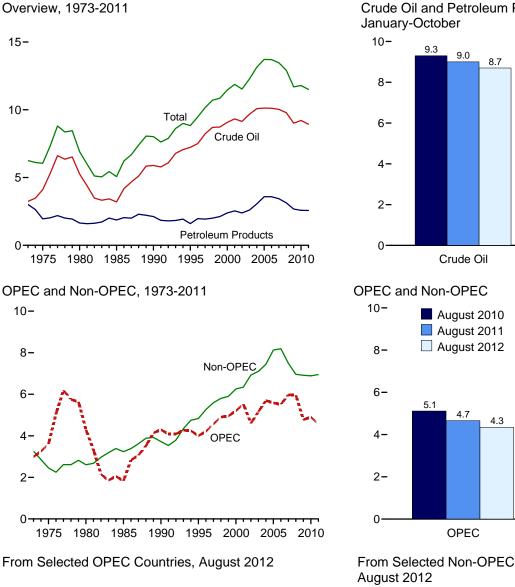
<sup>a</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).
 <sup>b</sup> See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. See Table 3.3c for notes on which countries are included in the data.
 R=Revised. E=Estimate. NA=Not available.
 Notes: • Readers of this table may be interested in a feature article, "Measuring Dependence on Imported Oil," that was published in the August 1995 *Monthly Energy Review.* Beginning in October 1977, data include Strategic Petroleum Reserve imports. See Table 3.3b. • Annual averages may not equal average of months due to independent rounding.
 U.S. geographic coverage is the 50 States and the

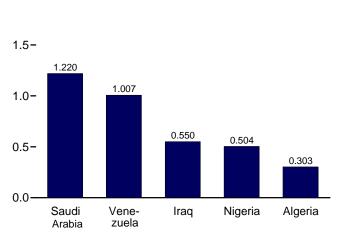
District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories. Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information,

http://www.eia.gov/totalenergy/data/montnly/#petroleum. • For related information, see http://www.eia.gov/totalenergy/data/montnly/#petroleum. Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: U.S. Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2011: EIA, Petroleum Supply Annual, annual reports. • 2012: 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 system calculations.

## Figure 3.3b Petroleum Trade: Imports

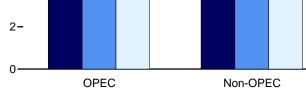
(Million Barrels per Day)



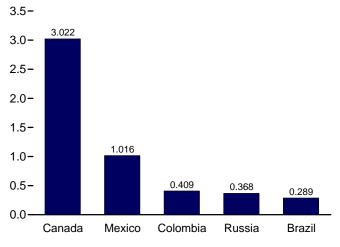


Note: OPEC=Organization of the Petroleum Exporting Countries. Web Page: http http://www.eia.gov/totalenergy/data/monthly/#petroleum. Sources: Tables 3.3b-3.3d.

2010 2011 2012 2.6 2.6 2.1 Petroleum Products 7.2 6.6 6.6



From Selected Non-OPEC Countries,



Crude Oil and Petroleum Products,

2.0-

### Table 3.3b Petroleum Trade: Imports and Exports by Type

(Thousand Barrels per Day)

					lm	ports						Exports	
	Cruc	le Oil <sup>a</sup>	Distillato	1-4	LPG	b	Madan	Desidual			Cruste	Detrolour	
	SPR <sup>c,d</sup>	Total	Distillate Fuel Oil	Jet Fuel <sup>e</sup>	<b>Propane</b> <sup>f</sup>	Total	Motor Gasoline <sup>g</sup>	Residual Fuel Oil	Other <sup>h</sup>	Total	Crude Oil <sup>a</sup>	Petroleum Products	Total
973 Average		3,244	392	212	71	132	134	1,853	290	6,256	2	229	231
975 Average		4,105	155	133	60	112	184	1,223	144	6,056	6	204	209
980 Average	44	5,263	142	80	69	216	140	939	130	6,909	287	258	544
985 Average	118	3,201	200	39	67	187	381	510	550	5,067	204	577	781
990 Average	27	5,894	278	108	115	188	342	504	705	8,018	109	748	857
995 Average	-	7,230	193	106	102	146	265	187	708	8,835	95	855	949
996 Average	-	7,508	230	111	119	166	336	248	879	9,478	110	871	981
997 Average	Ξ	8,225	228 210	91 124	113 137	169 194	309 311	194	945 888	10,162	108	896 835	1,003 945
998 Average	- 8	8,706	210	124	137			275	888 943	10,708			94:
999 Average	8	8,731	295	162	161	182 215	382 427	237 352	943 938	10,852 11,459	118 50	822 990	1,040
000 Average	11	9,071 9.328	295	148	145	215	427	295	1.095	11,459	20	990	971
001 Average	16	9,320	267	140	145	183	498	295	1,095	11,530	20	975	984
002 Average	10	9,665	333	107	145	225	498 518	327	1,085	12,264	12	1,014	1,027
003 Average 004 Average	77	10.088	325	109	209	263	496	426	1,419	13,145	27	1,014	1.048
005 Average	52	10,000	325	190	209	328	603	530	1,609	13,714	32	1,133	1,165
006 Average	8	10,120	365	186	233	332	475	350	1,881	13,707	25	1,292	1,317
007 Average	7	10,031	304	217	182	247	413	372	1.885	13,468	27	1,405	1,433
008 Average	19	9.783	213	103	185	253	302	349	1,913	12,915	29	1.773	1.802
009 Average	56	9,013	225	81	147	182	223	331	1,635	11,691	44	1,980	2,024
10 January	-	8,492	462	131	192	225	179	376	1,435	11,300	33	1,864	1,89
February	-	8,761	293	75	217	242	196	382	1,282	11,230	58	1,976	2,034
March		9,341	179	79	137	155	120	376	1,370	11,621	45	2,104	2,149
April		9,726	220	88	79	102	178	480	1,732	12,526	37	2,396	2,432
May		9,655	189	81	82	108	107	404	1,599	12,141	36	2,363	2,399
June	-	9,927	237	114	73	113	163	283	1,607	12,444	31	2,273	2,30
July	-	9,932	170	113	56	104	114	400	1,841	12,675	69	2,447	2,51
August		9,543	246	103	62	107	129	330	1,899	12,356	36	2,374	2,41
September	-	9,229	189	122	85	124	130	367	1,662	11,823	61	2,283	2,34
October	-	8,540	163	94	131	165	86	337	1,758	11,142	23	2,457	2,480
November	-	8,699	178 219	101	132	165 231	117	345 315	1,491	11,096 11,132	32 40	2,567 2,604	2,598 2,644
December Average	_	8,695 <b>9,213</b>	219 228	73 <b>98</b>	214 <b>121</b>	153	99 <b>134</b>	315 366	1,501 <b>1,600</b>	11,132 11,793	40 42	2,604 <b>2,311</b>	2,644
011 January	_	9,183	337	65	235	290	102	411	1,860	12,248	72	2,678	2,750
February	-	8,184	206	68	220	266	119	364	1,532	10,738	30	2,604	2,634
March	-	9,183	190	65	205	260	135	378	1,639	11,850	36	2,696	2,733
April	-	8,839	191	80	141	177	138	424	1,959	11,808	41	3,031	3,071
May	-	9,059	170	91	118	160	137	306	1,942	11,866	37	2,698	2,73
June		9,235	127	82	115	160	130	353	1,789	11,877	36	2,680	2,71
July	-	9,276	157	95	115	157	92	246	1,733	11,757	73	2,980	3,05
August		8,936	148	66	123	167	106	231	1,573	11,227	34	2,969	3,00
September	-	8,914	179	58	141	176	99	277	1,567	11,270	35	3,139	3,174
October	-	8,907	128	61	129	166	66	286	1,440	11,053	51	3,057	3,10
November	-	8,724	138	72	152	191	74	341	1,677	11,217	64	3,094	3,159
December	-	8,711	175	21	210	258	60	330	1,509	11,064	53	3,614	3,667
Average	-	8,935	179	69	158	202	105	328	1,686	11,504	47	2,939	2,986
12 January	-	8,572	156	6	145	168	99	305	1,637	10,944	56	2,783	2,839
February	_	8,558	142	41	125	155	46	226	1,296	10,464	59	2,921	2,980
March		8,767	136	5	108	136	91	271	1,205	10,610	60	3,004	3,064
April		8,591	98	56	102	129	53	240	1,466	10,634	32	3,231	3,263
May		8,909 9,101	111 87	49 42	172 133	218 170	60 66	251 325	1,534 1,602	11,132 11,393	69 46	3,124 3,163	3,19 3,20
June		9,101 8.606	113	42 48	133	170	52	325 247	1,602	10,748	46	3,163	3,20
July		<sup>R</sup> 8,631	<sup>R</sup> 110	<sup>40</sup> <sup>R</sup> 124	<sup>R</sup> 140	R 186	82 R 37	R 233	<sup>R</sup> 1,577	<sup>R</sup> 10,748	R 60	<sup>R</sup> 2,957	R 3,017
August September		E 8,497	E 116	E 84	E 99	NA	E 52	E 248	NA	<sup>E</sup> 10,544	E 41	E 2,863	E 2,90
October	_	E 8,277	E 65	E 95	E 103	NA	E 25	E 257	NA	<sup>E</sup> 10,295	E 41	E 2,754	E 2,79
10-Month Average	_	E 8,651	E 113	E 55	E 128	NA	E 58	E 260	NA	E 10,767	<sup>⊑</sup> 54	E 2,993	E 3,04
011 10-Month Average	-	8,979	183	73	154	198	112	327	1,704	11,577	45	2,855	2,899
010 10-Month Average		9,317	234	100	111	144	140	373	1,621	11,929	43	2.256	2,29

Includes lease condensate.

Includes leade contensate.
 <sup>b</sup> Liquefied petroleum gases.
 <sup>c</sup> "SPR" is the Strategic Petroleum Reserve, which began in October 1977.
 Through 2003, includes crude oil imports by SPR only; beginning in 2004, includes crude oil wiports by SPR, and crude oil moptrs into SPR by others.
 <sup>d</sup> See Note 6, "Petroleum Data Discrepancies," at end of section.
 <sup>e</sup> Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005 includes kerosene-type in the low in aphtha-type is included in provided in the section.

2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other

<sup>1</sup> Includes propylene.
 <sup>9</sup> Finished motor gasoline. Through 1980, also includes motor gasoline

<sup>b</sup> Initial and the gasanic. Initial 100, also induce induce set gasanic blending components. <sup>h</sup> Asphalt and road oil, finished aviation gasoline, gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks, petroleum coke, special naphthas, unfinished oils, waxes, other hydrocarbons and oxygenates, and miscellaneous products. Beginning in 2005, also includes

naphtha-type jet fuel. R=Revised. E=Estimate. NA=Not available. - - =Not applicable. - =No data reported. Notes:

reported. Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/tetroleum/.
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: U.S. Energy Information addiministration (EIA). Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2011: EIA, Petroleum Supply Annual, annual reports. • 2012: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system and Monthly Energy Review data Weekly Petroleum Status Report data system and Monthly Energy Review data system calculations.

#### Table 3.3c Petroleum Trade: Imports From OPEC Countries

(Thousand Barrels per Day)

	Algeria	Angolaa	Ecuador <sup>b</sup>	Iraq	Kuwait <sup>c</sup>	Libya	Nigeria	Saudi Arabia <sup>c</sup>	Vene- zuela	Otherd	Total OPEC
1973 Average	136	(a)	48	4	47	164	459	486	1,135	514	2,993
1975 Average	282	$\binom{a}{a}$	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
	187	a	67	46	21	4	293	168	605	439	1.830
1985 Average 1990 Average	280	(a)	49	518	86	ů 0	800	1,339	1,025	199	4,296
	234		( <sup>b</sup> )	0	218	0	627	1,339	1,480	98	4,290
1995 Average	256	(a)	{b}	1	236	Ö	617	1,344	1,400	62	4,002
1996 Average	230			89	253	0	698	1,303	1,773	64	4,211
1997 Average	205	(a)	{b}	336	301	Ö	696	1,407	1,719	73	4,905
1998 Average	259		$\left\{ \begin{array}{c} -\\ b \end{array} \right\}$	725	248	0	657	1,478	1,493	93	4,905
1999 Average	259	(-) (a)		620	240	0	896		1,495	93 72	4,953
2000 Average	225	(-) (a)	(-) (b)	795	250	0	885	1,572 1.662		105	5,203
2001 Average			$\left\{ \begin{array}{c} -\\ b \end{array} \right\}$		230	0			1,553		
2002 Average	264		( b)	459		-	621	1,552	1,398	83	4,605
2003 Average	382		{ b }	481	220	0	867	1,774	1,376	61	5,162
2004 Average	452	(a) (a)		656	250	20	1,140	1,558	1,554	70	5,701
2005 Average	478		(b) (b)	531	243	56	1,166	1,537	1,529	47	5,587
2006 Average	657	(a)	(")	553	185	87	1,114	1,463	1,419	38	5,517
2007 Average	670	508	(b)	484	181	117	1,134	1,485	1,361	39	5,980
2008 Average	548	513	221	627	210	103	988	1,529	1,189	26	5,954
2009 Average	493	460	185	450	182	79	809	1,004	1,063	50	4,776
2010 January	498	280	215	523	77	40	1,048	963	911	-	4,554
February	498	360	152	540	228	40	932	898	1,010	-	4,659
March	455	502	183	475	218	79	962	1,149	1,061	-	5,084
April	464	509	225	490	278	142	1,060	1,257	951	-	5,376
May	518	448	182	394	225	39	1,026	1,097	1,117	10	5,055
June	550	425	245	630	217	98	1,108	1,125	899	-	5,297
July	518	374	239	430	189	110	1,174	1,053	1,084	7	5,178
August	565	484	276	281	251	123	985	1,132	1,022	-	5,117
September	543	417	229	422	172	43	1.174	1.093	1.008	10	5.111
October	451	324	203	143	215	36	872	1,131	930	_	4,305
November	572	276	194	340	170	23	856	1,152	942	_	4,525
December	484	319	192	336	125	66	1,070	1,093	917	9	4,614
Average	510	393	212	415	197	70	1,023	1,096	988	3	4,906
2011 January	565	316	238	433	147	57	1,022	1,101	1,030	_	4,909
February	406	370	255	263	118	36	978	1,114	989	-	4,530
March	500	280	182	398	161	32	913	1,108	1,065	_	4,638
April	466	277	169	519	78	1	922	1,107	1,009	-	4,548
May	391	356	158	422	200	(s)	854	1,203	1,016	19	4,619
June	297	373	219	559	238	35	853	1,169	1,084	68	4,894
July	354	407	172	596	228	_	884	1,326	954	18	4,939
August	298	331	309	637	165	1	892	1,075	914	32	4,656
September	291	304	305	404	145	2	580	1.479	806	11	4,326
October	173	439	178	490	278	2	693	1,120	906	17	4,296
November	260	340	181	395	302	10	703	1,222	767	26	4,206
December	297	357	106	380	231	9	534	1,310	868	_	4.093
Average	358	346	206	459	191	15	818	1,195	951	16	4,555
2012 January	269	370	100	390	352	5	504	1,423	750	41	4,203
February	256	230	244	271	252	29	353	1.420	931	-	3.986
March	325	175	174	386	462	60	374	1,374	984	_	4,314
April	259	253	201	395	235	68	483	1,589	904 904	7	4,314
May	303	255	199	675	407	65	403	1,389	904 861	7	4,394
	236	256 378	236	649	250	93	420 515	1,471	788	17	4,672
June		285	176	352	250	93 110	372	1,456	1.046		
July	213				304 301	126	372 504			7	4,331
August 8-Month Average	303 271	153 <b>262</b>	180 <b>188</b>	550 <b>460</b>	301 322	70	504 <b>442</b>	1,220 <b>1,427</b>	1,007 <b>909</b>		4,344 <b>4,360</b>
2011 8-Month Average	410	339	213	480	168	20	914	1,151	1,007	17	4,719
2010 8-Month Average	509	423	215	469	210	84	1,038	1,086	1,007	2	5,042

<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

November 2007. For 1993-2007, Ecuador is included in "Total Non-UPEC" 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 Iran, Qatar, and United Arab Emirates. For 1973-2008, also includes Indonesia; and for 1975-1994, also includes Gabon. – =No data reported. (s)=Less than 500 barrels per day. 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 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 Strates and the District of Columbian States and the District of Columbia.

States and the District of Columbia.
Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual*, annual reports. • 1976-1980: U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual*, annual reports. • 1981-2011: EIA, *Petroleum Supply Annual*, annual reports. • 2012: EIA, *Petroleum Supply Monthly*, monthly reports.

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

(Thousand Barrels per Day)

	Brazil	Canada	Colombia	Mexico	Nether- lands	Norway	Russia <sup>a</sup>	United Kingdom	U.S. Virgin Islands	Other	Total Non-OPEC
1973 Average	9	1,325	9	16	53	1	26	15	329	1,480	3,263
1975 Average	5	846	9	71	19	17	14	14	406	1.052	2.454
1980 Average	3	455	4	533	2	144	1	176	388	903	2,609
1985 Average	61	770	23	816	58	32	8	310	247	913	3,237
1990 Average	49	934	182	755	55	102	45	189	282	1,128	3,721
1995 Average	49	1.332	219	1.068	15	273	45 25	383	278	1,120	4,833
1995 Average	9	1,332	219	1,000	15	313	25	308	313	1,233	4,833
1996 Average	5	1,424	234	1,244	25	309	13	226	300	1,495	5,207
1997 Average	26	1,503	354		25 31	236	24	220	293		5,593
1998 Average		1,598	354 468	1,351 1,324	27	230	24 89	365	293	1,640 1,478	5,803
1999 Average	26				30		69 72				
2000 Average	51 82	1,807	342 296	1,373 1.440	30 43	343 341	90	366 324	291 268	1,581	6,257
2001 Average		1,828	296	, -			210			1,631	6,343
2002 Average	116	1,971		1,547	66	393		478	236	1,649	6,925
2003 Average	108	2,072	195	1,623	87	270	254	440	288	1,766	7,103
2004 Average	104	2,138	176	1,665	101	244	298	380	330	2,008	7,444
2005 Average	156	2,181	196	1,662	151	233	410	396	328	2,413	8,127
2006 Average	193	2,353	155	1,705	174	196	369	272	328	2,446	8,190
2007 Average	200	2,455	155	1,532	128	142	414	277	346	1,839	7,489
2008 Average	258	2,493	200	1,302	168	102	465	236	320	1,416	6,961
2009 Average	309	2,479	276	1,210	140	108	563	245	277	1,307	6,915
2010 January	353	2,596	322	1,133	116	126	463	282	298	1,057	6,747
February	226	2,491	386	1,137	126	99	423	413	196	1,074	6,571
March	306	2,505	251	1,306	136	59	494	267	235	977	6,538
April	318	2,472	423	1,282	89	166	587	304	331	1,178	7,149
May	319	2,528	315	1,428	108	119	719	176	195	1,180	7,087
June	308	2,717	407	1,211	87	52	760	269	246	1,090	7,146
July	332	2,549	404	1,289	207	119	719	351	239	1,287	7,497
August	251	2,489	372	1,282	137	57	786	266	301	1,298	7,239
September	181	2,479	363	1,254	45	62	648	178	302	1,200	6,712
October	169	2,347	422	1,347	108	111	655	152	270	1,255	6,837
November	198	2,513	492	1,363	57	79	561	187	234	886	6,571
December	295	2,736	231	1,365	71	26	514	236	191	855	6,518
Average	272	2,535	365	1,284	108	89	612	256	253	1,112	6,887
2011 January	263	3,004	355	1,366	101	85	558	155	276	1,176	7,338
February	179	2,997	258	1,103	129	69	437	110	179	749	6,209
March	165	2,819	427	1,319	91	156	690	198	149	1,198	7,211
April	228	2,755	548	1,077	133	167	704	193	179	1,275	7,260
May	298	2,564	433	1,303	129	101	684	245	194	1,296	7,247
June	283	2,586	309	1,222	175	93	689	146	151	1,330	6,983
July	330	2,691	418	1,197	80	58	564	175	192	1,113	6,818
August	239	2,688	395	1,185	81	87	585	125	185	1,001	6,571
September	190	2,880	529	1,192	64	97	592	124	189	1,087	6,943
October	190	2,719	578	1,177	23	180	687	150	151	902	6,757
November	245	2,858	424	1,256	96	174	737	125	177	918	7,011
December	417	3.009	508	1,064	101	88	552	162	214	857	6,971
Average	253	2,796	433	1,206	100	113	624	159	186	1,077	6,948
2012 January	321	3,008	431	1,114	101	46	572	168	96	884	6,740
February	286	3.048	472	1.081	92	163	288	127	28	894	6,478
March	356	2,931	482	1,004	143	87	326	187	1	779	6,296
April	237	2,931	472	1,002	84	51	388	204	12	858	6,239
May	215	3,018	430	996	121	95	550	143	2	891	6,460
June	297	3,051	515	915	151	82	655	205	(s)	904	6,775
July	257	2,973	397	1.007	137	47	491	131	(3)	976	6,417
August	289	3,022	409	1,007	91	90	368	197	-	1,072	6,554
8-Month Average	289 282	2,998	409 450	1,010	115	80 82	455	170	 17	907	6,495
2011 8-Month Average	249	2,761	394	1,224	114	102	615	169	188	1,146	6,963
	302	2,544	359	1,260	126	99	621	290	256	1,144	7,001

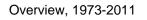
<sup>a</sup> Through 1992, may include imports from republics other than Russia in the former U.S.S.R. See "Union of Soviet Socialist Republics (U.S.S.R.)" in Glossary. – =No data reported. (s)=Less than 500 barrels per day.

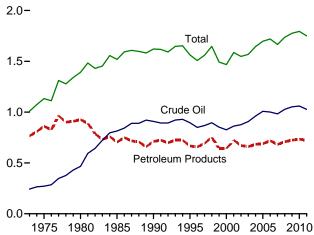
Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary for membership. Petroleum imports not classified as "OPEC" on Table 3.3c are included on this table. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products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

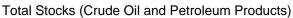
Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/. Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum* 

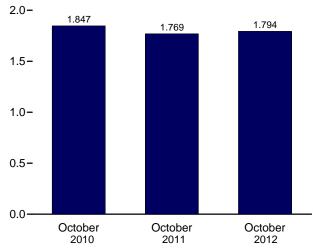
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • 1976-1980: U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • 1981-2011: EIA, *Petroleum Supply Annual,* annual reports. • 2012: EIA, *Petroleum Supply Monthly,* monthly reports.

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











210 207 202

250-

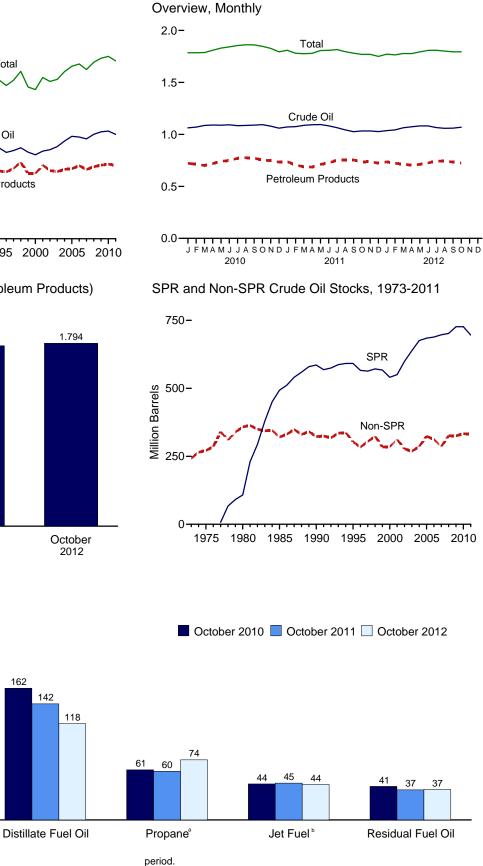
200-

150-

100-

50-

0



<sup>a</sup> Includes propylene.

<sup>b</sup> Includes kerosene-type jet fuel only. Notes: • SPR=Strategic Petroleum Reserve. • Stocks are at end of

Motor Gasoline

162

142

118

Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum. Source: Table 3.4.

Million Barrels

#### Table 3.4 Petroleum Stocks

(Million Barrels)

		Crude Oila		Distillate	1	LPC	<b>B</b> b	Madan	Desidual		
	SPRC	Non-SPR <sup>d,e,f</sup>	Total <sup>e,f</sup>	Distillate Fuel Oil <sup>f,g</sup>	Jet Fuel <sup>h</sup>	Propane <sup>f,i</sup>	Total <sup>f</sup>	Motor Gasoline <sup>f,j</sup>	Residual Fuel Oil <sup>f</sup>	Otherk	Total <sup>f</sup>
1973 Year		242	242	196	29	65	99	209	53	179	1,008
975 Year		271	271	209	30	82	125	235	74	188	1,133
980 Year	108	358	466	205	42	65	120	261	92	205	1,392
985 Year	493	321	814	144	40	39	74	223	50	174	1,519
990 Year	586	323	908	132	52	49	98	220	49	162	1,621
995 Year	592	303	895	130	40	43	93	202	37	165	1.563
996 Year	566	284	850	127	40	43	86	195	46	164	1,507
	563	305	868	138	40	43	89	210	40	169	1,560
997 Year			895		44			210	40		
998 Year	571	324		156		65	115			176	1,647
999 Year	567	284	852	125	41	43	89	193	36	157	1,493
000 Year	541	286	826	118	45	41	83	196	36	164	1,468
001 Year	550	312	862	145	42	66	121	210	41	166	1,586
002 Year	599	278	877	134	39	53	106	209	31	152	1,548
003 Year	638	269	907	137	39	50	94	207	38	147	1,568
004 Year	676	286	961	126	40	55	104	218	42	153	1,645
005 Year	685	324	1,008	136	42	57	109	208	37	157	1,698
006 Year	689	312	1,001	144	39	62	113	212	42	169	1,720
007 Year	697	286	983	134	39	52	96	218	39	156	1.665
2008 Year	702	326	1,028	146	38	55	113	214	36	162	1,737
009 Year	727	325	1,052	166	43	50	102	223	37	153	1,776
010 January	727	337	1,063	164	44	35	80	232	40	162	1,786
February	727	343	1.070	155	44	28	70	235	41	170	1,785
March	727	359	1,086	147	42	28	73	225	41	174	1.787
	727	363	1.090	145	44	35	89	220	44	178	1,810
April	727	362	1,030	145	44	42	105	218	44	178	1,830
May											
June	727	365	1,092	158	45	49	120	216	43	169	1,842
July	727	358	1,084	167	47	55	130	220	41	166	1,855
August	727	359	1,086	170	47	59	139	221	39	159	1,862
September	727	363	1,089	167	47	61	141	219	40	158	1,861
October	727	368	1,094	162	44	61	138	210	41	158	1,847
November	727	352	1,079	162	44	61	131	213	41	158	1,827
December	727	333	1,060	164	43	49	108	219	41	158	1,794
011 January	727	345	1,072	163	42	35	87	236	39	171	1,809
February	727	348	1,075	154	39	27	73	230	35	174	1,780
March	727	360	1,087	149	40	24	71	215	38	177	1,776
April	727	367	1,093	143	38	28	81	204	40	180	1,779
May	727	368	1,095	145	41	34	93	214	38	181	1,807
June	727	356	1,082	144	42	40	107	215	38	180	1,809
July	718	346	1.065	154	44	47	121	215	38	179	1.816
August	696	347	1,043	155	43	52	132	210	39	173	1,796
September	696	330	1,045	153	46	57	135	215	35	173	1,781
October	696	337	1,020	142	40	60	135	207	37	170	1,769
November	696	337	1,033	142	43	59	126	207	39	167	1,709
December	696	331	1,033	149	42	55	1120	220 223	39	167 164	1,750
	606	240	,	140	40	40	101	005	24	175	
012 January	696	340	1,036	149	42	48	101	235	34	175	1,772
February	696	347	1,043	139	41	43	96	231	36	179	1,765
March	696	368	1,064	134	39	45	102	219	36	184	1,778
April	696	377	1,073	125	40	50	116	211	34	179	1,777
May	696	386	1,082	122	40	56	133	205	33	179	1,794
June	696	386	1,082	120	38	62	147	208	37	176	1,808
July	696	370	1,066	127	40	69	159	210	36	172	1,809
August	696	<sup>R</sup> 363	<sup>R</sup> 1,058	127	43	73	<sup>R</sup> 171	<sup>R</sup> 201	<sup>R</sup> 34	<sup>R</sup> 166	R 1,801
September	E 695	E 365	E 1,060	E 123	E 44	E 76	F 171	E 196	E 35	<sup>RE</sup> 166	E 1,795
October	E 695	E 375	E 1,070	E 118	E 44	E74	F 164	E 202	E 37	E 159	E 1,794
0000001	030	575	1,070	110		74	104	202	51	155	1,794

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

b 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>6</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>†</sup> See Note 4, "Petroleum New Stock Basis," at end of section.

<sup>g</sup> Excludes stocks in the Northeast Heating Oil Reserve. Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil. <sup>h</sup> Through 2004, includes kerosene-type and naphtha-type iet fuel Beginning in

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

"Other.

Includes propylene.

<sup>j</sup> Includes finished motor gasoline and motor gasoline blending components; excludes oxygenates. <sup>k</sup> Asphalt and road oil, aviation gasoline, aviation gasoline blending

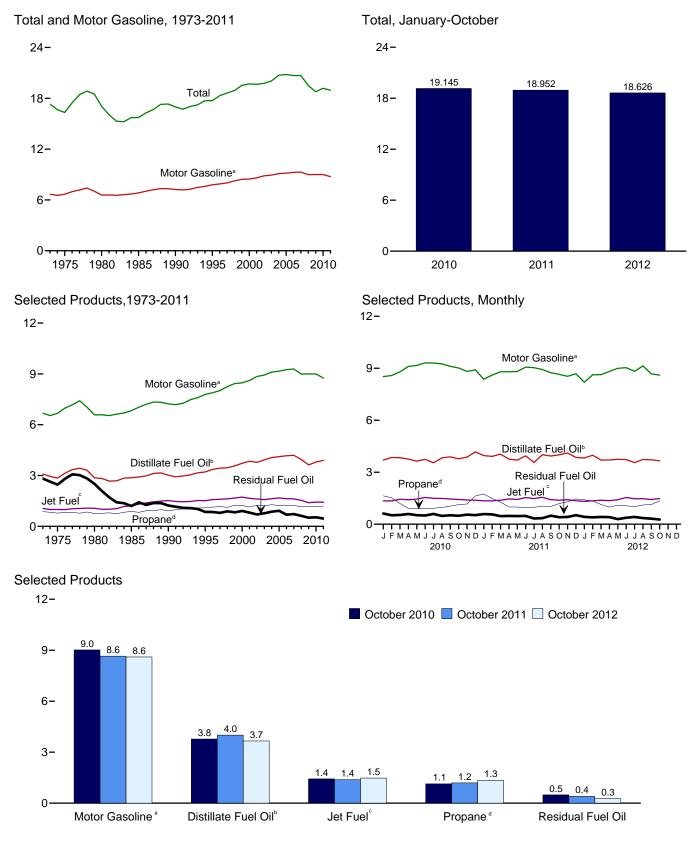
components, kerosene, lubricants, pentanes plus, petrochemical feedstocks, petroleum coke, special naphthas, unfinished oils, waxes, miscellaneous products, oxygenates, renewable fuels, and other hydrocarbons. Beginning in 2005, also includes naphtha-type jet fuel.

Notes: • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. . Geographic coverage is the 50 States web Pages: • For all available data beginning in 1973, see

http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

see http://www.eia.gov/petroleum/. Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • 1976-1980: U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • 1981-2011: EIA, *Petroleum Supply Annual,* annual reports. • 2012: 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)



<sup>a</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline. <sup>b</sup> Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

 $^{\rm c}$  Beginning in 2005, includes kerosene-type jet fuel only.

<sup>d</sup> Includes propylene.

Note: SPR=Strategic Petroleum Reserve. Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum. Source: Table 3.5.

### Table 3.5 Petroleum Products Supplied by Type

(Thousand Barrels per Day)

	Asphalt and	Aviation	Distillate	Jet	Kero-	LPG	a	Lubri-	Motor	Petro- leum	Residual		
	Road Oil	Gasoline	Fuel Oil <sup>b</sup>	Fuel <sup>c</sup>	sene	Propaned	Total	cants	Gasoline <sup>e</sup>	Coke	Fuel Oil	Other <sup>f</sup>	Total
1973 Average	522	45	3,092	1,059	216	872	1,449	162	6,674	261	2,822	1,005	17,308
1975 Average	419	39	2,851	1,001	159	783	1,333	137	6,675	247	2,462	1,001	16,322
1980 Average 1985 Average	396 425	35 27	2,866 2,868	1,068 1,218	158 114	754 883	1,469 1,599	159 145	6,579 6,831	237 264	2,508 1,202	1,581 1,032	17,056 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	521 547	19 21	3,461 3,572	1,622 1,673	78 73	1,120 1,246	1,952	168 169	8,253	447 477	887 830	1,508 1,532	18,917 19,519
1999 Average 2000 Average	547 525	20	3,572	1,073	67	1,240	2,195 2,231	169	8,431 8,472	477	909	1,532	19,519
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	546 521	19 18	4,118 4.169	1,679	70 54	1,229	2,030	141 137	9,159	515 522	920 689	1,605 1.640	20,802
2006 Average 2007 Average	494	18	4,169	1,633 1,622	54 32	1,215 1,235	2,052 2,085	137	9,253 9,286	522 490	689 723	1,640	20,687 20,680
2008 Average	417	15	3.945	1.539	14	1,154	1,954	131	8.989	464	622	1,408	19,498
2009 Average	360	14	3,631	1,393	18	1,160	2,051	118	8,997	427	511	1,251	18,771
2010 January	203	10	3,701	1,344	15	1,638	2,644	116	8,520	268	615	1,218	18,652
February	249 264	10 14	3,854 3.835	1,343 1,443	34 11	1,526 1,193	2,531 2,225	137 138	8,579 8,793	334 425	515 531	1,263 1,421	18,850 19.099
March April	264 331	14	3,835	1,443	7	916	2,225	130	8,793 9.108	425 385	590	1,421	19,099
May	378	15	3,639	1,446	11	891	1,878	128	9,162	339	519	1,351	18,866
June	517	18	3,743	1,543	16	901	1,938	155	9,311	411	500	1,386	19,537
July	470	20	3,544	1,494	19	915	1,978	141	9,301	385	595	1,373	19,319
August	537	14	3,830	1,486	9	973	2,025	129	9,255	434	476	1,467	19,662
September	463	20	3,886	1,457	8	1,040	2,084	136	9,112	433	513	1,326	19,438
October November	434 295	15 11	3,773 3,873	1,430 1,396	15 46	1,135 1,168	2,126 2,141	127 125	9,016 8,816	335 389	489 552	1,215 1,333	18,974 18,977
December	204	12	4,176	1,383		1,634	2,677	113	8,911	371	525	1,301	19,722
Average	362	15	3,800	1,432	20	1,160	2,173	131	8,993	376	535	1,343	19,180
2011 January	221	11	3,958	1,346	19	1,743	2,757	124	8,370	361	582	1,244	18,993
February March	248 282	14 18	3,913 4,045	1,352 1,385	50 26	1,485 1,277	2,527 2,410	121 150	8,604 8,799	293 348	566 462	1,185 1,405	18,873 19,329
April	311	10	3,755	1,365	20	996	2,410	136	8,796	355	402	1,403	18.650
May	357	18	3,699	1,424	(s)	989	2,077	122	8,817	414	468	1,082	18,479
June	454	17	3,947	1,540	4	958	2,027	125	9,067	379	479	1,213	19,253
July	465	19	3,564	1,473	9	976	2,039	119	9,031	368	329	1,363	18,778
August	545 462	18 13	4,009 3,936	1,554 1,416	5 8	1,040 1,021	2,102 2,050	137 125	8,925 8,744	461 349	347 491	1,311 1,299	19,415 18,892
September October	462	16	3,936 4,003	1,384	2	1,021	2,050 2,227	125	8,744 8,649	349 395	491	1,299	18,844
November	297	12	4,109	1,416	6	1,292	2,393	124	8,537	377	419	1,391	19,080
December	187	10	3,853	1,353	12	1,458	2,616	111	8,683	229	519	1,228	18,803
Average	355	15	3,899	1,425	12	1,202	2,272	125	8,753	361	461	1,272	18,949
2012 January	216	12	3,823	1,313	2	1,406	2,463	129	8,187	367	420	1,349	18,280
February March	218 236	11 14	3,980 3,706	1,350 1,382	23 2	1,343 1,134	2,421 2,226	139 111	8,622 8,633	297 323	394 416	1,306 1,163	18,760 18,213
April	329	14	3,700	1,352	3	986	2,220	122	8.817	338	408	1,105	18,330
May	378	17	3,745	1,409	1	1,095	2,152	116	8,996	376	294	1,224	18,707
June	454	13	3,729	1,545	2	1,064	2,072	107	9,035	372	372	1,214	18,915
July	461 8 405	20	3,552	1,468	2	1,008	2,120	_ 104	8,819	338	418 8 9 5 9	1,298	18,601
August	<sup>R</sup> 485 F 471	<sup>R</sup> 13 <sup>RF</sup> 15	<sup>R</sup> 3,740 <sup>E</sup> 3,715	<sup>R</sup> 1,469 <sup>E</sup> 1,424	<sup>R</sup> 1 <sup>RF</sup> 7	<sup>R</sup> 1,110 <sup>E</sup> 1,135	<sup>R</sup> 2,190 <sup>RF</sup> 2,113	<sup>R</sup> 111 <sup>RF</sup> 117	<sup>R</sup> 9,135 <sup>E</sup> 8.673	<sup>R</sup> 409 <sup>F</sup> 365	<sup>R</sup> 353 <sup>E</sup> 321	<sup>R</sup> 1,320 <sup>RE</sup> 1,170	<sup>R</sup> 19,226 <sup>E</sup> 18,391
September October	F 430	F 12	E 3,660	E 1,424	F 10	E 1,345	F 2,222	F 120	E 8,602	F 365	E 271	E 1,672	E 18,391 E 18,838
10-Month Average	E 368	E 14	E 3,734	E 1,420	E 5	E 1,162	E 2,205	E 117	E 8,752	E 355	E 367	E 1,289	E 18,626
2011 10-Month Average 2010 10-Month Average	378 385	15 15	3,883 3,755	1,434 1,440	13 14	1,166 1,110	2,225 2,125	126 134	8,781 9,018	373 375	459 534	1,265 1,349	18,952 19,145

Liquefied petroleum gases.

<sup>a</sup> Liquefied petroleum gases.
 <sup>b</sup> Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
 <sup>c</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

2005, includes kerosene-type jet fuel only; naphtha-type jet ruei is included in "Other." <sup>d</sup> Includes propylene. <sup>e</sup> Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline. <sup>f</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. (s)=Less than 500 barrels per day and areater than -500 barrels per day.

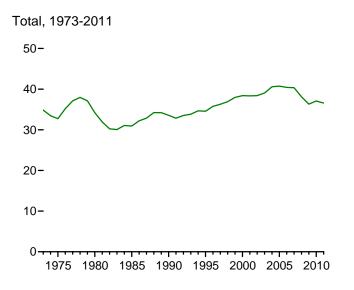
greater than -500 barrels per day.

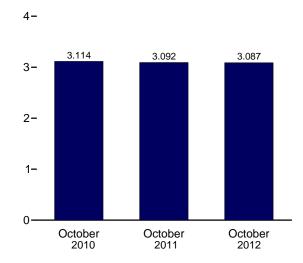
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. of Columbia. Web Pages:

of Columbia. Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/. Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum* Statement, Annual, annual reports. • 1976-1980: U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual*, annual reports. • 1981-2011: EIA, *Petroleum Supply Annual*, annual reports. • 2012: EIA, *Petroleum Slaply 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.

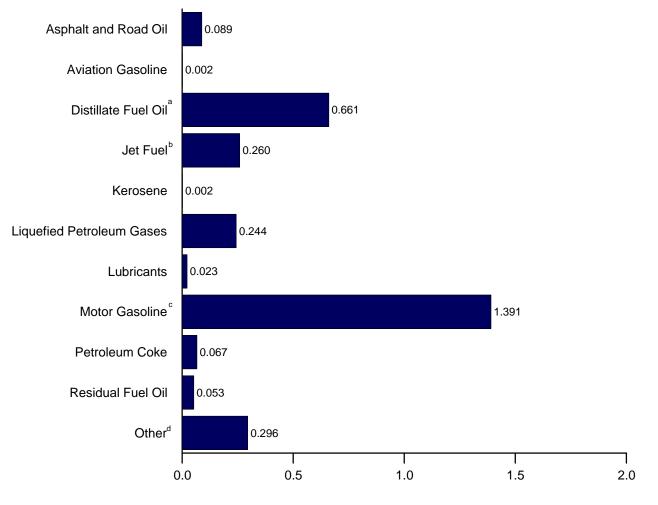
## Figure 3.6 Heat Content of Petroleum Products Supplied by Type (Quadrillion Btu)

Total





## By Product, October 2012



<sup>a</sup> Includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

<sup>b</sup> Includes kerosene-type jet fuel only.

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

<sup>d</sup> All petroleum products not shown above.
 Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
 Source: Table 3.6.

## Table 3.6 Heat Content of Petroleum Products Supplied by Type

(Trillion Btu)

	Asphalt					LPG	a			Petro-			
	and Road Oil	Aviation Gasoline	Distillate Fuel Oil <sup>b</sup>	Jet Fuel <sup>c</sup>	Kero- sene	Propaned	Total	Lubri- cants	Motor Gasoline <sup>e</sup>	leum Coke	Residual Fuel Oil	Other <sup>f</sup>	Total
		Cuccinic				repuire			Cuccinic			•	. etai
1973 Total	1,264	83	6,575	2,167	447	1,221	1,981	359	12,797	573	6,477	2,114	34,837
1975 Total	1,014	71	6,061	2,047	329	1,097	1,807	304	12,798	542	5,649	2,109	32,732
1980 Total	962	64	6,110	2,190	329	1,059	1,976	354	12,648	522	5,772	3,278	34,205
1985 Total	1,029	50	6,098	2,497	236	1,236	2,103	322	13,098	582	2,759	2,152	30,925
1990 Total	1,170	45	6,422	3,129	88	1,284	2,059	362	13,872	745	2,820	2,839	33,552
1995 Total	1,178	40 37	6,818	3,132	112	1,534	2,512	346	14,825	802	1,955	2,837	34,556
1996 Total	1,176	37 40	7,175	3,274	128 136	1,594	2,660 2,690	335 354	15,064	837 829	1,952	3,121	35,759
1997 Total 1998 Total	1,224 1,263	40 35	7,304 7,359	3,308 3,357	162	1,638 1,568	2,690	354 371	15,254 15,701	982	1,828 2,036	3,298 3,093	36,265 36,934
1999 Total	1,203	39	7,595	3,357	151	1,745	2,375	375	16,036	1,048	2,030	3,093	30,934
2000 Total	1,276	36	7,935	3,402	140	1,734	2,037	369	16,155	895	2,091	2,979	38,402
2001 Total	1,257	35	8,179	3,426	150	1,598	2,697	338	16,373	961	1,861	3,056	38,333
2002 Total	1,240	34	8,028	3,340	90	1,747	2,852	334	16,819	1,018	1,605	3,040	38,400
2003 Total	1,220	30	8,349	3,265	113	1,701	2,748	309	16,981	1,000	1,772	3,264	39,051
2004 Total	1,304	31	8,652	3,383	133	1,791	2,824	313	17,379	1,156	1,990	3,428	40,593
2005 Total	1,304	35	8,755	3,303	144	1,721	2,682	312	17,444	1,133	2,111	3,318	40,333
2006 Total	1,261	33	8,864	3,379	111	1,701	2,700	303	17,622	1,148	1,581	3,416	40,420
2007 Total	1,197	32	8,921	3,358	67	1,729	2,733	313	17,689	1,077	1,659	3,313	40,358
2008 Total	1.012	28	8.411	3,193	30	1.620	2.574	291	17,168	1.022	1.432	2.941	38.101
2009 Total	873	27	7,720	2,883	36	1,624	2,664	262	17,135	938	1,173	2,611	36,321
2010 January	42	2	668	236	3	195	294	22	1,378	50	120	215	3,029
February	46	1	629	213	5	164	255	23	1,253	56	91	202	2,776
March	54	2	692	254	2	142	246	26	1,422	79	103	252	3,134
April	66	3	657	240	1	105	198	24	1,426	70	111	251	3,046
May	78	2	657	254	2	106	207	24	1,482	63	101	240	3,111
June	103	3	654	263	3	104	206	28	1,458	74	94	237	3,122
July	97	3	640	263	3	109	217	27	1,504	72	116	242	3,183
August	110	2	692	261	2	116	220	24	1,497	81	93	259	3,241
September	92	3	679	248	1	120	219	25	1,426	78	97	227	3,097
October	89	2	681	251	3	135	233	24	1,458	63	95	215	3,114
November	59	2	677	238	8	134	228	23	1,380	70	104	227	3,014
December	42	2	754	243	9	194	298	21	1,441	69	102	233	3,214
Total	878	27	8,080	2,963	41	1,624	2,821	291	17,127	826	1,228	2,800	37,082
2011 January	45	2	715	237	3	207	304	23	1,354	67	113	227	3,091
February	46 58	2 3	638 730	215 243	8 5	159 152	254 265	20 28	1,257 1,423	49 65	100 90	190 250	2,779
March	62	2	656	243	1	115	205	20 25	1,423	64	90 90	230	3,160 2,965
April May	62 73	2	668	248 250	(s)	115	216	25 23	1,377	64 77	90 91	224 194	2,965
	90	3	690	250	(5)	110	220	23	1,420	68	90	209	3,032
June July	90 96	3	644	252	2	116	214	23	1,419	69	90 64	209	3,070
August	112	3	724	239	2	124	222	22	1,444	86	68	245	3,201
September	92	2	688	241	1	117	216	20	1,369	63	93	234	3,201
October	87	2	723	243	(s)	142	245	19	1,399	74	79	220	3,092
November	59	2	718	243	(3)	149	254	23	1,336	68	79	239	3,032
December	38	2	696	238	2	173	289	23	1,405	43	101	220	3,054
Total	859	27	8,289	2,950	25	1,682	2,937	276	16,670	794	1,058	2,676	36,562
2012 January	44	2	690	231	(s)	167	270	24	1,324	69	82	238	2,975
February	42	2	672	222	4	149	250	24	1,305	52	72	219	2,863
March	49	2	669	243	(s)	135	245	21	1,396	60	81	209	2,976
April	65	2	647	231	1	113	219	22	1,380	61	77	201	2,907
May	78	3	676	248	(s)	130	237	22	1,455	70	57	217	3,063
June	90	2	652	263	(s)	122	218	19	1,414	67	70	211	3,007
July	95	3	641	258	(s)	120	230	20	1,427	63	81	232	3,051
August	<sup>R</sup> 100	R 2	<sup>R</sup> 675	<sup>R</sup> 258	R (S)	<sup>R</sup> 132	<sup>R</sup> 239	R 21	<sup>R</sup> 1,478	<sup>R</sup> 76	<sup>R</sup> 69	R 233	<sup>R</sup> 3,152
September	F 94	F 2	E 649	E 242	+1	E 131	<sup>RF</sup> 224	RF 21	E 1,358	F 66	E 61	<sup>RE</sup> 198	E 2,916
October	F 89	F2	E 661	E 260	F2	E 160	F 244	F 23	E 1,391	F 67	E 53	E 296	E 3,087
10-Month Total	<sup>E</sup> 746	E 22	<sup>E</sup> 6,634	<sup>E</sup> 2,455	⊑9	<sup>E</sup> 1,360	E 2,377	<sup>E</sup> 217	<sup>E</sup> 13,928	<sup>E</sup> 652	<sup>E</sup> 703	E 2,254	<sup>E</sup> 29,997
2011 10-Month Total 2010 10-Month Total	762 777	24 24	6,876 6,649	2,471 2,482	22 25	1,360 1,295	2,394 2,295	232 247	13,929 14,306	683 686	878 1,022	2,218 2,341	30,488 30,853

a Liquefied petroleum gases. b Beginning in 2009, includes renewable diesel fuel (including biodiesel)

blended into distillate fuel oil. <sup>c</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

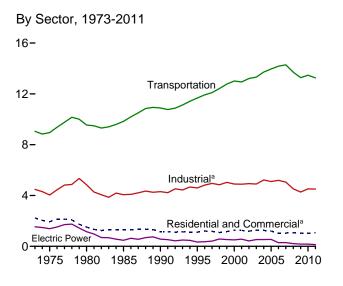
2005, includes kerosene-type jet uer only, naphtra type jet tet a susset
"Other."
d Includes propylene.
e Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.
f Pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned

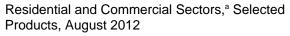
as fuel. Beginning in 2005, also includes naphtha-type jet fuel. R=Revised. E=Estimate. F=Forecast. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu.

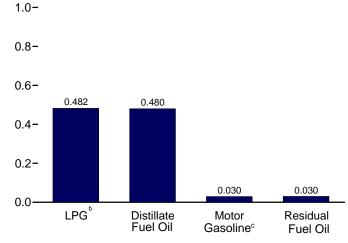
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due inducts the term of the section. to independent rounding. 
• Geographic coverage is the 50 States and the District of Columbia.

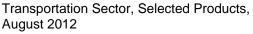
Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/. Sources: See end of section.

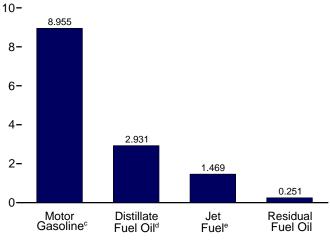












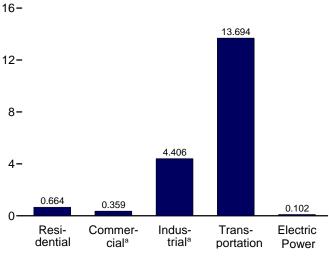
<sup>a</sup> Includes combined-heat-and-power plants and a small number of electricity-only plants.

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

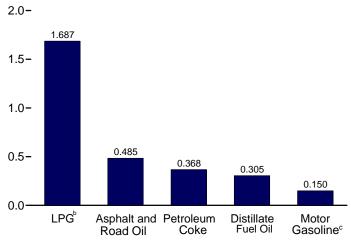
<sup>c</sup> Includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes renewable diesel fuel (including biodiesel) blended into

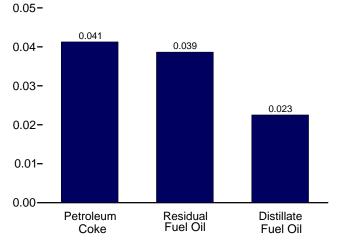
By Sector, August 2012



Industrial Sector,<sup>a</sup> Selected Products, August 2012



Electric Power Sector, August 2012



distillate fuel oil.

<sup>e</sup> Includes kerosene-type jet fuel only.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum. Sources: Tables 3.7a–3.7c.

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

		Residen	tial Sector		Commercial Sectora							
	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	407	1,459	303	31	105	45	NA	290	774	
1975 Average		78	365	1,293	276	24	92	46	NA	214	653	
1980 Average	617	51	222	890	243	20	63	56	NA	245	626	
1985 Average	•••	77	224	815	297	16	68	50	NA	99	530	
1990 Average		31	252	742	252	6	73	58	0	100	489	
1995 Average		36	282	743	225	11	78	10	(s)	62	385	
1996 Average		43	334	811	227	10	87	14	(s)	60	397	
1997 Average		45	325	781	209	12	86	22	(s)	48	378	
1998 Average		52	303	718	202	15	84	20	(s)	37	358	
1999 Average	. 389	54	376	819	206	13	100	15	(s)	32	366	
2000 Average	. 424	46	395	865	230	14	107	23	(s)	40	415	
2001 Average	. 427	46	375	849	239	15	102	20	(s)	30	406	
2002 Average	. 404	29	384	817	209	8	101	24	(s)	35	376	
2003 Average	. 425	34	389	848	226	9	112	32	(s)	48	428	
2004 Average	. 433	41	364	839	221	10	108	23	(s)	53	416	
2005 Average	. 402	40	366	809	210	10	94	24	(s)	50	389	
2006 Average	. 335	32	318	685	189	7	88	26	(s)	33	343	
2007 Average	. 342	21	345	708	181	4	87	32	(s)	33	337	
2008 Average	. 314	10	394	718	174	2	113	24	(s)	32	345	
2009 Average	. 283	13	391	687	194	2	99	28	(s)	33	357	
2010 January	. 460	10	461	931	324	2	122	28	(s)	57	532	
February		24	441	936	332	4	116	28	(s)	58	538	
March		8	388	666	190	1	102	28	(s)	33	356	
April		5	321	521	138	1	85	29	(s)	24	277	
May		8	327	542	146	1	86	30	Ó	25	289	
June		11	338	593	172	2	89	30	0	30	323	
July	. 189	13	345	547	133	2	91	30	Ó	23	280	
August	. 169	7	353	528	119	1	93	30	(s)	21	264	
September		6	363	526	111	1	96	29	(s)	19	256	
October		10	370	614	164	2	98	29	(s)	29	322	
November		32	373	676	190	5	99	29	(s)	33	356	
December		35	466	934	304	6	123	29	(s)	53	516	
Average		14	379	667	193	2	100	29	(s)	34	358	
2011 January	. 400	13	480	893	281	2	127	27	(s)	43	481	
February		35	440	895	295	6	116	28	(s)	45	490	
March		19	420	725	201	3	111	28	(s)	31	375	
April		6	356	559	139	1	94	28	Ó	21	283	
May	. 130	(s)	362	492	91	(s)	96	29	0	14	230	
June		3	353	558	142	1	93	29	0	22	287	
July		6	355	542	127	1	94	29	0	19	270	
August	. 246	4	366	616	174	1	97	29	0	26	326	
September	. 270	5	357	632	190	1	94	28	0	29	342	
October	. 293	1	388	682	206	(s)	102	28	0	31	368	
November	. 336	4	417	757	236	1	110	28	(s)	36	411	
December		9	456	898	305	1	120	28	(s)	46	502	
Average	. 282	9	396	686	198	1	105	28	(s)	30	363	
2012 January	. 469	1	429	899	330	(s)	113	26	(s)	50	521	
February		16	422	832	277	3	111	28	(s)	42	462	
March		1	388	709	225	(s)	102	28	(s)	34	391	
April		2	361	597	165	(s)	95	29	(s)	25	314	
May		(s)	375	608	164	(s)	99	29	0	25	317	
June	. 241	`´1	361	603	169	(s)	95	29	0	26	320	
July		2	369	<sup>R</sup> 596	<sup>R</sup> 158	(s)	98	29	(s)	24	R 309	
August	. 282	1	382	664	198	(s)	101	30	(s)	30	359	
8-Month Average		3	386	688	211	(s)	102	28	(s)	32	374	
2011 8-Month Average	256	11	391	658	180	2	103	28	(s)	27	341	
2010 8-Month Average		11	371	656	193	2	98	29	(s)	34	356	

<sup>a</sup> Commercial sector fuel use, including that at commercial

Commercial sector fuel ase, 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 fuel ethanol blended into motor gasoline.
 R=Revised. NA=Not available. (s)=Less than 500 barrels per day and greater

Notes: • Data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is

an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum 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					
973 Average	522	691	75	902	88	133	254	809	1,005	4.479					
975 Average	419	630	58	844	68	116	246	658	1,001	4,038					
980 Average	396	621	87	1,172	82	82	234	586	1,581	4,842					
985 Average	425	526	21	1,285	75	114	261	326	1,032	4,065					
990 Average	483	541	6	1.215	84	97	325	179	1,373	4.304					
995 Average	486	532	ž	1,527	80	105	328	147	1,381	4,594					
996 Average	484	557	9	1,580	78	105	343	146	1,518	4,819					
997 Average	505	566	9	1,617	82	111	331	127	1,605	4,953					
998 Average	521	570	11	1,553	86	105	390	100	1,508	4,844					
999 Average	547	558	6	1,709	87	80	426	90	1,532	5,035					
000 Average	525	563	8	1,720	86	79	361	105	1,458	4,903					
001 Average	519	611	11	1,557	79	155	390	89	1,481	4,892					
002 Average	512	566	7	1.668	78	163	383	83	1,474	4.934					
003 Average	503	534	12	1,561	72	171	375	96	1,579	4,903					
004 Average	537	570	14	1,646	73	195	423	108	1,657	5,222					
005 Average	546	594	19	1,549	72	187	404	123	1,605	5,100					
006 Average	521	594	14	1.627	71	198	425	104	1,640	5,193					
2007 Average	494	595	6	1.637	73	161	412	84	1,593	5.056					
008 Average	417	599	2	1,419	67	131	394	86	1,408	4,523					
009 Average	360	521	2	1,541	61	128	363	46	1,251	4,274					
010 January	203	484	3	2.036	60	140	201	59	1,218	4.403					
February	249	531	6	1,949	70	141	264	55	1,263	4,528					
March	264	686	2	1,714	70	144	356	54	1,421	4,712					
April	331	623	1	1,419	68	149	323	61	1,463	4,438					
May	378	472	2	1,446	66	150	274	51	1,351	4,190					
June	517	427	3	1,492	80	153	333	43	1,386	4,433					
July	470	331	3	1,523	73	153	303	53	1,373	4,282					
August	537	544	2	1,559	66	152	370	42	1,467	4,738					
September	463	701	1	1,604	70	150	371	51	1,326	4,738					
October	434	548	3	1,637	66	148	279	51	1,215	4.380					
November	295	664	8	1,648	64	145	339	57	1,333	4,553					
December	204	700	9	2,061	58	146	307	51	1,301	4,838					
Average	362	559	4	1,673	68	148	310	52	1,343	4,519					
011 January	221	<sup>R</sup> 715	3	2,123	64	137	<sup>R</sup> 275	<sup>R</sup> 62	1,244	<sup>R</sup> 4.844					
February	248	<sup>R</sup> 586	9	1,946	62	141	<sup>R</sup> 218	59	1,185	<sup>R</sup> 4,455					
March	282	<sup>R</sup> 764	5	1,856	77	144	<sup>R</sup> 266	48	1,405	<sup>R</sup> 4,847					
April	311	<sup>R</sup> 562	2	1.573	70	144	R 302	R 49	1,301	<sup>R</sup> 4.314					
May	357	<sup>R</sup> 555	(s)	1,600	63	145	<sup>R</sup> 359	49	1,082	<sup>R</sup> 4,209					
June	454	572	(0)	1,561	64	149	<sup>R</sup> 309	R 50	1,213	R 4,372					
July	465	R 307	2	1,570	61	148	<sup>R</sup> 287	32	1,363	<sup>R</sup> 4,235					
August	545	529	1	1,618	70	146	<sup>R</sup> 388	34	1,311	<sup>R</sup> 4,643					
September	462	<sup>R</sup> 557	1	1,579	64	143	<sup>R</sup> 276	<sup>R</sup> 51	1,299	<sup>R</sup> 4,432					
October	423	<sup>R</sup> 587	(s)	1,715	53	142	<sup>R</sup> 343	42	1,239	<sup>R</sup> 4,544					
November	297	<sup>R</sup> 705	1	1,842	64	140	336	<sup>R</sup> 43	1,391	4,819					
December	187	<sup>R</sup> 454	2	2,014	57	142	<sup>R</sup> 173	<sup>R</sup> 53	1,228	<sup>R</sup> 4,311					
Average	355	R 574	2	1,749	64	144	R 295	R 48	1,272	<sup>R</sup> 4,503					
012 January	216	<sup>R</sup> 552	(s)	1.896	66	134	<sup>R</sup> 303	<sup>R</sup> 41	1.349	<sup>R</sup> 4.558					
February	218	R 723	(0)	1,864	71	141	<sup>R</sup> 242	R 39	1,306	R 4,609					
March	236	<sup>R</sup> 498	(s)	1,715	57	142	R 292	41	1,163	<sup>R</sup> 4.145					
April	329	R 490	(0)	1,594	63	145	311	41	1,166	4.139					
May	378	<sup>R</sup> 468	(s)	1,657	59	148	<sup>R</sup> 343	29	1,224	R 4,307					
June	454	R 378	(s)	1,596	55	148	<sup>R</sup> 336	35	1,214	<sup>R</sup> 4,217					
July	461	<sup>R</sup> 253	(S)	1,632	54	145	<sup>R</sup> 298	<sup>R</sup> 40	1,298	<sup>R</sup> 4,181					
August	485	305	(s)	1,687	57	150	368	34	1,320	4,406					
8-Month Average	348	456	1	1,705	60	144	312	38	1,255	4,319					
011 8-Month Average	362	574	3	1.730	66	144	302	48	1.264	4.492					
010 8-Month Average	369	512	3	1,640	69	148	303	52	1,368	4,465					

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

<sup>C</sup> Industrial sector fuel use, including that at industrial combined-near-and-power (CHP) and industrial electricity-only plants.
<sup>b</sup> Finished motor gasoline. Beginning in 1993, also includes fuel 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 500 barrels per day and greater than -500 barrels per

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

Geographic coverage is the 50 States and the District of Columbia.
 Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum 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)

				Transportati	ion Secto	r			Electric Power Sector <sup>a</sup>				
	Aviation Gasoline	Distillate Fuel Oil <sup>b</sup>	Jet Fuel <sup>c</sup>	Liquefied Petroleum Gases	Lubri- cants	Motor Gasoline <sup>d</sup>	Residual Fuel Oil	Total	Distillate Fuel Oil <sup>e</sup>	Petro- leum Coke	Residual Fuel Oil <sup>f</sup>	Total	
1973 Average	45	1,045	1.042	35	74	6.496	317	9.054	129	7	1.406	1.542	
1975 Average	39	998	992	31	70	6,512	310	8,951	107	1	1,280	1,388	
1980 Average	35	1,311	1,062	13	77	6,441	608	9,546	79	2	1,069	1,151	
1985 Average	27	1,491	1,218	21	71	6,667	342	9,838	40	3	435	478	
1990 Average	24	1,722	1,522	16	80	7,080	443	10,888	45	14	507	566	
1995 Average	21	1,973	1,514	13	76	7,674	397	11,668	51	37	247	334	
1996 Average	20	2,096	1,578	11	73	7,772	370	11,921	51	36	273	360	
1997 Average	22	2,198	1,599	10	78	7,883	310	12,099	52	46	311	410	
1998 Average	19	2,263	1,622	13	81	8,128	294	12,420	64	56	456	576	
1999 Average	21	2,352	1,673	10	82	8,336	290	12,765	66	51	418	535	
2000 Average	20	2,422	1,725	8	81	8,370	386	13,012	82	45	378	505	
2001 Average	19	2,489	1,655	10	74	8,435	255	12,938	80	47	437	564	
2002 Average	18	2,536	1,614	10	73	8,662	295	13,208	60	80	287	427	
2003 Average	16	2,665	1,578	12	68	8,733	249	13,321	76	79	379	534	
2004 Average	17	2,783	1,630	14	69	8,887	321	13,720	52	101	382	535	
2005 Average	19	2,858	1,679	20	68	8,948	365	13,957	54	111	382	547	
2006 Average	18	3,017	1,633	20	67	9,029	395	14,178	35	97	157	289	
2007 Average	17	3,037	1,622	16	69	9,093	433	14,287	42	78	173	293	
2008 Average	15	2,824	1,539	29	64	8,834	400	13,704	34	70	104	209	
2009 Average	14	2,600	1,393	20	57	8,840	353	13,279	33	63	79	175	
2010 January	10	2,353	1,344	26	57	8,352	407	12,547	79	67	93	239	
February	10	2,490	1,343	24	66	8,411	364	12,709	30	69	38	138	
March	14	2,663	1,443	22	67	8,620	403	13,231	24	69	41	134	
April	17	2,779	1,410	18	64	8,929	465	13,682	23	62	40	125	
May	15	2,781	1,446	18	62	8,983	377	13,681	33	64	66	164	
June	18	2,858	1,543	19	75	9,128	322	13,963	41	78	105	224	
July	20	2,848	1,494	19	69	9,118	399	13,966	42	81	120	244	
August	14	2,963	1,486	20	63	9,074	315	13,934	34	63	98	196	
September	20	2,888	1,457	20	66	8,933	381	13,766	29	62	61	153	
October	15	2,803	1,430	21	62	8,839	371	13,540	25	56	37	118	
November	11	2,719	1,396	21	60	8,643	427	13,277	30	50	35	114	
December	12	2,679	1,383	26	55	8,736	355	13,245	60	63	67	189	
Average	15	2,737	1,432	21	64	8,816	382	13,466	38	65	67	170	
2011 January	11	<sup>R</sup> 2,520	1,346	27	60	8,206	<sup>R</sup> 421	<sup>R</sup> 12,591	<sup>R</sup> 43	<sup>R</sup> 85	<sup>R</sup> 56	<sup>R</sup> 184	
February	14	2,580	1.352	24	59	8,435	<sup>R</sup> 425	<sup>R</sup> 12,889	<sup>R</sup> 33	<sup>R</sup> 75	<sup>R</sup> 37	<sup>R</sup> 144	
March	18	<sup>R</sup> 2,765	1,385	23	73	8,626	346	<sup>R</sup> 13,235	<sup>R</sup> 29	<sup>R</sup> 82	<sup>R</sup> 37	<sup>R</sup> 147	
April	10	R 2,823	1,457	20	66	8,623	360	<sup>R</sup> 13,360	R 33	<sup>R</sup> 54	46	<sup>R</sup> 133	
May	18	R 2,892	1,424	20	59	8,644	<sup>R</sup> 363	<sup>R</sup> 13,420	<sup>R</sup> 31	<sup>R</sup> 55	41	<sup>R</sup> 128	
June	17	3,000	1,540	20	61	8,889	<sup>R</sup> 364	13,891	32	<sup>R</sup> 70	<sup>R</sup> 43	<sup>R</sup> 145	
July	19	2,914	1,473	20	58	8,854	226	13,562	<sup>R</sup> 36	<sup>R</sup> 81	52	<sup>R</sup> 169	
August	18	3,034	1,554	20	67	8,750	<sup>R</sup> 243	13,686	26	<sup>R</sup> 73	R 44	<sup>R</sup> 143	
September	13	2,895	1,416	20	61	8,572	378	<sup>R</sup> 13,355	<sup>R</sup> 24	<sup>R</sup> 73	<sup>R</sup> 33	<sup>R</sup> 130	
October	16	2,894	1,384	22	50	8,479	<sup>R</sup> 300	13,143	R 24	<sup>R</sup> 52	32	<sup>R</sup> 107	
November	12	<sup>R</sup> 2,807	1,416	23	60	8,369	<sup>R</sup> 308	<sup>R</sup> 12,996	<sup>R</sup> 25	40	32	<sup>R</sup> 97	
December	10	<sup>R</sup> 2,633	1,353	25	54	8,513	389	<sup>R</sup> 12,977	<sup>R</sup> 28	<sup>R</sup> 56	31	<sup>R</sup> 116	
Average	15	<sup>R</sup> 2,814	1,425	22	61	8,581	343	R 13,260	<sup>R</sup> 30	<sup>R</sup> 66	41	<sup>R</sup> 137	
2012 January	12	<sup>R</sup> 2,445	1,313	24	62	8,026	<sup>R</sup> 295	12,179	<sup>R</sup> 26	<sup>R</sup> 63	34	<sup>R</sup> 123	
February	11	R 2,562	1,350	23	67	8,452	R 285	R 12,752	R 23	<sup>R</sup> 55	27	<sup>R</sup> 105	
March	14	2,644	1,382	22	54	8,463	R 311	<sup>R</sup> 12,889	<sup>R</sup> 19	<sup>R</sup> 31	29	<sup>R</sup> 79	
April	14	2,790	1,359	20	59	8,644	314	R 13,200	<sup>R</sup> 26	27	28	<sup>R</sup> 80	
May	17	R 2,852	1,409	21	56	8,819	212	R 13,385	R 29	R 33	29	<sup>R</sup> 91	
June	13	2,912	1,545	20	52	8,857	R 265	<sup>R</sup> 13,664	<sup>R</sup> 29	R 37	45	R 111	
July	20	R 2,889	1,468	20	51	8,646	301	<sup>R</sup> 13,395	R 28	R 40	53	<sup>R</sup> 121	
August	13	2,931	1,469	21	54	8,955	251	13,694	23	41	39	102	
8-Month Average	14	2,754	1,412	21	57	8,608	279	13,146	25	41	36	102	
2011 8-Month Average	16	2,818	1,442	22	63	8,630	342	13,332	33	72	45	149	
2010 8-Month Average	15	2,010	1,442	21	65	8,830	381	13,471	39	69	76	143	

<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> Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
 <sup>c</sup> Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type, naphtha-type jet fuel is included in

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

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

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

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973.

Sources: See end of section.

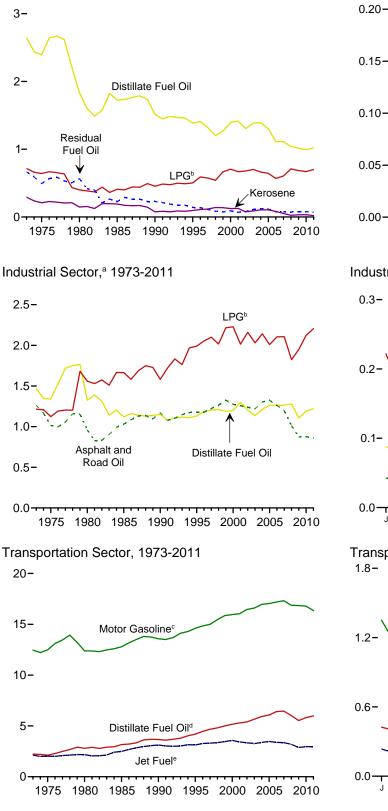
## Figure 3.8 Heat Content of Petroleum Consumption by Sector, Selected Products (Quadrillion Btu)

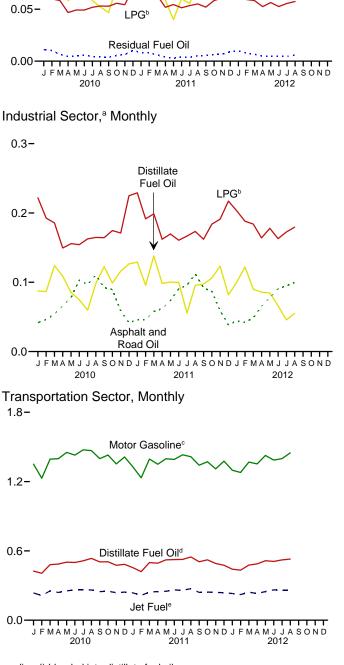
Residential and Commercial Sectors,<sup>a</sup> 1973-2011

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

Distillate

Fuel Oil





diesel) blended into distillate fuel oil.

Beginning in 2005, includes kerosene-type jet fuel only.
 Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
 Sources: Tables 3.8a–3.8c.

electricity-only plants. <sup>b</sup> Liquefied petroleum gases.

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

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline. <sup>d</sup> Beginning in 2009, includes renewable diesel fuel (including bio-

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

		Residenti	al 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	
973 Total	2.003	227	570	2.800	644	65	147	87	NA	665	1.607	
1975 Total	1,807	161	512	2,479	587	49	129	89	NA	492	1,346	
980 Total	1,316	107	311	1,734	518	41	88	107	NA	565	1,318	
1985 Total	1.092	159	314	1.565	631	33	95	96	NA	228	1.083	
990 Total	978	64	352	1,394	536	12	102	111	0	230	991	
995 Total	905	74	395	1,374	479	22	109	18	(s)	141	769	
996 Total	926	89	469	1,484	483	21	122	27	(s)	137	790	
997 Total	874	93	455	1,422	444	25	120	43	(s)	111	743	
998 Total	772	108	424	1,304	429	31	118	39	(s)	85	702	
1999 Total	828	111	526	1,465	438	27	140	28	(s)	73	707	
2000 Total	905	95	555	1,554	491	30	150	45	(s)	92	807	
2001 Total	908	95	526	1,529	508	31	143	37	(s)	70	790	
2002 Total	860	60	537	1,457	444	16	141	45	(s)	80	726	
2003 Total	905	70	544	1,519	481	19	157	60	(s)	111	828 810	
2004 Total	924 854	85 84	512 513	1,520	470 447	20 22	152	45	(s)	122		
2005 Total 2006 Total	854 712	84 66	513 446	1,451 1,224	447	15	131 123	46 49	(s) (s)	116 75	762 664	
2006 Total	712	44	440	1,224	384	9	123	49 61	(S) (S)	75	651	
2007 Total	669	21	553	1,234	372	4	158	46	(s) (s)	73	653	
2009 Total	602	28	547	1,176	413	4	139	53	(s) (s)	76	685	
		_0	•	.,•					(0)			
2010 January	83	2	55	140	58	(s)	14	4	(s)	11	89	
February	77	4	47	128	54	1	13	4	(s)	10	82	
March	49	1	46	96	34	(s)	12	5	(s)	6	58	
April	34	1	37	72	24	(s)	10	5	(s)	5	43	
May	37	1	39	78	26	(s)	10	5	0	5	47	
June	43	2	39	83	30	(s)	10	5	0	6	51	
July	34	2	41	78	24	(s)	11	5	0	5	45	
August	31	1	42	74	21	(s)	11	5	(s)	4	42	
September	27	1	42	70	19	(s)	11	5	(s)	4	39	
October	42 47	2 6	44 43	88 96	30 33	(s) 1	12	5	(s)	6	52	
November December	47 78	6	43 55	96 140	55	1	11 15	4 5	(s) (s)	6 10	56 86	
Total	583	29	530	1,142	410	5	140	55	(s) (s)	77	688	
2011 January	72	2	57	132	51	(s)	15	4	(s)	8	79	
February	68	6	47	121	48	(3)	12	4	(s)	8	74	
March	52	3	50	105	36	1	13	5	(s)	6	61	
April	34	1	41	76	24	(s)	11	4	Ő	4	44	
May	23	(s)	43	67	17	(s)	11	5	0	3	35	
June	35	`1	41	76	25	(s)	11	5	0	4	44	
July	33	1	42	76	23	(s)	11	5	0	4	43	
August	45	1	44	89	31	(s)	12	5	0	5	53	
September	47	1	41	89	33	(s)	11	4	0	5	54	
October	53	(s)	46	99	37	(s)	12	5	0	6	60	
November	59	1	48	107	41	(s)	13	4	(s)	7	65	
December	78	2	54	134	55	(s)	14	5	(s)	9	83	
Total	599	18	554	1,171	422	3	146	54	(s)	69	695	
012 January	85	(s)	51	136	60	(s)	13	4	(s)	10	87	
February	67	(3)	47	116	47	(s)	12	4	(S)	8	72	
March	58	(s)	46	104	41	(s)	12	5	(S)	7	64	
April	41	(s)	41	83	29	(s)	11	4	(s)	5	49	
May	42	(s)	45	87	30	(s)	12	5	0	5	51	
June	42	(s)	42	84	30	(s)	11	5	Ō	5	50	
July	41	(s)	44	85	29	(s)	12	5	(s)	5	50	
August	51	(s)	45	96	36	(s)	12	5	(s)	6	59	
8-Month Total	425	4	361	791	299	ີ 1	95	36	(s)	49	481	
2011 8-Month Total	362	15	365	742	255	2	96	36	(s)	42	432	
010 8-Month Total	388	15	346	748	273	2	91	37	(s)	51	455	

<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 fuel ethanol

NA=Not available. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu. Notes: • Data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption

and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973. Secureor: Secured ef condition

Sources: See end of section.

## Table 3.8b Heat Content of Petroleum Consumption: Industrial Sector

(Trillion Btu)

	Industrial Sector <sup>a</sup>											
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>b</sup>	Petroleum Coke	Residual Fuel Oil	Otherc	Total		
973 Total	1,264	1,469	156	1,215	195	255	558	1,858	2,114	9,083		
975 Total	1,014	1,339	119	1,123	149	223	540	1,509	2,109	8,127		
980 Total	962	1,324	181	1,559	182	158	516	1,349	3,278	9,509		
985 Total	1.029	1,119	44	1.664	166	218	575	748	2,152	7.714		
990 Total	1,170	1,150	12	1.582	186	185	714	411	2.839	8,25		
995 Total	1,178	1,130	12	1,582	178	200	714	337	2,839	8,58		
	1,176	1,131	15	2.054	178	200	757	335		9.02		
996 Total									3,121			
997 Total	1,224	1,203	19	2,100	182	212	727	291	3,298	9,25		
998 Total	1,263	1,211	22	2,016	191	199	858	230	3,093	9,08		
999 Total	1,324	1,187	13	2,217	193	152	936	207	3,129	9,357		
000 Total	1,276	1,200	16	2,228	190	150	796	241	2,979	9,076		
001 Total	1,257	1,300	23	2,014	174	295	858	203	3,056	9,18		
002 Total	1,240	1,204	14	2,160	172	309	842	190	3,040	9,171		
003 Total	1,220	1,136	24	2,030	159	324	825	220	3,264	9,202		
004 Total	1,304	1,214	28	2,141	161	372	934	249	3,428	9,83		
005 Total	1,323	1,264	39	2.009	160	356	889	281	3,318	9,640		
006 Total	1,323	1,263	30	2,003	156	376	934	239	3,416	9.78		
007 Total	1,197	1,205	13	2,104	161	306	906	193	3.313	9.46		
008 Total	1,197	1,205	4	1,823	150	250	868	193	2,941	8,523		
009 Total	873	1,107	4	1,950	135	244	799	106	2,611	7,82		
				,					,			
010 January	42	87	(s)	222	11	23	38	11	215	65		
February	46	87	1	193	12	21	45	10	202	61		
March	54	124	(s)	186	13	23	67	11	252	730		
April	66	109	(s)	149	12	23	58	11	251	68		
May	78	85	(s)	156	12	24	51	10	240	657		
June	103	75	(s)	154	14	24	60	8	237	676		
July	97	60	(-)	163	14	25	57	10	242	66		
August	110	98	(s)	165	12	25	69	8	259	74		
September	92	123	(S)	164	13	23	67	10	200	719		
October	89	99	(s)	175	13	23	52	10	215	676		
	59	116	(5)	175	12	24			215	680		
November							61	11				
December	42	126	2	225	11	24	57	10	233	729		
Total	878	1,188	7	2,121	149	281	682	120	2,800	8,227		
11 January	45	129	1	229	12	22	<sup>R</sup> 51	12	227	R 729		
February	46	96	1	191	11	21	<sup>R</sup> 37	10	190	<sup>R</sup> 603		
March	58	138	1	199	14	23	<sup>R</sup> 50	9	250	R 743		
April	62	98	(s)	162	13	23	55	9	224	R 646		
May	73	<sup>R</sup> 100	(S)	170	12	23	<sup>R</sup> 67	R 10	194	R 64		
June	90	100	(s)	161	12	23	<sup>R</sup> 56	9	209	R 660		
	90 96	55	(S) (S)	167	12	23	R 54	9	209	R 65		
July	90 112	96		173	13	24 24	<sup>R</sup> 73	6 7	245	R 73		
August			(s)				<sup>R</sup> 50	<sup>R</sup> 10				
September	92	97	(s)	162	12	22			224	R 669		
October	87	106	(s)	184	10	23	<sup>R</sup> 64	8	220	R 70		
November	59	123	(s)	191	12	22	61	8	239	71		
December	38	82	(s)	217	11	23	R 32	10	220	<sup>R</sup> 63		
Total	859	<sup>R</sup> 1,221	4	2,205	142	274	<sup>R</sup> 648	R 109	2,676	<sup>R</sup> 8,13		
12 January	44	100	(s)	203	12	22	<sup>R</sup> 57	8	238	<sup>R</sup> 68		
February	42	122	(0)	188	13	21	R 42	7	219	R 65		
March	49	90	(s)	184	11	23	R 55	8	209	R 62		
	65	86	(s)	164	11	23	56	8	203	614		
April	65 78	85		178	11	23	50 64	6 6	201	R 662		
May			(s)							R 004		
June	90	66	(s)	163	10	23	<sup>R</sup> 61	7	211	R 63		
July	95	<sup>R</sup> 46	(s)	172	10	23	56	8	232	R 64		
August	100	55	(s)	180	11	24	69	7	233	678		
8-Month Total	563	649	1	1,432	89	183	459	58	1,761	5,194		
011 8-Month Total	583	812	4	1,451	98	183	441	73	1,773	5,419		
10 8-Month Total	596	725	4	1,387	102	187	444	80	1,899	5,42		

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

<sup>C</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 fuel 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 and greater than -0.5 trillion Btu.

Notes: • Data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table by all sectors, see data for heat content of petroleum products supplied in Table
3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-3.8c.
See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973. Sources: See end of section.

			/						1			
				Transporta	tion Secto	r			E	lectric Po	wer Sector <sup>a</sup>	
	Aviation Gasoline	Distillate Fuel Oil <sup>b</sup>	Jet Fuel <sup>c</sup>	Liquefied Petroleum Gases	Lubri- cants	Motor Gasoline <sup>d</sup>	Residual Fuel Oil	Total	Distillate Fuel Oil <sup>e</sup>	Petro- leum Coke	Residual Fuel Oil <sup>f</sup>	Total
1973 Total 1975 Total	83 71 64	2,222 2,121	2,131 2,029	49 43 18	163 155	12,455 12,485	727 711	17,832 17,615	273 226 169	15 2	3,226 2,937	3,515 3,166
1980 Total 1985 Total 1990 Total	50 45	2,795 3,170 3,661	2,179 2,497 3,129	30 23	172 156 176	12,383 12,784 13,575	1,398 786 1,016	19,009 19,472 21,626	85	5 7 30	2,459 998 1,163	2,634 1,090 1,289
1995 Total 1996 Total	40 37 40	4,195 4,469 4.672	3,132 3,274 3,308	18 16 14	168 163 172	14,607 14,837 14,999	911 851 712	23,070 23,648 23,918	108 109 111	81 80 102	566 628 715	755 817 927
1997 Total 1998 Total 1999 Total	40 35 39	4,812 4,812 5,001	3,308 3,357 3,462	14 18 14	180 182	15,463 15,855	674 665	23,918 24,538 25,219	136 140	102 124 112	1,047 959	1,306 1,211
2000 Total	36	5,165	3,580	12	179	15,960	888	25,820	175	99	871	1,144
2001 Total	35	5,292	3,426	14	164	16,041	586	25,557	171	103	1,003	1,277
2002 Total	34	5,392	3,340	14	162	16,465	677	26,085	127	175	659	961
2003 Total	30	5,666	3,265	17	150	16,597	571	26,297	161	175	869	1,205
2004 Total	31	5,932	3,383	19	152	16,962	740	27,219	111	222	879	1,212
2005 Total	35	6,076	3,475	28	151	17,043	837	27,645	115	243	876	1,235
2006 Total	33	6,414	3,379	27	147	17,197	906	28,105	74	214	361	648
2007 Total	32	6,457	3,358	22	152	17,321	994	28,335	89	171	397	657
2008 Total	28	6,020	3,193	40	141	16,872	920	27,214	73	154	240	468
2009 Total	27	5,528	2,883	28	127	16,837	810	26,240	70	139	181	390
2010 January	2	425	236	3	11	1,351	79	2,107	14	12	18	45
February	1	406	213	3	11	1,229	64	1,928	5	12	7	23
March	2	481	254	3	13	1,394	79	2,225	4	13	8	25
April	3	486	240	2	12	1,398	88	2,227	4	11	8	23
May	2	502	254	2	12	1,453	73	2,299	6	12	13	31
June July	3 3	499 514	263 263	2 2 2	14 13	1,429 1,475	61 78	2,270 2,348	78	14 15	20 23	41 46
August	2	535	261	2 2 2	12	1,468	61	2,342	6	12	19	37
September	3	505	248		12	1,398	72	2,240	5	11	12	28
October	2	506	251		12	1,430	72	2,276	4	10	7	22
November	2	475	238	2	11	1,353	80	2,161	5	9	7	21
December	2	484	243	3	10	1,413	69	2,224	11	12	13	36
Total	<b>27</b>	<b>5,818</b>	<b>2,963</b>	<b>29</b>	<b>141</b>	<b>16,791</b>	<b>877</b>	<b>26,646</b>	<b>80</b>	<b>144</b>	<b>154</b>	<b>378</b>
2011 January	2	455	237	3	11	1,327	82	<sup>R</sup> 2,117 <sup>R</sup> 1,957	<sup>R</sup> 8	<sup>R</sup> 16 <sup>R</sup> 13	11	<sup>R</sup> 35 <sup>R</sup> 24
February March April	2 3 2	421 499 493	215 243 248	3	10 14 12	1,232 1,395 1,350	75 67 68	2,225 2,175	5 5 <sup>R</sup> 6	<sup>R</sup> 15 <sup>R</sup> 10	6 7 9	<sup>R</sup> 28 <sup>R</sup> 24
May	3	522	250	2	11	1,398	71	2,258	<sup>R</sup> 6	<sup>R</sup> 10	8	<sup>R</sup> 24
June	3	524	262	2	11	1,391	69	2,262	6	<sup>R</sup> 13	8	<sup>R</sup> 26
July	3	526	259	2	11	1,432	44	2,277	7	<sup>R</sup> 15	10	<sup>R</sup> 32
August	3	548	273	2	13	1,415	47	2,301	5	<sup>R</sup> 14	9	<sup>R</sup> 27
September		506	241	2	11	1,342	71	2,175	4	<sup>R</sup> 13	6	<sup>R</sup> 24
October	2	523	243	3	9	1,371	58	2,210	4	<sup>R</sup> 10	6	<sup>R</sup> 20
November	2	491	241	3	11	1,310	58	2,115	4	7	6	<sup>R</sup> 18
December	2	<sup>R</sup> 475	238	3	10	1,377	76	2,181	5	<sup>R</sup> 11	6	<sup>R</sup> 22
Total 2012 January	<b>27</b>	<sup>R</sup> <b>5,983</b> 442	<b>2,950</b> 231	<b>31</b> 3	<b>134</b> 12	<b>16,343</b> 1,298	<b>787</b> 58	<sup>R</sup> <b>26,254</b> 2,045	<sup>R</sup> 64	<sup>R</sup> 146 <sup>R</sup> 12	<sup>R</sup> 93 7	<sup>R</sup> 303 <sup>R</sup> 23
February March	2 2	433 477	222 243	3 3	12 10	1,279 1,369	52 61	2,002 2,165	43	R 10 6	5	<sup>R</sup> 18 15 <sup>R</sup> 15
April May June	2 3 2	488 515 509	231 248 263	2 2 2	11 11 9	1,353 1,427 1,387	59 41 50	2,146 2,246 2,222	4 5 5	5 6 <sup>R</sup> 7	5 6 9	<sup>R</sup> 17 <sup>R</sup> 20
July	3	<sup>R</sup> 522	258	2	10	1,399	59	2,252	5	7	10	23
August	2	529	258	3	10	1,449	49	2,300	4	8	8	19
8-Month Total	18	<b>3,914</b>	<b>1,953</b>	<b>20</b>	<b>84</b>	<b>10,960</b>	<b>428</b>	<b>17,377</b>	<b>36</b>	60	55	<b>150</b>
2011 8-Month Total	19	3,989	1,987	20	92	10,942	523	17,573	46	105	68	220
2010 8-Month Total	18	3,849	1,983	19	96	11,197	583	17,745	55	101	116	272

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

<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> Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
 <sup>c</sup> Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type, naphtha-type jet fuel is included in

<sup>6</sup> Through 2004, includes Kerosene-type and naprima-type jet rule. Degrimming in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Industrial Sector Other" on Table 3.8b.
 <sup>d</sup> Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

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

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

amount of fuel oil no. 4.

R=Revised.

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973. Sources: See end of section.

## Petroleum

**Note 1. Petroleum Survey Respondents.** The U.S. Energy Information Administration (EIA) uses a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review such industry publications as the *Oil & Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. Those sources are augmented by articles in newspapers, communications from respondents indicating changes in status, and information received from survey systems.

To supplement routine frames maintenance and to provide more thorough coverage, a comprehensive frames investigation is conducted every 3 years. This investigation results in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

In 1991, EIA conducted a frame identifier survey of companies that produce, blend, store, or import oxygenates. A summary of the results from the identification survey was published in the *Weekly Petroleum Status Report* dated February 12, 1992, and in the February 1992 issue of the *Petroleum Supply Monthly (PSM)*. 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 PSM, Appendix B, "Frame."

**Note 2. Motor Gasoline.** Beginning in January 1981, EIA expanded its universe to include non-refinery blenders and separated blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to describe refinery operations more accurately.

Beginning with the reporting of January 1993 data, EIA made adjustments to the product supplied series for finished motor gasoline. It was recognized that motor gasoline statistics published by EIA through 1992 were underreported because the reporting system was (1) not collecting all fuel ethanol blending, and (2) there was a misreporting of motor gasoline blending components that were blended into finished gasoline. The adjustments are incorporated into EIA's data beginning in January 1993. To facilitate data analysis across the 1992–1993 period, EIA prepared a table of 1992 data adjusted according to the 1993 basis. See *Petroleum Supply Monthly*, March 1993, Table H3.

**Note 3. Distillate and Residual Fuel Oils.** The requirement to report crude oil in pipelines or burned on leases as either distillate or residual fuel oil was eliminated. Prior to January 1981, the refinery input of unfinished oils typically exceeded the available supply of unfinished oils.

That discrepancy was assumed to be due to the redesignation of distillate and residual fuel oils received as such but used as unfinished oil inputs by the receiving refinery. The imbalance between supply and disposition of unfinished oils would then be subtracted from the production of distillate and residual fuel oils. Two-thirds of that difference was subtracted from distillate and one-third from residual. Beginning in January 1981, EIA modified its survey forms to account for redesignated product and discontinued the above-mentioned adjustment.

Prior to 1983, crude oil burned on leases and used at pipeline pump stations was reported as either distillate or residual fuel oil and was included as product supplied for these products.

**Note 4. Petroleum New Stock Basis.** In January 1975, 1979, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, affecting subsequent stocks reported and stock change calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

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

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

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

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

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

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

Residual Fuel Oil: 1974-75; 1980-91; and 1982-69.

Total Petroleum: 1974—1,121; 1980—1,425; and 1982—1,461.

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

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

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

**Note 5. Stocks of Alaskan Crude Oil.** Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock change calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Non-SPR).

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

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

## **Table 3.1 Sources**

1973–1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual*, annual reports.

1976–1980: U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual*, annual reports.

1981–2001: EIA, *Petroleum Supply Annual (PSA)*, annual reports.

2002 forward: EIA, PSA, annual reports; *Petroleum Supply Monthly*, monthly reports; revisions to crude oil production, total field production, and adjustments (based on crude oil production data from: State government agencies; U.S. Department of the Interior, Bureau of Safety and Environmental Enforcement, and predecessor agencies; and Form EIA-182, "Domestic Crude Oil First Purchase Report"); and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

## **Table 3.6 Sources**

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

### Jet Fuel

Product supplied data in thousand barrels per day for kerosene-type jet fuel and, through 2004, naphtha-type jet fuel are from the U.S. Energy Information Administration's (EIA) *Petroleum Supply Annual (PSA), Petroleum Supply Monthly (PSM)*, and earlier publications (see sources for Table 3.5). These data are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1. Total jet fuel product supplied is the sum of the data in trillion Btu for kerosene-type and naphtha-type jet fuel.

## Liquefied Petroleum Gases (LPG) Total

Prior to the current two months, product supplied data in thousand barrels per day for the component products of LPG (ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene) are from the PSA, PSM, and earlier publications (see sources for Table 3.5). These data are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1. Total LPG product supplied is the sum of the data in trillion Btu for the LPG component products.

For the current two months, product supplied data in thousand barrels per day for total LPG are from Table 3.5, and are converted to trillion Btu by multiplying by the LPG heat content factors in Table A3.

### **Motor Gasoline**

Product supplied data in thousand barrels per day for motor gasoline are from Table 3.5, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors in Table A3.

### **Other Petroleum Products**

Prior to the current two months, product supplied data in thousand barrels per day for "other" petroleum products are from the PSA, PSM, and earlier publications (see sources for Table 3.5). "Other" petroleum products include pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products; beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components; beginning in 1983, also includes crude oil burned as fuel; and beginning in 2005, also includes naphtha-type jet fuel. These data are converted to trillion Btu by multiplying by the appropriate heat content factors in MER Table A1. Total "Other" petroleum product supplied is the sum of the data in trillion Btu for the individual products.

For the current two months, total "Other" petroleum products supplied is calculated by first estimating total

petroleum products supplied (product supplied data in thousand barrels per day for total petroleum from Table 3.5 are converted to trillion Btu by multiplying by the total petroleum consumption heat content factor in Table A3), and then subtracting data in trillion Btu (from Table 3.6) for asphalt and road oil, aviation gasoline, distillate fuel oil, jet fuel, kerosene, total LPG, lubricants, motor gasoline, petroleum coke, and residual fuel oil.

### **Total Petroleum**

Total petroleum products supplied is the sum of the data in trillion Btu for the products (except "Propane") shown in Table. 3.6.

## Tables 3.7a–3.7c Sources

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

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

1976–1980: U.S. Energy Information Administration's (EIA), *Energy Data Reports*, "Petroleum Statement, Annual."

1981–2011: EIA, Petroleum Supply Annual. 2012: EIA, Petroleum Supply Monthly.

Energy-use allocation procedures by individual product are as follows:

## Asphalt and Road Oil

All consumption of asphalt and road oil is assigned to the industrial sector.

## **Aviation Gasoline**

All consumption of aviation gasoline is assigned to the transportation sector.

## **Distillate Fuel Oil**

Distillate fuel oil consumption is assigned to the sectors as follows:

## Distillate Fuel Oil Consumed by the Electric Power Sector

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

## Distillate Fuel Oil Consumed by the End-Use Sectors, Annually

The aggregate end-use amount is total distillate fuel oil supplied minus the amount consumed by the electric power

sector. The end-use total consumed annually is allocated to the individual end-use sectors (residential, commercial, industrial, and transportation) in proportion to each sector's share of sales as reported in EIA's *Fuel Oil and Kerosene Sales* (*Sales*) report series (DOE/EIA-0535), which is based primarily on data collected by Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report" (previously Form EIA-172). Shares for the current year are based on the most recent Sales report.

Following are notes on the individual sector groupings:

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

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

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

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

## Distillate Fuel Oil Consumed by the End-Use Sectors, Monthly

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

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

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

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

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

#### Jet Fuel

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

#### Kerosene

Kerosene product supplied is allocated to 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 allocated to the residential, commercial, and industrial sectors 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 allocated to the residential, commercial, and industrial sectors 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 allocated to the residential, commercial and industrial sectors in proportion

to the 1979 shares, and the estimated industrial (including farm) portion is added to all other uses.

#### Liquefied Petroleum Gases (LPG)

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

Sales of LPG to the residential and commercial sectors combined are converted from thousand gallons per year to thousand barrels per year and are assumed to be the annual consumption of LPG by the combined sectors. Since 2003, residential sector LPG consumption is assumed to equal propane retail sales, with the remainder of the combined residential and commercial LPG consumption being assigned to the commercial sector. Prior to 2003, residential sector LPG consumption is based on the average of the State residential shares for 2003–2008, with the remainder of the combined residential and commercial LPG consumption being assigned to the commercial sector.

The quantity of LPG sold each year for consumption in internal combustion engines is allocated between the transportation and industrial sectors on the basis of data for special fuels used on highways published by the U.S. Department of Transportation, Federal Highway Administration, in *Highway Statistics*. The allocations of LPG sold for internal combustion engine use to the transportation sector range from a low of 20 percent (in 2001) to a high of 78 percent (in 2008).

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

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

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

1983: End-use consumption estimates for 1983 are based on 1982 end-use consumption because the collection of data under Form EIA-174 was discontinued after data year 1982. 1984 forward: American Petroleum Institute (API), "Sales of Natural Gas Liquids and Liquefied Refinery Gases," which is based on an LPG sales survey jointly sponsored by API, the Gas Processors Association, and the National Liquefied Petroleum Gas Association. EIA adjusts the data to remove quantities of pentanes plus and to estimate withheld values.

#### Lubricants

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

#### **Motor Gasoline**

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

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

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

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

#### **Petroleum Coke**

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

#### **Residual Fuel Oil**

Residual fuel oil consumption is assigned to the sectors as follows:

# Residual Fuel Oil Consumed by the Electric Power Sector

See sources for Table 7.4b. For 1973–1979, electric utility consumption of residual fuel oil is assumed to be the amount of petroleum consumed in steam-electric power plants. For 1980–2000, electric utility consumption of residual fuel oil is assumed to be the amount of heavy oil (fuel oil nos. 4, 5, and 6) consumed.

# Residual Fuel Oil Consumed by the End-Use Sectors, Annually

The aggregate end-use amount is total residual fuel oil supplied minus the amount consumed by the electric power sector. The end-use total consumed annually is allocated to 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 allocated to the commercial and industrial sectors 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 allocated to the commercial and industrial sectors in proportion to the 1979 shares, and the estimated industrial portion is added to oil company and all other uses.

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

# Residual Fuel Oil Consumed by the End-Use Sectors, Monthly

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

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

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

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

#### **Other Petroleum Products**

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

#### Table 3.8a Sources

## Distillate Fuel Oil, Kerosene, Petroleum Coke, and Residual Fuel Oil

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

#### Liquefied Petroleum Gases (LPG)

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

#### **Motor Gasoline**

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

#### **Total Petroleum**

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

#### **Table 3.8b Sources**

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

#### Liquefied Petroleum Gases (LPG)

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

#### **Motor Gasoline**

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

#### **Other Petroleum Products**

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

#### **Total Petroleum**

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

#### Table 3.8c Sources

#### Aviation Gasoline, Distillate Fuel Oil, Lubricants, Petroleum Coke, and Residual Fuel Oil

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

#### Jet Fuel

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

#### Liquefied Petroleum Gases (LPG)

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

#### **Motor Gasoline**

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

#### **Total Petroleum**

Transportation sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Transportation Sector" in Table 3.8c. Electric power sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Electric Power Sector" in Table 3.8c. THIS PAGE INTENTIONALLY LEFT BLANK

# 4. Natural Gas

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

Overview, 1973-2011 Overview, Monthly 30-3.5-25-3.0-Consumption Consumption 2.5 -20-**Dry Production** 2.0-15-Dry 1.5-Production 10-1.0-5-Net Imports 0.5-Net Imports 0-----0.0----..... 1975 1980 1985 1990 1995 2000 2005 2010 J FMAMJ JASOND J FMAMJ JASOND J FMAMJ JASOND 2010 2011 2012 Consumption by Sector, 1973-2011 Consumption by Sector, Monthly 12-1.2-Electric Industrial Residential 10-Power 0.9-8-Industria 6-0.6-Residential Transportation 4 lectric Pow Commercia 0.3- $\sim$ 2-Commercial Transportation 0-0.0-----\_\_\_\_ <del>,,,,,,,,,</del> 1975 1980 1985 1990 1995 2000 2005 2010 J FMAM J J A SOND J FMAM J J A SOND J FMAM J J A SOND 2010 2011 2012 Underground Storage, End of Year, 1973-2011 Underground Storage, End of Month 9-8-Total Total 6-6 Working Gas Base Gas 4-Working Gas 3-**Base Gas** 2 0 0-1-----

Web Page: http://www.eia.gov/totalenergy/data/monthly/#naturalgas. Sources: Tables 4.1, 4.3, and 4.4.

1975 1980 1985 1990 1995 2000 2005 2010

J FMAMJ J A SOND J FMAMJ J A SOND J FMAMJ J A SOND

2011

2012

2010

#### Table 4.1 Natural Gas Overview

(Billion Cubic Feet)

	Gross	Marketed			Supple- mental		Trade		Net Storage		
	With- drawals <sup>a</sup>	Production (Wet) <sup>b</sup>	Extraction Loss <sup>c</sup>	Dry Gas Production <sup>d</sup>	Gaseous Fuels <sup>e</sup>	Imports	Exports	Net Imports	With- drawals <sup>f</sup>	Balancing Item <sup>g</sup>	Consump- tion <sup>h</sup>
1973 Total	24,067	22,648	917	21,731	NA	1,033	77	956	-442	-196	22,049
1975 Total	21,104	20,109	872	19,236	NA	953	73	880	-344	-235	19,538
1980 Total	21,870 19.607	20,180 17.270	777 816	19,403 16.454	155 126	985 950	49 55	936 894	23 235	-640 -428	19,877 17,281
1985 Total 1990 Total	21.523	18,594	784	17,810	120	1,532	86	1,447	-513	307	<sup>j</sup> 19.174
1995 Total	23.744	19,506	908	18,599	110	2,841	154	2,687	415	396	22,207
1996 Total	24,114	19,812	958	18,854	109	2,937	153	2,784	2	860	22,609
1997 Total	24,213	19,866	964	18,902	103	2,994	157	2,837	24	871	22,737
1998 Total	24,108	19,961	938	19,024	102	3,152	159	2,993	-530	657	22,246
1999 Total	23,823	19,805	973	18,832	98 90	3,586	163 244	3,422	172 829	-119 -306	22,405
2000 Total 2001 Total	24,174 24,501	20,198 20,570	1,016 954	19,182 19,616	90 86	3,782 3,977	244 373	3,538 3,604	829 -1,166	-306	23,333 22,239
2002 Total	23,941	19,885	957	18,928	68	4,015	516	3,499	467	65	23,027
2003 Total	24,119	19,974	876	19.099	68	3,944	680	3,264	-197	44	22,277
2004 Total	23,970	19,517	927	18,591	60	4,259	854	3,404	-114	461	22,403
2005 Total	23,457	18,927	876	18,051	64	4,341	729	3,612	52	236	22,014
2006 Total	23,535	19,410	906	18,504	66	4,186	724	3,462	-436	103	21,699
2007 Total	24,664	20,196	930	19,266	63	4,608	822	3,785	192	-203	23,104
2008 Total 2009 Total	25,636 26,057	21,112 21,648	953 1,024	20,159 20,624	61 65	3,984 3,751	963 1,072	3,021 2,679	34 -355	2 -103	23,277 22,910
2010 January	2,224	1,838	88	1,750	5	385	94	291	822	-86	2,783
February	2,057	1,692	81	1,611	5	324	88	236	628	-24	2,456
March	2,296	1,884	90	1,794	5	319	100	219	34	65	2,117
April	2,187 2,231	1,810 1.881	86 90	1,723 1,791	5 5	298 298	76 86	223 212	-364 -416	80 -2	1,667 1,591
May June	2,231	1,001	90 86	1,791	5 5	290	00 90	192	-416	-2 41	1,591
July	2,134	1,908	91	1.817	6	329	86	243	-231	-35	1,800
August	2,241	1,924	92	1,832	6	305	84	221	-190	-15	1,853
September	2,251	1,874	89	1,785	5	282	79	202	-363	-16	1,612
October	2,343	1,942	93	1,849	6	295	96	199	-360	-54	1,639
November	2,266	1,882	90	1,792	5	273	124	150	77	-78	1,947
December Total	2,388 <b>26,836</b>	1,971 <b>22,402</b>	94 <b>1,070</b>	1,877 <b>21,332</b>	6 65	352 <b>3,741</b>	135 <b>1,137</b>	217 <b>2,604</b>	675 <b>-13</b>	-89 <b>-213</b>	2,685 <b>23,775</b>
2011 January	2,309	<sup>E</sup> 1,972	92	<sup>E</sup> 1,880	6	371	136	235	799	<sup>R</sup> -47	<sup>R</sup> 2,873
February	2,109	E 1,752	79	E 1,674	5	308	125	183	584	<sup>R</sup> -11	<sup>R</sup> 2,435
March	2,423	E 2,020	99	E 1,921	6	314	145	170	145	-16	<sup>R</sup> 2,225
April	2,363	E 1,979	95	E 1,884	5	278	127	152	-212	<sup>R</sup> -10 <sup>R</sup> -34	R 1,818
May June	2,420 2,330	<sup>E</sup> 2,046 <sup>E</sup> 1,977	101 95	E 1,945 E 1.881	3 5	271 265	132 120	139 146	-398 -340	R -34 R -50	<sup>R</sup> 1,655 <sup>R</sup> 1,641
July	2,330	E 2.044	99	E 1,944	5	203	113	179	-244	<sup>R</sup> -12	<sup>R</sup> 1.872
August	2.371	E 2,051	99	E 1,951	5	279	111	168	-244	<sup>R</sup> -10	<sup>R</sup> 1.870
September	2,371	E 2,005	95	E 1,910	5	253	127	127	-398	<sup>R</sup> -6	<sup>R</sup> 1,637
October	2,496	E 2,112	104	E 2.008	5	281	110	171	-385	<sup>R</sup> -63	<sup>R</sup> 1,736
November	2,483	E 2,074	104	E 1,971	5	247	128	120	-37	<sup>R</sup> -53	<sup>R</sup> 2,006
December Total	2,557 <b>28,576</b>	<sup>E</sup> 2,138 <sup>E</sup> <b>24,170</b>	107 <b>1,169</b>	<sup>E</sup> 2,031 E <b>23,000</b>	6 61	295 <b>3,456</b>	134 <b>1,507</b>	161 <b>1,949</b>	384 <b>-348</b>	<sup>R</sup> -65 <sup>R</sup> -377	<sup>R</sup> 2,516 <sup>R</sup> <b>24,285</b>
2012 January	2,575	<sup>RE</sup> 2,151	109	<sup>E</sup> 2,042	6	281	130	150	545	<sup>R</sup> -13	<sup>R</sup> 2,730
February	2,380	E 1.991	102	E 1,889	5	269	130	139	459	R -9	R 2,484
March	2,539	E 2,125	109	E 2,016	6	265	141	124 R 100	-39	<sup>R</sup> -2	<sup>R</sup> 2.105
April	2,447	<sup>RE</sup> 2,067 <sup>RE</sup> 2,141	105	RE 1,962 E 2,033	5 4	243 <sup>R</sup> 258	123 <sup>R</sup> 133	<sup>R</sup> 120 <sup>R</sup> 125	-137	<sup>R</sup> -13 <sup>R</sup> -29	<sup>R</sup> 1,935 <sup>R</sup> 1,851
May	2,532 2,422	RE 2,141 RE 2,063	108 103	RE 1.960	4 5	258	125	125	-283 -230	-29	<sup>R</sup> 1,851
June July	<sup>R</sup> 2,422	RE 2,063	<sup>R</sup> 106	RE 2.034	5 5	259	125	162	-230 -134	-21 <sup>R</sup> -16	<sup>R</sup> 2,051
August	2,435	_ <sup>E</sup> 2,130	100	_ <sup>E</sup> 2,023	5	281	138	143	-168	-21	1,982
8-Month Total	19,728	E 16,807	849	E 15,958	41	2,138	1,040	1,098	12	-123	16,987
2011 8-Month Total 2010 8-Month Total	18,669 17,589	<sup>E</sup> 15,841 14,733	760 704	<sup>E</sup> 15,081 14,029	40 42	2,379 2,540	1,009 703	1,370 1,837	89 -41	-189 24	16,390 15,892

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

d

<sup>d</sup> Marketa 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 1980-2010, also includes net

withdrawals of liquefied natural gas in above-ground tanks. See Note 4, "Natural Gas Storage," at end of section. <sup>9</sup> See Note 5, "Natural Gas Balancing Item," at end of section. Since 1980, excludes transit shipments that cross the U.S.-Canada border (i.e., natural gas

delivered to its destination via the other country). <sup>h</sup> See Note 6, "Natural Gas Consumption," at end of section.

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, "Natural Gas Consumption, 1989-1992," at end of section. R=Revised. E=Estimate. NA=Not available. Notes: • See Note 8, "Natural Gas Adjustments, 1993-2000," at end of section.

Notes: • See Note 8, "Natural Gas Adjustments, 1993-2000," at end of section.
• Totals may not equal sum of components due to independent rounding.
• Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#naturalgas 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: 1973-2006—U.S. Energy Information Administration (EIA), Natural Gas Annual, annual reports. 2007 forward—EIA, Natural Gas Monthly, October 2012, Table 1. Table 1.

#### Table 4.2 Natural Gas Trade by Country

(Billion Cubic Feet)

					Imports			Exports						
	Algeriaa	Canada <sup>b</sup>	Egypt <sup>a</sup>	Mexicob	Nigeriaa	Qatara	Trinidad and Tobago <sup>a</sup>	<b>Other</b> <sup>a,c</sup>	Total	Canada <sup>b</sup>	Japan <sup>a</sup>	Mexicob	<b>Other</b> <sup>a,d</sup>	Total
973 Total	3	1,028	0	2	0	0	0	0	1,033	15	48	14	0	77
975 Total	5	948	ŏ	ō	ŏ	ŏ	ŏ	ŏ	953	10	53	.=	ŏ	73
980 Total	86	797	Õ	102	Ō	Ō	ō	Ō	985	0	45	4	Ō	49
985 Total		926	0	0	0	0	0	0	950	0	53	2	0	55
990 Total	84	1,448	0	0	0	0	0	0	1,532	17	53	16	0	86
995 Total	18	2,816	0	7	0	0	0	0	2,841	28	65	61	0	154
996 Total	35	2,883	0	14	0	0	0	5	2,937	52	68	34	0	153
997 Total	66 69	2,899 3.052	0	17 15	0	0	0	12 17	2,994 3.152	56 40	62 66	38 53	0	157 159
998 Total 999 Total	76	3,052	0	55	0	20	51	17	3,152	39	64	53 61	0	163
2000 Total	47	3,544	ŏ	12	13	46	99	21	3,782	73	66	106	ŏ	244
2001 Total		3,729	ŏ	10	38	23	98	14	3,977	167	66	141	ŏ	373
2002 Total		3,785	Ō	2	8	35	151	8	4,015	189	63	263	Ō	516
2003 Total	53	3,437	0	0	50	14	378	11	3,944	271	66	343	0	680
2004 Total	120	3,607	0	0	12	12	462	46	4,259	395	62	397	0	854
2005 Total	97	3,700	73	9	8	3	439	11	4,341	358	65	305	0	729
2006 Total 2007 Total	17 77	3,590 3.783	120 115	13 54	57 95	0 18	389 448	0 18	4,186 4,608	341 482	61 47	322 292	0 2	724 822
2007 Total	0	3,783	55	54 43	95 12	3	440 267	10	4,608 3,984	402 559	47 39	365	2	963
2009 Total		3,389	160	28	13	13	236	29	3,364	701	39	338	3	1,072
											0	00	0	
010 January	0 0	327 277	17 12	1 1	0	12 6	22 16	6 12	385 324	68 60	2 2	23 22	0 3	94 88
February March	0	277	9	5	3	1	16	9	324 319	77	2	22	0	00 100
April	0	252	9	5	9	9	15	3	298	50	4	21	0	76
May	-	257	9	4	9	ŏ	16	3	298	55	2	29	ŏ	86
June	0	248	6	2	11	0	11	5	282	51	2	34	3	90
July	0	291	6	1	5	0	17	8	329	50	4	32	0	86
August	0	282	0	1	0	0	17	5	305	49	2	33	0	84
September	0	250	6	3	3	0	16	3	282	50	7	23	0	79
October	0	257 242	3 0	4	2	5	15	9 9	295	63	2 2	25	6	96 124
November December	0	242 322	0	(s) 1	0	9 4	14 15	9	273 352	84 82	2	30 38	8 12	124
Total	ŏ	3,280	73	30	42	46	190	81	3,741	739	33	333	32	1,137
011 January	0	331	3	(s)	0	13	16	9	371	85	2	37	13	136
February	0	276	6	(s)	0	0	11	15	308	84	2	37	3	125
March	Õ	275	6	(s)	õ	14	10	9	314	98	2	41	3	145
April	0	245	6	(s)	0	4	11	13	278	76	2	43	6	127
May	0	235	3	(s)	0	24	8	0	271	80	3	44	6	132
June	0	238	6	(s)	0	5	11	6	265	71	2	47	0	120
July	0	272 249	0 0	(s)	0 2	5 8	13	3 9	293 279	64 67	0 2	47 42	3 0	113 111
August September	0	249 233	0	(s) (s)	2	8	11 8	9	279	77	2	42 39	8	127
October		249	3	(3)	0	8	8	12	233	64	0	43	3	110
November	Ő	232	0	(s)	0	3	12	0	247	84	2	39	3	128
December	Ō	269	3	(s)	0	4	10	9	295	87	ō	42	5	134
Total	0	3,104	35	3	2	91	129	92	3,456	937	18	500	52	1,507
2012 January	0	265	0	(s)	0	4	9	3	281	84	3	40	3	130
February	0	249	3	(s)	0	0	11	6	269	87	2	42	0	130
March	0	246	0	(s)	0	4	13	3	265	93	0	46	3	141
April	0	235	0	(s)	0	4	1	3	243	78	0	45	0	123
May	0	<sup>R</sup> 242	0	(s)	0	6	11	0	<sup>R</sup> 258	<sup>R</sup> 78	3	52	0	R 133
June	0	251	0 0	(s)	0	0	8	0	259 281	64	2 0	58 57	0	125 118
July August	0	265 262	0	(s)	0	3 3	12 16	0	281	62 77	0	57 59	0	118
8-Month Total	0	202 2,016	3	(s) (s)	0	22	83	14	281 2,138	622	13	<b>400</b>	6	1,040
	0			.,	2	73								
011 8-Month Total	0	2,121 2,209	29 64	1 22	37	73 28	90 129	63 50	2,379 2,540	625 460	14 19	337 217	33 6	1,009 703

<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 9, "Natural Gas 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 forward; Oman in 2000-2005; Peru in 2010 and 2011; United Arab Emirates in 1996-2000; Yemen in 2010 forward; and Other (unassigned) in 2004.
<sup>d</sup> Brazil in 2010 forward; China in 2011; Chile in 2011; India in 2010 forward; Russia in 2007; South Korea in 2009-2011; Spain in 2010 and 2011; and United Kingdom in 2010 and 2011.

Kingdom in 2010 and 2011.

R=Revised. (s)=Less than 500 million cubic feet. Notes: See Note 9, "Natural Gas Imports and Exports," at end of section.
Totals may not equal sum of components due to independent rounding. U.S. geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#naturalgas for all available data beginning in 1973. Sources: 1973-1987: U.S. Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas."
1988-2009: EIA, *Natural Gas Annual*, annual reports. 2010 forward: EIA, *Natural Gas Monthly*, October 2012, Tables 4 and 5; and U.S. Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

#### Table 4.3 Natural Gas Consumption by Sector

(Billion Cubic Feet)

					End-U	se Sectors						
					Industrial			Tr	ansportatio	n		
	Resi-	Com-	Lease and		Other Indust		-	Pipelines <sup>d</sup> and Dis-	Vehicle		Electric Power	
	dential	merciala	Plant Fuel	CHPb	Non-CHP <sup>c</sup>	Total	Total	tribution <sup>e</sup>	Fuel	Total	Sector <sup>f,g</sup>	Total
1973 Total         1975 Total         1980 Total         1980 Total         1995 Total         1995 Total         1996 Total         1997 Total         1997 Total         1998 Total         1997 Total         1997 Total         2000 Total         2001 Total         2003 Total         2003 Total         2005 Total         2006 Total         2005 Total         2006 Total         2007 Total         2008 Total         2009 Total	4,879 4,924 4,752 4,433 4,391 4,850 5,241 4,984 4,726 4,984 4,726 4,971 4,889 5,079 4,827 4,889 4,827 4,827 4,827 4,827 4,827 4,892 4,779	2,597 2,508 2,611 2,432 2,623 3,031 3,158 3,215 2,999 3,045 3,182 3,023 3,043 3,129 3,129 2,832 3,013 3,153 3,119	1,496 1,396 1,026 966 1,220 1,203 1,203 1,173 1,079 1,151 1,119 1,113 1,122 1,098 1,112 1,142 1,226 1,220 1,275	(h) (h) 1,055 1,258 1,289 1,282 1,301 1,386 1,310 1,240 1,144 1,144 1,144 1,15 1,084 1,115 1,055 990	8,689 6,968 7,172 5,901 5,963 6,965 6,965 6,678 6,965 6,678 6,035 6,035 6,035 6,035 6,066 5,518 5,412 5,604 5,715 5,178	8,689 6,968 7,172 5,901 17,018 8,164 8,435 8,511 8,320 8,079 8,142 7,344 7,344 7,344 7,344 7,344 7,527 7,150 7,2561 6,527 6,657 6,670 6,167	10,185 8,365 8,198 6,867 9,384 9,685 9,714 9,493 9,293 8,463 8,463 8,273 8,354 7,713 7,669 7,881 7,890 7,443	728 583 635 504 660 700 711 635 645 645 645 645 645 667 591 566 584 584 648 648 670	NA NA NA NA (\$) 5 6 8 92 13 15 15 15 18 23 24 226 27	728 583 635 504 660 705 718 760 645 655 640 645 640 645 610 587 607 608 646 674 697	$\begin{array}{c} 3,660\\ 3,158\\ 3,682\\ 3,044\\ 3,245\\ 4,237\\ 3,807\\ 4,065\\ 4,588\\ 4,820\\ 5,342\\ 5,5342\\ 5,5342\\ 5,5464\\ 5,869\\ 6,222\\ 6,841\\ 6,668\\ 6,873\\ \end{array}$	22,049 19,538 19,877 17,281 19,174 22,207 22,609 22,737 22,246 23,333 22,239 23,027 22,277 22,403 22,014 21,699 23,104 23,277 22,910
2010 January February April June July August September December December Total	934 796 580 313 198 134 111 107 117 202 447 848 <b>4,787</b>	499 441 337 215 161 130 120 127 133 185 287 467 <b>3,102</b>	106 98 109 104 107 102 107 108 107 112 108 114 1,282	90 80 84 79 82 84 95 87 87 87 84 82 92 <b>1,029</b>	526 490 488 435 437 420 419 424 438 469 521 <b>5,488</b>	616 570 572 514 519 504 512 514 511 522 551 613 <b>6,517</b>	722 667 681 618 626 607 619 622 618 634 659 727 <b>7,800</b>	80 70 60 46 44 45 50 52 45 45 45 55 76 <b>669</b>	3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	82 72 62 49 47 48 53 55 47 48 57 79 <b>700</b>	546 480 457 471 560 706 897 943 697 570 497 564 <b>7,387</b>	2,783 2,456 2,117 1,667 1,591 1,624 1,800 1,853 1,612 1,639 1,947 2,685 <b>23,775</b>
2011 January February April May June July August September October November December Total	R 972 771 607 348 208 134 112 109 122 227 430 688 <b>4,729</b>	529 433 365 236 168 132 130 135 141 213 284 398 <b>3,164</b>	E 113 E 100 E 116 E 113 E 117 E 113 E 117 E 117 E 117 E 115 E 121 E 122 E <b>1,383</b>	R 90 R 81 R 82 R 83 R 97 R 99 R 99 R 99 R 95 R 96 R 96 R <b>1,063</b>	545 R 495 509 R 463 454 R 427 R 422 R 432 R 435 R 465 R 465 R 486 R 524 R <b>5,657</b>	635 576 590 546 541 <sup>R</sup> 514 520 <sup>R</sup> 531 526 549 572 620 <sup>R</sup> <b>6,719</b>	748 676 706 659 658 <sup>R</sup> 627 637 649 641 670 691 742 <sup>R</sup> <b>8,103</b>	E 81 RE 69 E 63 E 51 E 47 E 46 E 53 E 46 E 53 E 46 E 56 E 56 E 571 RE <b>683</b>	E 3 E 3 E 3 E 3 E 3 E 3 E 3 E 2 S E 2 S E 2 S E 3 S	E 84 E 71 E 65 E 54 E 49 E 55 E 49 E 55 E 49 E 55 E 49 E 59 E 74 RE <b>716</b>	R 540 R 484 R 482 R 521 R 572 R 699 R 939 R 939 R 939 R 939 R 939 R 939 R 939 R 684 R 575 543 R 614 R <b>7,574</b>	R 2,873 R 2,435 R 2,225 R 1,818 R 1,655 R 1,641 R 1,870 R 1,637 R 1,637 R 1,736 R 1,736 R 2,516 R 24,285
2012 January           February           March           April           May           June           July           August           8-Month Total	803 668 283 165 125 109 107 <b>2,667</b>	448 389 263 210 150 133 126 135 <b>1,856</b>	E 123 E 114 E 122 E 118 E 123 E 123 E 122 E 122 E 962 E 907	R 98 R 90 R 90 R 87 R 93 R 94 R 101 98 <b>752</b>	R 529 R 502 R 483 R 460 R 448 R 439 R 439 455 <b>3,755</b>	627 592 574 547 541 534 539 552 <b>4,507</b>	751 706 695 665 663 652 R 662 674 <b>5,469</b>	E 77 E 70 E 59 RE 54 E 52 E 52 E 58 E 56 E 478	E 3 E 3 E 3 E 3 E 3 E 3 E 3 E 3 E 22 E 23	E 80 E 72 E 62 E 57 E 55 E 61 E 59 E 500	<sup>R</sup> 648 <sup>R</sup> 648 <sup>R</sup> 677 <sup>R</sup> 720 <sup>R</sup> 817 <sup>R</sup> 885 <sup>R</sup> 1,093 1,007 <b>6,495</b> <b>5</b> 159	R 2,730 R 2,484 R 2,105 R 1,935 R 1,851 R 1,848 R 2,051 1,982 <b>16,987</b>
2011 8-Month Total 2010 8-Month Total	3,262 3,173	2,128 2,030	<sup>E</sup> 907 841	706 684	3,747 3,636	4,453 4,320	5,359 5,161	<sup>E</sup> 461 448	<sup>E</sup> 22 20	<sup>E</sup> 483 468	5,158 5,059	16,390 15,892

<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

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 electric utilities only. Beginning in 1989, 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, "Natural Gas Consumption, 1989-1992," at end of section.
 <sup>R</sup>=Revised. E=Estimate. NA=Not available. (s)=Less than 500 million cubic

feet

Notes: • Data are for natural gas, plus a small amount of supplemental

gaseous fuels. • See Note 8, "Natural Gas Adjustments, 1993-2000," at end of section. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#naturalgas for al available data beginning in 1973. Sources: • **Residential, Commercial, Lease and Plant Fuel, Other Industrial Total** and **Pipelines and Distribution: 1973-2006**—U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA),* annual reports and unpublished revisions. **2007 forward**—EIA, *Natural Gas Monthly (NGM),* October 2012, Table 2. • **Industrial CHP:** Table 7.4c. • **Vehicle Fuel: 1990**—and **1991**—EIA, NGA 2000, (November 2001), Table 95. **1992**-198—EIA, "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent galions 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). **1999-2006**—EIA, NGA, annual reports. **2007 forward**—EIA, NGA, annual reports. **2007** forward—EIA, NGA, annual feeder (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent galions 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). **1999-2006**—EIA, NGA, annual reports. **2007 forward**—EIA, NGM, October 2012, Table 2. • **Electric Power Sector**: Table 7.4b. Sector: Table 7.4b.

#### Table 4.4 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

1973 Total       2         1975 Total       3         1980 Total       3         1985 Total       3         1985 Total       3         1995 Total       4         1997 Total       4         2001 Total       4         2001 Total       4         2003 Total       4         2004 Total       4         2005 Total       4         2006 Total       4         2007 Total       4         April       4         August       4         August       4         August       4         November       4         March       4         April       4         March       4         August       4         Julue       4         April	2,864 3,162 3,642 3,842 3,842 4,349 4,349 4,349 4,350 4,326 4,350 4,352 4,352 4,301 4,340 4,303 4,201 4,200 4,201 4,201 4,211 4,234 4,232 4,277 4,276 4,278	Working Gas 2,034 2,212 2,655 2,607 3,068 2,153 2,173 2,175 2,730 2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304 1,683	Total <sup>a</sup> 4,898 5,374 6,297 6,448 6,936 6,503 6,513 6,525 7,056 6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407 6,580	Volume 305 162 -99 -270 555 -453 19 2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39 290	Percent 17.6 7.9 -3.6 -9.4 22.1 -17.4 .9 1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4 10.2	Withdrawals 1,533 1,760 1,910 2,359 1,934 2,974 2,974 2,971 2,824 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 3,493 3,325 3,374 2,966	Injections 1,974 2,104 1,896 2,128 2,433 2,566 2,906 2,906 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	Net <sup>b,(</sup> -442 -344 14 231 -499 408 6 24 -526 174 814 -1,156 468 468 -193 -113 555 -431 192 34
1975 Total       3         1980 Total       3         1985 Total       3         1995 Total       3         1995 Total       3         1995 Total       4         1995 Total       4         1996 Total       4         1997 Total       4         1998 Total       4         1997 Total       4         1998 Total       4         1999 Total       4         2000 Total       4         2001 Total       4         2002 Total       4         2003 Total       4         2004 Total       4         2005 Total       4         2006 Total       4         2007 Total       4         2007 Total       4         2007 Total       4         April       4         August       4         July       4         August       4         August       4         Vovember       4         April       4         August       4         August       4         August       4         August	3,162 3,642 3,842 3,868 4,349 4,349 4,350 4,326 4,326 4,326 4,326 4,301 4,301 4,301 4,301 4,301 4,301 4,201 4,211 4,211 4,232 4,277 4,276	2,212 2,655 2,607 3,068 2,153 2,173 2,175 2,730 2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130	5,374 6,297 6,448 6,936 6,513 6,513 6,513 6,525 7,056 6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	162 -99 -270 555 -453 19 2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39	7.9 -3.6 -9.4 22.1 -17.4 -17.4 -1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	1,760 1,910 2,359 1,934 2,974 2,911 2,824 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,104 1,896 2,128 2,433 2,566 2,906 2,800 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	-344 14 231 -499 408 6 24 -526 174 814 -1,156 468 -193 -113 55 -431 192
975 Total       3         980 Total       3         985 Total       3         995 Total       3         995 Total       4         996 Total       4         997 Total       4         998 Total       4         997 Total       4         998 Total       4         999 Total       4         998 Total       4         999 Total       4         000 Total       4         001 Total       4         002 Total       4         003 Total       4         005 Total       4         006 Total       4         007 Total       4         008 Total       4         009 Total       4         009 Total       4         009 Total       4         March       4         April       4         August       4         August       4         November       4         Narch       4         March       4         March       4         November       4         November       4	3,162 3,642 3,842 3,868 4,349 4,349 4,350 4,326 4,326 4,326 4,326 4,301 4,301 4,301 4,301 4,301 4,301 4,201 4,211 4,211 4,232 4,277 4,276	2,212 2,655 2,607 3,068 2,153 2,173 2,175 2,730 2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130	5,374 6,297 6,448 6,936 6,513 6,513 6,513 6,525 7,056 6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	162 -99 -270 555 -453 19 2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39	7.9 -3.6 -9.4 22.1 -17.4 -17.4 -1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	1,760 1,910 2,359 1,934 2,974 2,911 2,824 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,104 1,896 2,128 2,433 2,566 2,906 2,800 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	-344 14 231 -499 408 6 24 -526 174 814 -1,156 468 -193 -113 55 -431 192
980 Total       3         985 Total       3         995 Total       3         995 Total       4         996 Total       4         997 Total       4         998 Total       4         000 Total       4         00	3,642 3,842 3,868 4,349 4,341 4,350 4,350 4,383 4,352 4,301 4,301 4,301 4,300 4,201 4,200 4,211 4,232 4,277 4,276	2,655 2,607 3,068 2,153 2,173 2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,297 6,448 6,936 6,503 6,513 6,525 7,056 6,906 6,071 7,204 6,715 6,807 6,835 7,281 7,113 7,073 7,407	-99 -270 555 -453 19 2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39	-3.6 -9.4 22.1 -17.4 .9 .1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	1,910 2,359 1,934 2,974 2,971 2,824 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	1,896 2,128 2,433 2,566 2,906 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	14 231 -499 408 6 24 -526 174 814 -1,156 468 -193 -113 55 -431 192
985 Total       3         990 Total       4         995 Total       4         997 Total       4         998 Total       4         999 Total       4         998 Total       4         999 Total       4         990 Total       4         997 Total       4         998 Total       4         999 Total       4         000 Total       4         000 Total       4         001 Total       4         002 Total       4         005 Total       4         006 Total       4         007 Total       4         008 Total       4         008 Total       4         009 Total       4         000 January       4         August       4         August       4         August       4         November       4         November       4         April	3,842 3,868 4,349 4,341 4,350 4,326 4,383 4,352 4,301 4,300 4,201 4,200 4,211 4,234 4,232 4,277 4,276	2,607 3,068 2,153 2,175 2,730 2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,448 6,936 6,503 6,513 6,525 7,056 6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	-270 555 -453 19 2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39	-9.4 22.1 -17.4 .9 .1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	2,359 1,934 2,974 2,911 2,824 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,128 2,433 2,566 2,906 2,800 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	231 -499 408 6 24 -526 174 814 -1,156 468 -193 -113 55 -431 192
990 Total       3         995 Total       4         996 Total       4         997 Total       4         998 Total       4         999 Total       4         000 Total       4         0001 Total       4         0002 Total       4         0005 Total       4         0005 Total       4         0007 Total       4         0007 Total       4         0008 Total       4         0007 Total       4         March       4         April       4         July       4         August       4         Voltober       4         November       4         November       4         March       4         March       4         March       4         March       4         March       4         March       4     <	3,868 4,349 4,341 4,350 4,326 4,383 4,352 4,301 4,303 4,301 4,301 4,303 4,201 4,200 4,211 4,234 4,232 4,277 4,276	3,068 2,153 2,173 2,730 2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,936 6,503 6,513 6,525 7,056 6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	555 -453 19 2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39	22.1 -17.4 -9 -1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	1,934 2,974 2,911 2,824 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,433 2,566 2,906 2,800 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	-499 408 6 24 -526 174 814 -1,156 468 -193 -113 55 -431 192
995 Total       4         996 Total       4         997 Total       4         998 Total       4         999 Total       4         999 Total       4         000 Total       4         001 January       4         August       4         August       4         August       4         November       4         April       4         August       4         August       4         July	4,349 4,341 4,350 4,383 4,352 4,361 4,301 4,301 4,301 4,300 4,201 4,201 4,200 4,211 4,234 4,232 4,277 4,276	2,153 2,173 2,175 2,730 2,523 1,719 2,904 2,375 2,563 2,635 3,070 2,879 2,840 3,130 2,304	6,503 6,513 6,525 7,056 6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	-453 19 2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39	-17.4 .9 .1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	2,974 2,911 2,824 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,566 2,906 2,800 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	408 6 24 -526 174 814 -1,156 468 -193 -113 55 -431 192
996 Total       4         997 Total       4         998 Total       4         999 Total       4         999 Total       4         000 Total       4         000 Total       4         001 Total       4         003 Total       4         003 Total       4         004 Total       4         005 Total       4         006 Total       4         007 Total       4         008 Total       4         009 Total       4         009 Total       4         009 Total       4         March       4         April       4         July       4         July       4         August       4         November       4         November       4         March       4         March       4         March       4         May       4         December       4         March       4         March       4         March       4         March       4 <td< td=""><td>4,341 4,350 4,326 4,383 4,352 4,301 4,300 4,301 4,300 4,201 4,200 4,211 4,230 4,211 4,232 4,277 4,276</td><td>2,173 2,175 2,730 2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304</td><td>6,513 6,525 7,056 6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407</td><td>19 2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39</td><td>.9 .1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4</td><td>2,911 2,824 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374</td><td>2,906 2,800 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340</td><td>6 24 -526 174 814 -1,156 468 -193 -113 55 -431 192</td></td<>	4,341 4,350 4,326 4,383 4,352 4,301 4,300 4,301 4,300 4,201 4,200 4,211 4,230 4,211 4,232 4,277 4,276	2,173 2,175 2,730 2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,513 6,525 7,056 6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	19 2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39	.9 .1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	2,911 2,824 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,906 2,800 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	6 24 -526 174 814 -1,156 468 -193 -113 55 -431 192
997 Total       4         998 Total       4         999 Total       4         000 Total       4         001 Total       4         002 Total       4         003 Total       4         004 Total       4         005 Total       4         005 Total       4         006 Total       4         007 Total       4         006 Total       4         007 Total       4         008 Total       4         008 Total       4         008 Total       4         008 Total       4         010 January       4         March       4         Jule       4         July       4         July       4         August       4         October       4         November       4         March       4         May       4         June       4         May       4         July       4         August       4         July       4         July       4         Aug	4,350 4,326 4,383 4,352 4,301 4,301 4,303 4,201 4,200 4,211 4,200 4,211 4,234 4,232 4,277 4,276	2,175 2,730 2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,525 7,056 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	2 554 -207 -806 1,185 -528 187 133 -61 435 -191 -39	.1 25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	2,624 2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,800 2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	24 -526 174 814 -1,156 468 -193 -113 55 -431 192
998 Total       4         999 Total       4         999 Total       4         000 Total       4         001 Total       4         001 Total       4         001 Total       4         003 Total       4         003 Total       4         004 Total       4         005 Total       4         006 Total       4         007 Total       4         008 Total       4         009 Total       4         009 Total       4         March       4         April       4         June       4         July       4         August       4         September       4         October       4         November       4         March       4         March       4         March       4         November       4         March       4         March       4         March       4         March       4         March       4         March       4         Ju	4,326 4,383 4,352 4,301 4,301 4,300 4,201 4,200 4,211 4,234 4,232 4,277 4,276	2,730 2,523 1,719 2,904 2,375 2,563 2,635 3,070 2,879 2,840 3,130 2,304	7,056 6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	554 -207 -806 1,185 -528 187 133 -61 435 -191 -39	25.5 -7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	2,379 2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,905 2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	-526 174 814 -1,156 468 -193 -113 55 -431 192
999 Total       4         000 Total       4         001 Total       4         002 Total       4         003 Total       4         004 Total       4         005 Total       4         006 Total       4         006 Total       4         007 Total       4         006 Total       4         007 Total       4         008 Total       4         009 Total       4         009 Total       4         March       4         April       4         June       4         July       4         August       4         November       4         November       4         March       4         March       4         November       4         March       4         March <td>4,383 4,352 4,301 4,340 4,303 4,201 4,200 4,211 4,234 4,232 4,277 4,276</td> <td>2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304</td> <td>6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,113 7,073 7,407</td> <td>-207 -806 1,185 -528 187 133 -61 435 -191 -39</td> <td>-7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4</td> <td>2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374</td> <td>2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340</td> <td>174 814 -1,156 468 -193 -113 55 -431 192</td>	4,383 4,352 4,301 4,340 4,303 4,201 4,200 4,211 4,234 4,232 4,277 4,276	2,523 1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,906 6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,113 7,073 7,407	-207 -806 1,185 -528 187 133 -61 435 -191 -39	-7.6 -31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	2,772 3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,598 2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	174 814 -1,156 468 -193 -113 55 -431 192
000 Total       4         001 Total       4         002 Total       4         003 Total       4         004 Total       4         005 Total       4         005 Total       4         006 Total       4         007 Total       4         007 Total       4         008 Total       4         009 Total       4         008 Total       4         008 Total       4         009 Total       4         March       4         April       4         June       4         July       4         July       4         August       4         October       4         March       4         March       4         November       4         March       4         March       4         March       4         March       4         May       4         June       4         March       4         March       4         March       4         July       <	4,352 4,301 4,340 4,303 4,201 4,200 4,211 4,234 4,232 4,277 4,276	1,719 2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,071 7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	-806 1,185 -528 187 133 -61 435 -191 -39	-31.9 68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	3,498 2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,684 3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	814 -1,156 468 -193 -113 55 -431 192
000 Total       4         001 Total       4         002 Total       4         003 Total       4         004 Total       4         005 Total       4         005 Total       4         006 Total       4         007 Total       4         007 Total       4         007 Total       4         007 Total       4         008 Total       4         March       4         June       4         June       4         June       4         July       4         August       4         November       4         November       4         March       4         May       4         June       4         March       4         March       4         March       4         July       4         July       4         July       4         July	4,301 4,340 4,303 4,201 4,200 4,211 4,234 4,232 4,277 4,276	2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	1,185 -528 187 133 -61 435 -191 -39	68.9 -18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	-1,156 468 -193 -113 55 -431 192
001 Total       4         002 Total       4         003 Total       4         004 Total       4         005 Total       4         006 Total       4         006 Total       4         007 Total       4         007 Total       4         007 Total       4         009 Total       4         009 Total       4         010 January       4         February       4         March       4         June       4         June       4         June       4         July       4         September       4         October       4         November       4         March       4         March       4         March       4         Movember       4         March	4,301 4,340 4,303 4,201 4,200 4,211 4,234 4,232 4,277 4,276	2,904 2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	7,204 6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	1,185 -528 187 133 -61 435 -191 -39	-18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	2,309 3,138 3,099 3,037 3,057 2,493 3,325 3,374	3,464 2,670 3,292 3,150 3,002 2,924 3,133 3,340	-1,156 468 -193 -113 55 -431 192
002 Total       4         003 Total       4         004 Total       4         005 Total       4         006 Total       4         007 Total       4         008 Total       4         009 Total       4         009 Total       4         009 Total       4         009 Total       4         010 January       4         April       4         March       4         June       4         July       4         July       4         August       4         November       4         November       4         March       4         November       4         March       4         March       4         November       4         March       4         March       4         March       4         March       4         May       4         July       4         August       4         July       4         August       4         October	4,340 4,303 4,201 4,200 4,211 4,234 4,232 4,277 4,276	2,375 2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,715 6,866 6,897 6,835 7,281 7,113 7,073 7,407	-528 187 133 -61 435 -191 -39	-18.2 7.9 5.2 -2.3 16.5 -6.2 -1.4	3,138 3,099 3,037 3,057 2,493 3,325 3,374	2,670 3,292 3,150 3,002 2,924 3,133 3,340	468 -193 -113 55 -431 192
003 Total       4         004 Total       4         005 Total       4         006 Total       4         007 Total       4         008 Total       4         009 Total       4         008 Total       4         009 Total       4         009 Total       4         0010 January       4         March       4         March       4         Jule       4         July       4         July       4         September       4         October       4         December       4         March       4         March       4         November       4         December       4         March       4         June       4         July <td< td=""><td>4,303 4,201 4,200 4,211 4,234 4,232 4,277 4,276</td><td>2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304</td><td>6,866 6,897 6,835 7,281 7,113 7,073 7,407</td><td>187 133 -61 435 -191 -39</td><td>7.9 5.2 -2.3 16.5 -6.2 -1.4</td><td>3,099 3,037 3,057 2,493 3,325 3,374</td><td>3,292 3,150 3,002 2,924 3,133 3,340</td><td>-193 -113 55 -431 192</td></td<>	4,303 4,201 4,200 4,211 4,234 4,232 4,277 4,276	2,563 2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,866 6,897 6,835 7,281 7,113 7,073 7,407	187 133 -61 435 -191 -39	7.9 5.2 -2.3 16.5 -6.2 -1.4	3,099 3,037 3,057 2,493 3,325 3,374	3,292 3,150 3,002 2,924 3,133 3,340	-193 -113 55 -431 192
004 Total       4         005 Total       4         006 Total       4         007 Total       4         008 Total       4         009 Total       4         009 Total       4         009 Total       4         010 January       4         February       4         March       4         June       4         July       4         July       4         September       4         October       4         December       4         March       4         March       4         September       4         October       4         November       4         March       4         March       4         March       4         April       4         July       4         July       4         July       4         August       4         September       4         October       4         November       4         December       4	4,201 4,200 4,211 4,234 4,232 4,277 4,276	2,696 2,635 3,070 2,879 2,840 3,130 2,304	6,897 6,835 7,281 7,113 7,073 7,407	133 -61 435 -191 -39	5.2 -2.3 16.5 -6.2 -1.4	3,037 3,057 2,493 3,325 3,374	3,150 3,002 2,924 3,133 3,340	-113 55 -431 192
005 Total       4         006 Total       4         007 Total       4         008 Total       4         009 Total       4         009 Total       4         010 January       4         February       4         March       4         April       4         June       4         July       4         July       4         August       4         December       4         Total       4         November       4         December       4         March       4         November       4         March       4         Mougust       4         March       4         Mougust       4         March       4         March       4         March       4         March       4         May       4         July       4         July       4         August       4         October       4         October       4         November       4 <td>4,200 4,211 4,234 4,232 4,277 4,276</td> <td>2,635 3,070 2,879 2,840 3,130 2,304</td> <td>6,835 7,281 7,113 7,073 7,407</td> <td>-61 435 -191 -39</td> <td>-2.3 16.5 -6.2 -1.4</td> <td>3,057 2,493 3,325 3,374</td> <td>3,002 2,924 3,133 3,340</td> <td>55 -431 192</td>	4,200 4,211 4,234 4,232 4,277 4,276	2,635 3,070 2,879 2,840 3,130 2,304	6,835 7,281 7,113 7,073 7,407	-61 435 -191 -39	-2.3 16.5 -6.2 -1.4	3,057 2,493 3,325 3,374	3,002 2,924 3,133 3,340	55 -431 192
006 Total       4         007 Total       4         008 Total       4         009 Total       4         009 Total       4         009 Total       4         010 January       4         February       4         March       4         March       4         June       4         July       4         July       4         July       4         September       4         October       4         Total       4         March       4         March       4         Vovember       4         March       4         March       4         March       4         May       4         June       4         July       4         July       4         August       4         September       4         October       4         October       4         November       4         November       4         November       4         November       4<	4,211 4,234 4,232 4,277 4,276	3,070 2,879 2,840 3,130 2,304	7,281 7,113 7,073 7,407	435 -191 -39	16.5 -6.2 -1.4	2,493 3,325 3,374	2,924 3,133 3,340	-431 192
007 Total       4         008 Total       4         009 Total       4         010 January       4         February       4         March       4         April       4         June       4         July       4         July       4         September       4         October       4         December       4         December       4         March       4         November       4         December       4         March       4         March       4         November       4         December       4         March       4         April       4         April       4         June       4         July       4         July       4         August       4         September       4         October       4         December       4         December       4	4,234 4,232 4,277 4,276	2,879 2,840 3,130 2,304	7,113 7,073 7,407	-191 -39	-6.2 -1.4	3,325 3,374	3,133 3,340	192
008 Total       4         009 Total       4         009 Total       4         010 January       4         February       4         March       4         April       4         June       4         July       4         July       4         August       4         September       4         October       4         November       4         December       4         Total       4         March       4         April       4         March       4         April       4         Ottal       4         October       4         April       4         March       4         July       4         July       4         August       4         September       4         October       4         October       4         November       4         December       4         December       4	<b>4,232</b> <b>4,277</b> 4,276	2,879 2,840 3,130 2,304	7,073 7,407	-39	-1.4	3,374	3,340	
008 Total       4         009 Total       4         009 Total       4         010 January       4         February       4         March       4         April       4         June       4         July       4         July       4         August       4         September       4         October       4         November       4         December       4         Total       4         March       4         April       4         March       4         April       4         Ottal       4         October       4         April       4         March       4         July       4         July       4         August       4         September       4         October       4         October       4         November       4         December       4         December       4	<b>4,232</b> <b>4,277</b> 4,276	<b>3,130</b> 2,304	7,073 7,407				3,340	24
009 Total       4         000 January       4         February       4         March       4         March       4         March       4         June       4         June       4         July       4         July       4         August       4         September       4         October       4         December       4         Total       4         March       4         March       4         July       4         May       4         June       4         Ot11 January       4         March       4         June       4         July       4         July       4         August       4         September       4         October       4         November       4         November       4         November       4         November       4         November       4	<b>4,277</b> 4,276	<b>3,130</b> 2,304	7,407					
February       4         March       4         April       4         June       4         July       4         July       4         August       4         September       4         October       4         December       4         Total       4         March       4         April       4         July       4         April       4         July       4         July       4         April       4         July       4         July       4         August       4         July       4         August       4         September       4         November       4         December       4         Dottober       4         April       4         August       4         Actione       4         November       4         December       4         December       4			6.580				3,315	-349
February         4           March         4           April         4           May         4           July         4           July         4           August         4           August         4           August         4           August         4           Active         4           October         4           December         4           Total         4           Porl         4           April         4           August         4           April         4           July         4           July         4           July         4           August         4           August         4           July         4           August         4           November         4           November         4           March         4           August         4           November         4           November         4           November         4           November         4				171	8.0	873	63	811
March       4         April       4         May       4         June       4         July       4         July       4         August       4         September       4         October       4         December       4         December       4         December       4         Total       4         March       4         April       4         July       4         July       4         July       4         July       4         July       4         November       4         December       4         Duly       4         August       4         September       4         October       4         November       4         December       4		1.003	5,961			657	38	619
April       4         May       4         June       4         July       4         August       4         September       4         October       4         November       4         December       4         Total       4         March       4         March       4         March       4         July       4         March       4         July       4         July       4         July       4         August       4         September       4         October       4         November       4         December       4         Doctober       4         November       4         December       4         November       4         November       4		1.050		-75	-4.2			
May       4         June       4         July       4         August       4         August       4         September       4         October       4         December       4         Total       4         March       4         April       4         July       4         July       4         July       4         August       4         September       4         Doctober       4         November       4         Doctober       4         November       4         December       4         December       4         Duby       4         August       4         Actober       4         December       4         December       4	4,278	1,652	5,930	-7	4	238	207	31
June         4           July         4           August         4           September         4           October         4           December         4           December         4           Total         4           March         4           April         4           July         4           July         4           July         4           July         4           September         4           October         4           July         4           July         4           Acgust         4           November         4           December         4	4,278	2,011	6,289	101	5.3	68	427	-360
July         4           August         4           September         4           October         4           November         4           December         4           Total         4           O11 January         4           March         4           March         4           June         4           June         4           July         4           July         4           July         4           August         4           October         4           November         4	4,279	2,420	6,699	45	1.9	53	463	-410
August         4           September         4           October         4           November         4           December         4           Total         4           Of1 January         4           February         4           March         4           April         4           July         4           July         4           September         4           October         4           November         4           November         4	4,287	2,740	7,027	-20	7	64	385	-321
August         4           September         4           October         4           November         4           December         4           Total         4           Of1 January         4           February         4           March         4           April         4           July         4           July         4           September         4           October         4           November         4           November         4	4,287	2,966	7,253	-125	-4.0	112	339	-227
September         4           October         4           November         4           December         4           Total         4           Ofl January         4           February         4           March         4           April         4           June         4           July         4           September         4           October         4           November         4	4,290	3,153	7,443	-206	-6.1	137	323	-186
October         4           November         4           December         4           Total         4           011 January         4           February         4           March         4           June         4           June         4           July         4           August         4           October         4           November         4           December         4	4.294	3.508	7.801	-138	-3.8	52	411	-359
November         4           December         4           Total         4           Ol1 January         4           February         4           March         4           April         4           June         4           July         4           July         4           September         4           November         4           December         4	4.305	3.851	8.156	41	1.1	52	407	-355
December         4           Total         4           Yotal         4           February         4           March         4           April         4           June         4           June         4           July         4           July         4           September         4           October         4           November         4           December         4								
Total         4           011 January         4           February         4           March         4           April         4           June         4           July         4           August         4           September         4           October         4           November         4	4,309	3,769	8,078	-69	-1.8	237	163	74
011 January         4           February         4           March         4           April         4           May         4           June         4           July         4           August         4           October         4           November         4           December         4	4,301	3,111	7,412	-19	6	731	66	665
February         4           March         4           April         4           May         4           June         4           July         4           August         4           September         4           November         4           December         4	4,301	3,111	7,412	-19	6	3,274	3,291	-17
February         4           March         4           April         4           June         4           July         4           July         4           September         4           October         4           November         4           December         4	4,306	2,308	6,614	4	.2	852	53	799
March         4           April         4           May         4           June         4           July         4           August         4           September         4           October         4           November         4           December         4	4,306	1,724	6,029	40	2.4	668	84	584
April         4           May         4           June         4           July         4           July         4           August         4           September         4           October         4           November         4           December         4	4,304	1,581	5,884	-72	-4.3	317	172	145
May         4           June         4           July         4           August         4           September         4           October         4           November         4           December         4	4,307	1,789	6.096	-222	-11.0	108	320	-212
June 4 July	4,308	2,188	6,495	-232	-9.6	66	464	-398
July         4           August         4           September         4           October         4           November         4           December         4								
August4September4October4November4December4	4,305	2,530	6,835	-210	-7.7	90	430	-340
September	4,304	2,774	7,079	-192	-6.5	124	368	-244
October	4,304	3,020	7,323	-133	-4.2	138	382	-244
November 4 December 4	4,305	3,416	7,721	-92	-2.6	64	462	-398
November 4 December 4	4,305	3,804	8,109	-46	-1.2	62	448	-385
December 4	4,302	3,843	8,145	74	2.0	198	235	-37
	4,305	3.462	7,767	351	11.3	488	105	384
	4,305	3,462	7,767	351	11.3	3,175	3,523	-348
12 January 4	4.307	2.016	7 000	608	26.4	600	88	545
		2,916	7,223		26.4	633		
	4,307	2,455	6,762	731	42.4	526	67	459
	4,325	2,477	6,802	896	56.7	217	256	-39
April 4	4,329	2,613	6,942	824	46.1	144	282	-137
		2.890	7.225	703	32.1	92	375	-283
	4.334	3,118	7,456	589	23.3	109	339	-230
	4,334			472	17.0	129	263	-230
	4,337	3,246	7,585					
	4,337 4,339	3,409	7,757	389	12.9	134 <b>1,984</b>	302 1,972	-168 <b>12</b>
	4,337					,	,	
011 8-Month Total 010 8-Month Total	4,337 4,339 4,348					2,362 2,202	2,274 2,244	89 -42

<sup>a</sup> For total underground storage capacity at the end of each calendar year, see Note 4, "Natural Gas Storage," at end of section.
 <sup>b</sup> For 1980-2010, 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 injections are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable ending stocks. See Note 4, "Natural Gas Storage," at end of section.
 Notes: • Totals may not equal sum of components due to independent roundina.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#naturalgas for all

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. 1996-2006—EIA, Natural Gas Monthly (NGM), monthly issues. 2007 forward—EIA, NGM, October 2012, Table 8. • All Other Data: 1973 and 1974—American Gas Association, Gas Facts, 1972 Data, Table 57, Gas Facts, 1973 Data, Table 57, and Gas Facts, 1974 Data, Table 40. 1975 and 1976—Federal Energy Administration (FEA), Form FEA-G318-M-0, "Underground Gas Storage Report." and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report." 1977 and 1978—EIA, Form FEA-G318-M-0, "Underground Gas Storage Report." 1977 and FERC, Form FERC-8, "Underground Gas Storage Report." 1996-2006—EIA, NGM, monthly issues. 2007 forward—EIA, NGM, October 2012, Table 8. forward—EIA, NGM, October 2012, Table 8.

### **Natural Gas**

**Note 1. Natural Gas Production.** Final annual data are from the U.S. Energy Information Administration (EIA) *Natural Gas Annual (NGA)*.

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

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

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

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

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

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

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

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

Annual data beginning with 1980 are from the EIA NGA. Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years. Monthly data are considered preliminary until after the publication of the EIA NGA. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. The ratio is applied to the monthly sum of the three elements to compute a monthly supplemental gaseous fuels figure.

Although the total amount of supplemental gaseous fuels consumed is known for 1980 forward, the amount consumed by each energy-use sector is estimated by EIA. These estimates are used to create natural gas (without supplemental gaseous fuels) data for Tables 1.3, 2.2, 2.3, 2.4, and 2.6 (note: to avoid double-counting in these tables, supplemental gaseous fuels are accounted for in their primary energy category: "Coal," "Petroleum," or "Biomass"). It is assumed that supplemental gaseous fuels are commingled with natural gas consumed by the residential, commercial, other industrial, and electric power sectors, but are not commingled with natural gas used for lease and plant fuel, pipelines and distribution, or vehicle fuel. The estimated consumption of supplemental gaseous fuels by each sector (residential, commercial, other industrial, and electric power) is calculated as that sector's natural gas consumption (see Table 4.3) divided by the sum of natural gas consumption by the residential, commercial, other industrial, and electric power sectors (see Table 4.3), and then multiplied by total supplemental gaseous fuels consumption (see Table 4.1). For estimated sectoral consumption of supplemental gaseous fuels in Btu, the residential, commercial, and other industrial values in cubic feet are multiplied by the "End-Use Sectors" conversion factors (see Table A4), and the electric power values in cubic feet are multiplied by the "Electric Power Sector" conversion factors (see Table A4). Total supplemental gaseous fuels consumption in Btu is calculated as the sum of the Btu values for the sectors.

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

Total underground storage capacity, which includes both active and inactive fields, at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

1001, 11 ab.		
<b>1975</b> 6,280	<b>1988</b> 8,124	2001 8,182
<b>1976</b> 6,544	<b>1989</b> 8,120	<b>2002</b> 8,207
<b>1977</b> 6,678	<b>1990</b> 7,794	2003 8,206
<b>1978</b> 6,890	<b>1991</b> 7,993	2004 8,255
<b>1979</b> 6,929	<b>1992</b> 7,932	2005 8,268
<b>1980</b> 7,434	<b>1993</b> 7,989	2006 8,330
<b>1981</b> 7,805	<b>1994</b> 8,043	2007 8,402
<b>1982</b> 7,915	<b>1995</b> 7.953	2008 8,499
<b>1983</b> 7,985	<b>1996</b> 7,980	2009 8,656
<b>1984</b> 8,043	1997 8,332	2010 8,764
<b>1985</b> 8,087	<b>1998</b> 8,179	<b>2011</b> <sup>p</sup> 8,776
<b>1986</b> 8,145	1999 8,229	
<b>1987</b> 8,124	2000 8,241	
	1	1

P=Preliminary

Monthly underground storage data are collected from the Federal Energy Regulatory Commission Form FERC-8 (interstate data) and EIA Form EIA-191 (intrastate data). Beginning in January 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the FERC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA NGA.

The final monthly and annual storage and withdrawal data for 1980–2010 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

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

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

**Note 6.** Natural Gas Consumption. Consumption includes use for lease and plant fuel, pipelines and distribution, vehicle fuel, and electric power plants, as well as deliveries to residential, commercial, and other industrial customers.

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

Note 7. Natural Gas Consumption, 1989–1992. Prior to 1993, deliveries to nonutility generators were not separately collected from natural gas companies on Form

EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." As a result, for 1989 through 1992, those volumes are probably included in both the industrial and electric power sectors and double-counted in total consumption. In 1993, 0.28 trillion cubic feet was reported as delivered to nonutility generators.

**Note 8.** Natural Gas Data Adjustments, 1993–2000. For 1993–2000, the original data for natural gas delivered to industrial consumers (now "Other Industrial" in Table 4.3) included deliveries to both industrial users and independent power producers (IPPs). These data were adjusted to remove the estimated consumption at IPPs from "Other Industrial" and include it with electric utilities under "Electric Power Sector." (To estimate the monthly IPP consumption, the monthly pattern for Other Industrial CHP in Table 4.3 was used.)

For 1996–2000, monthly data for several natural gas series in EIA's Natural Gas Navigator shown (see http://www.eia.gov/dnav/ng/ng cons sum dcu nus m.htm) were not reconciled and updated to be consistent with the final annual data in EIA's NGA. In the Monthly Energy Review, monthly data for these series were adjusted so that the monthly data sum to the final annual values. The Table 4.1 data series (and years) that were adjusted are: Gross Withdrawals (1996, 1997), Marketed Production (1997), Extraction Loss (1997, 1998, 2000), Dry Gas Production (1996, 1997), Supplemental Gaseous Fuels (1997-2000), Balancing Item (1997-2000), and Total Consumption (1997 -2000). The Table 4.3 data series (and years) that were adjusted are: Lease and Plant Fuel (1997-2000), Total Industrial (1997-2000), Pipelines and Distribution (2000), Total Transportation (2000), and Total Consumption (1997–2000).

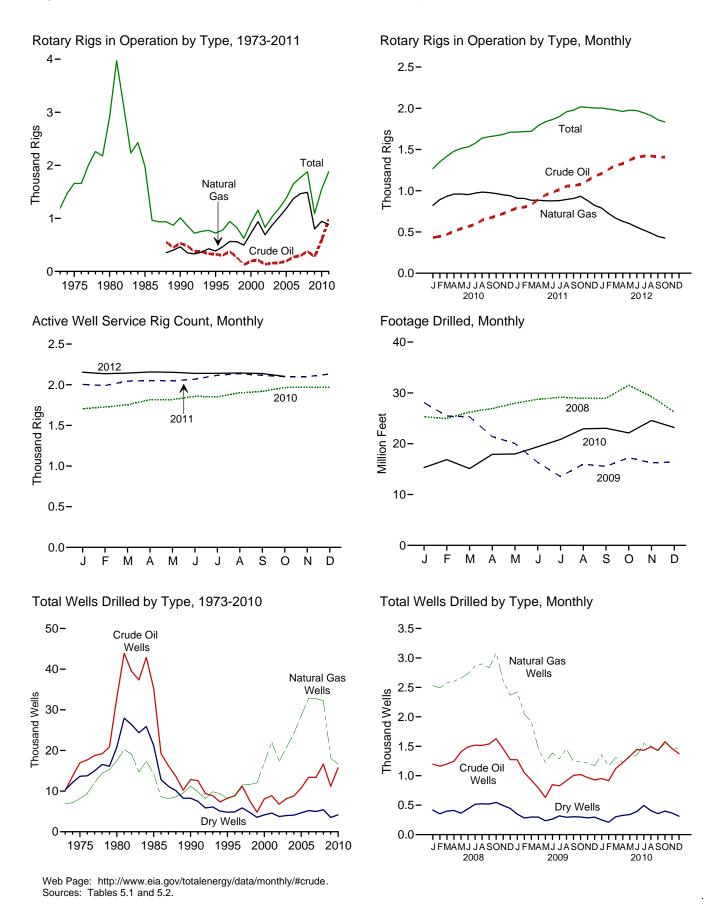
**Note 9.** Natural Gas Imports and Exports. The United States imports natural gas via pipeline from Canada and Mexico; and imports liquefied natural gas (LNG) via tanker from Algeria, Australia, Brunei, Egypt, Equatorial Guinea, Indonesia, Malaysia, Nigeria, Norway, Oman, Peru, Qatar, Trinidad and Tobago, the United Arab Emirates, and Yemen. In addition, very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico; and exports LNG via tanker to Brazil, China, Chile, India, Japan, Russia, South Korea, Spain, and United Kingdom. Also, small amounts of LNG have gone to Mexico since 1998.

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

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

# 5. Crude Oil and Natural Gas Resource Development

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



#### Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements (Number of Rigs)

		Ro	otary Rigs in Operation	n <sup>a</sup>		
	By	Site	By	Туре		Active Well Service
	Onshore	Offshore	Crude Oil	Natural Gas	Total <sup>b</sup>	Rig Count <sup>c</sup>
73 Average	1,110	84	NA	NA	1,194	2,008
75 Average	1.554	106	NA	NA	1,660	2,486
80 Average	2.678	231	NA	NA	2,909	4.089
	1,774	206	NA	NA	1,980	4,716
85 Average	902	108		464		
90 Average			532		1,010	3,658
95 Average	622	101	323	385	723	3,041
96 Average	671	108	306	464	779	3,445
97 Average	821	122	376	564	943	3,499
98 Average	703	123	264	560	827	3,014
99 Average	519	106	128	496	625	2,232
00 Average	778	140	197	720	918	2,692
01 Average	1.003	153	217	939	1.156	2,267
	717	113	137	691	830	1.830
02 Average						
03 Average	924	108	157	872	1,032	1,967
04 Average	1,095	97	165	1,025	1,192	2,064
05 Average	1,287	94	194	1,184	1,381	2,222
06 Average	1,559	90	274	1,372	1,649	2,364
07 Average	1,695	72	297	1,466	1,768	2,388
08 Average	1.814	65	379	1,491	1.879	2,515
09 Average	1,046	44	278	801	1,089	1,722
0 January	1,225	42	433	822	1,267	1,706
February	1.305	45	446	892	1.350	1,726
March	1,369	50	471	933	1,419	1,754
April	1,426	53	508	959	1,479	1.816
		49				
May	1,464		541	960	1,513	1,818
June	1,511	20	566	953	1,531	1,857
July	1,558	15	591	971	1,573	1,852
August	1,619	20	644	983	1,638	1,900
September	1,635	19	668	977	1,655	1.918
October	1,647	21	693	966	1,668	1,965
November	1,661	22	723	950	1,683	1,971
December	1.687	24	759	940	1,711	1,968
Average	1,514	31	591	943	1,546	1,854
11 January	1.686	26	793	909	1.711	2.004
February	1,692	26	801	907	1,718	1,990
March	1,694	26	830	884	1,720	2.044
					1,720	2,044
April	1,762	28	896	885		
May	1,804	32	948	878	1,836	2,047
June	1,829	34	979	877	1,863	2,069
July	1,865	35	1,014	880	1,900	2,116
August	1,923	35	1,055	894	1,957	2,136
September	1,946	32	1,063	907	1,978	2,115
October	1,982	35	1.077	933	2.017	2,100
November	1,974	37	1,125	880	2,011	2,100
December	1,961	42	1,177	821	2,003	2,100
December	1,846	42 32	984	887	2,003 1,879	2,131
Average	1,040	32	904	007	1,079	2,075
2 January	1,960	43	1,208	790	2,003	2,154
February	1,949	42	1,261	723	1,990	2,135
March	1.935	43	1.307	667	1,979	2,143
April	1,917	44	1.329	629	1,961	2,157
May	1,931	46	1,373	600	1,977	2,157
	1,923	40	1,373	558	1,972	2,133
June						
July	1,894	51	1,419	522	1,944	2,140
August	1,863	50	1,423	487	1,913	2,144
September	1,808	51	1,409	447	1,859	2,137
October	1.785	49	1.407	425	1.834	2,102
10-Month Average	1,897	47	1,356	584	1,944	2,133
11 10-Month Average	1,821	31	949	895	1,852	2,067
10 10-Month Average	1,481	33	559	943	1,514	1,831

<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.

NA=Not available. Note: Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#crude for all available data beginning in 1973. Sources: • Rotary Rigs in Operation: Baker Hughes, Inc., Houston, TX, Rotary Rigs Running—by State, used with permission. See http://investor.shareholder.com/bh/rig\_counts/rc\_index.cfm. • Active Well Service Rig Count: Cameron International Corporation, Houston, TX. See http://www.c-a-m.com/Forms/Product.aspx?prodID=cdc209c4-79a3-47e5-99c2-fideda6d4aad6 fdeda6d4aad6.

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

						Wells I	Drilled						j
-		Explo	atory			Develo	pment			То	tal		Total
	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Footage Drilled
						Num	nber						Thousand Feet
1973 Total	642	1,067	5,952	7,661	9,525	5,866	4,368	19,759	10,167	6,933	10,320	27,420	138,223
1975 Total	982	1,248	7,129	9,359	15,966	6,879	6,517	29,362	16,948	8,127	13,646	38,721	180,494
1980 Total	1,777	2,099	9,081	12,957	31,182	15,362	11,704	58,248	32,959	17,461	20,785	71,205	316,943
1985 Total	1,680	1,200	8,954	11,834	33,581	13,124	12,257	58,962	35,261	14,324	21,211	70,796	314,409
1990 Total	778	811	3,652	5,241	12,061	10,435	4,593	27,089	12,839	11,246	8,245	32,330	156,044
1995 Total	570	558	2,024	3,152	7,678	7,524	2,790	17,992	8,248	8,082	4,814	21,144	117,156
1996 Total	489	576	1,956	3,021	8,347	8,451	2,934	19,732	8,836	9,027	4,890	22,753	126,365
1997 Total	491	562	2,113	3,166	10,715	10,936	3,761	25,412	11,206	11,498	5,874	28,578	161,249
1998 Total	327	566	1,590	2,483	7,355	11,073	3,171	21,599	7,682	11,639	4,761	24,082	137,202
1999 Total	197 288	570 657	1,157	1,924	4,608	11,457	2,393	18,458	4,805	12,027	3,550	20,382	102,861
2000 Total	200	1,052	1,341 1,733	2,286 3,142	7,802 8,531	16,394 21,020	2,805 2,865	27,001 32,416	8,090 8,888	17,051 22,072	4,146 4,598	29,287 35,558	144,425 180,141
2001 Total 2002 Total	258	844	1,282	2,384	6,517	16,498	2,805	25,487	6,775	17,342	3,754	27,871	145,159
2002 Total	350	997	1,202	2,504	7,779	19,725	2,685	30,189	8,129	20,722	3,982	32,833	177,239
2003 Total	383	1,671	1,257	3,404	8,406	22,515	2,005	33,653	8,789	24,186	4,082	37,057	204,279
2005 Total	539	2,141	1,462	4,142	10,240	26,449	3,191	39,880	10,779	28,590	4,653	44,022	240,307
2006 Total	646	2,456	1,547	4,649	12,739	30,382	3,659	46,780	13,385	32,838	5,206	51,429	282,675
2007 Total	808	2,794	1,582	5,184	12,563	29,925	3,399	45,887	13,371	32,719	4,981	51,071	301,515
2008 January	88	208	144	440	1,111	2,321	272	3,704	1,199	2,529	416	4,144	25,306
February	82	230	107	419	1,080	2,261	247	3,588	1,162	2,491	354	4,007	24,958
March	66	216	127	409	1,132	2,363	271	3,766	1,198	2,579	398	4,175	26,226
April	68	189	130	387	1,177	2,415	281	3,873	1,245	2,604	411	4,260	26,920
May	88	206	124	418	1,317	2,449	240	4,006	1,405	2,655	364	4,424	27,947
June	63 79	195	139	397 413	1,428	2,540	299 344	4,267	1,491 1,518	2,735 2,858	438	4,664 4,891	28,739
July	79 67	163 165	171 144	376	1,439 1,448	2,695 2,735	344 379	4,478 4,562	1,516	2,000	515 523	4,891	29,140 28,942
August September	52	166	164	382	1,448	2,735	379	4,502	1,515	2,900	523	4,938	28,942
October	80	243	173	496	1,549	2,841	373	4,763	1,629	3.084	546	5,259	31,505
November	97	192	160	449	1,361	2,418	334	4,113	1,458	2,610	494	4,562	29,276
December	67	172	132	371	1,206	2,196	313	3.715	1,100	2,368	445	4.086	26.222
Total	897	2,345	1,715	4,957	15,736	29,901	3,708	49,345	16,633	32,246	5,423	54,302	334,141
2009 January	80	171	99	350	1,192	2,253	250	3,695	1,272	2,424	349	4,045	28,077
February	62	125	88 88	275 293	991	1,925	195	3,111	1,053	2,050	283	3,386	25,440
March	59 36	146 68	88 93	293 197	867 755	1,771	210 205	2,848 2.356	926 791	1,917 1,464	298 298	3,141	25,304
April	30 47	90	93 80	217	755 584	1,396 1,136	205 156	2,356	631	1,404	290	2,553 2,093	21,406 20,055
May June	44	91	75	217	804	1,130	189	2,290	848	1,388	264	2,033	16,301
July	40	100	101	241	789	1,188	217	2,194	829	1,288	318	2,435	13,543
August	49	84	88	221	867	1,372	207	2,134	916	1,200	295	2,667	15,970
September	61	71	96	228	945	1,170	207	2,322	1,006	1,430	303	2,550	15,547
October	55	79	78	212	966	1,167	222	2,355	1,021	1,246	300	2,567	17,261
November	38	83	85	206	931	1,133	199	2,263	969	1,216	284	2,469	16,236
December	34	98	84	216	894	1,074	213	2,181	928	1,172	297	2,397	16,424
Total	605	1,206	1,055	2,866	10,585	16,882	2,470	29,937	11,190	18,088	3,525	32,803	231,562
2010 January	55 44	91 71	81 67	227	898 871	1,264 1.096	169	2,331	953	1,355	250	2,558	15,304
February	44 59	71 85	67 88	182 232	871 1,062	1,096	144 216	2,111 2,502	915 1,121	1,167 1,309	211 304	2,293 2,734	16,862 15,102
March April	59 49	85 78	88 77	232 204	1,062	1,224	216	2,502	1,121	1,309	304 326	2,734 2,778	15,102
May	49 48	107	86	204 241	1,173	1,152	249 255	2,574 2,745	1,222	1,230	320 341	2,778	17,904
June	40 61	107	90	251	1,285	1,250	302	2,937	1,330	1,313	392	3,188	19,408
July	46	103	105	254	1,386	1,443	390	3,219	1,432	1,546	495	3,473	20,847
August	56	100	94	254	1,434	1,402	314	3,150	1,490	1,506	408	3,404	22,923
September	57	73	88	218	1,374	1,358	268	3,000	1,431	1,431	356	3,218	23,037
October	75	87	117	279	1,502	1,463	283	3,248	1,577	1,550	400	3,527	22,123
November	62	114	103	279	1,400	1,352	263	3,015	1,462	1,466	366	3,294	24,561
December	57	92	70	219	1,317	1,379	243	2,939	1,374	1,471	313	3,158	23,189
Total	669	1,105	1,066	2,840	15,084	15,591	3,096	33,771	15,753	16,696	4,162	36,611	239,247
Total	669	1,105	1,066	2,840	15,084	15,591	3,096	33,771	15,753	16,696	4,162	36,611	

Notes: • Data are estimates. • 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 and dwell deeper, drilling of laterals from the original well, drilling of service and injection wells, and drilling for resources other than crude oil or natural gas are excluded. After 1990, a new well is defined as the first hole in the ground whether it is lateral or not. Due to the methodology used to estimate ultimate well counts from the available partially reported data, the counts shown on this page are frequently revised. See Note, "Crude Oil and Natural Gas Exploratory and Development

Wells," at end of section. 
• Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#crude for all

 Sources: • 1973–1989: U.S. Energy Information Administration (EIA) computations based on well reports submitted to the American Petroleum Institute. • 1990 forward: EIA computations based on well reports submitted to IHS, Inc., Denver, CO.

2011 and 2012 data in this table have been removed while EIA evaluates the quality of the data and the estimation methodology.

## **Crude Oil and Natural Gas Resource Development**

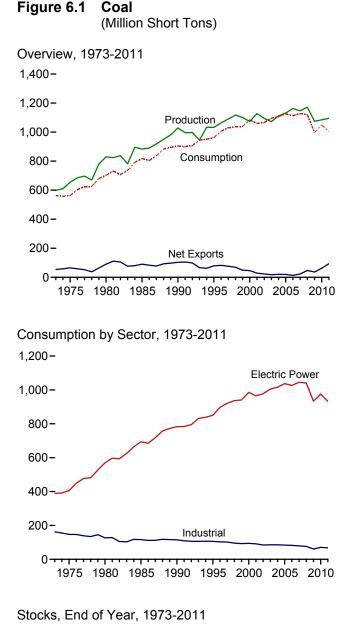
Note. Crude Oil and Natural Gas Exploratory and Development Wells. Three well types are considered in the *Monthly Energy Review* (*MER*) drilling statistics: "completed for crude oil," "completed for natural gas," and "dry hole." Wells that productively encounter both crude oil and natural gas are categorized as "completed for crude oil." Both development wells and exploratory wells (new field wildcats, new pool tests, and extension tests) are included in the statistics. All other classes of wells drilled in connection with the search for producible hydrocarbons are excluded. If a lateral is drilled at the same time as the original hole it is not counted separately, but its footage is included.

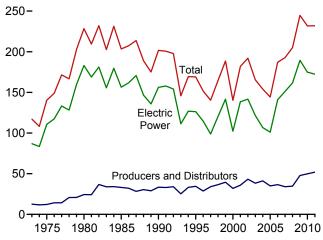
Prior to the March 1985 MER, drilling statistics consisted of

completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported well completions proved to be an inaccurate indicator of drilling activity. During 1982, for example, as-reported well completions rose, while the number of actual completions fell. Consequently, the drilling statistics published since the March 1985 MER are U.S. Energy Information Administration (EIA) estimates produced by statistically imputing well counts and footage based on the partial data available from the API. These estimates are subject to continuous revision as new data, some of which pertain to earlier months and years, become available. Additional information about the EIA estimation methodology may be found in "Estimating Well Completions," a feature article published in the March 1985 MER.

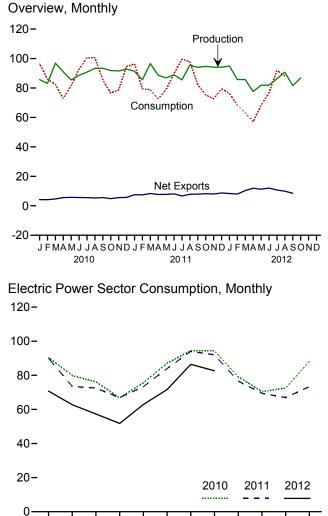
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Web Page: http://www.eia.gov/totalenergy/data/monthly/#coal. Sources: Tables 6.1–6.3.



Electric Power Sector Stocks, End of Month 240-

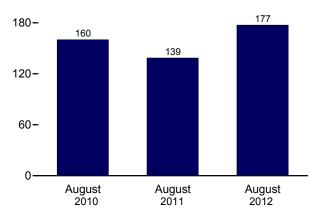
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#### Table 6.1 Coal Overview

(Thousand Short Tons)

		Waste Coal		Trade		Stock	Losses and Unaccounted	
	Production <sup>a</sup>	Supplied <sup>b</sup>	Imports	Exports	Net Imports <sup>c</sup>	Change <sup>d,e</sup>	for <sup>f</sup>	Consumption
973 Total	598,568	NA	127	53,587	-53,460	402	-17,878	562,584
975 Total	654.641	NA	940	66.309	-65,369	32.154	-5,522	562,640
980 Total	829,700	NA	1,194	91,742	-90,548	25.595	10.827	702,730
985 Total	883,638	NA	1,952	92,680	-90,727	-27,934	2,796	818,049
990 Total	1,029,076	3,339	2.699	105.804	-103,104	26,542	-1.730	904,498
995 Total	1.032.974	8,561	9.473	88.547	-79.074	-275	632	962.104
996 Total	1.063.856	8.778	8.115	90.473	-82.357	-17,456	1.411	1,006,321
997 Total	1,089,932	8.096	7,487	83,545	-76.058	-11,253	3,678	1,029,544
998 Total	1,117,535	8.690	8,724	78,048	-69,324	24,228	-4.430	1,037,103
999 Total	1.100.431	8.683	9.089	58,476	-49.387	23,988	-2,906	1.038.647
		9.089	12.513		-49,387	-48.309	-2,900	
000 Total	1,073,612			58,489				1,084,095
001 Total	1,127,689	10,085	19,787	48,666	-28,879	41,630	7,120	1,060,146
002 Total	1,094,283	9,052	16,875	39,601	-22,726	10,215	4,040	1,066,355
003 Total	1,071,753	10,016	25,044	43,014	-17,970	-26,659	-4,403	1,094,861
004 Total	1,112,099	11,299	27,280	47,998	-20,718	-11,462	6,887	1,107,255
005 Total	1,131,498	13,352	30,460	49,942	-19,482	-9,702	9,092	1,125,978
006 Total	1,162,750	14,409	36,246	49,647	-13,401	42,642	8,824	1,112,292
007 Total	1,146,635	14,076	36,347	59,163	-22,816	5,812	4,085	1,127,998
008 Total	1,171,809	14,146	34,208	81,519	-47,311	12,354	5,740	1,120,548
009 Total	1,074,923	13,666	22,639	59,097	-36,458	39,668	14,985	997,478
010 January	85,711	1,187	1,665	5,866	-4,202	-10,695	-3,103	96,494
February	83,087	908	1,239	5,386	-4,146	-7,306	1,154	86,001
March	96,904	1,192	1,899	6,554	-4,655	8,127	2,870	82,444
April	90,960	1,071	1,812	7,358	-5,545	11,519	2,176	72,790
May	85,401	1,138	1,475	7,220	-5,745	2,723	-3,500	81,570
June	88,621	1,219	1,771	7,387	-5,616	-9.407	647	92,983
July	90,795	1,273	1,390	6,928	-5,539	-15,499	1.446	100,582
August	93.350	1,261	1,702	7,001	-5,299	-8,766	-2.316	100,393
September	93,360	1,102	1,588	7,145	-5,556	5.111	-1.591	85.386
	91.831	982	1,566	6.623	-4,849	11.463	-1,591	76.591
October								
November	91,558	1,121	1,473	7,015	-5,542	8,878	-437	78,697
December Total	92,791 <b>1,084,368</b>	1,197 <b>13,651</b>	1,563 <b>19,353</b>	7,232 <b>81,716</b>	-5,669 <b>-62,363</b>	-9,187 <b>-13,039</b>	2,925 <b>182</b>	94,582 <b>1,048,514</b>
011 January	91,355	<sup>R</sup> 1.182	1,014	8,509	-7,496	<sup>R</sup> -11,679	<sup>R</sup> 418	<sup>R</sup> 96,303
February	85,575	R 1,046	843	8,275	-7,432	<sup>R</sup> -3,306	<sup>R</sup> 2,917	<sup>R</sup> 79,577
March	96,548	<sup>R</sup> 1,126	1,524	9,832	-8,308	<sup>R</sup> 3,991	R 6,608	<sup>R</sup> 78,767
April	88,563	<sup>R</sup> 996	1,136	8.843	-7,706	<sup>R</sup> 8,966	R 390	<sup>R</sup> 72.497
May	86,850	<sup>R</sup> 910	1,313	9,043	-7,730	<sup>R</sup> 2,393	<sup>R</sup> -1,461	<sup>R</sup> 79,098
	88,878	<sup>R</sup> 1,162	970	9,042	-8,132	<sup>R</sup> -9,803	<sup>R</sup> 2,060	<sup>R</sup> 89,652
June		<sup>R</sup> 1,202				<sup>R</sup> -15,788	<sup>R</sup> -3,788	<sup>R</sup> 99,652
July	85,498	·· 1,2U2	1,208	7,865	-6,657			
August	95,495	R 1,181	1,545	9,387	-7,843	<sup>R</sup> -10,739	R 1,809	<sup>R</sup> 97,762
September	94,013	R 1,117	835	8,723	-7,888	<sup>R</sup> 5,015	R-113	<sup>R</sup> 82,341
October	94,643	<sup>R</sup> 1,078	917	9,159	-8,242	<sup>R</sup> 13,552	<sup>R</sup> -1,334	<sup>R</sup> 75,261
November	94,109	<sup>R</sup> 1,133	807	8,808	-8,001	<sup>R</sup> 11,911	<sup>R</sup> 2,623	<sup>R</sup> 72,707
December	94,101	<sup>R</sup> 1,076	976	9,713	-8,737	<sup>R</sup> 5,698	<sup>R</sup> 1,377	<sup>R</sup> 79,365
Total	1,095,628	<sup>R</sup> 13,209	13,088	107,259	-94,171	<sup>R</sup> 211	<sup>R</sup> 11,506	R 1,002,948
012 January	94,944	1,068	789	9,126	-8,337	R 2,835	<sup>R</sup> 8,471	<sup>R</sup> 76,368
February	85,763	891	534	8,460	-7,927	<sup>R</sup> 8,065	R 2,290	<sup>R</sup> 68,373
March	85,698	837	699	11,055	-10,356	<sup>R</sup> 9,722	<sup>R</sup> 3,389	<sup>R</sup> 63,068
April	77,624	725	623	12,529	-11,905	<sup>R</sup> 7,292	<sup>R</sup> 2,169	<sup>R</sup> 56,983
May	81,825	892	986	12,257	-11,271	<sup>R</sup> 496	<sup>R</sup> 2,790	<sup>R</sup> 68,160
June	81,911	854	719	12,749	-12,030	<sup>R</sup> -5,246	<sup>R</sup> -693	<sup>R</sup> 76,676
July	86,244	F1,069	894	11,623	-10,729	<sup>R</sup> -14,888	<sup>R</sup> -400	<sup>R</sup> 91,872
August	90,768	RF 1,069	667	10,597	-9,930	<sup>R</sup> -7,206	R 899	<sup>R</sup> 88,213
September	81,605	NA	R 855	<sup>R</sup> 9,344	<sup>R</sup> -8,489	NA	NA	NA
October	86,744	NA	NA	NA	NA	NA	NA	NA
10-Month Total	853,126	NA	NA	NA	NA	NA	NA	NA
011 10-Month Total	907,418	11,000	11,305	88,738	-77,433	-17,399	7,506	850,877
010 10-Month Total	900,019	11,333	16,316	67,469	-51,153	-12,730	-2,305	875,235

<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 <sup>f</sup> The difference between calculated coal supply and disposition, due to coal

am, 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. A minus sign indicates exports are arreater then imports.

greater than imports. <sup>d</sup> For 1980-2007, excludes coal stocks in the residential and commercial

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

increase

<sup>f</sup> The difference between calculated coal supply and disposition, due to coal quantities lost or to data reporting problems. R=Revised. NA=Not available. F=Forecast. Notes: • For methodology used to calculate production, consumption, and Note 3, "Coal Stocks," at end of section. • Data include refined coal. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#coal for all available data beginning in 1973. Sources: See end of section.

#### Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

					End-L	Jse Sectors	6					
			Commerci	al			Industrial					
	Resi-				Coke	o	ther Industria	al		Trans-	Electric Power	
	dential	CHPa	Otherb	Total	Plants	CHPC	Non-CHP <sup>d</sup>	Total	Total	portation	Sector <sup>e,f</sup>	Total
1973 Total 1975 Total	4,113 2,823	(g)	7,004 6,587	7,004 6,587	94,101 83,598	( <sup>h</sup> )	68,038 63,646	68,038 63,646	162,139 147,244	116 24	389,212 405,962	562,584 562,640
1975 Total	2,025	(g)	5,097	5,097	66,657	{h}	60,347	60,347	127,004	(h)	569,274	702,730
1985 Total	1,711	(°)	6,068	6,068	41,056	('n)	75,372	75,372	116,429	('n)	693,841	818,049
1990 Total	1,345	1,191	4,189	5,379	38,877	27,781	48,549	76,330	115,207	(h) (h)	782,567	904,498
1995 Total 1996 Total	755 721	1,419 1,660	3,633 3,625	5,052 5,285	33,011 31,706	29,363 29,434	43,693 42,254	73,055 71,689	106,067 103,395	(hí	850,230 896,921	962,104 1,006,321
1997 Total	711	1,738	4,015	5,752	30,203	29,853	41,661	71,515	101,718	(h)	921,364	1,029,544
1998 Total	534	1,443	2,879	4,322	28,189	28,553	38,887	67,439	95,628	(h) (h)	936,619	1,037,103
1999 Total 2000 Total	585 454	1,490 1,547	2,803 2,126	4,293 3.673	28,108 28,939	27,763 28.031	36,975 37,177	64,738 65,208	92,846 94.147	('') (h)	940,922 985,821	1,038,647 1,084,095
2000 Total	481	1,448	2,120	3,888	26,075	25,755	39,514	65,268	91,344	(h)	964,433	1,060,146
2002 Total	533	1,405	2,506	3,912	23,656	26,232	34,515	60,747	84,403	('n)	977,507	1,066,355
2003 Total	551 512	1,816 1,917	1,869 2,693	3,685	24,248	24,846 26,613	36,415	61,261	85,509	(h)	1,005,116	1,094,861
2004 Total 2005 Total	378	1,917	2,693	4,610 4,342	23,670 23,434	25,875	35,582 34,465	62,195 60,340	85,865 83,774	}h{	1,016,268 1,037,485	1,107,255 1,125,978
2006 Total	290	1,886	1,050	2,936	22,957	25,262	34,210	59,472	82,429	(h)	1,026,636	1,112,292
2007 Total	353	1,927	1,247	3,173	22,715	22,537	34,078	56,615	79,331	(h) (h)	1,045,141	1,127,998
2008 Total 2009 Total	351 353	2,021 1,798	1,134 1,059	3,155 2,857	22,070 15,326	21,902 19,766	32,491 25,549	54,393 45,314	76,463 60,641	(") (h)	1,040,580 933,627	1,120,548 997,478
2010 January	43	193	156	349	1,472	2,094	2,084	4,178	5,650	( h )	90,452	96,494
February	37	167	136	303	1,584	1,978	2,215	4,193	5,777	(h) (h)	79,884	86,001
March April	33 21	149 117	121 54	271 171	1,801 1,786	2,124 2,220	2,106 1,749	4,230 3.969	6,030 5,755	(h)	76,110 66,842	82,444 72,790
May	21	118	55	173	1,794	2,010	1,975	3,985	5,779	(h)	75,597	81,570
June	24	135	62	197	1,772	1,898	2,061	3,959	5,732	('n)	87,030	92,983
July	24 25	142 152	48 52	190 203	1,783	2,122 2,194	1,944 1,909	4,066 4,103	5,849 5,917	(h) (h)	94,519 94,247	100,582 100,393
August September	23	132	45	178	1,814 1,894	1,941	2,174	4,103	6,010	(h)	94,247 79,176	85,386
October	26	121	86	207	1,731	1,958	2,178	4,136	5,866	(h)	70,492	76,591
November	27	128	90	218	1,787	1,854	2,297	4,151	5,938	(h) (h)	72,514	78,697
December Total	35 339	165 <b>1,720</b>	116 <b>1,022</b>	281 <b>2,742</b>	1,874 <b>21,092</b>	2,246 <b>24,638</b>	1,957 <b>24,650</b>	4,203 <b>49,289</b>	6,077 <b>70,381</b>	(") ( <sup>h</sup> )	88,189 <b>975,052</b>	94,582 <b>1,048,514</b>
2011 January	40	<sup>R</sup> 189	<sup>R</sup> 136	<sup>R</sup> 324	1,746	<sup>R</sup> 2,082	<sup>R</sup> 2,090	4,172	5,917	( <sup>h</sup> )	<sup>R</sup> 90,021	<sup>R</sup> 96,303
February	37 35	<sup>R</sup> 173 <sup>R</sup> 164	<sup>R</sup> 124 <sup>R</sup> 118	298 <sup>R</sup> 283	1,623	<sup>R</sup> 1,800 <sup>R</sup> 1,891	<sup>R</sup> 2,345 <sup>R</sup> 2,281	4,145	5,769	(h) (h)	R 73,474	<sup>R</sup> 79,577 <sup>R</sup> 78,767
March	23	124	<sup>R</sup> 63	R 187	1,819 1,668	<sup>R</sup> 1,787	<sup>R</sup> 1,902	4,173 3,689	5,991 5,357	(h)	<sup>R</sup> 72,458 <sup>R</sup> 66,930	<sup>R</sup> 72,497
May	R 23	<sup>R</sup> 124	<sup>R</sup> 64	<sup>R</sup> 188	1,878	<sup>R</sup> 1,836	<sup>R</sup> 1,836	3,672	5,550	(h)	<sup>R</sup> 73,338	<sup>R</sup> 79,098
June	R 24	<sup>R</sup> 130	<sup>R</sup> 67	<sup>R</sup> 197	1,846	R 1,843	R 1,833	3,676	5,522	(h) (h)	<sup>R</sup> 83,908	<sup>R</sup> 89,652
July August	21 19	<sup>R</sup> 145 <sup>R</sup> 129	<sup>R</sup> 27 <sup>R</sup> 24	<sup>R</sup> 172 <sup>R</sup> 153	1,670 1,863	<sup>R</sup> 1,946 <sup>R</sup> 1,962	<sup>R</sup> 1,772 <sup>R</sup> 1,753	3,718 3,715	5,388 5,578	(n) (h)	<sup>R</sup> 94,037 <sup>R</sup> 92,012	<sup>R</sup> 99,618 <sup>R</sup> 97,762
September	<sup>R</sup> 18	R 122	<sup>R</sup> 23	<sup>R</sup> 145	1,874	R 1,788	<sup>R</sup> 1,947	3,735	5,609	(h)	<sup>R</sup> 76,569	<sup>R</sup> 82,341
October	R 20	<sup>R</sup> 110	<sup>R</sup> 52	<sup>R</sup> 162	1,784	<sup>R</sup> 1.748	R 2,088	3,836	5,621	('n)	<sup>R</sup> 69,458	<sup>R</sup> 75,261
November	R 21	<sup>R</sup> 117 <sup>R</sup> 139	<sup>R</sup> 55 <sup>R</sup> 65	R 173	1,772	<sup>R</sup> 1,712 <sup>R</sup> 1,923	<sup>R</sup> 2,110	3,822	5,594	(h) (h)	<sup>R</sup> 66,919	R 72,707
December Total	R 25 307	<sup>R</sup> 1,668	R 818	<sup>R</sup> 204 <b>2,485</b>	1,891 <b>21,434</b>	R 22,319	<sup>R</sup> 1,962 <sup>R</sup> <b>23,919</b>	3,885 <b>46,238</b>	5,776 <b>67,671</b>	( <sup>h</sup> )	<sup>R</sup> 73,359 <sup>R</sup> <b>932,484</b>	<sup>R</sup> 79,365 <sup>R</sup> <b>1,002,948</b>
2012 January	28	<sup>R</sup> 162	<sup>R</sup> 62	224	1,701	<sup>R</sup> 1,913	<sup>R</sup> 1,783	3,696	5,397	( <sup>h</sup> )	<sup>R</sup> 70,720	<sup>R</sup> 76,368
February	25	<sup>R</sup> 141 <sup>R</sup> 135	<sup>R</sup> 57 <sup>R</sup> 55	199	1,687	R 1,708	R 2,000	3,708	5,395	(h) (h)	R 62,755	R 68,373
March April	23 15	<sup>R</sup> 135	<sup>N</sup> 55 <sup>R</sup> 6	190 121	1,895 1,765	<sup>R</sup> 1,707 <sup>R</sup> 1,542	<sup>R</sup> 1,952 <sup>R</sup> 1,789	3,659 3,331	5,554 5.096	('') (h)	<sup>R</sup> 57,300 <sup>R</sup> 51,751	<sup>R</sup> 63,068 <sup>R</sup> 56,983
May	16	<sup>R</sup> 121	R 6	127	1,839	<sup>R</sup> 1,689	R 1.621	3,310	5,149	λh ή	<sup>R</sup> 62,868	<sup>R</sup> 68,160
June	_ 15	<sup>R</sup> 114	<sup>R</sup> 6	_ 120	1 641	<sup>R</sup> 1,634	<sup>R</sup> 1.671	3.305	4,946	(h)	<sup>R</sup> 71,595	<sup>R</sup> 76,676
July	F 22 F 25	<sup>R</sup> 118 126	<sup>RF</sup> 61 _ <sup>F</sup> 73	F 180 F 199	<sup>F</sup> 1,793 <sup>F</sup> 1,764	<sup>R</sup> 1,773 1,827	<sup>RF</sup> 1,676 <sup>F</sup> 1,754	<sup>F</sup> 3,449 <sup>F</sup> 3,582	F 5,242 F 5,346	(h) (h)	<sup>R</sup> 86,429 82,643	R 91,872
August 8-Month Total	E 168	1,032	E 327	E 1,359	E 14,085	1,827 13,792	E 14,247	E 28,039	E <b>42,124</b>	(h)	82,643 <b>546,062</b>	88,213 <b>589,712</b>
2011 8-Month Total 2010 8-Month Total	223 230	1,179 1,173	623 685	1,802 1,858	14,112 13,806	15,147 16,640	15,812 16,044	30,959 32,684	45,071 46,490	( <sup>h</sup> ) ( <sup>h</sup> )	646,179 664,681	693,275 713,258

<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>b</sup> All commercial sector fuel use other than that in "Commercial CHP."
 <sup>b</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. E=Estimate. F=Forecast.
 Notes: • CHP monthly values are from Table 7.4c; electric power sector monthly values are rom 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 include refined coal. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#coal for all available data beginning in 1973.

Sources: See end of section.

#### Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

			E	nd-Use Sectors				
	Producers	Residential		Industrial			Electric	
	and Distributors	and Commercial	Coke Plants	Othera	Total	Total	Power Sector <sup>b,c</sup>	Total
973 Year	12,530	290	6,998	10,370	17,368	17,658	86,967	117,155
975 Year	12,108	233	8,797	8,529	17,326	17,559	110,724	140,391
980 Year	24,379	NA	9,067	11,951	21,018	21,018	183,010	228,407
985 Year	33,133	NA	3,420	10,438	13,857	13,857	156,376	203,367
990 Year	33,418	NA	3,329	8,716	12,044	12,044	156,166	201,629
995 Year	34,444	NA	2,632	5,702	8,334	8,334	126,304	169,083
996 Year	28,648	NA	2,667	5,688	8,355	8,355	114,623	151,627
97 Year	33,973	NA	1,978	5,597	7,576	7,576	98,826	140,374
998 Year	36,530	NA	2,026	5,545	7,571	7,571	120,501	164,602
999 Year	39,475	NA	1,943	5,569	7,511	7,511	° 141,604	188,590
000 Year	31,905	NA	1,494	4,587	6,081	6,081	102,296	140,282
001 Year	35,900	NA	1,510	6,006	7,516	7,516	138,496	181,912
002 Year	43,257	NA	1,364	5,792	7,156	7,156	141,714	192,127
003 Year	38,277	NA	905	4,718	5,623	5,623	121,567	165,468
004 Year	41,151	NA	1,344	4,842	6,186	6,186	106,669	154,006
005 Year	34,971	NA	2,615	5,582	8,196	8,196	101,137	144,304
006 Year	36,548	NA	2,928	6,506	9,434	9,434	140,964	186,946
007 Year	33,977	NA	1,936	5,624	7,560	7,560	151,221	192,758
008 Year	34,688	498	2,331	6,007	8,338	8,836	161,589	205,112
009 Year	47,718	529	1,957	5,109	7,066	7,595	189,467	244,780
10 January	48,854	510	1,832	4,798	6,630	7,140	178,091	234,085
February	49,069	490	1,708	4,486	6,194	6,684	171,026	226,779
March	50,936	471	1,583	4,175	5,758	6,229	177,742	234,906
April	50,761	482	1,715	4,207	5,922	6,404	189,260	246,425
May	50,900	494	1,846	4,239	6,086	6,579	191,669	249,148
June	51,497	505	1,978	4,272	6,250	6,755	181,490	239,741
July	47,935	509	1,948	4,345	6,294	6,803	169,504	224,242
August	48,638	513	1,918	4,419	6,337	6,851	159,987	215,476
September	49,913	517	1,889	4,492	6,381	6,899	163,776	220,587
October	49,430	529	1,901	4,503	6,404	6,933	175,686	232,050
November	50,571	541	1,913	4,514	6,428	6,968	183,389	240,928
December	49,820	552	1,925	4,525	6,451	7,003	174,917	231,740
011 January	48,709	536	1,937	4,305	6,241	6,777	<sup>R</sup> 164,575	<sup>R</sup> 220,061
February	49,140	520	1,948	4,084	6,032	6,552	<sup>R</sup> 161,064	R 216,758
March	48,165	503	1,959	3,864	5,823	6,326	<sup>R</sup> 166,255	R 220,746
April	49,852	505	1,958	3,969	5,927	6,433	<sup>R</sup> 173,427	R 229,712
May	51,473	508	1,957	4,075	6,032	6,539	<sup>R</sup> 174,093	R 232,105
June	50,507	510	1,956	4,181	6,136	6,646	<sup>R</sup> 165,149	R 222,302
July	52,420	513	2,082	4,203	6,285	6,798	<sup>R</sup> 147,296	R 206,514
August	50,287	515	2,221	4,225	6,446	6,961	<sup>R</sup> 138,527	<sup>R</sup> 195,775
September	49,909	518	2,405	4,247	6,652	7,170	<sup>R</sup> 143,711	<sup>R</sup> 200,790
October	50,810	546	2,473	4,316	6,790	7,336	<sup>R</sup> 156,196	<sup>R</sup> 214,342
November	50,997	575	2,541	4,386	6,927	7,502	<sup>R</sup> 167,754	<sup>R</sup> 226,253
December	51,897	603	2,610	4,455	7,065	7,668	<sup>R</sup> 172,387	<sup>R</sup> 231,951
12 January	F 48,424	587	2,507	4,238	6,745	7,332	<sup>R</sup> 179,030	<sup>R</sup> 234,787
February	<sup>F</sup> 49,954	572	2,403	4,021	6,425	6,997	<sup>R</sup> 185,901	<sup>R</sup> 242,852
March	<sup>F</sup> 51,458	557	2,300	3,804	6,105	6,661	<sup>R</sup> 194,455	R 252,574
April	<sup>F</sup> 51,705	566	2,316	3,911	6,227	6,793	<sup>R</sup> 201,368	R 259,866
May	<sup>두</sup> 51,253	575	2,331	4,018	6,349	6,925	<sup>R</sup> 202,184	R 260,362
June	<sup>F</sup> 51,007	_585	_2,347	_4,125	_6,472	_7,057	<sup>R</sup> 197,052	R 255,115
July	F 49,859	<sup>두</sup> 586	F_2,308	F_4,356	F_6,664	F_7,250	<sup>R</sup> 183,119	<sup>R</sup> 240,227
August	F 48,343	F 586	F 2,269	<sup>F</sup> 4,578	<sup>F</sup> 6,847	F 7,433	177,246	233,021

<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

<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 <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 include refined coal. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent examples a Coastration of States and the District of Columbia

Geographic coverage is the 50 States and the District of Columbia.
 Web Page: See http://www.eia.gov/totalenergy/data/monthly/#coal for all available data beginning in 1973.

Sources: See end of section.

## Coal

**Note 1. Coal Production.** Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the U.S. Energy Information Administration (EIA) and published in the *Weekly Coal Production* report. When a week extends into a new month, production is allocated on a daily basis and added to the appropriate month. Weekly estimates are based on Association of American Railroads (AAR) data showing the number of railcars loaded with coal during the week by Class I and certain other railroads.

Prior to 2002, the weekly coal production model converted AAR data into short tons of coal by using the average number of short tons of coal per railcar loaded reported in the "Quarterly Freight Commodity Statistics" from the Surface Transportation Board. If an average coal tonnage per railcar loaded was not available for a specific railroad, the national average was used. To derive the estimate of total weekly production, the total rail tonnage for the week was divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years were used to derive this ratio. This method ensured that the seasonal variations were preserved in the production estimates.

Beginning in 2002, the weekly coal production model uses statistical autoregressive methods to estimate national coal production as a function of railcar loadings of coal, and heating degree-days and cooling degree-days. On Thursday of each week, EIA receives from the AAR data for the previous week. The latest weekly national data for heating degree-days and cooling degree-days are obtained from the National Oceanic and Atmospheric Administration's Climate Prediction Center. The weekly coal model is run and a national level coal production estimate is obtained. The weekly coal model is refit every quarter after preliminary coal data are available.

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figures. The adjustment procedure uses State-level production data and is explained in EIA's Quarterly Coal *Report.* Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first nine months (three quarters) and weekly/monthly estimates for the fourth quarter. The fourth quarter estimates may or may not be revised when preliminary data become available in March of the following year, depending on the magnitude of the difference between the estimates and the preliminary data. In any event, all quarterly, monthly, and weekly production figures are adjusted to conform to the final annual production data published in the Monthly Energy Review in the fall of the following year.

Note 2. Coal Consumption. Coal consumption data are reported by major end-use sector. Forecast data (designated

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

Residential and Commercial-Coal consumption by the residential and commercial sectors is reported to EIA for the two sectors combined; EIA estimates the amount consumed by the sectors individually. To create the estimates, it is first assumed that an occupied coal-heated housing unit consumes fuel at the same Btu rate as an oil-heated housing unit. Then, for the years in which data are available on the number of occupied housing units by heating source (1973-1981 and subsequent odd-numbered years), residential consumption of coal is estimated by the following steps: a ratio is created of the number of occupied housing units heated by coal to the number of occupied housing units heated by oil; that ratio is then multiplied by the Btu quantity of oil consumed by the residential sector to derive an estimate of the Btu quantity of coal consumed by the residential sector; and, finally, the amount estimated as the residential sector consumption is subtracted from the residential and commercial sectors' combined consumption to derive the commercial sector's estimated consumption. The 2007 share is applied to 2008 forward, and the other missing years' shares are interpolated.

Industrial Coke Plants—Prior to 1980, monthly coke plant consumption data were taken directly from reported data. For 1980–1987, coke plant consumption estimates were derived by proportioning reported quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported. Beginning in January 1988, monthly coke plant consumption estimates are derived from the reported quarterly data by using monthly ratios of raw steel production data from the American Iron and Steel Institute. The ratios are the monthly raw steel production from open hearth and basic oxygen process furnaces as a proportion of the quarterly production from those kinds of furnaces.

Industrial Other—Prior to 1978, monthly consumption data for the other industrial sector (all industrial users minus coke plants) were derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. For 1980–1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Beginning in January 1988, monthly consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Governors of the Federal Reserve System. Indices for six major industry groups are used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 311; paper manufacturing, NAICS 322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324; non-metallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights. Prior to 2008, quarterly consumption data for the other industrial sector were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts are the greater of either reported receipts from manufacturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, and construction consumption data were included where appropriate. Beginning in 2008, quarterly consumption totals for other industrial coal include data for manufacturing and mining only. Over time, surveyed coal consumption data for agriculture, forestry, fishing, and construction dwindled to about 20,000 to 30,000 tons annually. Therefore, in 2008, EIA consolidated its programs by eliminating agriculture, forestry, fishing, and construction as surveyed sectors.

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

**Note 3. Coal Stocks.** Coal stocks data are reported by major end-use sector. Forecast data for the most recent months (designated by an "F") are derived from forecasted values shown in the EIA *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Base Case." The monthly estimates are based on the quarterly values (released in March, June, September, and December) or annual values. The estimates are revised as collected data become available from the data sources. Sector-specific information follows.

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

Residential and Commercial—Prior to 1980, stock estimates for the residential and commercial sector were taken directly from reported data. For 1980–2007, stock estimates were not collected. Beginning in 2008, quarterly stocks data are collected on Form EIA-3 (data for "Commercial and Institutional Coal Users").

Industrial Coke Plants—Prior to 1980, monthly stocks at coke plants were taken directly from reported data.

Beginning in 1980, coke plant stocks are estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Quarterly stocks are taken directly from data reported on Form EIA-5.

Industrial Other—Prior to 1978, stocks for the other industrial sector were derived by using reported data to modify baseline figures from a one-time Bureau of Mines survey of consumers. For 1978–1982, monthly estimates were derived by judgmentally proportioning reported quarterly data based on representative seasonal patterns of supply and demand. Beginning in 1983, other industrial coal stocks are estimated as indicated above for coke plants. Quarterly stocks are taken directly from data reported on Form EIA-3 and therefore include only manufacturing industries; data for agriculture, forestry, fishing, mining, and construction stocks are not available.

Electric Power Sector—Monthly stocks data at electric power plants are taken directly from reported data.

**Note 4. Coal Forecast Values**. Data values preceded by "F" in this section are forecast values. They are derived from EIA Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

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

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

#### Table 6.1 Sources

#### Production

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

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

#### Waste Coal Supplied

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

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

2001–2003: EIA, Form EIA-906, "Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and

Quality Report-Manufacturing Plants."

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

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Imports and Exports**

U.S. Department of Commerce, Bureau of the Census, Monthly Reports IM 145 (Imports) and EM 545 (Exports).

#### **Stock Change**

Calculated from data in Table 6.3. (The 1973 stock change value is calculated using the 1972 total stocks value of 116,753 thousand short tons from EIA, *Annual Energy Review*, Table 7.6. The 1972 stocks value excludes stocks at producers and distributors.)

#### Losses and Unaccounted for

Calculated as the sum of production, imports, and waste coal supplied, minus exports, stock change, and consumption.

#### Consumption

Table 6.2.

#### Table 6.2 Sources

#### **Residential and Commercial Total**

Coal consumption by the residential and commercial sectors combined is reported to the U.S. Energy Information Administration (EIA). EIA estimates the sectors individually using the method described in Note 2, "Consumption," at the end of Section 6. Data for the residential and commercial sectors combined are from:

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.

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

1980–1997: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

1998–2007: DOI, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production."

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

#### **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, STIFS.

#### Other Industrial Total

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

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

1980–1997: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.

1998–2007: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," Form EIA-6A, "Coal Distribution Report," annual, and Form EIA-7A, "Coal Production Report," annual.

2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users," and Form EIA-7A, "Coal Production Report," annual; and, for forecast values, EIA, STIFS.

#### **Other Industrial CHP**

Table 7.4c.

#### **Other Industrial Non-CHP**

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

#### Transportation

1973–1976: DOI, BOM, Minerals Yearbook.

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

October–December 1977: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

#### **Electric Power**

Table 7.4b.

#### Table 6.3 Sources

#### **Producers and Distributors**

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

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(EIA), Form EIA-6, "Coal Distribution Report," quarterly. 1998–2007: EIA, Form EIA-6A, "Coal Distribution Report," annual.

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

#### **Residential and Commercial**

1973–1976: DOI, BOM, Minerals Yearbook.

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

2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users" (data for "Commercial and Institutional Coal Users"); and, for forecast values, EIA, STIFS.

#### **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, STIFS.

#### **Industrial Other**

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

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

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

2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users"; and, for forecast values, EIA, STIFS.

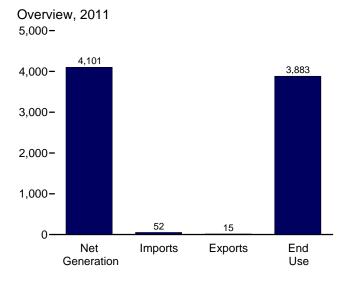
#### **Electric Power**

Table 7.5.

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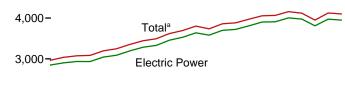


#### Figure 7.1 Electricity Overview (Billion Kilowatthours)



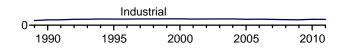
### Net Generation by Sector, 1989-2011

5,000-



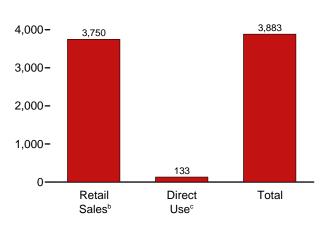
2,000-

1,000-



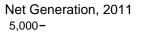


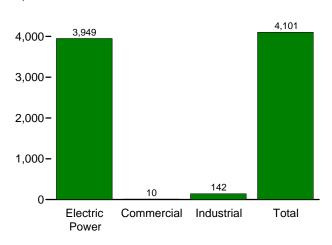




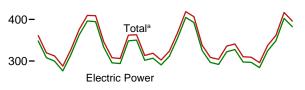
<sup>a</sup> Includes commercial sector.

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



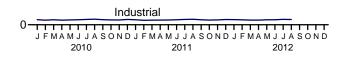


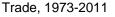
Net Generation by Sector, Monthly 500-

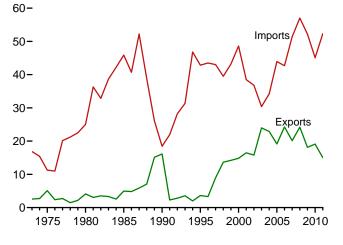


200-

100-







° See "Direct Use" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity. Source: Table 7.1.

#### Table 7.1 Electricity Overview

(Billion Kilowatthours)

		Net Gen	eration			Trade				End Use	
	Electric Power Sector <sup>a</sup>	Com- mercial Sector <sup>b</sup>	Indus- trial Sector <sup>c</sup>	Total	Importsd	Exports <sup>d</sup>	Net Imports <sup>d</sup>	T&D Losses <sup>e</sup> and Unaccounted for <sup>f</sup>	Retail Sales <sup>g</sup>	Direct Use <sup>h</sup>	Total
973 Total	1.861	NA	3	1.864	17	3	14	165	1,713	NA	1,713
975 Total	1,918	NA	3	1,921	11	5	6	180	1,747	NA	1,747
980 Total	2,286	NA	3	2,290	25	4	21	216	2,094	NA	2,094
985 Total	2,470	NA	3	2,473	46	5	41	190	2,324	NA	2,324
	2,901	6	131	3.038	18	16	2	203	2,713	125	2,324
990 Total											
995 Total	3,194	8	151	3,353	43	4	39	229	3,013	151	3,164
996 Total	3,284	9	151	3,444	43	3	40	231	3,101	153	3,254
997 Total	3,329	9	154	3,492	43	9	34	224	3,146	156	3,302
998 Total	3,457	9	154	3,620	40	14	26	221	3,264	161	3,425
999 Total	3,530	9	156	3,695	43	14	29	240	3,312	172	3,484
000 Total	3,638	8	157	3,802	49	15	34	244	3,421	171	3,592
001 Total	3,580	7	149	3,737	39	16	22	202	3,394	163	3,557
002 Total	3,698	7	153	3.858	37	16	21	248	3.465	166	3.632
003 Total	3,721	7	155	3,883	30	24	6	228	3,494	168	3,662
004 Total	3,808	8	154	3,971	34	23	11	266	3,547	168	3,716
	3,902	8	145	4,055	44	19	25	269	3,661	150	3,811
005 Total	3,902	8	145	4,055	44	24	25 18	269		150	3,811
2006 Total									3,670		
007 Total	4,005	8	143	4,157	51	20	31	298	3,765	126	3,890
008 Total	3,974	8	137	4,119	57	24	33	287	3,733	132	3,865
009 Total	3,810	8	132	3,950	52	18	34	261	3,597	127	3,724
010 January	348	1	12	361	5	1	4	22	332	E 11	343
February	308	1	11	320	4	1	3	15	298	E 10	309
March	300	1	12	312	4	1	3	12	293	E 11	303
April	276	1	11	288	4	1	3	13	267	E 10	277
	316	1	12	328	3	2	1	35	284	E 11	294
May										E 11	
June	363	1	12	376	4	2	2	36	331	E 11	342
July	396	1	13	410	4	1	3	32	369	E 12	381
August	395	1	13	409	4	2	2	27	372	E 12	384
September	333	1	12	346	3	2	1	8	328	E 11	339
October	296	1	12	308	3	2	(s)	10	288	E 11	298
November	294	1	11	306	3	2	1	21	275	E 11	285
December	349	1	13	362	4	1	3	34	319	E 12	331
Total	3,972	9	144	4,125	45	19	26	265	3,754	132	3,886
011 January	<sup>R</sup> 350	1	12	<sup>R</sup> 363	4	2	3	<sup>R</sup> 20	<sup>R</sup> 334	E 11	<sup>R</sup> 345
February	302	1	11	313	4	2	2	R g	R 297	E 10	R 307
	302	1	11	319	4	2	2	R 19	R 292	RE 10	R 307
March		•		<sup>R</sup> 302	4			R 19	R 292	E 10	R 286
April	291	1	11	11 302 R 004		2	2		" 275 B 200		
May	<sup>R</sup> 311	1	<sup>R</sup> 11	<sup>R</sup> 324	5	1	4	<sup>R</sup> 29	<sup>R</sup> 288	E 11	R 299
June	<sup>R</sup> 355	1	12	368	4	1	3	R 31	<sup>R</sup> 329	E 11	<sup>R</sup> 340
July	<sup>R</sup> 405	1	13	419	6	1	5	<sup>R</sup> 41	<sup>R</sup> 371	E 12	<sup>R</sup> 383
August	<sup>R</sup> 392	1	13	<sup>R</sup> 407	6	1	5	<sup>R</sup> 26	<sup>R</sup> 373	E 12	<sup>R</sup> 385
September	325	1	12	338	4	1	3	R 4	<sup>R</sup> 326	E 11	<sup>R</sup> 337
October	297	1	11	309	4	1	3	<sup>R</sup> 13	<sup>R</sup> 288	<sup>RE</sup> 11	<sup>R</sup> 299
November	292	1	12	304	3	1	2	R 20	R 275	E 11	R 286
December	R 322	1	13	336	4	1	3	R 25	R 302	<sup>⊑</sup> 12	R 314
Total	R 3,949	<sup>R</sup> 10	142	R 4,101	52	15	37	R 255	R 3,750	R 133	R 3,883
012 January	<sup>R</sup> 328	4	<sup>R</sup> 12	244	4	4	2	22	211	<sup>E</sup> 12	R 323
012 January February	298	1	12	341 310	4 4	1 1	3 3	22 16	311 286	= 12 = 11	1 323
	298	1	<sup>R</sup> 11	<sup>R</sup> 309	4	1	3	<sup>R</sup> 19	<sup>R</sup> 283	E 11	297
March	<sup>297</sup> <sup>R</sup> 284	1	11	296	4		3 4	<sup>R</sup> 19	283	E 10	<sup>R</sup> 281
April	284	•	11			1			27U R 005	= 10 E 4 4	
May	325	1	12	338	5	1	4	35	R 295	E 11	307
June	349	1	12	362	5	1	4	30	<sup>R</sup> 324	E 11	336
July	<sup>R</sup> 403	1	13	<sup>R</sup> 417	7	1	6	40	370	<sup>E</sup> 12	382
August	383	1	13	396	6	1	5	26	364	<sup>E</sup> 12	376
8-Month Total	2,664	7	96	2,768	41	8	32	206	2,504	<sup>E</sup> 90	2,594
011 8-Month Total	2.713	7	94	2.814	37	11	26	193	2,558	<sup>E</sup> 88	2.647

<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

Control combined between the combined

exports.

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>9</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

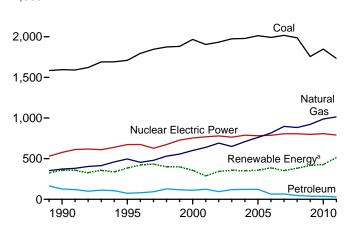
<sup>h</sup> Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use. R=Revised. E=Estimate. NA=Not available. (s)=Less than 0.5 billion

kilowatthours

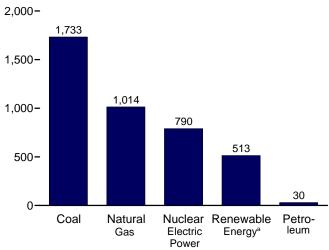
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at routes. • See Note, Classification of Power Plants into Energy-Ose Sectios, at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973. Sources: See end of section.

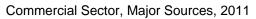
#### Figure 7.2 Electricity Net Generation (Billion Kilowatthours)

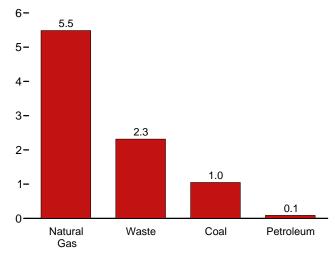
Total (All Sectors), Major Sources, 1989-2011 2,500-



#### Total (All Sectors), Major Sources, 2011



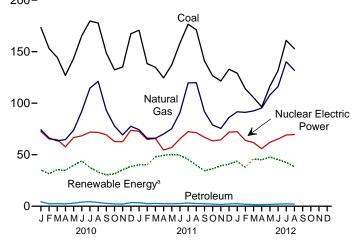




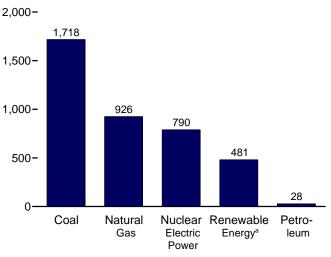
<sup>a</sup> Conventional hydroelectric power, wood, waste, geothermal, solar/PV, and wind.

 $^{\rm b}\,\textsc{Blast}$  furnace gas, and other manufactured and waste gases derived from fossil fuels.

Total (All Sectors), Major Sources, Monthly 200-



Electric Power Sector, Major Sources, 2011



Industrial Sector, Major Sources, 2011

81.9 26.7

20-14.5 8.6 1.9 1.8 0 Wood Coal Petroleum Natural Other Hydro-Gases <sup>b</sup> Gas electric Power<sup>c</sup>

° Conventional hydroelectric power.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity. Sources: Tables 7.2a–7.2c.

100 -

80-

60-

40-

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

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

		Fossil	Fuels						Renewab	le Energy			
	Coal <sup>a</sup>	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Nuclear Electric Power	Hydro- electric Pumped Storage <sup>e</sup>	Conven- tional Hydro- electric Power <sup>f</sup>	Bior Wood <sup>g</sup>	nass Waste <sup>h</sup>	Geo- thermal	Solar/ PV <sup>i</sup>	Wind	Total <sup>j</sup>
1973 Total           1975 Total           1980 Total           1985 Total           1990 Total           1990 Total           1996 Total           1996 Total           1996 Total           1996 Total           1996 Total	1,402,128 1,594,011 1,709,426 1,795,196 1,845,016	314,343 289,095 245,994 100,202 126,460 74,554 81,411 92,555	340,858 299,778 346,240 291,946 372,765 496,058 455,056 479,399	NA NA NA 10,383 13,870 14,356 13,351	83,479 172,505 251,116 383,691 576,862 673,402 674,729 628,644	( <sup>f</sup> ) ( <sup>f</sup> ) ( <sup>f</sup> ) -3,508 -2,725 -3,088 -4,040	275,431 303,153 279,182 284,311 292,866 310,833 347,162 356,453	130 18 275 743 32,522 36,521 36,800 36,948	198 174 158 640 13,260 20,405 20,911 21,709	1,966 3,246 5,073 <u>9,325</u> 15,434 13,378 14,329 14,726	NA NA NA 367 497 521 511	NA NA 2,789 3,164 3,234 3,288	1,864,057 1,920,755 2,289,600 2,473,002 3,037,827 3,353,487 3,3444,188 3,492,172
1998 Total           1999 Total           2000 Total           2001 Total           2001 Total           2002 Total           2003 Total           2004 Total           2005 Total           2006 Total           2007 Total           2007 Total           2008 Total           2008 Total           2008 Total	1,873,516 1,881,087 1,966,265 1,903,956 1,933,130 1,973,737 1,978,301 2,012,873 1,990,511 2,016,456 1,985,801	128,800 118,061 111,221 124,880 94,567 119,406 121,145 122,225 64,166 65,739 46,243 38,937	531,257 556,396 601,038 639,129 691,006 649,908 710,100 760,960 816,441 896,590 882,981 920,979	13,492 14,126 13,955 9,039 11,463 15,600 15,252 13,464 14,177 13,453 11,707 10,632	673,702 728,254 753,893 768,826 780,064 763,733 788,528 787,219 806,425 806,208 798,855	-4,467 -6,097 -5,539 -8,823 -8,743 -8,535 -8,488 -6,558 -6,558 -6,558 -6,288 -6,288 -4,627	323,336 319,536 275,573 216,961 264,329 275,806 268,417 270,321 289,246 247,510 254,831 273,445	36,338 37,041 37,595 35,200 38,665 37,529 38,117 38,856 38,762 39,014 37,300 36,050	22,448 22,572 23,131 14,548 15,044 15,812 15,421 15,420 16,099 16,525 17,734 18,443	14,774 14,827 14,093 13,741 14,491 14,424 14,811 14,692 14,568 14,637 14,840 15,009	502 495 493 543 555 534 575 550 508 612 864 891	3,026 4,488 5,593 6,737 10,354 11,187 14,144 17,811 26,589 34,450 55,363 73,886	3,620,295 3,694,810 3,802,105 3,736,644 3,858,452 3,883,185 3,970,555 4,055,423 4,064,702 4,156,745 4,119,388 3,950,331
2010 January February March April June July August September October December December Total	173,320 153,044 144,406 126,952 143,572 165,491 179,600 177,745 148,746 132,270 135,185 167,258 <b>1,847,290</b>	4,348 2,373 2,470 2,286 2,994 3,989 4,411 3,575 2,783 2,228 2,079 3,523 <b>37,061</b>	74,173 66,198 63,431 64,644 73,665 92,268 114,624 121,151 93,004 77,738 69,227 77,573 <b>987,697</b>	909 825 1,010 943 1,017 964 963 1,061 954 808 907 952 <b>11,313</b>	72,569 65,245 64,635 57,611 66,658 68,301 71,913 71,574 69,371 62,751 62,655 73,683 <b>806,968</b>	-565 -351 -325 -335 -441 -472 -557 -600 -421 -438 -467 -530 <b>-5,501</b>	22,383 20,590 20,886 19,097 25,079 29,854 24,517 20,119 17,265 17,683 19,562 23,169 <b>260,203</b>	3,126 2,895 3,090 2,932 2,893 3,094 3,308 3,319 3,157 3,003 3,080 3,275 <b>37,172</b>	1,503 1,382 1,592 1,558 1,577 1,627 1,640 1,642 1,575 1,547 1,625 1,650 <b>18,917</b>	1,312 1,159 1,307 1,240 1,211 1,264 1,274 1,253 1,222 1,252 1,330 <b>15,219</b>	10 33 76 112 153 176 161 156 138 75 77 44 <b>1,212</b>	6,854 5,432 8,589 9,764 8,698 8,049 6,724 6,686 7,106 7,944 9,748 9,059 <b>94,652</b>	360,957 319,735 312,168 287,800 327,936 375,759 409,725 408,884 346,045 307,921 306,010 362,119 <b>4,125,060</b>
2011 January February March May June July August September October November December Total	R 170,803 R 138,311 R 134,845 R 124,488 R 137,102 R 158,055 R 176,586 R 171,281 R 140,941 R 126,627 R 121,463 R 132,929 R 1,733,430	R 3,457 R 2,434 R 2,692 R 2,424 R 2,378 R 2,594 R 3,154 R 2,424 R 2,486 R 30,182	R 74,254 R 65,924 R 65,947 R 70,029 R 75,243 R 90,691 R 119,624 R 119,626 R 91,739 R 78,819 R 75,441 R 86,122 R <b>1013689</b>	R 930 R 807 R 945 R 918 R 875 R 1,018 R 1,098 R 1,008 R 1,007 R 941 R 943 1,005 R <b>11,566</b>	72,743 64,789 65,662 54,547 <sup>R</sup> 57,013 65,270 72,345 71,339 66,849 <sup>R</sup> 63,337 64,474 71,837 <sup>R</sup> <b>790,204</b>	-426 -247 R -349 R -466 R -418 R -567 R -708 -663 R -553 -572 -441 -496 R <b>-5,905</b>	R 25,531 R 24,131 R 31,134 R 31,194 R 32,587 R 32,151 R 31,285 R 25,764 R 21,378 R 19,787 R 20,681 R 23,732 R <b>319,355</b>	R 3,290 R 2,937 R 3,081 R 2,798 R 2,794 R 3,230 R 3,362 R 3,384 R 3,178 R 3,178 R 3,088 R 3,353 R <b>37,449</b>	R 1,515 R 1,427 R 1,565 R 1,563 R 1,563 R 1,632 R 1,690 R 1,692 R 1,684 R 1,731 R 19,222	R 1,351 R 1,219 R 1,342 R 1,342 R 1,322 R 1,218 R 1,273 R 1,279 R 1,285 R 1,275 R 1,329 R <b>1,364</b>	R 40 R 85 R 122 R 164 R 191 R 223 R 191 R 229 R 186 R 159 R 107 R 121 R 1,818	R 8,550 R 10,452 R 10,545 R 12,422 R 11,772 R 10,985 R 7,489 R 7,474 R 6,869 R 10,525 R 12,439 R 10,656 R 120,177	R 363,105 R 313,293 R 318,710 R 302,400 R 322,627 R 348,67,727 R 418,693 R 406,541 R 308,727 R 304,119 R 308,727 R 304,119 R 335,753 R 4,100,656
2012 January February April May June July 8-Month Total	R 129,115 R 113,908 R 105,546 R 105,546 R 116,345 R 131,569 R 160,938 152,743 <b>1,006,627</b>	R 2,444 R 1,926 R 1,561 R 1,564 R 1,727 R 2,056 R 2,288 2,072 <b>15,639</b>	R 91,641 R 91,091 R 92,503 R 95,346 R 107,927 R 116,015 R 140,202 131,828 <b>866,552</b>	R 980 R 1,005 R 1,010 R 980 R 969 R 945 R 968 1,024 <b>7,881</b>	R 72,381 R 63,847 R 61,729 55,871 62,081 65,140 69,129 69,602 <b>519,781</b>	-330 -226 -268 -242 -343 R -475 -587 -496 <b>-2,967</b>	R 23,359 R 20,361 R 25,770 R 26,136 R 28,542 R 26,611 R 26,758 23,146 <b>200,684</b>	R 3,366 R 3,126 R 2,938 R 2,666 R 2,997 R 3,060 R 3,296 3,311 <b>24,759</b>	R 1,629 R 1,537 R 1,663 R 1,668 R 1,713 R 1,668 R 1,713 R 1,687 R 1,769 1,676 <b>13,342</b>	R 1,415 R 1,339 R 1,413 R 1,335 R 1,422 R 1,380 R 1,421 1,388 <b>11,113</b>	<sup>R</sup> 86 <sup>R</sup> 137 <sup>R</sup> 249 <sup>R</sup> 346 <sup>R</sup> 511 <sup>R</sup> 561 <sup>R</sup> 522 464 <b>2,876</b>	R 13,806 R 11,164 R 13,897 R 12,812 R 12,573 R 11,944 R 8,724 8,287 <b>93,206</b>	R 340,919 R 310,151 R 309,040 R 295,940 R 337,530 R 361,506 R 416,515 396,108 <b>2,767,709</b>
2011 8-Month Total 2010 8-Month Total	1,211,470 1,263,832	21,728 26,448	681,568 670,155	7,673 7,692	523,707 538,508	-3,843 -3,645	233,777 182,524	24,876 24,657	12,586 12,520	10,246 10,162	1,245 878	79,688 60,796	2,814,095 2,802,965

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

<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, waste oil, and, beginning in 2011, propane.
 <sup>c</sup> Natural gas, plus a small amount of supplemental gaseous fuels.
 <sup>d</sup> Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
 <sup>e</sup> Pumped storage facility production minus energy used for pumping.
 <sup>f</sup> Through 1989, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."
 <sup>g</sup> Wood and wood-derived fuels.
 <sup>h</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>i</sup> Solar thermal and photovoltaic (PV) energy.

<sup>i</sup> Solar thermal and photovoltaic (PV) energy.
 <sup>j</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>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.
 R=Revised. NA=Not available.
 Notes: • Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.
 Sources: See sources for Tables 7.2b and 7.2c.

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 F	uels										
	<b>Coal</b> <sup>a</sup>	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Nuclear Electric Power	Hydro- electric Pumped Storage <sup>e</sup>	Conven- tional Hydro- electric Power <sup>f</sup>	Bior Wood <sup>g</sup>	mass Waste <sup>h</sup>	Geo- thermal	Solar/ PV <sup>i</sup>	Wind	Total
1973 Total 1975 Total 1980 Total 1985 Total 1990 Total <sup>k</sup>	1,402,128 1,572,109	314,343 289,095 245,994 100,202 118,864	340,858 299,778 346,240 291,946 309,486	NA NA NA 621	83,479 172,505 251,116 <u>383,691</u> 576,862	(f) (f) (f) (f) -3,508	272,083 300,047 276,021 281,149 289,753	130 18 275 743 7,032	198 174 158 <u>640</u> 11,500	1,966 3,246 5,073 <u>9,325</u> 15,434	NA NA NA 11 367	NA NA NA 2,789	1,860,710 1,917,649 2,286,439 <u>2,469,841</u> 2,901,322
1995 Total           1996 Total           1997 Total           1998 Total           1998 Total           1998 Total           2000 Total           2001 Total           2002 Total           2003 Total           2004 Total           2005 Total           2005 Total           2007 Total           2007 Total           2008 Total           2009 Total	1,771,973 1,820,762 1,850,193 1,858,618 1,943,111 1,882,826 1,910,613 1,952,714 1,957,188 1,992,054 1,969,737 1,998,330 1,968,838 1,741,123	68,146 74,783 86,479 122,211 111,539 105,192 119,149 89,733 113,697 114,678 116,482 59,706 61,306 42,881 35,811	419,179 378,757 399,596 449,293 472,996 517,978 554,940 607,683 567,303 627,172 683,829 734,417 814,752 802,372 841,006	1,927 1,341 1,533 2,315 1,607 2,028 586 1,970 2,647 3,568 3,777 4,254 4,042 3,200 3,058	673,402 674,729 628,644 673,702 728,254 753,893 768,826 780,064 763,733 788,528 781,986 787,986 787,989 806,425 806,208 798,855	-2,725 -3,088 -4,040 -4,467 -5,539 -8,823 -8,743 -8,535 -8,488 -6,558 -6,558 -6,558 -6,288 -6,288 -6,288 -4,627	305,410 341,159 350,648 317,867 314,663 271,338 213,749 260,491 271,512 265,064 267,040 286,254 245,843 253,096 271,506	7,597 8,386 8,680 8,961 8,916 8,916 8,294 9,009 9,528 9,736 10,570 10,341 10,711 10,638 10,738	17,986 17,816 18,485 19,233 20,307 12,944 13,145 13,808 13,062 13,031 13,031 14,294 15,379 15,954	13,378 14,329 14,776 14,774 14,827 14,093 13,741 14,491 14,491 14,692 14,568 14,637 14,840 15,009	497 521 511 502 495 493 543 555 555 555 550 508 612 864 891	3,164 3,234 3,288 3,026 4,488 5,593 6,737 10,354 11,187 14,144 17,811 26,583 34,450 55,363 73,886	3,194,230 3,284,141 3,329,375 3,457,416 3,529,982 3,637,529 3,580,053 3,698,458 3,721,159 3,808,360 3,902,192 3,908,077 4,005,343 3,974,349 3,809,837
2010 January February March April June July August September October December December Total	171,660 151,461 142,665 125,615 141,669 163,912 177,778 175,848 147,157 130,663 133,815 165,494 <b>1,827,738</b>	4,111 2,166 2,299 2,109 2,801 3,792 4,199 3,375 2,608 2,037 1,879 3,302 <b>34,679</b>	66,847 59,556 56,492 58,124 66,862 85,033 106,964 112,961 85,498 70,876 62,305 69,875 <b>901,389</b>	275 247 275 273 279 265 267 249 240 170 219 208 <b>2,967</b>	72,569 65,245 57,611 66,658 68,301 71,913 71,574 69,371 62,751 62,655 73,683 <b>806,968</b>	-565 -351 -325 -335 -441 -472 -557 -600 -421 -438 -438 -467 -530 <b>-5,501</b>	22,207 20,421 20,691 18,898 24,903 29,711 24,405 20,019 17,188 17,561 19,426 23,024 <b>258,455</b>	1,011 926 939 837 830 955 1,061 1,074 974 887 934 1,018 11,446	1,294 1,207 1,391 1,334 1,359 1,409 1,413 1,364 1,330 1,412 1,443 <b>16,376</b>	1,312 1,159 1,307 1,240 1,311 1,264 1,274 1,227 1,253 1,222 1,252 1,330 <b>15,219</b>	10 33 76 112 153 175 161 156 137 75 76 43 <b>1,206</b>	6,853 5,431 8,588 9,763 8,696 8,048 6,723 6,685 7,104 7,942 9,746 9,058 <b>94,636</b>	348,128 307,994 299,571 276,121 315,656 362,985 396,195 394,651 333,057 295,646 293,833 348,549 <b>3,972,386</b>
2011 January February April May June July September October December December Total	R 169,390 R 137,082 R 133,584 R 123,272 R 135,820 R 156,716 R 175,129 R 169,798 R 139,648 R 125,442 R 120,323 R 131,686 R 1,717,891	R 3,229 R 2,255 R 2,526 R 2,257 R 2,218 R 2,438 R 3,006 R 2,449 R 2,272 R 2,272 R 1,894 R 1,632 R 2,025 R <b>28,202</b>	R 66,932 R 59,380 R 59,362 R 63,257 R 68,175 R 83,426 R 111,502 R 111,502 R 111,540 R 84,300 R 71,962 R 78,193 R 926,290	R 243 R 207 R 252 R 244 R 259 R 262 R 264 R 252 R 264 R 252 R 240 R 257 R 247 R 247 R 243	72,743 64,789 65,662 54,547 R 57,013 65,270 72,345 71,339 R 63,337 64,474 71,837 R <b>790,204</b>	-426 -247 R -349 R -466 R -418 R -567 R -708 -663 R -553 -572 -441 -496 R <b>-5,905</b>	R 25,386 R 23,970 R 30,945 R 31,008 R 32,386 R 31,999 R 31,173 R 25,666 R 21,254 R 19,660 R 20,533 R 23,552 R <b>317,531</b>	R 981 R 886 R 897 R 705 R 760 R 936 R 1,048 R 1,038 R 916 R 807 R 800 R 959 R <b>10,733</b>	R 1,247 R 1,180 R 1,299 R 1,251 R 1,296 R 1,365 R 1,413 R 1,407 R 1,319 R 1,354 R 1,403 R 1,455 R <b>15,989</b>	R 1,351 R 1,219 R 1,342 R 1,243 R 1,222 R 1,218 R 1,273 R 1,279 R 1,225 R 1,275 R 1,329 R <b>15,364</b>	R 37 R 81 R 116 R 155 R 181 R 210 R 181 R 218 R 177 R 151 R 103 R 117 R 1,727	R 8,547 R 10,540 R 12,417 R 11,767 R 10,981 R 7,486 R 7,471 R 6,865 R 10,519 R 12,431 R 10,649 R <b>120,121</b>	R 350,234 R 301,798 R 306,808 R 290,519 R 311,401 R 354,929 R 404,802 R 392,471 R 325,143 R 296,704 R 291,657 R 322,237 R 3,948,701
2012 January February April May June July August 8-Month Total	R 127,857 R 112,775 R 104,379 R 95,403 R 115,212 R 130,371 R 159,516 151,372 <b>996,885</b>	R 2,144 R 1,727 R 1,358 R 1,344 R 1,541 R 1,842 R 2,071 1,813 <b>13,841</b>	R 83,819 R 83,629 R 85,311 R 88,356 R 100,212 R 108,256 R 131,757 123,795 <b>805,135</b>	R 237 R 233 R 241 R 234 R 226 R 228 R 237 244 <b>1,880</b>	R 72,381 R 63,847 R 61,729 55,871 62,081 65,140 69,129 69,602 <b>519,781</b>	-330 -226 -268 -242 -343 R -475 -587 -496 <b>-2,967</b>	R 23,181 R 20,201 R 25,580 R 25,973 R 28,357 R 26,476 R 26,646 23,045 <b>199,458</b>	R 952 R 879 R 830 R 642 R 802 R 869 R 989 1,016 <b>6,979</b>	R 1,349 R 1,264 R 1,394 R 1,395 R 1,426 R 1,414 R 1,467 1,379 <b>11,088</b>	R 1,415 R 1,339 R 1,413 R 1,335 R 1,422 R 1,380 R 1,421 1,388 <b>11,113</b>	<sup>R</sup> 83 <sup>R</sup> 132 <sup>R</sup> 240 <sup>R</sup> 334 <sup>R</sup> 493 <sup>R</sup> 544 <sup>R</sup> 506 451 <b>2,782</b>	R 13,798 R 11,157 R 13,888 R 12,804 R 12,565 R 11,936 R 8,719 8,282 <b>93,148</b>	R 327,525 R 297,543 R 296,736 R 284,075 R 324,644 R 348,626 R 402,532 382,523 <b>2,664,204</b>
2011 8-Month Total 2010 8-Month Total		20,379 24,852	623,573 612,835	1,972 2,130	523,707 538,508	-3,843 -3,645	232,532 181,256	7,251 7,633	10,458 10,826	10,246 10,162	1,179 875	79,656 60,786	2,712,961 2,701,301

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

<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, waste oil, and, beginning in 2011, propane.
 <sup>c</sup> Natural gas, plus a small amount of supplemental gaseous fuels.
 <sup>d</sup> Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
 <sup>e</sup> Pumped storage facility production minus energy used for pumping.
 <sup>f</sup> Through 1989, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."
 <sup>g</sup> Wood and wood-derived fuels.
 <sup>h</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>i</sup> Solar thermal and photovoltaic (PV) energy.
 <sup>j</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>k</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.
 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 electric und heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
 Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.

#### Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

		Com	mercial Se	ector <sup>a</sup>	Industrial Sector <sup>b</sup>								
	Coal <sup>c</sup> leum <sup>d</sup>		Biomass		[		Net of	<b>0</b>	Hydro-	Biomass			
			Natural Gas <sup>e</sup>	Waste <sup>f</sup>	Total <sup>g</sup>	Coalc	Petro- leum <sup>d</sup>	Natural Gas <sup>e</sup>	Other Gases <sup>h</sup>	electric Power <sup>i</sup>	Wood <sup>j</sup>	Waste <sup>f</sup>	Total <sup>k</sup>
1973 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,347	NA	NA	3,347
1975 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,106	NA	NA	3,106
1980 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,161	NA	NA	3,161
1985 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,161	NA	NA	3,161
1990 Total	796	589	3,272	812	5,837	21,107	7,008	60,007	9,641	2,975	25,379	949	130,830
1995 Total	998	379	5,162	1,519	8,232	22,372	6,030	71,717	11,943	5,304	28,868	900	151,025
1996 Total	1,051 1.040	369 427	5,249 4,725	2,176 2,342	9,030 8,701	22,172 23,214	6,260 5,649	71,049 75,078	13,015 11,814	5,878 5,685	28,354 28,225	919 882	151,017 154,097
1997 Total 1998 Total	985	383	4,725	2,342	8,748	22,337	6,206	77,085	11,170	5,349	20,225	880	154,097
1999 Total	995	434	4,607	2,393	8,563	21,474	6,088	78,793	12,519	4,758	28,060	686	156,264
2000 Total	1.097	432	4.262	1,985	7,903	22.056	5.597	78,798	11.927	4.135	28.652	839	156.673
2001 Total	995	438	4,434	1,007	7,416	20,135	5,293	79,755	8,454	3,145	26,888	596	149,175
2002 Total	992	431	4,310	1,053	7,415	21,525	4,403	79,013	9,493	3,825	29,643	846	152,580
2003 Total	1,206	423	3,899	1,289	7,496	19,817	5,285	78,705	12,953	4,222	27,988	715	154,530
2004 Total	1,340	499	3,969	1,562	8,270	19,773	5,967	78,959	11,684	3,248	28,367	797	153,925
2005 Total	1,353	375	4,249	1,657	8,492	19,466	5,368	72,882	9,687	3,195	28,271	733	144,739
2006 Total 2007 Total	1,310 1.371	235 189	4,355 4.257	1,599 1,599	8,371 8,273	19,464 16,694	4,223 4,243	77,669 77,580	9,923 9,411	2,899 1,590	28,400 28,287	572 631	148,254 143,128
2007 Total	1.261	142	4,237	1,535	7.926	15.703	3.219	76.421	8.507	1,550	26,207	821	137.113
2009 Total	1,096	163	4,225	1,748	8,165	13,686	2,963	75,748	7,574	1,868	25,292	740	132,329
2010 January	116	13	367	137	709	1,544	225	6,959	634	169	2,114	72	12,120
February	102	11	339	111	623	1,481	197	6,303	578	162	1,967	64	11,118
March	91	8	351	134	661	1,649	163	6,588	735	188	2,149	67	11,936
April	80	9	326	144	645	1,258	169	6,194	669	187	2,094	80	11,034
May	84 97	12 10	326	149	666	1,519	181	6,477	738	164	2,061	69	11,614
June	97 110	10	350 459	150 146	699 812	1,482 1,713	187 194	6,885 7,205	700 696	132 107	2,137 2,246	68 75	12,075 12,718
July August	105	10	439	140	838	1,792	189	7,205	812	99	2,240	78	13,395
September	89	9	421	148	750	1,499	165	7,085	713	76	2,182	62	12,238
October	80	7	419	133	712	1,527	184	6,443	637	117	2,114	84	11,562
November	69	4	401	134	683	1,301	196	6,520	688	130	2,145	79	11,493
December	88	12	476	136	793	1,677	209	7,223	744	134	2,255	71	12,777
Total	1,111	124	4,725	1,672	8,592	18,441	2,258	81,583	8,343	1,668	25,706	869	144,082
2011 January	<sup>R</sup> 108 <sup>R</sup> 104	<sup>R</sup> 21 <sup>R</sup> 11	<sup>R</sup> 421 <sup>R</sup> 367	<sup>R</sup> 186 <sup>R</sup> 169	<sup>R</sup> 817 <sup>R</sup> 725	<sup>R</sup> 1,304	<sup>R</sup> 207 <sup>R</sup> 168	<sup>R</sup> 6,901 <sup>R</sup> 6,177	<sup>R</sup> 687 <sup>R</sup> 600	<sup>R</sup> 143	R 2,307	<sup>R</sup> 82 <sup>R</sup> 78	R 12,054
February	R 104 R 100	7	R 367	<sup>R</sup> 188	R 725	<sup>R</sup> 1,125 <sup>R</sup> 1,161	R 168	<sup>R</sup> 6,212	R 693	160 <sup>R</sup> 187	<sup>R</sup> 2,048 <sup>R</sup> 2,181	R 78	<sup>R</sup> 10,770 <sup>R</sup> 11,149
March April	R 77	R 4	R 357	<sup>R</sup> 179	<sup>R</sup> 706	<sup>R</sup> 1,139	<sup>R</sup> 163	<sup>R</sup> 6.416	R 674	<sup>R</sup> 184	R 2,090	<sup>R</sup> 73	<sup>R</sup> 11,175
May	R 82	R 5	R 471	R 202	R 867	R 1,199	<sup>R</sup> 156	<sup>R</sup> 6,597	R 633	R 198	R 2,033	R 66	R 11,359
June	<sup>R</sup> 90	R 3	<sup>R</sup> 463	<sup>R</sup> 200	<sup>R</sup> 860	<sup>R</sup> 1,249	<sup>R</sup> 152	<sup>R</sup> 6,802	<sup>R</sup> 753	<sup>R</sup> 150	R 2,292	<sup>R</sup> 67	R 11,938
July	<sup>R</sup> 104	R 7	<sup>R</sup> 605	<sup>R</sup> 205	<sup>R</sup> 1,023	<sup>R</sup> 1,353	<sup>R</sup> 141	<sup>R</sup> 7,517	<sup>R</sup> 836	<sup>R</sup> 109	<sup>R</sup> 2,312	<sup>R</sup> 71	<sup>R</sup> 12,868
August	<sup>R</sup> 94	7	<sup>R</sup> 571	<sup>R</sup> 210	<sup>R</sup> 985	<sup>R</sup> 1,389	<sup>R</sup> 138	<sup>R</sup> 7,745	<sup>R</sup> 823	<sup>R</sup> 96	<sup>R</sup> 2,343	76	<sup>R</sup> 13,085
September	R 84	R7	R 487	R 195	R 870	<sup>R</sup> 1,209	<sup>R</sup> 145	<sup>R</sup> 6,953	R 752	R 122	<sup>R</sup> 2,260	R 75	R 11,948
October	<sup>R</sup> 65 <sup>R</sup> 62	R 6 R 7	<sup>R</sup> 438 <sup>R</sup> 437	<sup>R</sup> 190 <sup>R</sup> 195	<sup>R</sup> 799 <sup>R</sup> 800	<sup>R</sup> 1,120 <sup>R</sup> 1,077	<sup>R</sup> 162 <sup>R</sup> 143	<sup>R</sup> 6,419 <sup>R</sup> 6,742	<sup>R</sup> 700 <sup>R</sup> 715	126 <sup>R</sup> 146	R 2,146	<sup>R</sup> 86 <sup>R</sup> 86	<sup>R</sup> 11,224 <sup>R</sup> 11,663
November December	78	6	R 499	<sup>R</sup> 195	R 800	<sup>R</sup> 1,165	R 155	<sup>R</sup> 7,429	<sup>R</sup> 758	<sup>R</sup> 178	<sup>R</sup> 2,286 <sup>R</sup> 2,392	R 81	R 12,642
Total	<sup>R</sup> 1,049	R 89	<sup>R</sup> 5,487	<sup>R</sup> 2,315	<sup>R</sup> 10,080	<sup>R</sup> 14,490	<sup>R</sup> 1,891	<sup>R</sup> 81,911	<sup>R</sup> 8,624	R 1,799	R 26,691	R 917	R 141,875
2012 January	<sup>R</sup> 84	R 7	<sup>R</sup> 528	<sup>R</sup> 203	<sup>R</sup> 913	<sup>R</sup> 1,175	<sup>R</sup> 294	<sup>R</sup> 7,293	<sup>R</sup> 743	<sup>R</sup> 175	<sup>R</sup> 2,412	<sup>R</sup> 77	<sup>R</sup> 12,480
February	<sup>R</sup> 78	<sup>R</sup> 5	<sup>R</sup> 499	<sup>R</sup> 202	<sup>R</sup> 875	<sup>R</sup> 1,055	<sup>R</sup> 194	<sup>R</sup> 6,963	<sup>R</sup> 771	<sup>R</sup> 157	<sup>R</sup> 2,246	<sup>R</sup> 72	R 11,733
March	R 70	R 5	<sup>R</sup> 476	<sup>R</sup> 199	<sup>R</sup> 853	<sup>R</sup> 1,097	197	<sup>R</sup> 6,716	<sup>R</sup> 769	<sup>R</sup> 186	<sup>R</sup> 2,106	R 70	<sup>R</sup> 11,452
April	R 64	6	R 468	R 202	R 843	R 998	<sup>R</sup> 214	<sup>R</sup> 6,522	<sup>R</sup> 745	<sup>R</sup> 160	R 2,022	R 72	R 11,022
May	<sup>R</sup> 70 <sup>R</sup> 68	6 10	<sup>R</sup> 480 <sup>R</sup> 493	<sup>R</sup> 210 <sup>R</sup> 202	<sup>R</sup> 880 <sup>R</sup> 880	<sup>R</sup> 1,063 <sup>R</sup> 1,130	<sup>R</sup> 180 <sup>R</sup> 204	<sup>R</sup> 7,235 <sup>R</sup> 7,266	<sup>R</sup> 742 <sup>R</sup> 717	<sup>R</sup> 182 <sup>R</sup> 131	<sup>R</sup> 2,193 <sup>R</sup> 2,188	<sup>R</sup> 77 71	R 12,006 R 12,000
June	<sup>R</sup> 68	10 12	<sup>R</sup> 553	R 202	<sup>R</sup> 980	<sup>R</sup> 1,344	204	<sup>R</sup> 7,266	<sup>R</sup> 731	<sup>R</sup> 109	<sup>R</sup> 2,188	<sup>71</sup> <sup>R</sup> 82	R 13,003
July August	71	12	498	220	980	1.299	205	7,692	779	97	2,304	77	12.669
8-Month Total	583	<b>60</b>	3,994	1,657	7,141	9,159	1,738	<b>57,422</b>	5,998	1,196	17,763	597	96,364
2011 8-Month Total	760	63	3,627	1,539	6,737	9,919	1,286	54,368	5,698	1,227	17,607	589	94,398
2010 8-Month Total	785	92	3,008	1,121	5,653	12,438	1,504	54,311	5,560	1,210	17,010	573	96,012

(Subset of Table 7.2a; Million Kilowatthours)

a 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

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

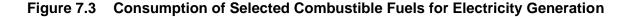
<sup>6</sup> Distillate rule oil, residual rule oil, petroleum coke, jet rulei, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.
 <sup>6</sup> Natural gas, plus a small amount of supplemental gaseous fuels.
 <sup>f</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and fine derived fuels).

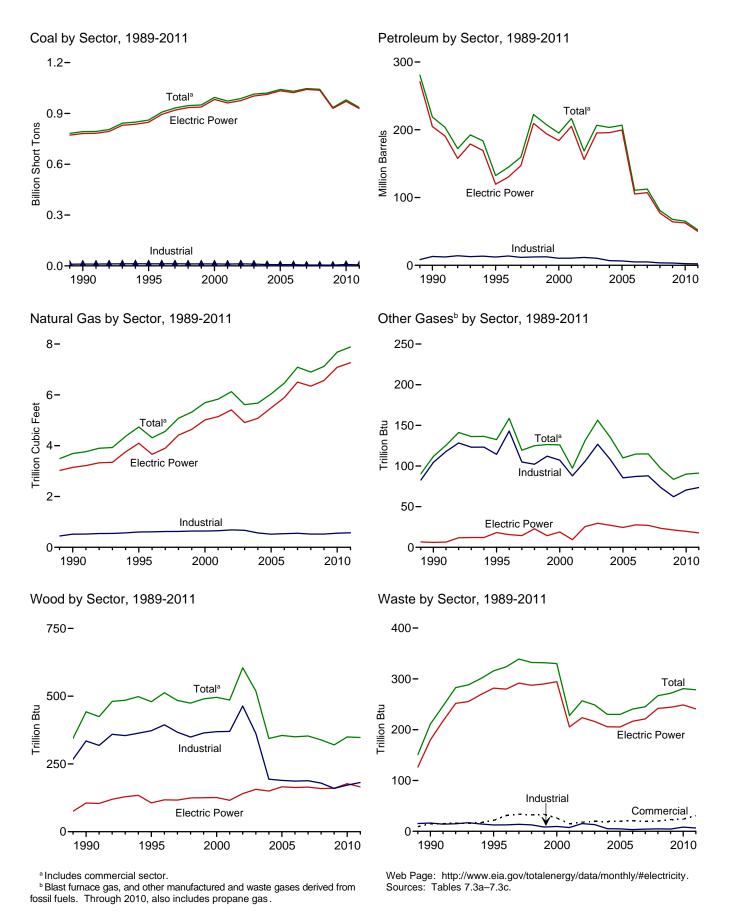
<sup>9</sup> Includes a small amount of conventional hydroelectric power, other gases, photovoltaic (PV) energy, wind, wood, and other, which are not separately displayed.

<sup>h</sup> Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas. <sup>1</sup> Conventional hydroelectric power.

<sup>j</sup> Wood and wood-derived fuels. <sup>k</sup> Includes photovoltaic (PV) energy, wind, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and

non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels). R=Revised. NA=Not available. Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973. Sources: See end of section.





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				Petroleum					Bion	nass	
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Tł	nousand Barre	ls	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total 1975 Total	389,212 405,962	47,058 38,907	513,190 467,221	NA NA	507 70	562,781 506,479	3,660 3,158	NA NA	1 (s)	2 2	NA NA
1980 Total 1985 Total	569,274 693,841	29,051 14,635	391,163 158,779	NA NA	179 231	421,110 174,571	3,682 3,044	NA NA	3	27	NA NA
1990 Total <sup>k</sup>	792,457	18,143	190,652	437	1,914	218,800	3,692	112	442	211	36
1995 Total	860,594	19,615	95,507	680	3,355	132,578	4,738	133	480	316	42
1996 Total 1997 Total	907,209 931.949	20,252 20,309	106,055 118,741	1,712 237	3,322 4,086	144,626 159,715	4,312 4,565	159 119	513 484	324 339	37 36
1998 Total	946,295	25,062	172,728	549	4,860	222,640	5,081	125	475	332	36
1999 Total	949,802	25,951	158,187	974	4,552	207,871	5,322	126	490	332	41
2000 Total 2001 Total	994,933 972.691	31,675 31,150	143,381 165,312	1,450 855	3,744 3.871	195,228 216,672	5,691 5.832	126 97	496 486	330 228	46 160
2002 Total	987,583	23,286	109,235	1,894	6,836	168,597	6,126	131	605	257	191
2003 Total 2004 Total	1,014,058 1.020.523	29,672 20,163	142,518 142.088	2,947 2.856	6,303 7.677	206,653 203,494	5,616 5.675	156 135	519 344	249 230	193 183
2004 Total	1.041.448	20,103	142,000	2,850	8,330	203,494 206,785	6.036	110	355	230	173
2006 Total	1,030,556	13,174	58,473	2,174	7,363	110,634	6,462	115	350	241	172
2007 Total 2008 Total	1,046,795 1,042,335	15,683 12,832	63,833 38,191	2,917 2,822	6,036 5,417	112,615 80,932	7,089 6.896	115 97	353 339	245 267	168 172
2009 Total	934,683	12,658	28,576	2,328	4,821	67,668	7,121	84	320	272	170
2010 January	90,767	2,485	2,860	241	433	7,751	570	7	30	22	15
February	80,209 76,544	869 785	1,075 1,245	212 147	404 438	4,174 4,370	502 479	6 8	28 29	20 24	13 15
March April	67,037	785	1,245	147	436 382	4,370 3,923	479 494	o 8	29 27	24	15
May	76,061	1,050	1,997	121	415	5,244	582	8	27	24	15
June	87,395 94,993	1,244 1,347	3,087 3,681	154 200	493 524	6,950 7,849	731 923	8 8	29 31	24 24	16 16
July August	94,993	1,093	2,987	164	423	6,358	923	8	31	24	16
September	79,573	905	1,789	151	394	4,813	723	8	30	23	16
October November	70,918 72,756	787 876	1,113 982	129 143	362 317	3,840 3,588	594 519	6 7	28 29	23 24	15 15
December	88,645	1,883	2,021	266	408	6,210	591	8	31	24	16
Total	979,684	14,050	23,997	2,056	4,994	65,071	7,680	90	350	281	184
2011 January	<sup>R</sup> 90,208	R 1,347	<sup>R</sup> 1,723	R 255	R 552	<sup>R</sup> 6,086	564	7	R 31	22	<sup>R</sup> 16 <sup>R</sup> 15
February March	<sup>R</sup> 73,614 <sup>R</sup> 72,645	<sup>R</sup> 913 <sup>R</sup> 907	<sup>R</sup> 1,020 <sup>R</sup> 1,113	<sup>R</sup> 144 <sup>R</sup> 140	<sup>R</sup> 431 <sup>R</sup> 517	<sup>R</sup> 4,230 <sup>R</sup> 4,746	<sup>R</sup> 505 <sup>R</sup> 503	6 7	<sup>R</sup> 28 <sup>R</sup> 29	21 <sup>R</sup> 23	R 15
April	<sup>R</sup> 67,128	<sup>R</sup> 1,005	<sup>R</sup> 1,333	<sup>R</sup> 111	<sup>R</sup> 336	<sup>R</sup> 4,130	<sup>R</sup> 546	7	<sup>R</sup> 25	R 22	<sup>R</sup> 17
May	<sup>R</sup> 73,522 <sup>R</sup> 84,156	<sup>R</sup> 973 <sup>R</sup> 968	<sup>R</sup> 1,230 <sup>R</sup> 1,249	<sup>R</sup> 88 <sup>R</sup> 138	<sup>R</sup> 357 <sup>R</sup> 432	<sup>R</sup> 4,078 <sup>R</sup> 4,514	<sup>R</sup> 599 <sup>R</sup> 727	7 8	<sup>R</sup> 26 <sup>R</sup> 30	<sup>R</sup> 23 <sup>R</sup> 24	<sup>R</sup> 18 <sup>R</sup> 18
June July	<sup>R</sup> 94,304	R 1,138	R 1,550	R 238	<sup>R</sup> 510	<sup>R</sup> 5,476	R 967	Rg	R 31	R 25	<sup>R</sup> 19
August	<sup>R</sup> 92,297	<sup>R</sup> 831	<sup>R</sup> 1,313	<sup>R</sup> 146	<sup>R</sup> 464	<sup>R</sup> 4,610	<sup>R</sup> 951	R 9	R 32	25	<sup>R</sup> 18
September October	<sup>R</sup> 76,790 <sup>R</sup> 69,605	<sup>R</sup> 736 <sup>R</sup> 753	<sup>R</sup> 942 <sup>R</sup> 938	<sup>R</sup> 156 <sup>R</sup> 143	<sup>R</sup> 454 <sup>R</sup> 338	<sup>R</sup> 4,105 <sup>R</sup> 3,522	<sup>R</sup> 712 600	8 R 7	R 30 R 27	<sup>R</sup> 23 24	<sup>R</sup> 17 <sup>R</sup> 17
November	<sup>R</sup> 67,059	<sup>R</sup> 768	<sup>R</sup> 917	<sup>R</sup> 147	<sup>R</sup> 257	<sup>R</sup> 3,115	568	8	<sup>R</sup> 28	24 24	<sup>R</sup> 17
December	<sup>R</sup> 73,610	<sup>R</sup> 892	<sup>R</sup> 922	<sup>R</sup> 138	<sup>R</sup> 365	<sup>R</sup> 3,775	<sup>R</sup> 642	8	<sup>R</sup> 31	25	<sup>R</sup> 18
Total	<sup>R</sup> 934,938	<sup>R</sup> 11,231	<sup>R</sup> 14,251	<sup>R</sup> 1,844	<sup>R</sup> 5,012	<sup>R</sup> 52,387	<sup>R</sup> 7,884	91	<sup>R</sup> 348	R 279	R 205
2012 January	<sup>R</sup> 70,846 <sup>R</sup> 62,906	<sup>R</sup> 816 <sup>R</sup> 689	<sup>R</sup> 994 <sup>R</sup> 760	<sup>R</sup> 78 <sup>R</sup> 118	<sup>R</sup> 465 <sup>R</sup> 354	<sup>R</sup> 4,213 <sup>R</sup> 3,340	<sup>R</sup> 675 <sup>R</sup> 673	R 8 R 8	<sup>R</sup> 33 <sup>R</sup> 31	<sup>R</sup> 22 <sup>R</sup> 21	<sup>R</sup> 15 <sup>R</sup> 14
February March	<sup>R</sup> 57,442	<sup>R</sup> 599	<sup>R</sup> 875	<sup>R</sup> 128	<sup>R</sup> 234	<sup>R</sup> 2,771	<sup>R</sup> 702	R 8	R 28	<sup>R</sup> 23	<sup>R</sup> 15
April	<sup>R</sup> 51,893	<sup>R</sup> 789	<sup>R</sup> 799	<sup>R</sup> 141	<sup>R</sup> 202	<sup>R</sup> 2,741	<sup>R</sup> 742	8	R 26	<sup>R</sup> 23	<sup>R</sup> 14
May June	<sup>R</sup> 62,978 <sup>R</sup> 71,750	R 907 R 899	<sup>R</sup> 839 <sup>R</sup> 1.299	<sup>R</sup> 166 <sup>R</sup> 177	<sup>R</sup> 245 <sup>R</sup> 265	<sup>R</sup> 3,138 <sup>R</sup> 3,698	<sup>R</sup> 844 <sup>R</sup> 911	8 R 8	R 29 R 30	<sup>R</sup> 24 <sup>R</sup> 23	<sup>R</sup> 16 <sup>R</sup> 15
July	<sup>R</sup> 86,667	<sup>R</sup> 894	R 1,608	R 174	R 291	<sup>R</sup> 4,131	R 1,123	8	32	R 25	16
August	82,862	723	1,143	154	319	3,617	1,034	8	33	23	16
8-Month Total	547,344	6,316	8,317	1,136	2,376	27,648	6,705	64	242	183	120
2011 8-Month Total 2010 8-Month Total	647,874 667,792	8,082 9,600	10,532 18,092	1,261 1,367	3,599 3,512	37,869 46,620	5,362 5,253	61 61	231 232	183 186	136 122

# Table 7.3a Consumption of Combustible Fuels for Electricity Generation:

Total (All Sectors) (Sum of Tables 7.3b and 7.3c)

<sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel. <sup>b</sup> Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal

combustion plant use of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel. <sup>c</sup> Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of

ber ole nor 1980-2000, electric utility data also include a small amount of fuel oil no. 4. <sup>d</sup> Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011,

<sup>6</sup> Detruel, kerosene, other petroleum liquids, waste oli, and, beginning in 2011, propane.
 <sup>6</sup> Petroleum coke is converted from short tons to barrels by multiplying by 5.
 <sup>7</sup> Natural gas, plus a small amount of supplemental gaseous fuels.
 <sup>9</sup> Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
 <sup>h</sup> Wood and wood-derived fuels.
 <sup>i</sup> Municipal potid words from biogenia pourses.

<sup>11</sup> Wood and wood-derived rules. <sup>1</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

holn-feriewable waste (infinitupal solid waste from non-biogenic source), and tire-derived fuels).
 j Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
 k Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial nlante.

plants.

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

Nervevised. NA=Not available. (s)=Less than 0.5 trillion Btu. Notes: • Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia

web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973. Sources: See sources for Tables 7.3b and 7.3c.

				Petroleum					Bion	nass	
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Tł	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total 1975 Total	389,212 405,962	47,058 38,907	513,190 467,221	NA NA	507 70	562,781 506,479	3,660 3,158	NA NA	1 (s)	2 2	NA NA
1980 Total 1985 Total	569,274 693,841	29,051 14,635	391,163 158,779	NA NA	179 231	421,110 174,571	3,682 3,044	NA NA	3	2 7	NA NA
1990 Total <sup>k</sup> 1995 Total	781,301 847.854	16,394 18.066	183,285 88,895	25 441	1,008 2,452	204,745 119.663	3,147 4.094	6 18	106 106	180 282	(s) 2
1996 Total	894,400	18,472	98,795	567	2,467	130,168	3,660	16	117	280	2
1997 Total 1998 Total	919,009 934.126	18,646 23,166	112,423 165,875	130 411	3,201 3,999	147,202 209,447	3,903 4,416	14 23	117 125	292 287	1
1999 Total	937,888	23,875	151,921	514	3,607	194,345	4,644	14	125	290	1
2000 Total	982,713	29,722 29,056	138,047	403 374	3,155	183,946	5,014	19 9	126	294 205	1
2001 Total 2002 Total	961,523 975,251	29,056	159,150 104,577	1,243	3,308 5,705	205,119 156,154	5,142 5,408	9 25	116 141	205	109 137
2003 Total	1,003,036	27,441	137,361	1,937	5,719	195,336	4,909	30	156	216	136
2004 Total 2005 Total	1,012,459 1.033.567	18,793 19,450	138,831 138,337	2,511 2,591	7,135 7.877	195,809 199,760	5,075 5.485	27 24	150 166	206 205	131 116
2006 Total	1,022,802	12,578	56,347	1,783	6,905	105,235	5,891	28	163	216	117
2007 Total 2008 Total	1,041,346 1,036,891	15,135 12,318	62,072 37,222	2,496 2,608	5,523 5,000	107,316 77,149	6,502 6,342	27 23	165 159	221 242	117 122
2009 Total	929,692	11,848	27,768	2,110	4,485	64,151	6,567	21	160	244	115
2010 January	90,080	2,441	2,804	219	404	7,482	519	2	16	20	9
February	79,537	833 756	1,023	196	379	3,946	456 432	2 2	15	18	8 9
March April	75,772 66.559	695	1,214 1.132	130 112	415 360	4,176 3.741	432	2	15 14	21 20	9
May	75,311	1,021	1,964	104	390	5,040	536	2 2	13	21	10
June July	86,725 94,194	1,220 1,306	3,059 3,643	137 185	463 495	6,733 7,610	681 869	2	15 16	21 22	10 10
August	93,922	1,066	2,962	149	392	6,136	915	2	16	22	10
September	78,881 70,205	880 762	1,760 1,076	136 112	371 337	4,628 3,634	671 547	1	15 13	21 20	10 10
November	72,206	849	949	125	290	3,373	473	1	15	21	10
December Total	87,854 <b>971,245</b>	1,847 <b>13,677</b>	1,973 <b>23,560</b>	244 <b>1,848</b>	383 <b>4,679</b>	5,978 <b>62,477</b>	538 <b>7.085</b>	1 20	16 177	22 <b>249</b>	10 <b>116</b>
	<sup>R</sup> 89.681	<sup>R</sup> 1,314	<sup>R</sup> 1,660	<sup>R</sup> 238	<sup>R</sup> 524	<sup>R</sup> 5.833	512		15	R 19	<sup>R</sup> 10
2011 January February	<sup>R</sup> 73,167	<sup>R</sup> 886	R 977	R 127	R 409	R 4,033	R 459	1	14	18	<sup>R</sup> 10
March	R 72,148	R 882	R 1,082	R 124	R 495	R 4,563	457 R 400	R 2 R 1	<sup>R</sup> 14	R 20 R 19	<sup>R</sup> 11 <sup>R</sup> 11
April May	<sup>R</sup> 66,643 <sup>R</sup> 73.010	<sup>R</sup> 989 <sup>R</sup> 955	<sup>R</sup> 1,302 <sup>R</sup> 1,206	<sup>R</sup> 96 <sup>R</sup> 72	<sup>R</sup> 312 <sup>R</sup> 333	<sup>R</sup> 3,948 <sup>R</sup> 3,899	<sup>R</sup> 498 <sup>R</sup> 548	R 1	11 12	R 19 R 20	R 11
June	R 83,622	<sup>R</sup> 951	<sup>R</sup> 1.223	<sup>R</sup> 123	R 409	<sup>R</sup> 4.344	<sup>R</sup> 675	2	14	R 21	<sup>R</sup> 12
July August	<sup>R</sup> 93,724 <sup>R</sup> 91,707	<sup>R</sup> 1,117 <sup>R</sup> 812	<sup>R</sup> 1,524 <sup>R</sup> 1,287	<sup>R</sup> 223 <sup>R</sup> 130	<sup>R</sup> 491 <sup>R</sup> 440	<sup>R</sup> 5,317 <sup>R</sup> 4,430	<sup>R</sup> 909 <sup>R</sup> 893	2	<sup>R</sup> 16 <sup>R</sup> 16	R 21 R 21	<sup>R</sup> 12 <sup>R</sup> 12
September	<sup>R</sup> 76,286	<sup>R</sup> 714	<sup>R</sup> 915	<sup>R</sup> 140	<sup>R</sup> 428	<sup>R</sup> 3.911	<sup>R</sup> 659	2 R1	<sup>R</sup> 14	R 20	<sup>R</sup> 11
October November	<sup>R</sup> 69,165 <sup>R</sup> 66,642	<sup>R</sup> 727 <sup>R</sup> 745	<sup>R</sup> 906 <sup>R</sup> 889	<sup>R</sup> 128 <sup>R</sup> 132	R 312 R 232	<sup>R</sup> 3,321 <sup>R</sup> 2,926	<sup>R</sup> 551 518	R 1 R 1	<sup>R</sup> 13 12	R 20 21	<sup>R</sup> 11 <sup>R</sup> 11
December	<sup>R</sup> 73,063	<sup>R</sup> 868	<sup>R</sup> 891	<sup>R</sup> 123	<sup>R</sup> 339	<sup>R</sup> 3,579	<sup>R</sup> 586	<sup>R</sup> 1	15	22	<sup>R</sup> 12
Total	<sup>R</sup> 928,857	<sup>R</sup> 10,961	<sup>R</sup> 13,861	<sup>R</sup> 1,655	<sup>R</sup> 4,726	<sup>R</sup> 50,105	<sup>R</sup> 7,265	<sup>R</sup> 18	<sup>R</sup> 166	R 241	<sup>R</sup> 132
2012 January	<sup>R</sup> 70,382	R 797	<sup>R</sup> 958	R 62	R 382	R 3,727	R 620	R 1	15	R 19	R 11
February March	<sup>R</sup> 62,486 <sup>R</sup> 57,010	<sup>R</sup> 674 <sup>R</sup> 582	R 725 R 845	<sup>R</sup> 102 <sup>R</sup> 119	<sup>R</sup> 306 <sup>R</sup> 183	<sup>R</sup> 3,032 <sup>R</sup> 2,463	<sup>R</sup> 621 <sup>R</sup> 652	R 1 R 1	14 <sup>R</sup> 12	<sup>R</sup> 17 <sup>R</sup> 20	<sup>R</sup> 10 10
April	<sup>R</sup> 51,504	<sup>R</sup> 766	<sup>R</sup> 773	<sup>R</sup> 113	<sup>R</sup> 153	R 2,415	<sup>к</sup> 693	R 1	10	R 20	10
May June	<sup>R</sup> 62,569 <sup>R</sup> 71,310	<sup>R</sup> 885 <sup>R</sup> 871	<sup>R</sup> 808 <sup>R</sup> 1,276	<sup>R</sup> 158 <sup>R</sup> 159	<sup>R</sup> 196 <sup>R</sup> 215	<sup>R</sup> 2,831 <sup>R</sup> 3,380	<sup>R</sup> 789 856	R 1 R 1	12 13	R 21 R 20	11 <sup>R</sup> 11
July	<sup>R</sup> 86,138	<sup>R</sup> 867	<sup>R</sup> 1,579	<sup>R</sup> 166	<sup>R</sup> 237	<sup>R</sup> 3,796	<sup>R</sup> 1,063	R 1	15	R 21	12
August 8-Month Total	82,344 <b>543,742</b>	696 <b>6,139</b>	1,119 <b>8,084</b>	147 <b>1,026</b>	247 <b>1,918</b>	3,195 <b>24,839</b>	977 <b>6,272</b>	1 11	15 <b>106</b>	20 <b>158</b>	11 <b>86</b>
			,		,		,				
2011 8-Month Total 2010 8-Month Total	643,701 662,100	7,907 9,338	10,260 17,802	1,133 1,231	3,414 3,298	36,368 44,864	4,951 4,856	12 14	111 119	158 165	88 77

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

<sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel. <sup>b</sup> Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal

combustion plant use of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.
 c Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of petroleum. For 1980-2000, electric utility data also include a small amount of fuel and the state of the st

<sup>d</sup> Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane. <sup>e</sup> Petroleum coke is converted from short tons to barrels by multiplying by 5.

<sup>6</sup> Petroleum coke is converted from short tons to barrels by multiplying by 5.
 <sup>6</sup> Natural gas, plus a small amount of supplemental gaseous fuels.
 <sup>9</sup> Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
 <sup>h</sup> Wood and wood-derived fuels.
 <sup>i</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

tire-derived fuels).

tire-derived fuels). <sup>1</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). <sup>k</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. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity on electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973. Sources: See end of section.

		Commerci	al Sector <sup>a</sup>				Indu	strial Sector	D		
			Natural	Biomass			Netural	Other	Bior	nass	
	Coal <sup>c</sup>	Petroleum <sup>d</sup>	Natural Gas <sup>e</sup>	Waste <sup>f</sup>	Coalc	Petroleum <sup>d</sup>	Natural Gas <sup>e</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>f</sup>	Other <sup>i</sup>
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1989 Total	414	1,165	18	9	9,707	8,482	444	83	267	15	37
1990 Total	417	953	28	15	10,740	13,103	517	104	335	16	36
1995 Total 1996 Total	569 656	649 645	43 42	21 31	12,171 12,153	12,265 13,813	601 610	114 143	373 394	13 13	40 35
1997 Total	630	790	39	34	12,311	11,723	623	105	367	14	36
1998 Total	440	802	41	32	11,728	12,392	625	102	349	13	35
1999 Total 2000 Total	481 514	931 823	39 37	33 26	11,432 11,706	12,595 10,459	639 640	112 107	364 369	8 10	39 45
2001 Total	532	1,023	36	15	10,636	10,530	654	88	370	7	44
2002 Total	477	834	33	18	11,855	11,608	685	106	464	15	43
2003 Total 2004 Total	582 377	894 766	38 33	19 19	10,440 7,687	10,424 6,919	668 566	127 108	362 194	13 5	46 41
2005 Total	377	585	34	20	7,504	6,440	518	85	189	5	46
2006 Total	347	333	35	21	7,408	5,066	536	87	187	3	45
2007 Total 2008 Total	361 369	258 166	34 33	19 20	5,089 5.075	5,041 3.617	554 520	88 73	188 179	4 5	41 39
2009 Total	317	190	34	23	4,674	3,328	520	62	160	4	42
2010 January	32	18	3	2	654	252	48	5	14	1	4
February	28 26	16 12	3 3	2 2	643 746	212	43 44	5 6	13 14	1	4
March April	20	12	3	2	456	182 171	44 42	6 6	14	1	4
May	23	14	3	2	727	190	44	6	14	1	4
June	27 30	13 26	3 4	2 2	643	204	47	6	14	1	5
July August	30 29	∠6 15	4	2	769 835	213 207	50 53	6 7	15 15	1	5 5
September	26	13	3	2	666	171	48	6	15	1	5
October	23	11	3	2	690	195	44	5	14	1	5
November December	21 26	7 15	3 4	2 2	529 765	208 217	43 48	6 6	14 15	1 1	4 5
Total	314	172	39	24	8,125	2,422	555	70	172	8	55
2011 January	<sup>R</sup> 40	<sup>R</sup> 27	<sup>R</sup> 4	R 3	<sup>R</sup> 487	<sup>R</sup> 226	<sup>R</sup> 48	6	<sup>R</sup> 16	1	R 4
February	<sup>R</sup> 39 <sup>R</sup> 37	<sup>R</sup> 16 <sup>R</sup> 11	3 3	2 R3	<sup>R</sup> 409 <sup>R</sup> 460	<sup>R</sup> 180 <sup>R</sup> 173	<sup>R</sup> 43 <sup>R</sup> 43	5 R 5	<sup>R</sup> 14 <sup>R</sup> 15	1 1	R 4 R 5
March April	R 25	R 5	3	2	R 460	<sup>R</sup> 173	45		14	1	R 5
May	R 25	R 5	R 4	R 3	<sup>R</sup> 487	<sup>R</sup> 174	<sup>R</sup> 47	<sup>R</sup> 6	<sup>R</sup> 14	1	<sup>R</sup> 5
June	R 27 R 32	<sup>R</sup> 5 <sup>R</sup> 14	R 4 R 5	R 3 R 3	R 507	R 165	R 48	R 7	<sup>R</sup> 16 <sup>R</sup> 16	1 1	R 5 R 5
July August	R 29	R 14 R 12	R 5	R 3	<sup>R</sup> 548 <sup>R</sup> 562	<sup>R</sup> 145 <sup>R</sup> 168	<sup>R</sup> 53 <sup>R</sup> 54	7 R7	<sup>R</sup> 16	1	R 5
September	<sup>R</sup> 26	<sup>R</sup> 13	R 4	R 3	R 479	<sup>R</sup> 181	<sup>R</sup> 49	6	<sup>R</sup> 15	1	R 4
October	R 21 R 21	R 10 R 11	R 4 R 4	R3 R3	<sup>R</sup> 419 <sup>R</sup> 397	<sup>R</sup> 191 <sup>R</sup> 179	R 45	6	<sup>R</sup> 15 <sup>R</sup> 16	1 1	R 5 R 5
November December	R 21	Rg	R 4	R 3	R 521	R 179 R 187	47 51	6 6	16	1	R 5
Total	R 347	<sup>R</sup> 137	R 47	<sup>R</sup> 31	R 5,735	<sup>R</sup> 2,145	R 572	R 74	R 182	R <b>7</b>	R 57
2012 January	R 29	R 9	R 4	R3	<sup>R</sup> 435	<sup>R</sup> 476	50	6	<sup>R</sup> 18	1	R3
February	<sup>R</sup> 27 <sup>R</sup> 25	<sup>R</sup> 7 <sup>R</sup> 8	R 4 R 4	R 3 R 3	<sup>R</sup> 393 <sup>R</sup> 407	<sup>R</sup> 301 <sup>R</sup> 300	<sup>R</sup> 48 46	R 7 7	<sup>R</sup> 17 <sup>R</sup> 15	1	R 3 R 3
March April	R 25 R 22	R 10	R 4	2	R 366	R 300	46 <sup>R</sup> 45	۲ 86	<sup>R</sup> 16	1	R 3
May	<sup>R</sup> 24	R g	R 4	R 3	<sup>R</sup> 385	<sup>R</sup> 298	51	<sup>R</sup> 6	<sup>R</sup> 17	1	3
June	R 26 R 30	<sup>R</sup> 15 <sup>R</sup> 18	4 <sup>R</sup> 5	R 2 R 3	R 413 R 500	R 303	51	6 <sup>R</sup> 6	<sup>R</sup> 17 <sup>R</sup> 18	1 1	R 3
July August	^30 28	^18 16	^5 4	×3 2	<sup>R</sup> 500 491	<sup>R</sup> 318 407	55 53	∿6 7	∿ 18 18	1	3 3
8-Month Total	212	91	33	20	3,391	2,718	400	52	136	4	23
2011 8-Month Total 2010 8-Month Total	254 218	95 125	31 25	21 16	3,919 5,474	1,407 1,631	380 372	49 47	120 113	4 5	38 36

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

<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

<sup>c</sup> Anthracite, bituminious coal, succession and the petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.
 <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>9</sup> Blast furnace gas, and other manufactured and waste gases derived from fossil fuels.
 <sup>9</sup> Nood and wood-derived fuels.

<sup>i</sup> Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous

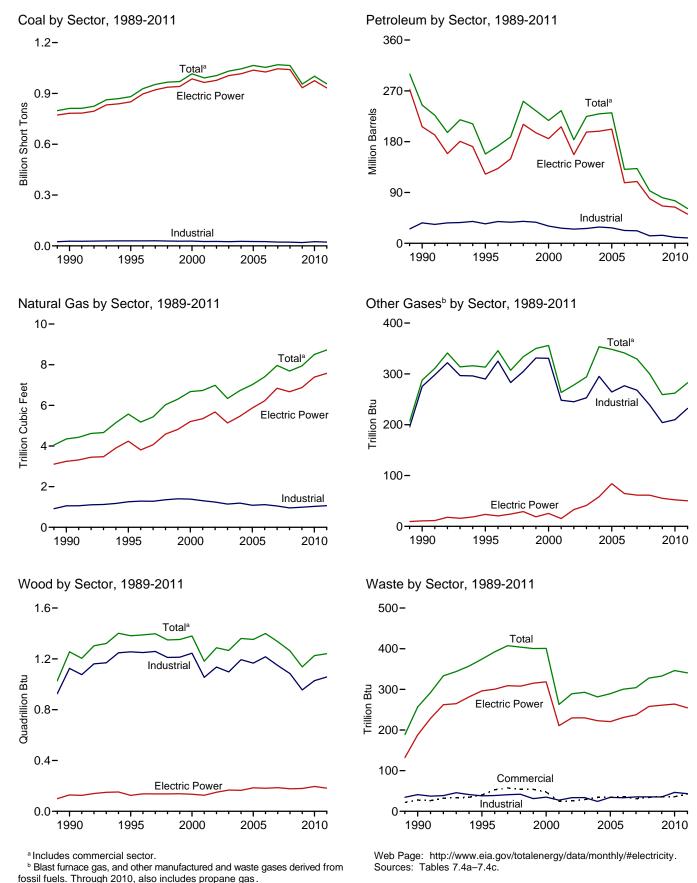
technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels). R=Revised.

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

and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all

and the District of Columbia.
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1989.
Sources: • 1989-1997: U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • 1998-2000: EIA, Form EIA-866, "Annual Electric Generator Report—Nonutility." • 2001-2003: EIA, Form EIA-906, "Power Plant Report." • 2004-2007: EIA, Form EIA-906, "Power Plant Report."
2008 forward: EIA, Form EIA-923, "Power Plant Operations Report."





				Petroleum					Bion	nass	
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	т	nousand Barre	ls	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total	389,212	47,058	513,190	NA	507	562,781	3,660	NA	1	2	NA
1975 Total	405,962	38,907	467,221	NA	70	506,479	3,158	NA	0	2	NA
1980 Total	569,274	29,051	391,163	NA	179	421,110	3,682	NA	3	2	NA
1985 Total 1990 Total <sup>k</sup>	<u>693,841</u> 811,538	<u>14,635</u> 20,194	<u>158,779</u> 209,081	<u>NA</u> 1,332	<u>231</u> 2,832	<u>174,571</u> 244,765	<u>3,044</u> 4,346	NA 288	<u>8</u> 1,256	257	<u>NA</u> 86
1995 Total	881,012	21,697	112,168	1,322	4,590	158,140	5,572	313	1,382	374	97
1996 Total	928,015	22,444	124,607	2,468	4,596	172,499	5,178	346	1,389	392	91
1997 Total	952,955	22,893	134,623	526	6,095	188,517	5,433	307	1,397	407	103
1998 Total 1999 Total	966,615 970.175	30,006 30,616	189,267 172,319	1,230 1.812	6,196 5.989	251,486 234,694	6,030 6,305	334 350	1,349 1,352	404 400	95 101
2000 Total		34,572	156,673	2.904	4,669	234,094 217,494	6,677	356	1,352	400	101
2001 Total	991,635	33,724	177,137	1,418	4,532	234,940	6,731	263	1,182	263	229
2002 Total	1,005,144	24,749	118,637	3,257	7,353	183,409	6,986	278	1,287	289	252
2003 Total	1,031,778	31,825	152,859	4,576	7,067	224,593	6,337	294	1,266	293	262
2004 Total 2005 Total	1,044,798 1,065,281	23,520 24,446	157,478 156,915	4,764 4,270	8,721 9,113	229,364 231,193	6,727 7,021	353 348	1,360 1,353	282 289	254 237
2006 Total	1,053,783	14,655	69,846	3,396	8,622	131,005	7,404	340	1,399	300	247
2007 Total		17,042	74,616	4,237	7,299	132,389	7,962	329	1,336	304	239
2008 Total	1,064,503	14,137	43,477	3,765	6,314	92,948	7,689	300	1,263	328	212
2009 Total	955,190	14,800	33,672	3,218	5,828	80,830	7,938	259	1,137	333	228
2010 January	92,738	2,643	3,212	338	525	8,819	643	21	103	29	18
February	82,029	978	1,397	286	497	5,143	566	19	96	26	17
March April	78,383 69,179	866 837	1,439 1,355	207 176	522 458	5,124 4.656	547 556	23 22	103 98	30 29	19 19
May	77,725	1.111	2,221	176	500	6,005	647	23	98	29	20
June	89,063	1,295	3,291	204	586	7,721	796	23	101	29	21
July	96,783	1,455	3,921	244	613	8,684	997	22	105	29	21
August	96,593	1,185 961	3,190	206	510	7,132	1,047 791	23 22	106	29 27	21 20
September October	81,250 72,571	871	2,006 1,370	191 186	475 453	5,534 4,693	662	22	103 101	27	20
November	74,496	1,017	1,212	204	414	4,503	586	20	102	30	20
December	90,600	2,029	2,332	361	499	7,218	665	23	109	30	21
Total	1,001,411	15,247	26,944	2,777	6,053	75,231	8,502	262	1,226	346	237
2011 January	<sup>R</sup> 92,292	<sup>R</sup> 1,411	<sup>R</sup> 2,123	<sup>R</sup> 329	<sup>R</sup> 645	<sup>R</sup> 7,087	<sup>R</sup> 636	R 23	R 111	<sup>R</sup> 28	R 20
February	R 75,447	<sup>R</sup> 986 <sup>R</sup> 965	R 1,247	<sup>R</sup> 213 <sup>R</sup> 201	<sup>R</sup> 521 <sup>R</sup> 603	R 5,052	R 570	R 22	<sup>R</sup> 99 <sup>R</sup> 104	26 <sup>R</sup> 28	<sup>R</sup> 19 <sup>R</sup> 22
March April	<sup>R</sup> 74,514 <sup>R</sup> 68,841	R 1.034	1,327 <sup>R</sup> 1,537	R 166	<sup>R</sup> 428	<sup>R</sup> 5,506 <sup>R</sup> 4,876	570 <sup>R</sup> 610	24 <sup>R</sup> 22	R 96	R 26	R 21
May	<sup>R</sup> 75.298	R 1,016	<sup>R</sup> 1,416	<sup>R</sup> 146	<sup>R</sup> 452	<sup>R</sup> 4,838	R 666	23	<sup>R</sup> 95	<sup>R</sup> 27	R 22
June	<sup>R</sup> 85,881	R 1,001	<sup>R</sup> 1.450	<sup>R</sup> 191	<sup>R</sup> 521	<sup>R</sup> 5,246	794	24	104	<sup>R</sup> 28	R 23
July	<sup>R</sup> 96,128	<sup>R</sup> 1,169	<sup>R</sup> 1,738	<sup>R</sup> 292	<sup>R</sup> 599	<sup>R</sup> 6,194	<sup>R</sup> 1,045	<sup>R</sup> 25	R 107	<sup>R</sup> 29	<sup>R</sup> 24
August	<sup>R</sup> 94,103	R 855	R 1,515	R 204	R 545	R 5,298	R 1,030	R 25	<sup>R</sup> 107 <sup>R</sup> 104	<sup>R</sup> 29 <sup>R</sup> 28	R 23
September October	<sup>R</sup> 78,479 <sup>R</sup> 71,317	<sup>R</sup> 770 <sup>R</sup> 797	<sup>R</sup> 1,136 <sup>R</sup> 1,147	<sup>R</sup> 207 <sup>R</sup> 201	<sup>R</sup> 545 <sup>R</sup> 429	<sup>R</sup> 4,837 <sup>R</sup> 4,289	<sup>R</sup> 782 666	<sup>R</sup> 24 <sup>R</sup> 24	™ 104 <sup>R</sup> 100	× 28 R 30	<sup>R</sup> 21 <sup>R</sup> 22
November	<sup>R</sup> 68,748	<sup>R</sup> 805	<sup>R</sup> 1.118	R 201	R 345	<sup>R</sup> 3.848	636	23	R 103	30	R 22
December	<sup>R</sup> 75,422	<sup>R</sup> 926	<sup>R</sup> 1,123	<sup>R</sup> 189	<sup>R</sup> 460	<sup>R</sup> 4,537	<sup>R</sup> 718	<sup>R</sup> 24	<sup>R</sup> 111	31	<sup>R</sup> 23
Total	R 956,470	R 11,735	R 16,877	<sup>R</sup> 2,540	<sup>R</sup> 6,092	<sup>R</sup> 61,610	<sup>R</sup> 8,724	R 282	<sup>R</sup> 1,241	<sup>R</sup> 340	R 261
2012 January	<sup>R</sup> 72,795	<sup>R</sup> 847	<sup>R</sup> 1,188	<sup>R</sup> 131	<sup>R</sup> 561	<sup>R</sup> 4,970	<sup>R</sup> 755	26	<sup>R</sup> 109	<sup>R</sup> 28	<sup>R</sup> 18
February	<sup>R</sup> 64,604	<sup>R</sup> 710	<sup>R</sup> 892	<sup>R</sup> 168	<sup>R</sup> 449	<sup>R</sup> 4,015	<sup>R</sup> 746	<sup>R</sup> 25	<sup>R</sup> 101	<sup>R</sup> 26	<sup>R</sup> 16
March	R 59,142	<sup>R</sup> 626	R 994	<sup>R</sup> 198	R 360	<sup>R</sup> 3,617	775	R 27	R 96	29 R 07	R 17
April	<sup>R</sup> 53,407 <sup>R</sup> 64,678	<sup>R</sup> 814 <sup>R</sup> 938	<sup>R</sup> 920 <sup>R</sup> 991	<sup>R</sup> 219 <sup>R</sup> 206	<sup>R</sup> 317 <sup>R</sup> 355	<sup>R</sup> 3,538 <sup>R</sup> 3,909	814 <sup>R</sup> 917	25 <sup>R</sup> 26	<sup>R</sup> 91 <sup>R</sup> 100	R 27 R 29	<sup>R</sup> 17 <sup>R</sup> 18
May June	<sup>R</sup> 73,344	R 943	<sup>R</sup> 1,458	R 234	R 365	<sup>R</sup> 4,458	<sup>R</sup> 987	R 25	R 100	R 28	<sup>R</sup> 18
July	<sup>R</sup> 88,319	<sup>R</sup> 937	<sup>R</sup> 1,767	R 205	<sup>R</sup> 385	<sup>R</sup> 4,836	<sup>R</sup> 1,203	R 25	<sup>R</sup> 105	R 29	18
August	84,597	754	1,303	180	412	4,297	1,113	26	103	28	18
8-Month Total	560,886	6,569	9,512	1,541	3,204	33,639	7,310	205	806	225	139
2011 8-Month Total	662,505	8,437	12,353	1,741	4,313	44,098	5,921	187	823	222	173
2010 8-Month Total	682,494	10,369	20,025	1,836	4,211	53,283	5,799	176	809	229	157

### Table 7.4a Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Total (All Sectors) (Sum of Tables 7.4b and 7.4c)

<sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel. <sup>b</sup> Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small

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

<sup>d</sup> Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011,

propane.

propane.
 <sup>e</sup> Petroleum coke is converted from short tons to barrels by multiplying by 5.
 <sup>f</sup> Natural gas, plus a small amount of supplemental gaseous fuels.
 <sup>g</sup> Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
 <sup>h</sup> Wood and wood-derived fuels.
 <sup>i</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes

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

Indifference waste (infinitopal solid waste from non-biogenic source, and tire-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).
 <sup>k</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are

for electric utilities, independent power producers, commercial plants, and industrial plants.

plants. R=Revised. NA=Not available. Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973. Sources: See sources for Tables 7.4b and 7.4c

Sources: See sources for Tables 7.4b and 7.4c.

				Petroleum					Bion	nass	
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other
	Thousand Short Tons	т	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total	389,212	47,058	513,190	NA	507	562,781	3,660	NA	1	2	NA
1975 Total 1980 Total	405,962 569,274	38,907 29,051	467,221 391,163	NA NA	70 179	506,479 421,110	3,158 3,682	NA NA	(s) 3	2	NA NA
1985 Total	693,841	14,635	158,779	NA	231	174,571	3,082	NA	8	7	NA
1985 Total 1990 Total <sup>k</sup> 1995 Total	782,567 850,230	16,567 18,553	184,915 90.023	26 499	1,008 2,674	206,550 122,447	3,245 4,237	11 24	129 125	188 296	(s) 2
1995 Total	896,921	18,780	90,023 99,951	499 653	2,674	132,593	3,807	24	125	290	2
1997 Total	921,364	18,989	113,669	152	3,372	149,668	4,065	24	137	309	1
1998 Total 1999 Total	936,619 940,922	23,300 24.058	166,528 152,493	431 544	4,102 3,735	210,769 195,769	4,588 4.820	29 19	137 138	308 315	2 1
2000 Total	985,821	30,016	138,513	454	3,275	185,358	5,206	25	134	318	1
2001 Total	964,433	29,274	159,504	377	3,427	206,291 156.996	5,342	15 33	126 150	211 230	113 143
2002 Total 2003 Total	977,507 1,005,116	21,876 27,632	104,773 138,279	1,267 2,026	5,816 5,799	196,996	5,672 5,135	33 41	150	230	143
2004 Total	1,016,268	19,107	139,816	2,713	7,372	198,498	5,464	58	165	223	138
2005 Total 2006 Total	1,037,485 1,026,636	19,675 12,646	139,409 57,345	2,685 1,870	8,083 7,101	202,184 107,365	5,869 6,222	84 65	185 182	221 231	123 125
2007 Total	1,045,141	15,327	63,086	2,594	5,685	109,431	6,841	61	186	237	123
2008 Total 2009 Total	1,040,580 933,627	12,547 12,035	38,241 28,782	2,670 2,210	5,119 4,611	79,056 66,081	6,668 6,873	61 55	177 180	258 261	131 124
2010 January	90,452	2,459	2,887	222	413	7,636	546	5	17	21	10
February	79,884	851	1,061	219	389	4,076	480	4	16	20	9
March	76,110 66,842	759 699	1,256 1,214	131 112	427 369	4,281 3,871	457 471	5 5	16 15	22 21	10 10
May	75,597	1,023	2,055	104	400	5,181	560	5	14	22	10
June	87,030 94,519	1,222 1,309	3,147 3,730	137 185	471 503	6,860 7,742	706 897	5 5	16 17	23 23	11 11
July August	94,247	1,068	3,051	149	394	6,236	943	4	18	23	11
September	79,176	883	1,845	136	372	4,726	697	4	16	22	10
October November	70,492 72,514	772 890	1,161 1,035	112 126	346 301	3,773 3,557	570 497	3 4	15 16	22 23	10 10
December	88,189	1,854	2,062	245	391	6,118	564	4	17	23	11
Total	975,052	13,790	24,503	1,877	4,777	64,055	7,387	52	196	264	124
2011 January	<sup>R</sup> 90,021 <sup>R</sup> 73,474	<sup>R</sup> 1,322 <sup>R</sup> 911	<sup>R</sup> 1,745 <sup>R</sup> 1,024	<sup>R</sup> 239 <sup>R</sup> 127	<sup>R</sup> 529 <sup>R</sup> 417	<sup>R</sup> 5,953 <sup>R</sup> 4,148	<sup>R</sup> 540 <sup>R</sup> 484	4	<sup>R</sup> 17 <sup>R</sup> 16	21 <sup>R</sup> 19	<sup>R</sup> 11 <sup>R</sup> 10
February March	<sup>R</sup> 72,458	<sup>R</sup> 885	<sup>R</sup> 1.153	R 124	<sup>R</sup> 506	<sup>R</sup> 4,692	<sup>R</sup> 482	4 5	15	R 21	<sup>R</sup> 12
April	<sup>R</sup> 66,930	<sup>R</sup> 991	<sup>R</sup> 1.384	<sup>R</sup> 96	<sup>R</sup> 321	<sup>R</sup> 4.078	<sup>R</sup> 521	4	12	R 20	<sup>R</sup> 12
May June	<sup>R</sup> 73,338 <sup>R</sup> 83,908	<sup>R</sup> 957 <sup>R</sup> 954	<sup>R</sup> 1,286 <sup>R</sup> 1,303	<sup>R</sup> 72 <sup>R</sup> 123	<sup>R</sup> 344 <sup>R</sup> 419	<sup>R</sup> 4,034 <sup>R</sup> 4,474	<sup>R</sup> 572 <sup>R</sup> 699	4 R 4	13 <sup>R</sup> 16	R 21 R 22	<sup>R</sup> 12 <sup>R</sup> 12
July	<sup>R</sup> 94,037	<sup>R</sup> 1,120	<sup>R</sup> 1.609	<sup>R</sup> 223	<sup>R</sup> 501	<sup>R</sup> 5,458	<sup>R</sup> 939	R 4	<sup>R</sup> 17	R 22	<sup>R</sup> 13
August	<sup>R</sup> 92,012 <sup>R</sup> 76,569	<sup>R</sup> 816 <sup>R</sup> 716	<sup>R</sup> 1,375 <sup>R</sup> 1,002	<sup>R</sup> 130 <sup>R</sup> 140	<sup>R</sup> 451 <sup>R</sup> 439	<sup>R</sup> 4,575 <sup>R</sup> 4,052	<sup>R</sup> 921 <sup>R</sup> 684	R 4 R 4	R 17 15	R 22 R 21	<sup>R</sup> 13 <sup>R</sup> 12
September October	<sup>R</sup> 69,458	<sup>R</sup> 730	<sup>R</sup> 990	R 128	R 319	R 3,445	<sup>R</sup> 575	R /	<sup>R</sup> 14	R 22	<sup>R</sup> 12
November	<sup>R</sup> 66,919	<sup>R</sup> 748	<sup>R</sup> 968	<sup>R</sup> 134	<sup>R</sup> 241	<sup>R</sup> 3,052	543	R 4	<sup>R</sup> 14	<sup>R</sup> 22	<sup>R</sup> 12
December Total	<sup>R</sup> 73,359 <sup>R</sup> <b>932,484</b>	<sup>R</sup> 870 R <b>11,021</b>	<sup>R</sup> 965 <sup>R</sup> 14,803	<sup>R</sup> 123 <sup>R</sup> 1,658	<sup>R</sup> 350 <sup>R</sup> <b>4,837</b>	<sup>R</sup> 3,707 <sup>R</sup> <b>51,667</b>	<sup>R</sup> 614 R <b>7,574</b>	<sup>R</sup> 4 <sup>R</sup> 50	16 <sup>R</sup> 182	23 <sup>R</sup> <b>255</b>	<sup>R</sup> 12 <sup>R</sup> 142
2012 January	<sup>R</sup> 70,720	<sup>R</sup> 800	<sup>R</sup> 1,050	<sup>R</sup> 63	<sup>R</sup> 393	<sup>R</sup> 3,877	<sup>R</sup> 648	R 4	16	<sup>R</sup> 21	<sup>R</sup> 12
February	R 62,755	R 676	<sup>R</sup> 787 <sup>R</sup> 895	R 102	R 317	R 3,149	R 648	R 4 R 4	15	<sup>R</sup> 19 <sup>R</sup> 21	10
March	<sup>R</sup> 57,300 <sup>R</sup> 51,751	<sup>R</sup> 585 <sup>R</sup> 769	<sup>R</sup> 836	<sup>R</sup> 119 <sup>R</sup> 113	<sup>R</sup> 194 <sup>R</sup> 162	<sup>R</sup> 2,568 <sup>R</sup> 2,526	<sup>R</sup> 677 <sup>R</sup> 720	4	14 11	<sup>R</sup> 20	11 11
May	<sup>R</sup> 62,868	<sup>R</sup> 890	<sup>R</sup> 889	<sup>R</sup> 158	<sup>R</sup> 207	<sup>R</sup> 2,971	<sup>R</sup> 817	R 4	13	R 22	<sup>R</sup> 12
June	<sup>R</sup> 71,595 <sup>R</sup> 86,429	<sup>R</sup> 874 <sup>R</sup> 871	<sup>R</sup> 1,362 <sup>R</sup> 1,656	<sup>R</sup> 159 <sup>R</sup> 166	<sup>R</sup> 221 <sup>R</sup> 246	<sup>R</sup> 3,497 <sup>R</sup> 3,922	<sup>R</sup> 885 <sup>R</sup> 1,093	R 4 R 4	15 16	<sup>R</sup> 21 <sup>R</sup> 22	<sup>R</sup> 12 12
July August	82,643	699	1,199	147	256	3,324	1,007	4	16	21	12
8-Month Total	546,062	6,164	8,672	1,027	1,994	25,832	6,495	33	116	168	93
2011 8-Month Total 2010 8-Month Total	646,179 664,681	7,957 9,391	10,879 18,400	1,133 1,259	3,489 3,366	37,412 45,881	5,158 5,059	33 37	123 131	167 175	95 82

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

<sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel. <sup>b</sup> Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small

amounts of kerosene and jet fuel. <sup>c</sup> Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4. <sup>d</sup> Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011.

Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane.

propane.
 <sup>e</sup> Petroleum coke is converted from short tons to barrels by multiplying by 5.
 <sup>f</sup> Natural gas, plus a small amount of supplemental gaseous fuels.
 <sup>g</sup> Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
 <sup>h</sup> Wood and wood-derived fuels.
 <sup>i</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

tire-derived fuels).

tire-derived fuels). <sup>j</sup> Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels). <sup>k</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: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973. Sources: See end of section.

Sources: See end of section.

		Commerci	ial Sector <sup>a</sup>				Indu	strial Sector	D		
				Biomass					Biom	ass	
	Coalc	Petroleumd	Natural Gas <sup>e</sup>	Wastef	Coalc	Petroleumd	Natural Gas <sup>e</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Wastef	Other <sup>i</sup>
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillion	Btu	
1989 Total	1,125	1,967	30	22	24,867	25,444	914	195	926	35	85
1990 Total	1,191	2,056	46	28	27,781	36,159	1,055	275	1,125	41	86
1995 Total	1,419	1,245 1,246	78 82	40	29,363 29,434	34,448 38.661	1,258 1,289	290 325	1,255 1,249	38 39	95 89
1996 Total 1997 Total	1,660 1,738	1,240	87	53 58	29,434 29,853	37,265	1,289	283	1,249	39 41	10
1998 Total	1,443	1,807	87	54	28,553	38,910	1,355	305	1,211	42	9
1999 Total	1,490	1,613	84	54	27,763	37,312	1,401	331	1,213	31	9
2000 Total	1,547 1.448	1,615 1.832	85 79	47 25	28,031	30,520	1,386	331 248	1,244 1.054	35 27	108 101
2001 Total 2002 Total	1,448	1,832	79	25 26	25,755 26,232	26,817 25,163	1,310 1,240	248 245	1,054	27 34	92
2003 Total	1,816	1,449	58	29	24,846	26,212	1,144	253	1,097	34	103
2004 Total	1,917	2,009	72	34	26,613	28,857	1,191	295	1,193	24	94
2005 Total	1,922	1,630	68	34	25,875	27,380	1,084	264	1,166	34	94
2006 Total 2007 Total	1,886 1,927	935 752	68 70	36 31	25,262 22,537	22,706 22.207	1,115 1.050	277 268	1,216 1,148	33 36	102 98
2007 Total	2.021	671	66	34	22,537	13.222	955	200	1,146	30	60
2009 Total	1,798	521	76	36	19,766	14,228	990	204	955	35	82
2010 January	193	55	7	3	2,094	1,128	90	17	86	4	6
February	167	47	7	3	1,978	1,021	80	15	79	4	7
March	149	26	7	3	2,124	817	84	18	86	4	1
April May	117 118	24 28	6 6	3 4	2,220 2,010	761 796	79 82	18 18	83 83	5 3	7
June	135	26	6	3	1.898	835	84	18	85	3	6
July	142	59	8	3	2,122	883	91	17	88	3	Ē
August	152	46	9	3	2,194	849	95	19	88	3	8
September	133	27	7	3	1,941	780	87	18	87	3	8
October November	121 128	21 22	7 7	3 3	1,958 1,854	899 924	84 82	17 17	86 86	5 5	8
December	165	55	8	3	2,246	1,045	92	19	91	4	6
Total	1,720	437	86	36	24,638	10,740	1,029	210	1,029	47	91
2011 January	<sup>R</sup> 189	<sup>R</sup> _103	R 7	3	<sup>R</sup> 2,082	<sup>R</sup> 1,031	<sup>R</sup> 90	_ 18	<sup>R</sup> 94	4	R 7
February	R 173	R 48	<sup>R</sup> 6	3	<sup>R</sup> 1,800	R 856	R 81	R 18	R 83	4 R 4	R
March	<sup>R</sup> 164 124	<sup>R</sup> 26 <sup>R</sup> 8	6 6	3 3	<sup>R</sup> 1,891 <sup>R</sup> 1,787	<sup>R</sup> 788 <sup>R</sup> 791	<sup>R</sup> 82 <sup>R</sup> 83	<sup>R</sup> 19 <sup>R</sup> 18	<sup>R</sup> 88 <sup>R</sup> 84	<sup>R</sup> 4 3	R g R g
April May	<sup>R</sup> 124	<sup>R</sup> 12	7	R 4	<sup>R</sup> 1,836	<sup>R</sup> 791	87	<sup>R</sup> 19	<sup>R</sup> 82	R 3	Rg
June	R 130	Rg	R 7	R 4	R 1,843	<sup>R</sup> 764	R 88	R 20	<sup>R</sup> 88	R3	Rg
July	<sup>R</sup> 145	R 23	R 9	<sup>R</sup> 4	<sup>R</sup> 1,946	<sup>R</sup> 714	<sup>R</sup> 97	<sup>R</sup> 20	<sup>R</sup> 90	R3	Ro
August	R 129	20 R 20	Rg	R 4	<sup>R</sup> 1,962	R 703	R 99	R 20	R 90	R3	R g
September	<sup>R</sup> 122 <sup>R</sup> 110	R 23 R 14	R 8 R 7	R 4 R 4	<sup>R</sup> 1,788 <sup>R</sup> 1,748	<sup>R</sup> 762 <sup>R</sup> 830	<sup>R</sup> 91 <sup>R</sup> 85	R 20 20	R 88 R 86	<sup>R</sup> 3 4	R 8
October November	R 110 R 117	<sup>R</sup> 28	7	R 4	R 1,748	767	86	20 19	R 90	8 R 5	Rg
December	<sup>R</sup> 139	<sup>R</sup> 19	8	R 4	R 1,923	<sup>R</sup> 812	<sup>R</sup> 96	20	<sup>R</sup> 95	4	R
Total	<sup>R</sup> 1,668	<sup>R</sup> 333	R 87	<sup>R</sup> 43	<sup>R</sup> 22,319	<sup>R</sup> 9,610	<sup>R</sup> 1,063	R 232	<sup>R</sup> 1,057	<sup>R</sup> 43	R 94
2012 January	<sup>R</sup> 162	R 27	Rg	<sup>R</sup> 4	R 1,913	<sup>R</sup> 1,065	<sup>R</sup> 98	ຼ21	R 93	4	R 2
February	R 141	R 20	R 8 R 8	R 4 R 4	R 1,708	R 847	R 90 R 90	<sup>R</sup> 21 <sup>R</sup> 22	<sup>R</sup> 86 <sup>R</sup> 82	4 R 4	R Z
March April	<sup>R</sup> 135 <sup>R</sup> 115	<sup>R</sup> 23 <sup>R</sup> 16	R 7	۳4 3	<sup>R</sup> 1,707 <sup>R</sup> 1,542	<sup>R</sup> 1,026 <sup>R</sup> 997	R 87	<sup>R</sup> 22 <sup>R</sup> 21	× 82 R 80	×4 4	K 2
Арлі Мау	<sup>R</sup> 121	<sup>R</sup> 17	R7	R 4	R 1,689	<sup>R</sup> 921	R 93	R 22	<sup>R</sup> 87	4	4
June	<sup>R</sup> 114	R 29	8	R 3	<sup>R</sup> 1,634	<sup>R</sup> 932	<sup>R</sup> 94	21	R 85	R 3	R 4
July	<sup>R</sup> 118	<sup>R</sup> 38	8	<sup>R</sup> 4	<sup>R</sup> 1,773	<sup>R</sup> 876	<sup>R</sup> 101	21	<sup>R</sup> 89	R 4	4
August	126	32	8	3	1,827	942	98	22	86	4	2
8-Month Total	1,032	201	63	29	13,792	7,606	752	171	689	29	29
2011 8-Month Total 2010 8-Month Total	1,179 1,173	248 311	57 55	28 25	15,147 16,640	6,438 7,091	706 684	154 140	699 678	27 30	62

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

<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.  $^{\rm d}$  Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other

<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).

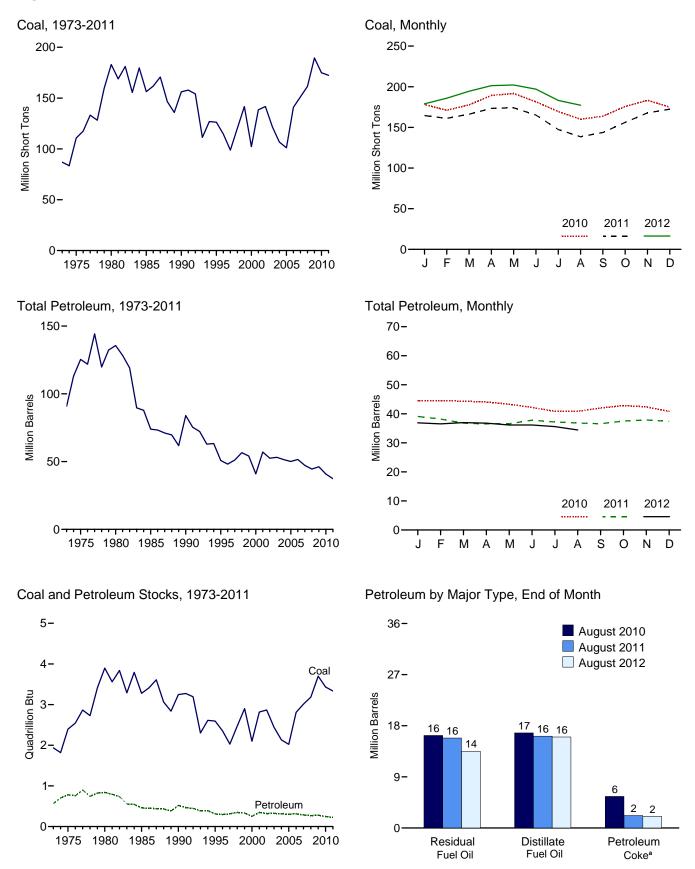
<sup>9</sup> Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
 <sup>h</sup> Wood and wood-derived fuels.

<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).

R=Revised. Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at

Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1989.
 Sources: • **1989-1997**: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report." • **1998-2000**: EIA, Form EIA-806, "Annual Electric Generator Report." • **1998-2000**: EIA, Form EIA-906, "Power Plant Report." • **2004-2007**: EIA, Form EIA-906, "Power Plant Report." • **2004-2007**: EIA, Form EIA-906, "Form EIA-920, "Combined Heat and Power Plant Report."
 • **2008 forward**: EIA, Form EIA-923, "Power Plant Operations Report."

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



<sup>a</sup> Converted from short tons to barrels by multiplying by 5. Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity. Sources: Tables 7.5, A1, and A5 (column 6).

				Petroleum		
	Coal <sup>a</sup>	Distillate Fuel Oilb	Residual Fuel Oilc	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>
	Thousand Short Tons		Thousand Barrels		Thousand Short Tons	Thousand Barrel
973 Year	86.967	10.095	79,121	NA	312	90,776
975 Year		16,432	108.825	NA	31	125.413
980 Year	183.010	30.023	105,351	NA	52	135.635
					49	
985 Year	156,376	16,386	57,304	NA		73,933
990 Year	156,166	16,471	67,030	NA	94	83,970
995 Year		15,392	35,102	NA	65	50,821
996 Year	114,623	15,216	32,473	NA	91	48,146
997 Year		15,456	33.336	NA	469	51,138
998 Year	120,501	16.343	37.451	NA	559	56.591
999 Year <sup>f</sup>	141.604	17,995	34,256	NA	372	54.109
	141,004					
000 Year	102,296	15,127	24,748	NA	211	40,932
001 Year		20,486	34,594	NA	390	57,031
002 Year		17,413	25,723	800	1,711	52,490
003 Year	121,567	19,153	25,820	779	1,484	53,170
004 Year		19,275	26.596	879	937	51,434
005 Year		18,778	27,624	1.012	530	50.062
006 Year		18,013	28.823	1.380	674	51,583
	151.221		24,136	1,902	554	47.203
007 Year		18,395				
008 Year	161,589	17,761	21,088	1,955	739	44,498
009 Year	189,467	17,886	19,068	2,257	1,394	46,181
010 January	178,091	17,193	18,035	2,198	1,406	44,454
February	171.026	17.409	18.532	2.222	1,280	44.562
March		17,353	18,679	2,105	1,240	44.337
April		17,295	18,353	2,228	1,243	44.090
		17,185		2,220		43,294
May			17,935		1,188	
June		17,040	17,411	2,172	1,117	42,209
July		16,917	16,441	2,268	1,046	40,856
August	159,987	16,737	16,288	2,292	1,112	40,878
September	163,776	16,608	17,269	2,330	1,158	41.996
October	175.686	16,698	17,781	2,377	1,197	42.840
November	183.389	17.024	17.492	2,410	1.098	42.414
December	174,917	16,758	16,629	2,319	1,019	40,800
011 January	<sup>R</sup> 164,575	<sup>R</sup> 16,613	<sup>R</sup> 16,012	<sup>R</sup> 2,492	<sup>R</sup> 799	<sup>R</sup> 39,111
February	<sup>R</sup> 161,064	<sup>R</sup> 16,565	<sup>R</sup> 15,552	<sup>R</sup> 2,545	_ 707	<sup>R</sup> 38,198
March		<sup>R</sup> 16,367	<sup>R</sup> 15,405	<sup>R</sup> 2,546	<sup>R</sup> 495	<sup>R</sup> 36,794
April		<sup>R</sup> 16,153	<sup>R</sup> 15,181	<sup>R</sup> 2,561	<sup>R</sup> 526	<sup>R</sup> 36,525
May		R 15,997	R 15,209	R 2.539	R 563	R 36.558
June		<sup>R</sup> 16,379	<sup>R</sup> 16,359	<sup>R</sup> 2.601	R 496	<sup>R</sup> 37,820
		<sup>R</sup> 16,170	<sup>R</sup> 16,111	R 2.622	<sup>R</sup> 463	<sup>R</sup> 37,218
July						
August	R 138,527	<sup>R</sup> 16,162	R 15,843	R 2,631	R 437	R 36,822
September	<sup>R</sup> 143,711	<sup>R</sup> 16,311	<sup>R</sup> 15,726	<sup>R</sup> 2,628	<sup>R</sup> 385	<sup>R</sup> 36,593
October	<sup>R</sup> 156,196	<sup>R</sup> 16,567	<sup>R</sup> 16,044	<sup>R</sup> 2,681	<sup>R</sup> 440	<sup>R</sup> 37,495
November	<sup>R</sup> 167,754	<sup>R</sup> 16.729	<sup>R</sup> 15.964	<sup>R</sup> 2,744	<sup>R</sup> 494	<sup>R</sup> 37.906
December	<sup>R</sup> 172,387	<sup>R</sup> 16,649	<sup>R</sup> 15,491	<sup>R</sup> 2,707	<sup>R</sup> 508	<sup>R</sup> 37,387
012 January	<sup>R</sup> 179.030	<sup>R</sup> 16.712	<sup>R</sup> 15.232	<sup>R</sup> 2,735	<sup>R</sup> 443	<sup>R</sup> 36.893
February	<sup>R</sup> 185,901	<sup>R</sup> 16,532	<sup>R</sup> 15,121	<sup>R</sup> 2,778	R 420	<sup>R</sup> 36,532
		<sup>R</sup> 16,423	<sup>R</sup> 15.244	<sup>R</sup> 2,815	R 500	<sup>R</sup> 36,984
March						
April	R 201,368	<sup>R</sup> 16,325	R 15,082	<sup>R</sup> 2,856	R 507	R 36,795
May	<sup>R</sup> 202,184	<sup>R</sup> 16,232	<sup>R</sup> 14,747	<sup>R</sup> 2,872	<sup>R</sup> 459	<sup>R</sup> 36,147
June		<sup>R</sup> 16,152	<sup>R</sup> 14,500	R 2,900	<sup>R</sup> 519	<sup>R</sup> 36,145
July		R 16,581	R 13,728	R 2,941	474	<sup>R</sup> 35,617
August		16,023	13,509	2,840	413	34,439
muyuət	111,240	10,020	10,000	2,040	415	54,458

Table 7.5 Stocks of Coal and Petroleum: Electric Power Sector

<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 fuel or stocks of fuel or stock and fuel and so include semillar amounts of fuel or stock and fuel and so include semillar amount of fuel and semillar amount of fuel amount of fuel and semillar amount of fuel and semillar amount of fuel amount

petroleum. For 1980-2000, electric utility data also include a small amount of fuel

oil no. 4. d Jet fuel and kerosene. Through 2003, data also include a small amount of waste oil.

<sup>6</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. R=Revised. NA=Not available.

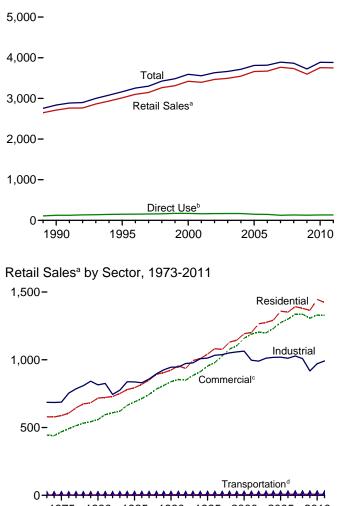
Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Stocks

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

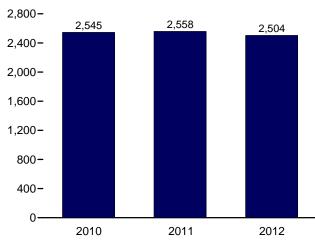
Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973. Sources: • **1973-September 1977**: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977-1981**: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982-1988**: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report." • **1989-1997**: EIA, Form EIA-759, "Monthly Power Plant Report." • **1989-2000**: EIA, Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000**: EIA, Form EIA-759, "Monthly Power Plant Report." • **1998-2000**: EIA, Form EIA-759, "Monthly Power Plant Report." • **2001-2003**: EIA, Form EIA-966, "Power Plant Report." • **2004-2007**: EIA, Form EIA-966, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 forward**: EIA, Form EIA-923, "Power Plant Operations Report."

# Figure 7.6 Electricity End Use (Billion Kilowatthours)

Electricity End Use Overview, 1989-2011



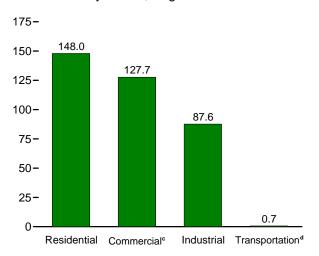
1975 1980 1985 1990 1995 2000 2005 2010



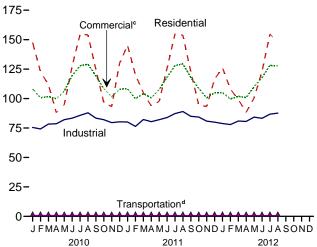
 <sup>a</sup> Electricity retail sales to ultimate customers reported by utilities and other energy service providers.
 <sup>b</sup> See "Direct Use" in Glossary.

° Commercial sector, including public street and highway lighting, inter-

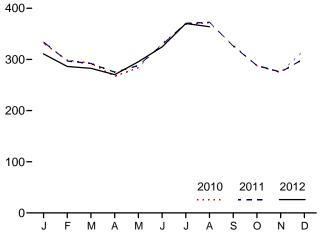
Retail Sales<sup>a</sup> by Sector, August 2012



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



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



departmental sales, and other sales to public authorites. <sup>d</sup> Transportation sector, including sales to railroads and railways. Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity. Source: Table 7.6.

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

## Table 7.6 Electricity End Use

(Million Kilowatthours)

			Retail Sales <sup>a</sup>					Discont Retail Sale	
	Residential	Commercialb	Industrialc	Transpor- tation <sup>d</sup>	Total Retail Sales <sup>e</sup>	Direct Use <sup>f</sup>	Total End Use <sup>g</sup>	Commercial (Old) <sup>h</sup>	Other (Old) <sup>i</sup>
973 Total	579,231	<sup>E</sup> 444,505	686,085	<sup>E</sup> 3,087	1,712,909	NA	1,712,909	388,266	59,326
975 Total	588,140	<sup>E</sup> 468,296	687,680	<sup>E</sup> 2,974	1,747,091	NA	1,747,091	403,049	68,222
980 Total	717,495	558,643	815,067	3,244	2,094,449	NA	2,094,449	488,155	73,732
985 Total	793,934	689,121	836,772	4,147	2,323,974	NA	2,323,974	605,989	87,279
990 Total	924.019	838,263	945,522	4.751	2,712,555	124,529	2,837,084	751.027	91.98
995 Total	1,042,501	953,117	1,012,693	4.975	3,013,287	150,677	3,163,963	862,685	95,40
996 Total	1,082,512	980.061	1.033.631	4.923	3,101,127	152,638	3.253.765	887,445	97,53
997 Total	1,075,880	1,026,626	1,038,197	4.907	3,145,610	156,239	3,301,849	928,633	102,90
998 Total	1,130,109	1,077,957	1,051,203	4,962	3,264,231	160,866	3,425,097	979,401	103,518
999 Total	1,144,923	1,103,821	1,058,217	5,126	3,312,087	171,629	3,483,716	1,001,996	106,952
000 Total	1,192,446	1,159,347	1,064,239	5,382	3,421,414	170.943	3,592,357	1,055,232	109.496
001 Total	1,201,607	1,190,518	996,609	5,724	3,394,458	162,649	3,557,107	1,083,069	113,174
002 Total	1,265,180	1,204,531	990,238	5,517	3,465,466	166,184	3,631,650	1,104,497	105,552
003 Total	1,275,824	1,198,728	1,012,373	6,810	3,493,734	168,295	3,662,029		
004 Total	1,291,982	1,230,425	1,017,850	7,224	3,547,479	168,470	3,715,949		
005 Total	1,359,227	1,275,079	1,019,156	7,506	3,660,969	150,016	3,810,984		
006 Total	1,351,520	1,299,744	1,011,298	7,358	3,669,919	146,927	3,816,845		
007 Total	1.392.241	1.336.315	1.027.832	8,173	3.764.561	125.670	3.890.231		
008 Total	1.379.981	1,335,981	1.009.300	7.700	3,732,962	132,197	3,865,159		
009 Total	1,364,474	1,307,168	917,442	7,781	3,596,865	126,938	3,723,803		
010 January	147,500	108,120	75,506	715	331,841	E 11,084	342,925		
February	122,840	100,747	74,164	689	298,440	E 10,144	308,585		
March	111,790	101,756	78,303	656	292,505	E 10,884	303,389		
April	88,046	99,791	78,597	600	267,034	E 10,091	277,125		
May	94,843	106,176	82,088	606	283,712	E 10,611	294,323		
June	127,496	119,388	83,347	658	330,889	E 11,037	341,927		
July	154,688	127,925	85,725	667	369,006	E 11,690	380,696		
August	154,053	129,143	87,904	628	371,728	E 12,298	384,026		
September	124,582	119,137	83,353	639	327,711	E 11,221	338,932		
October	96,688	108,461	82,046	615	287,811	E 10,605	298,416		
November	93,166	101,524	79,575	607	274,871	E 10,520	285,392		
December	130,015	108,031	80,264	633	318,943	<sup>E</sup> 11,725	330,668		
Total		1,330,199	970,873	7,712	3,754,493	131,910	3,886,403		
011 January	<sup>R</sup> 145,054 <sup>R</sup> 120,121	<sup>R</sup> 108,247 <sup>R</sup> 99,791	<sup>R</sup> 80,074 <sup>R</sup> 76,360	710 <sup>R</sup> 637	<sup>R</sup> 334,085 <sup>R</sup> 296,908	<sup>RE</sup> 11,245 <sup>RE</sup> 10.042	<sup>R</sup> 345,330 <sup>R</sup> 306,951		
February	<sup>R</sup> 104,921	<sup>R</sup> 104,263	<sup>R</sup> 82,204	<sup>R</sup> 664	<sup>R</sup> 292,051	RE 10,398	<sup>R</sup> 302,449		
March April	<sup>R</sup> 93,700	R 100,505	<sup>R</sup> 80,349	R 629	<sup>R</sup> 275,184	RE 10,380	<sup>R</sup> 285,564		
May	<sup>R</sup> 97,688	<sup>R</sup> 107,627	<sup>R</sup> 82,088	R 619	R 288,022	RE 10,681	R 298,703		
	<sup>R</sup> 125,983	<sup>R</sup> 118,169	<sup>R</sup> 83,922	R 643	<sup>R</sup> 328,716	RE 11,181	R 339,898		
June July	<sup>R</sup> 154,729	<sup>R</sup> 128,066	<sup>R</sup> 87,246	<sup>R</sup> 650	R 370,690	RE 12,136	<sup>R</sup> 382,826		
August	<sup>R</sup> 153,739	<sup>R</sup> 129,369	R 88.994	R 625	<sup>R</sup> 372,726	RE 12,130	R 385.019		
September	R 122,720	<sup>R</sup> 117,946	<sup>R</sup> 84.947	R 634	<sup>R</sup> 326,246	RE 11.199	<sup>R</sup> 337,445		
October	<sup>R</sup> 94,585	<sup>R</sup> 108,654	<sup>R</sup> 84.291	<sup>R</sup> 616	<sup>R</sup> 288,146	RE 10.504	<sup>R</sup> 298,650		
November	<sup>R</sup> 93,220	<sup>R</sup> 100,552	<sup>R</sup> 80.870	R 590	R 275,232	RE 10,888	<sup>R</sup> 286,120		
December	<sup>R</sup> 116,341	<sup>R</sup> 104,870	<sup>R</sup> 79,972	R 656	R 301.838	RE 11,808	<sup>R</sup> 313,646		
Total		R 1,328,057	<sup>R</sup> 991,316	R 7,672	<sup>R</sup> 3,749,846	R 132,754	R 3,882,600		
012 January	<sup>R</sup> 126,208	<sup>R</sup> _105,118	<sup>R</sup> 78,821	<sup>R</sup> 666	<sup>R</sup> 310,813	E 11,702	<sup>R</sup> 322,515		
February	<sup>R</sup> 107,951	<sup>R</sup> 99,682	<sup>R</sup> 77,898	_ 646	R 286,177	E 11,014	<sup>R</sup> 297,191		
March	<sup>R</sup> 99,153	<sup>R</sup> 101,930	<sup>R</sup> 80,911	R 619	<sup>R</sup> 282,613	E 10,750	<sup>R</sup> 293,363		
April	<sup>R</sup> 88,300	<sup>R</sup> 100,839	<sup>R</sup> 80,604	<sup>R</sup> 604	<sup>R</sup> 270,348	E 10 366	<sup>R</sup> 280,713		
May	<sup>R</sup> 100,478	<sup>R</sup> 110,062	<sup>R</sup> 84,273	<sup>R</sup> 606	<sup>R</sup> 295,420	E 11,258	<sup>R</sup> 306,678		
June	<sup>R</sup> 122,992	<sup>R</sup> 117,651	<sup>R</sup> 83,202	<sup>R</sup> 610	<sup>R</sup> 324,455	L <sup>L</sup> 11,252	<sup>R</sup> 335,708		
July	<sup>R</sup> 154,649	<sup>R</sup> 128,157	<sup>R</sup> 86,762	642	<sup>R</sup> 370,210	E 12,216	<sup>R</sup> 382,426		
August	147,991	127,713	87,629	650	363,984	E 11,869	375,853		
8-Month Total	947,721	891,153	660,102	5,043	2,504,020	<sup>E</sup> 90,427	2,594,446		
11 8-Month Total	995,935 1 001 257	896,036 893,046	661,236 645,635	5,177 5,219	2,558,383 2,545,157	<sup>E</sup> 88,355 <sup>E</sup> 87,838	2,646,738 2,632,995		
010 8-Month Total	1,001,257	093,040	645,635	<b>5,∠19</b>	2,343,13/	-01,038	∠,⊽ა∠,995		

<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.
 R=Revised. E=Estimate. NA=Not available. - - =Not applicable.
 Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
 Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.
 Sources: See end of section.

Sources: See end of section

# Electricity

Note. Classification of Power Plants Into Energy-Use Sectors. The U.S. Energy Information Administration (EIA) classifies power plants (both electricity-only and combined-heat-and-power plants) into energy-use sectors based on the North American Industry Classification System (NAICS), which replaced the Standard Industrial Classification (SIC) system in 1997. Plants with a NAICS code of 22 are assigned to the Electric Power Sector. Those with NAICS codes beginning with 11 (agriculture, forestry, fishing, and hunting); 21 (mining, including oil and gas extraction); 23 (construction); 31-33 (manufacturing); 2212 (natural gas distribution); and 22131 (water supply and irrigation systems) are assigned to the Industrial Sector. Those with all other codes are assigned to the Commercial Sector. Form EIA-860, "Annual Electric Generator Report," asks respondents to indicate the primary purpose of the facility by assigning a NAICS code from the list at

http://www.eia.gov/survey/form/eia\_860/instructions.doc

# **Table 7.1 Sources**

**Net Generation, Electric Power Sector** Table 7.2b.

**Net Generation, Commercial and Industrial Sectors** Table 7.2c.

# Imports and Exports, Electricity Trade With Canada and Mexico, 1973–1989

1973–September 1977: Unpublished Federal Power Commission data.

October 1977–1980: Unpublished Economic Regulatory Administration (ERA) data.

1981: U.S. Department of Energy (DOE), Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).

1982 and 1983: DOE, ERA, *Electricity Exchanges Across International Borders*.

1984–1986: DOE, ERA, *Electricity Transactions Across International Borders*.

1987 and 1988: DOE, ERA, Form ERA-781R, "Annual Report of International Electrical Export/Import Data."

1989: DOE, Fossil Energy, Form FE-781R, "Annual Report of International Electrical Export/Import Data."

# Imports and Exports, Electricity Trade with Canada, 1990 Forward

National Energy Board of Canada, data for total sales (firm and interruptible; which exclude non-revenue, inadvertent, and service) from Canada to the United States, and data for total purchases (which exclude non-revenue, inadvertent,

# Imports and Exports, Electricity Trade with Mexico, 1990 Forward

DOE, Office of Electricity Delivery and Energy Reliability, Form OE-781R, "Monthly Electricity Imports and Exports Report," and predecessor form. For 2001 forward, data from the California Independent System Operator are used in combination with the Form OE-781 values to estimate electricity trade with Mexico.

# T&D Losses and Unaccounted for

Calculated as the sum of total net generation and imports minus end use and exports.

# End Use

Table 7.6.

# **Table 7.2b Sources**

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report."

2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report."

# **Table 7.2c Sources**

**Industrial Sector, Hydroelectric Power, 1973–1988** 1973–September 1977: Federal Power Commission (FPC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FPC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.

October 1977–1978: Federal Energy Regulatory Commission (FERC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FERC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.

1979: FERC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and U.S. Energy Information Administration (EIA) estimates for all other plants. 1980–1988: Estimated by EIA as the average generation over the 6-year period of 1974–1979.

# All Data, 1989 Forward

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

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

2001–2003: EIA, Form EIA-906, "Power Plant Report."

2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report."

# **Table 7.3b Sources**

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001-2003: EIA, Form EIA-906, "Power Plant Report."

2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report."

# **Table 7.4b Sources**

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report."

2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report."

# Table 7.6 Sources

# **Retail Sales, Residential and Industrial**

1973–September 1977: Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."

October 1977–February 1980: Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."

March 1980–1982: FERC, Form FPC-5, "Electric Utility Company Monthly Statement."

1983: U.S. Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." 1984–1997: EIA, Form EIA-861, "Annual Electric Utility Report."

1998 forward: EIA, *Electric Power Monthly*, October 2012, Table 5.1.

# **Retail Sales, Commercial**

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

http://www.eia.gov/state/seds/sep\_use/notes/use\_elec.pdf.

2003 forward: EIA, *Electric Power Monthly*, October 2012, Table 5.1.

# **Retail Sales, Transportation**

1973–2002: Estimated by EIA as the transportation portion of "Other (Old)." See estimation methodology at http://www.eia.gov/states/sep\_use/notes/use\_elec.pdf.

2003 forward: EIA, *Electric Power Monthly*, October 2012, Table 5.1.

# **Direct Use, Annual**

1989–1996: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1997–2010: EIA, *Electric Power Annual 2010*, November 2011, Table 7.2.

2011: EIA, Form EIA-923, "Power Plant Operations Report."

## **Direct Use, Monthly**

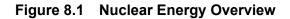
Annual shares are calculated as annual direct use divided by annual commercial and industrial net generation (on Table 7.1). Then monthly direct use estimates are calculated as the annual share multiplied by the monthly commercial and industrial net generation values. For 2012, the 2011 annual share is used.

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

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

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# 8. Nuclear Energy



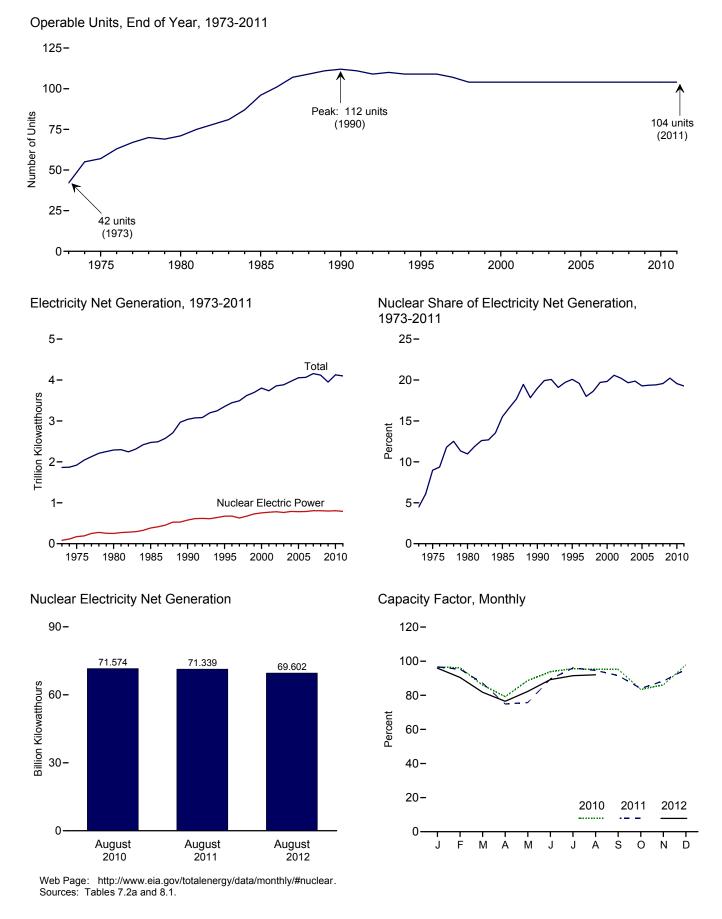


Table 8.1	Nuclear	Energy	Overview
	Itaoioai		•••••

	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		rcent
	10				50.5
973 Total	42	22.683	83,479	4.5	53.5
975 Total	57	37.267	172,505	9.0	55.9
980 Total	71	51.810	251,116	11.0	56.3
985 Total	96	79.397	383,691	15.5	58.0
990 Total	112	99.624	576,862	19.0	66.0
995 Total	109	99.515	673,402	20.1	77.4
996 Total	109	100.784	674,729	19.6	76.2
997 Total	107	99.716	628,644	18.0	71.1
998 Total	104	97.070	673,702	18.6	78.2
	104				85.3
999 Total		97.411	728,254	19.7	
000 Total	104	97.860	753,893	19.8	88.1
001 Total	104	98.159	768,826	20.6	89.4
002 Total	104	98.657	780,064	20.2	90.3
003 Total	104	99.209	763,733	19.7	87.9
004 Total	104	99.628	788,528	19.9	90.1
005 Total	104	99.988	781,986	19.3	89.3
006 Total	104	100.334		19.4	89.6
			787,219		
007 Total	104	100.266	806,425	19.4	91.8
008 Total	104	100.755	806,208	19.6	91.1
009 Total	104	101.004	798,855	20.2	90.3
10 January	104	<sup>e E</sup> 101.002	72,569	20.1	<sup>E</sup> 96.6
February	104	E 101.000	65,245	20.4	<sup>E</sup> 96.1
March	104	E 100.998	64,635	20.7	E 86.0
April	104	E 100.996	57,611	20.0	E 79.2
	104	E 101.063	66,658	20.0	E 88.7
May					
June	104	E 101.094	68,301	18.2	E 93.8
July	104	<sup>E</sup> 101.092	71,913	17.6	<sup>E</sup> 95.6
August	104	<sup>E</sup> 101.090	71,574	17.5	<sup>E</sup> 95.2
September	104	<sup>E</sup> 101.088	69,371	20.0	<sup>E</sup> 95.3
October	104	<sup>E</sup> 101.104	62,751	20.4	<sup>E</sup> 83.4
November	104	E 101.129	62,655	20.5	E 86.0
December	104	101.167	73,683	20.3	97.9
Total	104	101.167	806,968	19.6	91.1
11 January	104	<sup>E</sup> 101.167	72,743	20.0	<sup>E</sup> 96.6
February	104	<sup>E</sup> 101.167	64,789	20.7	<sup>E</sup> 95.3
March	104	<sup>E</sup> 101.167	65,662	20.6	E 87.2
April	104	<sup>E</sup> 101.167	54,547	18.0	E 74.9
	104	<sup>E</sup> 101.167	<sup>R</sup> 57,013	17.6	<sup>RE</sup> 75.7
June	104	E 101.281	65,270	17.7	E 89.5
July	104	E 101.281	72,345	<sup>R</sup> 17.3	E 96.0
	104	<sup>E</sup> 101.351	72,345	<sup>R</sup> 17.5	<sup>E</sup> 94.6
August					E 94.6
September	104	E 101.351	66,849	19.8	
October	104	E 101.351	<sup>R</sup> 63,337	20.5	<sup>E</sup> 84.0
November	104	<sup>E</sup> 101.351	64,474	21.2	<sup>E</sup> 88.4
December	104	<sup>R</sup> 101.419	71,837	21.4	95.2
Total	104	<sup>R</sup> 101.419	<sup>R</sup> 790,204	<sup>R</sup> 19.3	89.1
<b>12</b> January	104	<sup>RE</sup> 101.419	<sup>R</sup> 72,381	21.2	<sup>E</sup> 95.9
February	104	<sup>RE</sup> 101.419	<sup>R</sup> 63.847	20.6	E 90.5
		RE 101.419		<sup>R</sup> 20.0	<sup>E</sup> 81.8
March	104		<sup>R</sup> 61,729		- 81.8
April	104	<sup>RE</sup> 101.419	55,871	18.9	<sup>E</sup> 76.5
May	104	<sup>RE</sup> 101.442	62,081	18.4	E 82.3
June	104	<sup>RE</sup> 101.442	65,140	18.0	<sup>E</sup> 89.2
July	104	RE 101.564	69.129	16.6	E 91.5
August	104	E 101.673	69,602	17.6	E 92.0
8-Month Total	104 104	E 101.673	519,781	18.8	E 87.5
11 8-Month Total	104	E 101.351	523,707	18.6	E 88.7
10 8-Month Total	104	<sup>E</sup> 101.090	538,508	19.2	<sup>E</sup> 91.4

<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 2011*, September 2012, Table 9.1, http://www.eia.gov/totalenergy/data/annual/#nuclear. <sup>b</sup> At end of period.

 <sup>c</sup> For the definition of "Net Summer Capacity," see Note 2, "Nuclear Capacity," <sup>d</sup> For an explanation of the method of calculating the capacity factor, see Note

2, "Nuclear Capacity," at end of section. <sup>e</sup> Beginning in 2010, monthly capacity values are estimated in two steps: 1)

uprates reported on Form EIA-860M are added to specific months; and 2) the

difference between the resulting year-end capacity (from data reported on Form EIA-860M) and final capacity (reported on Form EIA-860) is distributed evenly across the 12 months.

R=Revised. E=Estimate. Notes: • For a discussion of nuclear reactor unit coverage, see Note 1, Operable Nuclear Reactors," of nuclear reactor unit coverage, see Nucle 1, "Operable Nuclear Reactors," at end of section.
Nuclear electricity net generation totals may not equal sum of components due to independent rounding.
Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#nuclear for all available data beginning in 1973. Sources: See end of section.

# **Nuclear Energy**

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

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

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

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

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

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

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

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

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

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

# Table 8.1 Sources

# Total Operable Units and Net Summer Capacity of Operable Units

1973–1982: Compiled from various sources, primarily U.S. Department of Energy, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones."

1983 forward: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report," Form EIA-860M, "Monthly Update to the Annual Electric Generator Report," and monthly updates as appropriate. For a list of currently operable units, see http://www.eia.gov/nuclear/reactors/stats table1.html.

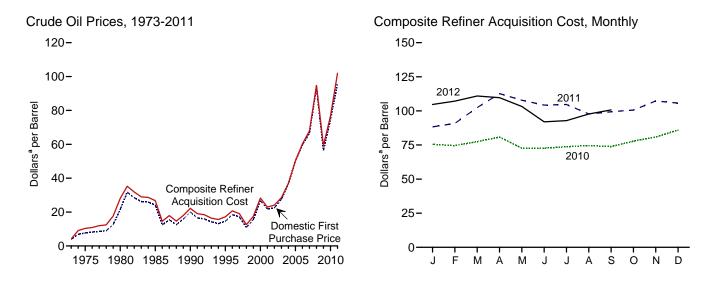
# Nuclear Electricity Net Generation and Nuclear Share of Electricity Net Generation

See Table 7.2a.

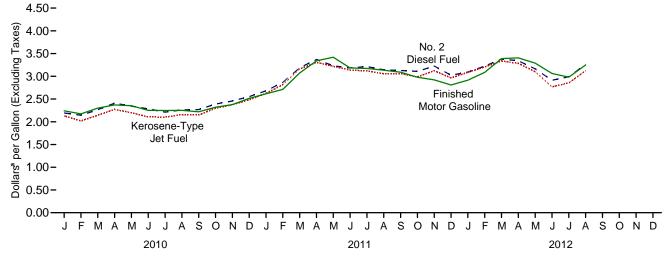
### **Capacity Factor**

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

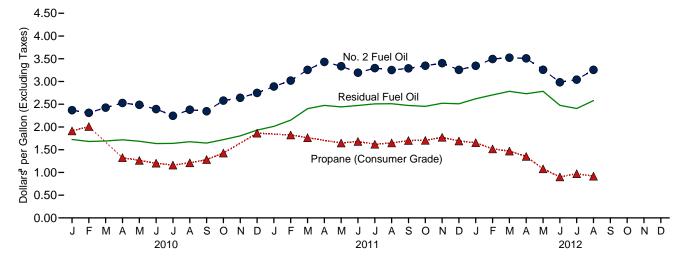
# 9. Energy Prices



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



<sup>a</sup>Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary. Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices. Sources: Tables 9.1, 9.5, and 9.7.

# Table 9.1 Crude Oil Price Summary

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

				R	efiner Acquisition Co	st <sup>D</sup>
	Domestic First	F.O.B. Cost	Landed Cost			
	Purchase Price <sup>c</sup>	of Imports <sup>d</sup>	of Imports <sup>e</sup>	Domestic	Imported	Composite
973 Average	3.89	<sup>f</sup> 5.21	<sup>f</sup> 6.41	<sup>E</sup> 4.17	<sup>E</sup> 4.08	<sup>E</sup> 4.15
975 Average	7.67	11.18	12.70	8.39	13.93	10.38
980 Average	21.59	32.37	33.67	24.23	33.89	28.07
985 Average	24.09	25.84	26.67	26.66	26.99	26.75
990 Average	20.03	20.37	21.13	22.59	21.76	20.75
995 Average	14.62	15.69	16.78	17.33	17.14	17.23
996 Average	18.46	19.32	20.31	20.77	20.64	20.71
997 Average	17.23	16.94	18.11	19.61	18.53	19.04
998 Average	10.87	10.76	11.84	13.18	12.04	12.52
999 Average	15.56	16.47	17.23	17.90	17.26	17.51
000 Average	26.72	26.27	27.53	29.11	27.70	28.26
001 Average	21.84	20.46	21.82	24.33	22.00	22.95
002 Average	22.51	22.63	23.91	24.65	23.71	24.10
003 Average	27.56	25.86	27.69	29.82	27.71	28.53
004 Average	36.77	33.75	36.07	38.97	35.90	36.98
005 Average	50.28	47.60	49.29	52.94	48.86	50.24
	59.69	57.03	59.11	62.62	59.02	60.24
006 Average						
2007 Average	66.52	66.36	67.97	69.65	67.04	67.94
008 Average	94.04	90.32	93.33	98.47	92.77	94.74
009 Average	56.35	57.78	60.23	59.49	59.17	59.29
010 January	72.89	72.96	74.78	76.04	75.07	75.48
February	72.74	71.50	75.01	75.91	73.73	74.58
March	75.77	75.41	77.65	78.52	76.77	77.43
April	78.80	78.27	79.34	82.12	80.03	80.83
May	70.90	69.21	72.00	75.23	71.15	72.66
June	70.77	70.17	72.62	73.93	71.91	72.66
July	71.37	71.01	73.43	74.54	73.25	73.73
August	72.07	71.27	73.63	76.21	73.50	74.58
September	71.23	71.72	74.25	74.87	73.20	73.85
October	76.02	75.52	77.26	78.88	77.02	77.77
November	79.20	79.56	81.56	82.05	80.07	80.85
December	83.98	83.95	86.64	86.48	85.59	85.95
Average	74.71	74.20	76.49	77.96	75.88	76.69
011 January	85.66	86.80	89.61	88.73	87.99	88.28
February	86.69	92.07	94.25	89.50	91.72	90.85
March	99.19	104.19	104.80	102.34	102.48	102.43
April	108.80	111.52	112.54	111.96	113.08	112.65
May	102.46	105.92	108.28	107.55	107.99	107.82
June	97.30	104.35	105.19	102.53	105.36	104.23
July	97.82	105.60	106.19	102.67	105.94	104.68
August	89.00	97.72	99.27	95.89	99.01	97.70
	90.22	100.84	101.03	96.89	101.05	99.39
September	90.22 92.28	101.92	101.03	98.34	102.00	99.39 100.57
October						
November	100.18	105.79	105.98	106.69	107.67	107.28
December	98.71	103.09	105.62	104.51	106.52	105.69
Average	95.73	101.68	102.99	100.74	102.70	101.93
012 January	98.99	103.96	105.27	103.97	105.25	104.70
February	102.05	108.56	109.24	105.93	108.08	107.18
March	105.42	110.72	110.68	110.80	111.00	110.92
April	103.62	107.17	107.58	111.26	108.53	109.70
May	95.57	100.79	101.56	103.17	103.26	103.23
	83.59	<sup>R</sup> 87.89	<sup>R</sup> 91.90	91.66	92.18	91.96
June	03.39 B 96.40					
July	<sup>R</sup> 86.10	<sup>R</sup> 92.60	<sup>R</sup> 93.09	92.64 B 00.57	92.98 P 07.00	92.83
August	<sup>R</sup> 92.53	<sup>R</sup> 99.77	<sup>R</sup> 96.81	<sup>R</sup> 98.57	<sup>R</sup> 97.06	<sup>R</sup> 97.71
September	NA	NA	NA	E 100.40	E 100.90	E 100.70

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
 <sup>b</sup> See Note 1, "Crude Oil Refinery Acquisition Costs," at end of section.
 <sup>c</sup> See Note 2, "Crude Oil Domestic First Purchase Prices," at end of section.

 <sup>d</sup> See Note 2, "Crude Oil F.O.B. Costs," at end of section.
 <sup>e</sup> See Note 4, "Crude Oil Landed Costs," at end of section.
 <sup>f</sup> Based on October, November, and December data only.
 R=Revised. NA=Not available. E=Estimate. d

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 coverages are the averages of the monthly prices, weighted by volume.
 Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions.
 Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

Sources: See end of section.

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

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

			S	elected Count	ries			Persian		
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Gulf Nations <sup>b</sup>	Total OPEC <sup>c</sup>	Total Non-OPEC
1973 Average <sup>d</sup>	w	w	-	7.81	3.25	-	5.39	3.68	5.43	4.80
1975 Average	10.97	-	11.44	11.82	10.87	-	11.04	10.88	11.34	10.62
980 Average	33.45	w	31.06	35.93	28.17	34.36	24.81	28.92	32.21	32.85
985 Average	26.30		25.33	28.04	22.04	27.64	23.64	23.31	25.67	25.96
990 Average	20.23	20.75	19.26	22.46	20.36	23.43	19.55	18.54	20.40	20.32
995 Average	16.58	16.73	15.64	17.40	W	16.94	13.86	W	15.36	16.02
996 Average	20.71	21.33	19.14	21.27	19.28	19.43	17.73	19.22	18.94	19.65
997 Average	18.81	18.85	16.72	19.43	15.16	18.59	15.33	15.24	16.26	17.51
998 Average	12.11 17.46	12.56 17.20	10.49 15.89	12.97 17.32	8.87 17.65	12.52 19.14	9.31	9.09 17.15	10.20 15.90	11.21 16.84
999 Average	27.90	29.04	25.39	28.70	24.62	27.21	14.33 24.45	24.72	25.56	26.77
2000 Average	23.25	29.04	18.89	24.85	18.98	23.30	18.01	18.89	19.73	21.04
2002 Average	24.09	24.64	21.60	25.38	23.92	24.50	20.13	23.38	22.18	22.93
2003 Average	28.22	28.89	24.83	29.40	25.03	28.76	23.81	25.17	25.36	26.21
2004 Average	37.26	37.73	31.55	38.71	34.08	37.30	31.78	33.08	33.95	33.58
2005 Average	52.48	51.89	43.00	55.95	47.96	54.48	46.39	47.21	49.60	45.79
2006 Average	62.23	59.77	52.91	65.69	56.09	66.03	55.80	56.02	59.18	55.35
2007 Average	67.80	67.93	61.35	76.64	W	69.96	64.10	69.93	69.58	62.69
2008 Average	95.66	91.17	84.61	102.06	93.03	96.33	88.06	91.44	93.15	87.15
2009 Average	57.07	57.90	56.47	64.61	57.87	65.63	55.58	59.53	58.53	57.16
010 January	74.62	70.08	72.96	75.91	W	_	70.86	W	73.42	72.49
February	W	68.70	69.16	76.07	W	-	68.83	71.89	71.77	71.14
March	78.11	73.90	72.76	81.27	W	-	70.88	76.10	75.83	74.91
April	84.40	74.85	75.57	85.94	W	W	72.59	80.01	78.88	77.73
May	71.86	64.32	68.30	74.28	W	-	66.37	73.60	70.45	68.24
June	72.90	67.19	67.64	75.61	W	-	66.19	72.49	71.39	69.20
July	74.77	70.00	68.53	79.63	W	_	67.25	71.76	72.16	69.87
August	77.11	69.88	69.53	75.70	W	W	68.27	72.79	72.38	70.35
September	W	69.71	69.90 73.93	80.93	74.06 W	_	67.59	73.34	73.24	70.24
October November	85.99	76.06 78.92	73.93	84.59 86.61	Ŵ	_	72.10 75.03	78.28 80.99	77.55 80.95	73.80 78.49
December	W	81.62	81.75	93.68	Ŵ		77.78	W	85.72	82.40
Average	78.18	72.56	72.46	80.83	76.44	w	70.30	75.65	<b>75.23</b>	73.24
2011 January	95.97	83.36	84.36	99.86	W	_	81.25	W	89.74	83.92
February	W	87.23	88.77	109.07	Ŵ	-	85.11	97.25	96.01	88.67
March	113.63	101.29	102.55	117.98	W	-	97.56	107.36	106.19	102.44
April	122.52	114.17	109.90	126.05	W	-	106.56	114.82	115.15	107.71
May	113.33	106.15	105.13	117.66	W	-	101.60	110.29	108.50	103.81
June	115.13	102.78	103.43	119.13	W	-	100.59	106.39	108.22	100.42
July	114.80	100.30	104.84	119.68	W	-	100.62	109.06	110.09	100.90
August	W	95.01	98.21	115.61	W	-	97.17	106.98	104.19	93.57
September	112.49	97.45	100.28	115.43	109.99	-	95.72	108.41	105.82	97.08
October	109.74	102.37	101.48	114.46	W	-	96.93	105.62	105.20	98.65
November	112.49	106.97	107.94	115.35 W	W	_	105.44	106.51	108.16	104.17
December Average	111.26 <b>111.82</b>	103.10 <b>100.19</b>	105.96 <b>100.92</b>	115.35	107.08	_	105.75 <b>97.23</b>	104.48 <b>106.49</b>	106.42 <b>105.34</b>	100.80 <b>98.51</b>
2012 January	111.10	106.69	107.79	114.12	w	_	105.08	107.51	107.51	101.40
February	121.45	114.47	110.14	124.31	Ŵ	_	110.37	111.12	113.85	103.42
March	W	118.46	114.81	124.31	ŵ	_	112.76	118.06	117.06	103.42
April	118.84	114.06	110.54	W	Ŵ	_	109.33	115.02	113.85	101.42
May	110.79	101.27	103.12	110.79	Ŵ	_	101.45	105.16	105.28	96.74
June	95.65	91.81	90.60	98.96	<sup>R</sup> 91.90	_	87.64	90.55	90.63	<sup>R</sup> 85.28
July	W	96.83	<sup>R</sup> 95.03	<sup>R</sup> 103.86	W	-	<sup>R</sup> 93.81	95.47	<sup>R</sup> 96.30	R 88.59
August	Ŵ	106.19	101.20	114.47	Ŵ	_	99.68	105.21	104.45	95.31

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
 <sup>b</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and

balladin, main, main, main, kawain, datan, odduk rabia, onitieu raba Elimitet shall the Neutral Zone (between Kuwait and Saudi Arabia).
<sup>c</sup> See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary.
On this table, "Total OPEC" for all years includes Algeria, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; for 1973–2008, also includes Indonesia; for 1973–1992 and again beginning in 2008, one induced Equation (other services of OEC)" in Glossary. also includes Ecuador (although Ecuador rejoined OPEC in November 2007, on this table Ecuador is included in "Total Non-OPEC" for 2007); for 1974–1995, also includes Gabon (although Gabon was a member of OPEC for only 1975–1994); and beginning in 2007, also includes Angola. Data for all countries not included in "Total OPEC" are included in "Total Non-OPEC."

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

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See "F.O.B." in Glossary, and Note 3, "Crude Oil F.O.B. Costs," at end of section. • Values for the current two months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia.

coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

Sources: See end of section.

## Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

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

				Selected	Countries							
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>b</sup>	Total OPEC <sup>c</sup>	Total Non-OPEC <sup>c</sup>	
1973 Average <sup>d</sup>	w	5.33	w	_	9.08	5.37	_	5.99	5.91	6.85	5.64	
1975 Average	11.81	12.84	-	12.61	12.70	12.50	-	12.36	12.64	12.70	12.70	
1980 Average	34.76	30.11	w	31.77	37.15	29.80	35.68	25.92	30.59	33.56	33.99	
1985 Average	27.39	25.71	-	25.63	28.96	24.72	28.36	24.43	25.50	26.86	26.53	
1990 Average	21.51	20.48	22.34	19.64	23.33	21.82	22.65	20.31	20.55	21.23	20.98	
1995 Average	17.66	16.65	17.45	16.19	18.25	16.84	17.91	14.81	16.78	16.61	16.95	
1996 Average	21.86	19.94	22.02	19.64	21.95	20.49	20.88	18.59	20.45	20.14	20.47	
1997 Average	20.24	17.63	19.71	17.30	20.64	17.52	20.64	16.35	17.44	17.73	18.45	
1998 Average	13.37	11.62	13.26	11.04	14.14	11.16	13.55	10.16	11.18	11.46	12.22	
1999 Average	18.37	17.54	18.09	16.12	17.63	17.48	18.26	15.58	17.37	16.94	17.51	
2000 Average	29.57	26.69	29.68	26.03	30.04	26.58	29.26	26.05	26.77	27.29	27.80	
2001 Average	25.13	20.72	25.88	19.37	26.55	20.98	25.32	19.81	20.73	21.52	22.17	
2002 Average	25.43	22.98	25.28	22.09	26.45	24.77	26.35	21.93	24.13	23.83	23.97	
2003 Average	30.14	26.76	30.55	25.48	31.07	27.50	30.62	25.70	27.54	27.70	27.68	
2004 Average	39.62	34.51	39.03	32.25	40.95	37.11	39.28	33.79	36.53	36.84	35.29	
2005 Average	54.31	44.73	53.42	43.47	57.55	50.31	55.28	47.87	49.68	51.36	47.31	
2006 Average	64.85	53.90	62.13	53.76	68.26	59.19	67.44	57.37	58.92	61.21	57.14	
2007 Average	71.27	60.38	70.91	62.31	78.01	70.78	72.47	66.13	69.83	71.14	63.96	
2008 Average 2009 Average	98.18 61.32	90.00 57.60	93.43 58.50	85.97 57.35	104.83 68.01	94.75 62.14	96.95 63.87	90.76 57.78	93.59 62.15	95.49 61.90	90.59 58.58	
2010 January	77.32	72.59	74.26	73.23	78.58	76.63	77.97	72.63	76.34	75.91	73.59	
February	79.06	73.37	73.11	69.48	79.25	77.29	77.84	70.91	77.27	76.24	73.33	
March	80.93	76.82	76.08	73.07	83.68	77.57	79.07	72.92	77.55	78.40	76.84	
April	82.26	78.36	76.33	75.03	86.80	79.53	80.25	75.21	79.15	80.07	78.61	
May	74.80	69.16	66.52	68.71	76.90	77.52	W	68.53	76.20	73.95	70.20	
June	76.54	69.14	69.64	68.02	78.14	76.01	77.67	68.30	75.14	74.55	70.92	
July	77.20	70.25	71.61	69.31	81.07	75.46	76.60	69.59	74.75	74.81	72.03	
August	78.40	70.10	71.49	69.95	79.15	76.06	79.52	70.14	75.81	75.42	71.81	
September	80.49	68.66	70.85	70.47	81.58	77.15	W	68.88	76.64	76.39	71.89	
October	85.33	69.23	76.72	74.73	86.01	81.81	W	74.29	81.24	80.52	74.15	
November	86.98	75.40	80.24	77.55	89.15	84.62	87.10	77.53	84.09	84.38	78.96	
December	91.77	80.76	82.76	82.37	95.44	90.45	92.50	80.79	89.99	89.25	83.97	
Average	80.63	72.80	74.25	72.86	83.15	79.25	80.12	72.43	78.58	78.27	74.67	
2011 January	99.58	81.43	85.88	85.00	101.24	96.59	W	84.70	96.57	94.03	85.02	
February	110.07	80.65	90.14	89.08	108.94	103.20	W	89.88	101.81	99.96	89.03	
March	114.40	89.32	105.74	103.03	117.17	110.12	118.42	101.22	109.56	109.23	101.20	
April	124.01	99.26	112.47	110.55	126.47	116.13	124.67	107.95	115.18	116.64	108.91	
May	116.76	98.29	109.70	105.62	119.95	112.19	W	104.04	111.48	111.90	105.06	
June	116.73	92.36	104.31	103.71	120.81	110.00	W	102.32	108.97	109.87	100.83	
July	117.98	91.76	101.35	105.38	121.80	111.06	W	103.04	110.19	111.58	100.38	
August	113.36	84.05	95.08	98.78	115.83	109.38	W	99.54	108.26	106.24	93.81	
September	112.63	85.19	99.17	99.90	117.19	109.91	W	99.10	108.82	107.67	95.59	
October	114.82	88.21	104.14	101.97	116.09	108.90	W	99.89	108.07	107.98	97.91	
November	115.14	93.80	108.52	108.46	117.05	108.61	W	106.90	108.35	110.09	102.90	
December Average	115.65 <b>114.05</b>	95.74 <b>90.03</b>	106.64 <b>102.53</b>	106.31 <b>101.22</b>	117.10 <b>116.40</b>	108.27 <b>108.81</b>	W 118.35	108.02 <b>100.14</b>	107.53 <b>108.06</b>	109.63 <b>107.85</b>	102.52 <b>98.75</b>	
2012 January	115.13	93.43	110.54	108.38	115.41	110.49	w	106.23	110.61	110.32	101.31	
February	121.40	92.14	115.19	111.24	126.42	114.73	ŵ	111.72	114.22	115.76	103.02	
March	128.35	88.73	119.93	115.20	130.46	117.55	_	114.29	117.14	118.26	103.98	
April	120.60	85.55	113.78	111.55	124.06	115.65	w	110.58	115.98	116.20	99.94	
May	114.94	82.78	105.04	103.79	113.89	108.39	ŵ	103.02	108.52	108.26	95.20	
June	103.10	<sup>R</sup> 78.11	93.85	90.89	103.24	<sup>R</sup> 99.38	_	89.41	<sup>R</sup> 99.24	<sup>R</sup> 97.29	<sup>R</sup> 87.15	
July	<sup>R</sup> 106.95	<sup>R</sup> 75.48	<sup>R</sup> 97.70	<sup>R</sup> 95.24	<sup>R</sup> 106.95	<sup>R</sup> 97.27	RW	<sup>R</sup> 94.91	<sup>R</sup> 97.55	<sup>R</sup> 98.86	<sup>R</sup> 87.97	
August	115.29	79.58	105.91	102.07	114.65	103.42	-	101.16	103.16	104.78	91.26	
, lugust	110.20	15.50	100.01	102.01	114.00	100.42		101.10	100.10	104.10	51.20	

 <sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
 <sup>b</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).
 <sup>c</sup> See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. On this table, "Total OPEC" for all years includes Algeria, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; for 1973–2008, also includes Indonesia; for 1973–1992 and again beginning in 2008, also includes Ecuador (although Ecuador rejoined OPEC in November 2007, on this table Ecuador is included in "Total Non-OPEC" for 2007); for 1974–1994, also includes Cabon (although Boundon was a member of OPEC. In only 1975–1994) this table Ecuador is included in "Total Non-OPEC" for 2007); for 1974–1995, also includes Gabon (although Gabon was a member of OPEC for only 1975–1994); and beginning in 2007, also includes Angola. Data for all countries not included in "Total OPEC" are included in "Total Non-OPEC." <sup>d</sup> Based on October, November, and December data only. R=Revised. – =No data reported. W=Value withheld to avoid disclosure of individual company data. Notes: • See "Landed Costs" in Glossary, and Note 4, "Crude Oil Landed

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

available data beginning in 1973.
 Sources: • October 1973-September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • October 1977-December 1977: U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • 1978-2009: EIA, Petroleum Marketing Annual 2009, Table 22.
 2010 forward: EIA, Petroleum Marketing Monthly, November 2012, Table 22.

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

(Dollars<sup>a</sup> per Gallon, Including Taxes)

	Leaded Regular	Unleaded Regular	Unleaded Premium <sup>b</sup>	All Types <sup>c</sup>
172 Average	0.388	NA	NA	NA
973 Average	0.567	NA	NA	NA
975 Average		1.245		
980 Average	1.191		NA	1.221
85 Average	1.115	1.202	1.340	1.196
90 Average	1.149	1.164	1.349	1.217
95 Average	NA	1.147	1.336	1.205
96 Average	NA	1.231	1.413	1.288
97 Average	NA	1.234	1.416	1.291
98 Average	NA	1.059	1.250	1.115
99 Average	NA	1.165	1.357	1.221
000 Average	NA	1.510	1.693	1.563
01 Average	NA	1.461	1.657	1.531
02 Average	NA	1.358	1.556	1.441
03 Average	NA	1.591	1.777	1.638
	NA	1.880	2.068	1.923
04 Average				
05 Average	NA	2.295	2.491	2.338
06 Average	NA	2.589	2.805	2.635
007 Average	NA	2.801	3.033	2.849
008 Average	NA	3.266	3.519	3.317
009 Average	NA	2.350	2.607	2.401
10 January	NA	2.731	2.987	2.779
February	NA	2.659	2.922	2.709
March	NA	2.780	3.035	2.829
April	NA	2.858	3.113	2.906
May	NA	2.869	3.124	2.915
June	NA	2.736	3.000	2.783
July	NA	2.736	2.997	2.783
August	NA	2.745	3.015	2.795
	NA	2.743	2.968	2.754
September				
October	NA	2.795	3.055	2.843
November	NA	2.852	3.109	2.899
December	NA	2.985	3.234	3.031
Average	NA	2.788	3.047	2.836
11 January	NA	3.091	3.345	3.139
February	NA	3.167	3.424	3.215
March	NA	3.546	3.807	3.594
April	NA	3.816	4.074	3.863
May	NA	3.933	4.192	3.982
June	NA	3.702	3.972	3.753
July	NA	3.654	3.915	3.703
August	NA	3.630	3.893	3.680
September	NA	3.612	3.887	3.664
October	NA	3.468	3.745	3.521
November	NA	3.423	3.700	3.475
December	NA	3.278	3.553	3.329
Average	NA	3.527	3.792	3.577
12 January	NA	3.399	3.663	3.447
February	NA	3.572	3.840	3.622
March	NA	3.868	4.138	3.918
April	NA	3.927	4.194	3.976
May	NA	3.792	4.062	3.839
June	NA	3.552	3.825	3.602
July	NA	3.451	3.726	3.502
August	NA	3.707	3.991	3.759
September	NA	3.856	4.140	3.908
October	NA	3.786	4.079	3.839

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

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

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

NA=Not available.

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

more heavily. • Geographic coverage for 1973-1977 is 56 urban areas. Geographic coverage for 1978 forward is 85 urban areas. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices 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—Plat's Oil Price Handbook and Oilmanac, 1974, 51st Edition. 1974 forward—calculated by the U.S. Energy Information Administration as the simple averages of monthly data.

# Table 9.5 Refiner Prices of Residual Fuel Oil

(Dollars<sup>a</sup> per Gallon, Excluding Taxes)

	Sulfur Co	l Fuel Oil ntent Less al to 1 Percent	Sulfur	Il Fuel Oil Content an 1 Percent	Ανε	erage
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
978 Average	0.293	0.314	0.245	0.275	0.263	0.298
980 Average	0.608	0.675	0.479	0.523	0.528	0.607
985 Average	0.610	0.644	0.560	0.582	0.577	0.610
990 Average	0.472	0.505	0.372	0.400	0.413	0.444
995 Average	0.383	0.436	0.338	0.377	0.363	0.392
996 Average	0.456	0.526	0.389	0.433	0.420	0.455
997 Average	0.415	0.488	0.366	0.403	0.387	0.423
998 Average	0.299	0.354	0.269	0.287	0.280	0.305
999 Average	0.382	0.405	0.329	0.362	0.354	0.374
000 Average	0.627	0.708	0.512	0.566	0.566	0.602
001 Average	0.523	0.642	0.428	0.492	0.476	0.531
002 Average	0.546	0.640	0.508	0.544	0.530	0.569
003 Average	0.728	0.804	0.588	0.651	0.661	0.698
004 Average	0.764	0.835	0.601	0.692	0.681	0.739
005 Average	1.115	1.168	0.842	0.974	0.971	1.048
006 Average	1.202	1.342	1.085	1.173	1.136	1.218
007 Average	1.406	1.436	1.314	1.350	1.350	1.374
008 Average	1.918	2.144	1.843	1.889	1.866	1.964
009 Average	1.337	1.413	1.344	1.306	1.342	1.341
oos Average	1.557	1.415	1.544	1.500	1.542	1.541
<b>010</b> January	1.767	1.852	1.705	1.660	1.721	1.725
February	1.725	1.862	1.650	1.574	1.666	1.681
March	1.739	1.862	1.700	1.609	1.711	1.692
April	1.827	1.887	1.725	1.655	1.748	1.718
May	1.675	1.898	1.675	1.601	1.675	1.686
June	1.629	1.874	1.604	1.555	1.612	1.636
July	1.686	1.858	1.604	1.536	1.629	1.639
August	1.705	1.895	1.625	1.571	1.642	1.676
	1.716	1.883	1.612	1.558	1.632	1.645
September October	1.793	1.003	1.688	1.637	1.712	1.645
November	1.865	2.025	1.741	1.701	1.768	1.804
	2.036	2.025	1.814	1.784	1.865	1.004
December						
Average	1.756	1.920	1.679	1.619	1.697	1.713
011 January	NA	2.302	1.896	1.870	1.918	2.013
February	2.100	2.302	2.079	2.019	2.086	2.013
March	2.344	2.654	2.307	2.245	2.321	2.403
April	2.555	2.034	2.307	2.245	2.448	2.403
May	2.463	2.741	2.374	2.325	2.392	2.475
June	2.463	2.905	2.374	2.325	2.392	2.440
July	2.547	2.905	2.430	2.362	2.402	2.508
August	2.394	2.896	2.430	2.342	2.392	2.508
September	2.394	2.882	2.392	2.342	2.392	2.512
October	2.512	2.891	2.375	2.276	2.309	2.473
November	2.566	2.853	2.375	2.368	2.408	2.454
December	2.566	2.891	2.335	2.348	2.459	2.521
Average	2.473 2.389	2.091	2.335 2.316	2.340 2.257	2.371	2.509 2.401
Average	2.000	2.750	2.510	2.231	2.000	2.401
012 January	2.591	2.965	2.480	2.452	2.512	2.620
February	2.739	3.070	2.632	2.556	2.654	2.705
March	2.921	3.159	2.717	2.601	2.772	2.784
April	2.805	3.201	2.624	2.596	2.670	2.731
	2.589	3.170	2.501	2.652	2.527	2.784
May	2.589	3.083	2.501	2.652	2.527	2.784
June						
July	2.271	2.926	2.224	2.221	2.234	2.406
August	2.582	3.041	2.458	2.442	2.483	2.579

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary. NA=Not available.

 6, "Historical Petroleum Prices," at end of section.
 Geographic coverage is the 50 States and the District of Columbia.
 Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for al available data beginning in 1978.

Sources: • 1978-2009: EIA, Petroleum Marketing Annual 2009, Table 16.
 2010 forward: EIA, Petroleum Marketing Monthly, November 2012, Table 16.

## Table 9.6 Refiner Prices of Petroleum Products for Resale

(Dollars<sup>a</sup> per Gallon, Excluding Taxes)

	Finished Motor Gasoline <sup>b</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consume Grade)
079 Average	0.434	0.537	0.386	0.404	0.369	0.365	0.237
978 Average	0.434	1.128	0.868	0.864	0.803	0.801	0.237
980 Average							0.398
985 Average	0.835	1.130	0.794	0.874	0.776	0.772	
990 Average	0.786	1.063	0.773	0.839	0.697	0.694	0.386
95 Average	0.626	0.975	0.539	0.580	0.511	0.538	0.344
96 Average	0.713	1.055	0.646	0.714	0.639	0.659	0.461
97 Average	0.700	1.065	0.613	0.653	0.590	0.606	0.416
998 Average	0.526	0.912	0.450	0.465	0.422	0.444	0.288
999 Average	0.645	1.007	0.533	0.550	0.493	0.546	0.342
000 Average	0.963	1.330	0.880	0.969	0.886	0.898	0.595
001 Average	0.886	1.256	0.763	0.821	0.756	0.784	0.540
002 Average	0.828	1.146	0.716	0.752	0.694	0.724	0.431
003 Average	1.002	1.288	0.871	0.955	0.881	0.883	0.607
004 Average	1.288	1.627	1.208	1.271	1.125	1.187	0.751
005 Average	1.670	2.076	1.723	1.757	1.623	1.737	0.933
06 Average	1.969	2.490	1.961	2.007	1.834	2.012	1.031
007 Average	2.182	2.758	2.171	2.249	2.072	2.203	1.194
008 Average	2.586	3.342	3.020	2.851	2.745	2.994	1.437
009 Average	1.767	2.480	1.719	1.844	1.657	1.713	0.921
010 January	2.097	2.759	2.121	2.282	2.075	2.078	1.332
February	2.033	2.662	1.999	2.216	1.986	2.025	1.324
March	2.197	2.906	2.129	2.219	2.100	2.163	1.179
April	2.265	2.999	2.247	2.281	2.214	2.312	1.144
	2.152	2.945	2.186	2.110	2.129	2.177	1.098
June	2.113	2.835	2.094	2.103	2.037	2.120	1.049
July	2.113	2.891	2.100	2.046	2.001	2.098	1.012
August	2.095	2.842	2.138	2.125	2.041	2.161	1.084
September	2.088	2.805	2.131	2.163	2.093	2.190	1.151
October	2.198	2.890	2.263	2.384	2.221	2.325	1.253
November	2.243	2.868	2.342	NA	2.308	2.392	1.233
December	2.383	3.024	2.459	2.744	2.435	2.486	1.322
	2.303 2.165	3.024 2.874	2.459 <b>2.185</b>	2.744	2.435 <b>2.147</b>	2.400 <b>2.214</b>	1.322
Average	2.105	2.074	2.100	2.299	2.147	2.214	1.212
11 January	2.472	3.161	2.585	2.804	2.585	2.621	1.380
February	2.584	3.248	2.783	2.974	2.737	2.820	1.401
March	2.934	3.607	3.095	3.196	2.996	3.134	1.403
April	3.218	4.035	3.259	3.296	3.167	3.296	1.433
May	3.174	4.096	3.188	W	3.039	3.116	1.515
June	2.970	3.847	3.101	3.054	2.956	3.079	1.503
July	3.058	4.011	3.090	3.158	3.024	3.135	1.513
August	2.949	3.899	3.040	3.089	2.927	3.032	1.522
	2.896	3.878	3.025	3.073	2.927	3.032	1.557
September	2.805	3.616	2.962	3.096	2.927	3.035	1.511
October							
November	2.701	3.494	3.089	3.258	3.050	3.157	1.498
December	2.614 <b>2.867</b>	3.424 <b>3.739</b>	2.951 <b>3.014</b>	3.006 <b>3.065</b>	2.928 <b>2.907</b>	2.927 <b>3.034</b>	1.444 <b>1.467</b>
Average	2.007	3.139	3.014	3.003	2.907	3.034	1.407
12 January	2.747	3.576	3.059	3.197	3.027	3.018	1.341
February	2.936	3.788	3.186	3.293	3.166	3.163	1.282
March	3.203	4.052	3.296	3.306	3.211	3.308	1.293
April	3.189	4.157	3.255	3.243	3.153	3.252	1.163
May	3.016	4.004	3.076	3.008	2.976	3.039	0.950
June	2.757	3.883	2.747	2.697	2.635	2.741	0.350
			2.747	2.936		<sup>R</sup> 2.907	<sup>R</sup> 0.809
July	2.806	3.877			<sup>R</sup> 2.774		
August	3.087	4.124	3.129	3.195	2.988	3.213	0.876

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
 <sup>b</sup> See Note 5, "Motor Gasoline Prices," at end of section.
 R=Revised. NA=Not available. W=Value withheld to avoid disclosure of

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

for the current month are preliminary. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia. Web Page:

See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

Sources: • 1978-2009: EIA, Petroleum Marketing Annual 2009, Table 4. • 2010 forward: EIA, Petroleum Marketing Monthly, November 2012, Table 4.

## Table 9.7 Refiner Prices of Petroleum Products to End Users

(Dollars<sup>a</sup> per Gallon, Excluding Taxes)

	Finished Motor Gasoline <sup>b</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
978 Average	0.484	0.516	0.387	0.421	0.400	0.377	0.335
980 Average	1.035	1.084	0.868	0.902	0.788	0.818	0.482
985 Average	0.912	1.201	0.796	1.030	0.849	0.789	0.717
990 Average	0.883	1.120	0.766	0.923	0.734	0.725	0.745
995 Average	0.765	1.005	0.540	0.589	0.562	0.560	0.492
996 Average	0.847	1.116	0.651	0.740	0.673	0.681	0.605
997 Average	0.839	1.128	0.613	0.745	0.636	0.642	0.552
998 Average	0.673	0.975	0.452	0.501	0.482	0.494	0.405
999 Average	0.781	1.059	0.543	0.605	0.558	0.584	0.458
000 Average	1.106	1.306	0.899	1.123	0.927	0.935	0.603
001 Average	1.032	1.323	0.775	1.045	0.829	0.842	0.506
002 Average	0.947	1.288	0.721	0.990	0.737	0.762	0.419
	1.156	1.493	0.872	1.224	0.933	0.944	0.577
003 Average							
004 Average	1.435	1.819	1.207	1.160	1.173	1.243	0.839
005 Average	1.829	2.231	1.735	1.957	1.705	1.786	1.089
006 Average	2.128	2.682	1.998	2.244	1.982	2.096	1.358
007 Average	2.345	2.849	2.165	2.263	2.241	2.267	1.489
008 Average	2.775	3.273	3.052	3.283	2.986	3.150	1.892
009 Average	1.888	2.442	1.704	2.675	1.962	1.834	1.220
10 January	2.240	2.914	2.129	2.986	2.369	2.192	1.913
February	2.173	2.855	2.018	2.974	2.310	2.144	2.009
March	2.301	3.103	2.144	2.978	2.425	2.265	NA
April	2.370	3.201	2.272	3.040	2.527	2.410	1.326
May	2.353	3.129	2.199	2.938	2.487	2.343	1.264
June	2.251	2.981	2.105	2.965	2.393	2.284	1.204
	2.247	3.028	2.103	2.903 NA	2.395	2.212	1.162
July							
August	2.250	2.967	2.158	2.772	2.379	2.260	1.211
September	2.219	2.893	2.148	2.898	2.346	2.269	1.283
October	2.319	3.000	2.298	3.058	2.580	2.389	1.425
November	2.378	3.095	2.374	3.130	2.641	2.457	NA
December	2.514	3.218	2.484	3.276	2.749	2.554	1.863
Average	2.301	3.028	2.201	3.063	2.462	2.314	1.481
011 January	2.615	3.323	2.623	3.358	2.889	2.681	NA
February	2.712	3.374	2.818	3.506	3.020	2.867	1.823
March	3.072	3.767	3.161	3.697	3.255	3.189	1.763
April	3.340	4,132	3.306	3,796	3.430	3.370	NA
May	3.419	4.091	3.220	3.894	3.337	3.231	1.648
June	3.184	3.913	3.138	3.802	3.193	3.183	1.681
July	3.172	4.027	3.118	3.812	3.294	3.214	1.620
	3.134	3.920	3.057	3.851	3.251	3.143	1.650
August	3.090	3.920	3.059	3.873	3.288	3.143	1.702
September							
October	2.980	3.697	2.987	3.823	3.346	3.108	1.706
November	2.922	3.620	3.124	3.892	3.403	3.225	1.773
December	2.808	W	2.963	3.824	3.255	3.024	1.691
Average	3.050	3.803	3.054	3.616	3.193	3.117	1.709
12 January	2.914	3.732	3.087	3.848	3.345	3.093	1.655
February	3.087	W	3.206	3.874	3.495	3.224	1.518
March	3.389	4.133	3.337	3.919	3.522	3.378	1.470
April	3.405	4.313	3.283	3.916	3.509	3.342	1.352
May	3.289	W	3.100	3.741	3.258	3.163	1.080
June	3.061	Ŵ	2.768	3.753	2.982	2.912	0.902
	2.981	Ŵ			<sup>R</sup> 3.041	2.989	0.902
July			2.856	3.612			
August	3.248	4.091	3.123	3.575	3.256	3.265	0.918

 <sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
 <sup>b</sup> See Note 5, "Motor Gasoline Prices," at end of section.
 R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data. 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.  $\hfill \bullet$  Values for

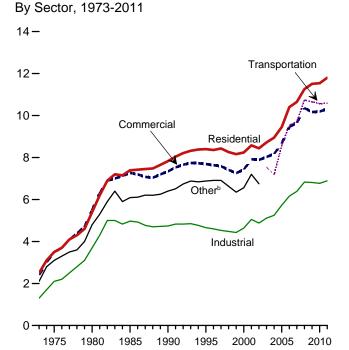
the current month are preliminary. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia. Web Page:

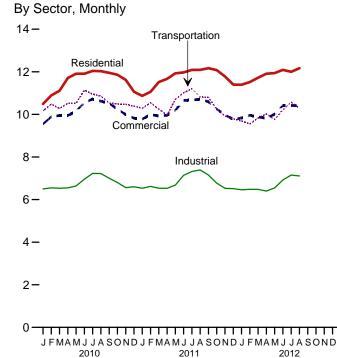
See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

Sources: • 1978-2009: EIA, Petroleum Marketing Annual 2009, Table 2. • 2010 forward: EIA, Petroleum Marketing Monthly, November 2012, Table 2.

# Figure 9.2 Average Retail Prices of Electricity

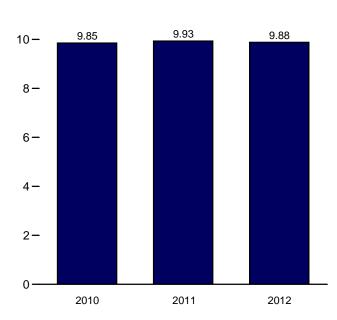
(Cents<sup>a</sup> per Kilowatthour)





### Total, January-August

12-



By Sector, August 2012

14 -

12 - 12.17 10 - 10.43 10.29 8 - 7.11 6 - 7.11 4 - 7.11 6 - 7.11 7.11 6 - 7.11

<sup>a</sup>Prices are not adjusted for inflation. See "Nominal Price" in Glossary. <sup>b</sup>Public street and highway lighting, interdepartmental sales, other sales to public authorities, agricultural and irrigation, and transportation including railroads and railways. Note: Includes taxes.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices. Source: Table 9.8.

#### Table 9.8 Average Retail Prices of Electricity

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

	Residential	Commercial <sup>b</sup>	Industrial <sup>c</sup>	Transportation <sup>d</sup>	Other <sup>e</sup>	Total
973 Average	2.50	2.40	1.30	NA	2.10	2.00
975 Average	3.50	3.50	2.10	NA	3.10	2.90
	5.40	5.50	3.70	NA	4.80	4.70
980 Average						
85 Average	7.39	7.27	4.97	NA	6.09	6.44
90 Average	7.83	7.34	4.74	NA	6.40	6.57
95 Average	8.40	7.69	4.66	NA	6.88	6.89
96 Average	8.36	7.64	4.60	NA	6.91	6.86
97 Average	8.43	7.59	4.53	NA	6.91	6.85
98 Average	8.26	7.41	4.48	NA	6.63	6.74
99 Average	8.16	7.26	4.43	NA	6.35	6.64
00 Average	8.24	7.43	4.64	NA	6.56	6.81
01 Average	8.58	7.92	5.05	NA	7.20	7.29
02 Average	8.44	7.89	4.88	NA	6.75	7.20
03 Average	8.72	8.03	5.11	7.54		7.44
	8.95	8.17	5.25	7.18		7.61
04 Average						
05 Average	9.45	8.67	5.73	8.57		8.14
06 Average	10.40	9.46	6.16	9.54		8.90
07 Average	10.65	9.65	6.39	9.70		9.13
08 Average	11.26	10.36	6.83	10.74		9.74
09 Average	11.51	10.17	6.81	10.65		9.82
10 January	10.49	9.55	6.50	10.17		9.28
February	10.89	9.89	6.55	10.48		9.47
March	11.11	9.95	6.53	10.28		9.48
April	11.71	9.95	6.55	10.52		9.53
May	11.91	10.15	6.64	10.52		9.72
June	11.91	10.56	6.96	11.14		10.18
	12.04	10.72	7.23	10.95		10.46
July						
August	12.03	10.62	7.22	10.86		10.40
September	11.95	10.52	7.00	10.53		10.17
October	11.86	10.25	6.80	10.49		9.81
November	11.62	9.99	6.56	10.47		9.55
December	11.06	9.82	6.60	10.39		9.52
Average	11.54	10.19	6.77	10.57		9.83
11 January	<sup>R</sup> 10.87	<sup>R</sup> 9.78	<sup>R</sup> 6.53	<sup>R</sup> 10.29		<sup>R</sup> 9.48
February	<sup>R</sup> 11.06	<sup>R</sup> 9.99	<sup>R</sup> 6.62	<sup>R</sup> 10.55		<sup>R</sup> 9.56
March	<sup>R</sup> 11.52	<sup>R</sup> 9.93	R 6.53	<sup>R</sup> 10.24		<sup>R</sup> 9.55
April	<sup>R</sup> 11.67	<sup>R</sup> 9.96	<sup>R</sup> 6.53	<sup>R</sup> 9.97		<sup>R</sup> 9.54
	<sup>R</sup> 11.93	<sup>R</sup> 10.19	<sup>R</sup> 6.68	<sup>R</sup> 10.70		<sup>R</sup> 9.78
May						
June	<sup>R</sup> 11.97	<sup>R</sup> 10.66	<sup>R</sup> 7.14	<sup>R</sup> 11.01		<sup>R</sup> 10.26
July	<sup>R</sup> 12.09	<sup>R</sup> 10.67	<sup>R</sup> 7.32	<sup>R</sup> 11.21		<sup>R</sup> 10.47
August	<sup>R</sup> 12.09	<sup>R</sup> 10.72	<sup>R</sup> 7.39	<sup>R</sup> 10.82		<sup>R</sup> 10.49
September	<sup>R</sup> 12.17	<sup>R</sup> 10.59	<sup>R</sup> 7.15	<sup>R</sup> 10.80		<sup>R</sup> 10.29
October	<sup>R</sup> 12.08	<sup>R</sup> 10.25	<sup>R</sup> 6.77	<sup>R</sup> 10.25		<sup>R</sup> 9.84
November	<sup>R</sup> 11.78	<sup>R</sup> 9.98	<sup>R</sup> 6.53	<sup>R</sup> 9.93		<sup>R</sup> 9.58
December	<sup>R</sup> 11.40	<sup>R</sup> 9.77	R 6.51	<sup>R</sup> 9.79		R 9.53
Average	R 11.72	R 10.21	R 6.81	R 10.46		R 9.86
<b>12</b> January	<sup>R</sup> 11.39	<sup>R</sup> 9.83	<sup>R</sup> 6.46	<sup>R</sup> 9.69		<sup>R</sup> 9.61
February	<sup>R</sup> 11.52	<sup>R</sup> 9.96	<sup>R</sup> 6.48	<sup>R</sup> 9.55		<sup>R</sup> 9.60
March	<sup>R</sup> 11.72	<sup>R</sup> 9.88	<sup>R</sup> 6.48	<sup>R</sup> 9.83		<sup>R</sup> 9.56
	<sup>R</sup> 11.91	R 9.83	<sup>R</sup> 6.40	<sup>R</sup> 10.02		R 9.49
April	<sup>R</sup> 11.94		<sup>R</sup> 6.55	<sup>R</sup> 9.76		<sup>R</sup> 9.68
May		<sup>R</sup> 10.01				
June	<sup>R</sup> 12.09	<sup>R</sup> 10.42	<sup>R</sup> 6.92	<sup>R</sup> 10.22		<sup>R</sup> 10.15
July	<sup>R</sup> 12.00	<sup>R</sup> 10.42	<sup>R</sup> 7.15	<sup>R</sup> 10.57		<sup>R</sup> 10.31
August	12.17	10.43	7.11	10.29		10.34
8-Month Average	11.86	10.12	6.70	9.99		9.88
11 8-Month Average	11.66	10.27	6.86	10.59		9.93
10 8-Month Average	11.51	10.21	6.79	10.61		9.85

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Price" in Glossary

Prices are not adjusted for initiation. See Nominal Price in Glossary.
 b Commercial sector. For 1973–2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.
 c Industrial sector. For 1973–2002, prices exclude agriculture and irrigation.
 d Transportation sector, including raincads and railways.

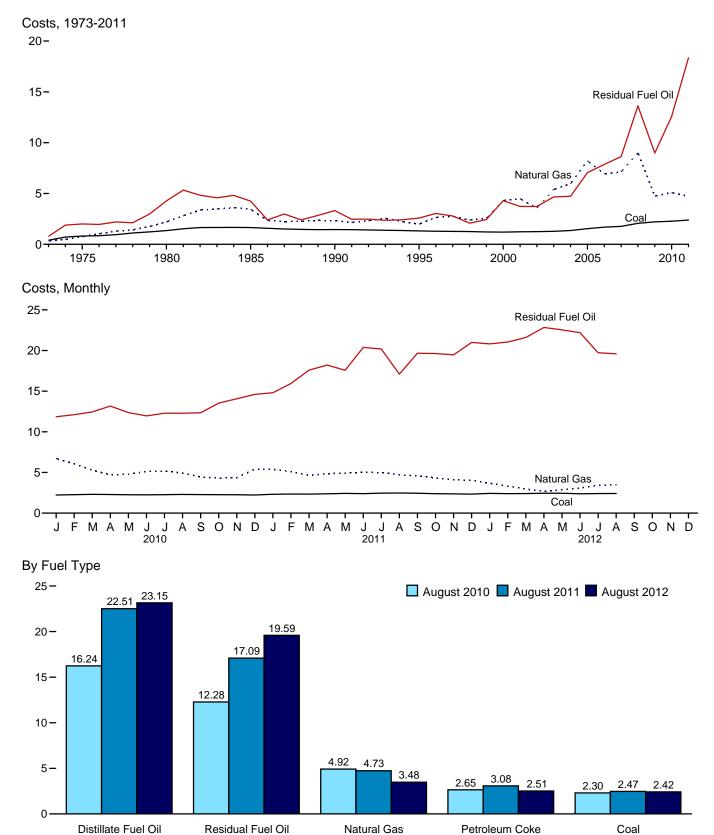
 <sup>d</sup> Transportation sector, including railroads and railways.
 <sup>e</sup> Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railwavs.

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

miscellaneous charges applied to end-use customers during normal billing operations. Prices do not include deferred charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods. • See Note 7, "Electricity Retail Prices," at end of section for plant coverage, and for information on preliminary and final values. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www available data beginning in 1973. See http://www.eia.gov/totalenergy/data/monthly/#prices for all

available data beginning in 1973.
Sources: • 1973-September 1977: Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • October 1977-February 1980: Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • March 1980-1982: FERC, Form FERC-5, "Electric Utility Company Monthly Statement."
1983: U.S. Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." • 1984-1997: EIA, Form EIA-861, "Annual Electric Utility Report." • 1998 forward: EIA, *Electric Power Monthly*, October 2012, Table 5.3.



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

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

 $^{\mathrm{a}}\mathrm{Prices}$  are not adjusted for inflation. See "Nominal Dollars" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices. Source: Table 9.9.

### Table 9.9 Cost of Fossil-Fuel Receipts at Electric Generating Plants

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

			Petrole	um			
	Coal	Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oilc	Petroleum Coke	Totald	Natural Gas <sup>e</sup>	All Fossil Fuels
	0.41	0.79	NA	NA	0.80	0.34	0.48
973 Average	.81	2.01	NA	NA	2.02		1.04
975 Average						.75	
980 Average	1.35	4.27	NA	NA	4.35	2.20	1.93
985 Average	1.65	4.24	NA	NA	4.32	3.44	2.09
990 Average	1.45	3.32	5.38	.80	3.35	2.32	1.69
995 Average	1.32	2.59	3.99	.65	2.57	1.98	1.45
996 Average	1.29	3.03	4.87	.78	3.03	2.64	1.52
997 Average	1.27	2.79	4.49	.91	2.73	2.76	1.52
998 Average	1.25	2.08	3.30	.71	2.02	2.38	1.44
999 Average	1.22	2.44	4.03	.65	2.36	2.57	1.44
000 Average	1.20	4.29	6.65	.58	4.18	4.30	1.74
001 Average	1.23	3.73	6.30	.78	3.69	4.49	1.73
002 Average <sup>g</sup>	1.25	3.73	5.34	.78	3.34	3.56	1.86
003 Average	1.28	4.66	6.82	.72	4.33	5.39	2.28
	1.36	4.73	8.02	.83	4.29	5.96	2.48
004 Average							
005 Average	1.54	7.06	11.72	1.11	6.44	8.21	3.25
006 Average	1.69	7.85	13.28	1.33	6.23	6.94	3.02
007 Average	1.77	8.64	14.85	1.51	7.17	7.11	3.23
008 Average	2.07	13.62	21.46	2.11	10.87	9.01	4.12
009 Average	2.21	8.98	13.22	1.61	7.02	4.74	3.04
010 January	2.23	11.85	15.73	1.72	9.72	6.71	3.74
February	2.27	12.11	15.69	1.80	9.51	6.07	3.45
March	2.31	12.44	16.42	2.09	8.95	5.29	3.16
April	2.29	13.17	17.10	2.18	7.95	4.71	3.01
May	2.26	12.36	16.54	2.22	9.47	4.79	3.12
June	2.25	11.96	16.12	2.15	9.26	5.12	3.34
	2.23	12.28	15.89	2.13	9.63	5.18	3.51
July							
August	2.30	12.28	16.24	2.65	9.18	4.92	3.39
September	2.28	12.34	16.53	2.67	9.35	4.45	3.10
October	2.27	13.53	17.14	2.43	9.13	4.30	2.94
November	2.26	14.06	17.43	2.22	10.86	4.35	2.94
December	2.23	14.61	18.56	2.57	11.29	5.43	3.32
Average	2.27	12.57	16.61	2.28	9.54	5.09	3.26
011 January	2.33	<sup>R</sup> 14.80	<sup>R</sup> 19.59	<sup>R</sup> 3.13	<sup>R</sup> 11.83	<sup>R</sup> 5.39	<sup>R</sup> 3.37
February	R 2.35	<sup>R</sup> 15.94	20.93	<sup>R</sup> 2.84	<sup>R</sup> 11.60	<sup>R</sup> 5.09	<sup>R</sup> 3.27
March	2.34	<sup>R</sup> 17.59	<sup>R</sup> 22.59	<sup>R</sup> 3.09	<sup>R</sup> 12.98	<sup>R</sup> 4.64	3.12
April	<sup>R</sup> 2.38	<sup>R</sup> 18.21	24.06	<sup>R</sup> 3.20	<sup>R</sup> 13.04	<sup>R</sup> 4.86	3.29
May	<sup>R</sup> 2.43	R 17.57	R 23.04	R 3.31	<sup>R</sup> 13.21	<sup>R</sup> 4.89	R 3.39
June	<sup>R</sup> 2.40	<sup>R</sup> 20.38	R 23.13	<sup>R</sup> 2.78	<sup>R</sup> 14.29	<sup>R</sup> 5.04	<sup>R</sup> 3.52
	2.40	<sup>R</sup> 20.18	<sup>R</sup> 22.95	<sup>R</sup> 3.30	<sup>R</sup> 12.13	<sup>R</sup> 4.98	<sup>R</sup> 3.62
July	2.45 <sup>R</sup> 2.47	∠U.10 B 47.00	<sup>R</sup> 22.95	<sup>R</sup> 3.08	<sup>R</sup> 10.52	<sup>R</sup> 4.73	
August		<sup>R</sup> 17.09			10.5Z		3.44
September	2.44	<sup>R</sup> 19.66	<sup>R</sup> 22.73	<sup>R</sup> 2.93	<sup>R</sup> 11.51	<sup>R</sup> 4.56	3.26
October	2.39	<sup>R</sup> 19.62	<sup>R</sup> 23.20	R 3.32	<sup>R</sup> 13.20	<sup>R</sup> 4.33	<sup>R</sup> 3.14
November	2.37	<sup>R</sup> 19.47	<sup>R</sup> 23.38	<sup>R</sup> 2.58	<sup>R</sup> 13.03	<sup>R</sup> 4.10	<sup>R</sup> 3.04
December	<sup>R</sup> 2.34	<sup>R</sup> 20.99	<sup>R</sup> 22.45	<sup>R</sup> 2.74	<sup>R</sup> 12.11	<sup>R</sup> 4.04	<sup>R</sup> 3.02
Average	<sup>R</sup> 2.39	<sup>R</sup> 18.35	<sup>R</sup> 22.46	<sup>R</sup> 3.03	<sup>R</sup> 12.48	<sup>R</sup> 4.72	<sup>R</sup> 3.30
012 January	2.43	<sup>R</sup> 20.81	<sup>R</sup> 22.87	<sup>R</sup> 2.71	<sup>R</sup> 12.76	3.67	<sup>R</sup> 2.98
February	<sup>R</sup> 2.40	R 21.04	R 23.73	<sup>R</sup> 2.57	<sup>R</sup> 12.61	3.32	2.83
March	<sup>R</sup> 2.41	R 21.60	<sup>R</sup> 24.80	R 2.43	R 12.31	2.96	R 2.73
April	2.44	R 22.83	<sup>R</sup> 24.30	<sup>R</sup> 2.64	R 13.17	<sup>R</sup> 2.68	R 2.65
	2.44	<sup>R</sup> 22.54	R 23.23	<sup>R</sup> 2.68	<sup>R</sup> 13.88	2.90	R 2.75
May		22.04 B 00.40		∠.00 R 0.70	13.00 R 13.44		
June	2.38	R 22.19	21.66	R 2.73	<sup>R</sup> 13.41	3.08	2.81
July	<sup>R</sup> 2.41	<sup>R</sup> 19.72	<sup>R</sup> 21.80	<sup>R</sup> 2.93	<sup>R</sup> 13.95	3.41	2.98
August	2.42	19.59	23.15	2.51	13.24	3.48	2.97
8-Month Average	2.42	21.14	23.09	2.65	13.16	3.20	2.85
011 8-Month Average	2.39	17.74	22.21	3.10	12.48	4.94	3.39
010 8-Month Average	2.27	12.22	16.12	2.18	9.28	5.31	3.35

 <sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
 <sup>b</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). For 1973–2001, electric utility data are for light oil (fuel oil nos. 1 and 2).

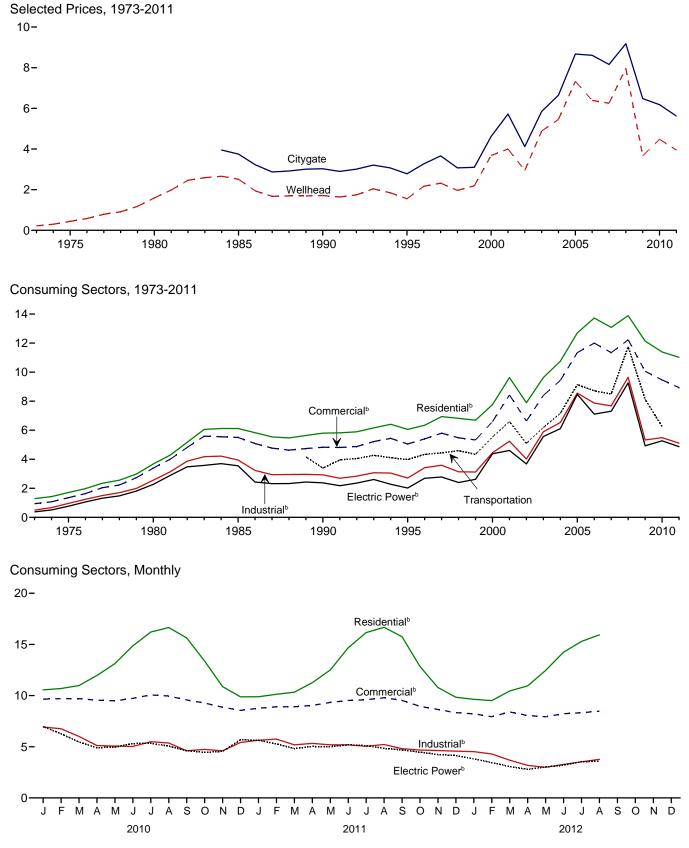
<sup>d</sup> Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil. For 1973–1982, data do not include refined motor oil, bunker oil, and liquefied petroleum gases. For 1973–1989, data do not include

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

derived from fossil fuels. <sup>f</sup> Weighted average of costs shown under "Coal," "Petroleum," and "Natural

Gas." <sup>9</sup> Through 2001, data are for electric utilities only. Beginning in 2002, data also include independent power producers, and electric generating plants in the commercial and industrial sectors. See Note 8, "Costs of Fossil-Fuel Receipts at Electric Generating Plants," at end of section for plant coverage. R=Revised. NA=Not available. Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • Geographic coverage is the 50 States and the District of Columbia. Web Pane: See http://www.eia.gov/totalenergv/data/monthly/#thrices.for. all

Web Page: See http://www available data beginning in 1973. Sources: See end of section. See http://www.eia.gov/totalenergy/data/monthly/#prices for all



<sup>a</sup>Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary. <sup>b</sup>Includes taxes.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices. Source: Table 9.10.

### Table 9.10 Natural Gas Prices

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

		Consuming Sectors <sup>b</sup>																		
											City-	Res	idential	Com	mercialc	Ind	ustriald	Transportation	Electr	ic Power <sup>e</sup>
	Wellhead Price	gate Price	Price <sup>f</sup>	Percentage of Sector <sup>g</sup>	Price <sup>f</sup>	Percentage of Sector <sup>g</sup>	Price <sup>f</sup>	Percentage of Sector <sup>g</sup>	Vehicle Fuel <sup>h</sup> Price <sup>f</sup>	Price <sup>f</sup>	Percentage of Sector <sup>g,i</sup>									
1973 Average           1975 Average           1975 Average           1980 Average           1985 Average           1995 Average           1995 Average           1995 Average           1996 Average           1997 Average           1998 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2007 Average           2007 Average	0.22	NA NA 3.75 3.03 2.78 3.66 3.07 3.10 4.62 5.72 5.85 6.67 8.67 8.16	1.29 1.71 3.68 6.12 5.80 6.63 6.34 6.84 6.69 7.66 7.66 7.63 7.89 9.63 10.75 12.70 13.73 13.08	NA NA NA 99.0 99.0 99.0 98.8 97.7 92.6 92.4 97.5 97.5 97.5 97.7 98.1 98.1 98.1 98.0	0.94 1.35 3.39 5.50 4.83 5.50 4.83 5.540 5.40 5.40 5.40 5.40 5.40 5.40 5.4	NA NA NA 86.6 76.7 77.6 77.6 77.6 67.0 66.1 63.9 66.0 77.4 78.2 78.0 82.1 80.8 80.4	0.50 .96 2.56 3.95 2.93 2.71 3.42 3.59 3.14 3.12 4.45 5.89 6.53 8.56 7.87 7.68	NA NA NA 668.8 35.2 24.5 19.4 18.1 16.1 18.8 19.8 20.8 22.7 22.1 23.6 24.0 23.4 22.2	NA NA NA NA 3.39 3.98 4.34 4.44 4.59 4.34 5.54 6.60 5.10 6.19 7.16 9.14 8.72 8.50	0.38 .77 2.27 3.55 2.38 2.02 2.69 2.78 2.69 2.78 2.69 2.78 2.62 4.38 4.61 ************************************	92.1 96.1 96.9 94.0 76.8 71.4 68.4 68.0 63.7 58.3 50.5 40.2 83.9 91.2 83.9 91.2 83.9 91.3 93.4 92.2									
2008 Average           2009 Average           2010 January	7.97 3.67 5.69	9.18 6.48 6.84	13.89 12.14 10.56	97.5 97.4 97.4	12.23 10.06 9.65	79.9 77.8 81.2	9.65 5.33 6.93	<b>20.5</b> <b>18.8</b> 19.0	11.75 8.13 NA	9.26 4.93 6.98	<b>101.1</b> <b>101.1</b> <b>101.1</b> 101.0									
February March May June July August September October November December December Average	5.30 4.70 4.10 4.24 4.27 4.44 4.38 3.83 4.05 4.12	6.64 6.50 5.88 5.81 6.02 6.31 6.22 5.72 5.70 5.48 5.74 <b>6.18</b>	10.69 10.98 11.97 13.12 14.86 16.21 16.65 15.64 13.37 10.88 9.88 <b>11.39</b>	97.8 97.6 96.2 97.1 96.9 96.8 96.4 96.7 96.8 97.4 97.4 <b>97.4</b>	9.71 9.70 9.55 9.49 9.73 10.07 9.96 9.57 9.28 8.86 8.56 <b>9.47</b>	81.8 79.7 75.7 73.0 71.9 70.6 69.8 68.5 71.8 77.7 80.2 <b>77.5</b>	6.76 6.01 5.12 5.07 5.03 5.49 5.37 4.61 4.74 4.60 5.42 <b>5.49</b>	18.6 18.4 17.7 17.9 18.0 18.3 17.8 17.5 16.8 17.6 17.8 17.6 17.8	NA NA NA NA NA NA NA NA NA NA <b>6.25</b>	6.27 5.47 4.91 4.96 5.31 5.06 4.61 4.45 4.55 5.68 <b>5.27</b>	100.5 101.0 100.9 100.6 100.6 100.5 100.7 101.3 101.3 101.3 101.3									
2011 January February March April July August September October November December Average	E 4.34 E 3.95 E 4.05 E 4.12 E 4.20 E 4.20 E 4.20 E 3.82 E 3.62 E 3.35 E 3.14	5.68 5.75 5.68 5.62 5.79 6.09 6.15 6.19 5.93 5.43 5.28 5.03 <b>5.62</b>	9.89 10.13 10.33 11.26 12.50 14.67 16.16 16.67 15.76 12.84 10.79 9.84 <b>11.02</b>	96.5 96.6 96.2 96.3 96.3 95.7 95.6 95.7 95.2 96.4 <b>96.4</b>	8.76 8.90 8.91 9.04 9.33 9.59 9.79 9.53 8.95 8.64 8.33 <b>8.93</b>	72.9 72.1 69.7 66.5 64.0 63.1 <sup>R</sup> 59.3 58.2 57.9 58.4 66.2 69.2 <b>67.2</b>	5.63 5.75 5.19 5.33 <sup>R</sup> 5.19 5.05 5.22 4.81 4.63 4.63 4.57 <b>5.11</b>	R 17.6 17.5 17.4 16.8 16.7 17.5 16.9 16.6 16.7 17.0 17.5 <b>17.1</b>	NA NA NA NA NA NA NA NA NA NA NA NA <b>NA</b>	R 5.66 R 5.29 R 4.84 5.03 R 5.04 R 5.20 R 5.13 R 4.85 R 4.71 R 4.49 R 4.26 R 4.18 R <b>4.89</b>	R 101.7 R 101.8 R 101.0 R 101.6 R 101.3 R 101.1 R 100.5 R 101.1 R 101.4 R 101.5 R 101.1 101.4 <b>101.2</b>									
2012 January February April May June July August 8-Month Average	E 2.46 E 2.25 E 1.89 E 1.94 E 2.54 E 2.59 E 2.86	4.86 4.74 4.84 4.20 4.31 4.65 4.86 5.17 <b>4.72</b>	9.64 9.51 10.45 12.46 <sup>R</sup> 14.24 <sup>R</sup> 15.30 15.94 <b>10.75</b>	96.2 96.2 95.6 95.7 95.6 95.6 95.6 95.1 <b>96.0</b>	8.22 7.94 8.40 8.05 7.93 8.23 8.32 8.48 <b>8.17</b>	70.4 69.2 66.9 63.5 60.7 60.4 59.0 57.0 <b>65.6</b>	4.52 4.30 3.69 3.18 2.99 3.27 3.53 3.77 <b>3.69</b>	16.9 16.9 16.2 16.6 16.5 16.9 17.9 <b>16.9</b>	NA NA NA NA NA NA NA NA NA	3.81 3.45 3.07 <sup>R</sup> 2.79 <sup>R</sup> 3.03 3.20 3.53 3.59 <b>3.32</b>	R 100.8 R 100.4 R 100.3 R 101.1 R 100.8 100.7 R 100.7 100.5 <b>100.7</b>									
2011 8-Month Average 2010 8-Month Average	<sup>E</sup> 4.19 4.64	5.78 6.45	11.00 11.54	96.3 97.3	9.04 9.70	68.4 77.9	5.33 5.79	17.2 18.2	NA NA	5.11 5.48	101.2 100.7									

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
 <sup>b</sup> See Note 9, "Natural Gas Prices," at end of section.
 <sup>c</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>d</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>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. Through 2001, data are for electric utilities only; beginning in 2002, data also include independent power producers. See Note 8, "Costs of Fossil-Fuel Receipts at Electric Generating Plants," at end of section for plant coverage.
 <sup>f</sup> Includes taxes.
 <sup>g</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 9.10 Sources at end of section.

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

vehicles. <sup>I</sup> Percentages exceed 100 percent when reported natural gas receipts are greater than reported natural gas consumption—this can occur when binded heat-and-power plants report fuel receipts related to non-electric generating activities

generating activities. R=Revised. NA=Not available. E=Estimate. Notes: • Prices are for natural gas, plus a small amount of supplemental gaseous fuels. • Prices are intended to include all taxes. See Note 9, "Natural Gas Prices," at end of section. • Wellhead annual and year-to-date prices are simple averages of the monthly prices; all other annual and year-to-date prices are volume-weighted averages of the monthly prices. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

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

# **Energy Prices**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

# Table 9.1 Sources

## **Domestic First Purchase Price**

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

1977: Federal Energy Administration, based on Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report." 1978–2009: U.S. Energy Information Administration (EIA), *Petroleum Marketing Annual 2009*, Table 1.

2010 forward: EIA, *Petroleum Marketing Monthly*, November 2012, 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."

1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 1.

2010 forward: EIA, *Petroleum Marketing Monthly*, November 2012, Table 1.

### **Refiner Acquisition Cost**

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

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

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

1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 1.

2010 forward: EIA, *Petroleum Marketing Monthly*, November 2012, Table 1.

# **Table 9.2 Sources**

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

1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 21.

2010 forward: EIA, *Petroleum Marketing Monthly*, November 2012, Table 21.

# **Table 9.9 Sources**

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

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

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

1980–1989: EIA, Electric Power Monthly, May issues.

1990–2000: EIA, *Electric Power Monthly*, March 2003, Table 26.

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

2008 forward: EIA, *Electric Power Monthly*, October 2012, Table 4.1; and Form EIA-923, "Power Plant Operations Report."

# Table 9.10 Sources

# All Prices Except Vehicle Fuel and Electric Power

1973–2006: U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports and unpublished revisions.

2007 forward: EIA, *Natural Gas Monthly (NGM)*, October 2012, Table 3.

# Vehicle Fuel Price

EIA, NGA, annual reports.

# **Electric Power Sector Price**

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

# Percentage of Residential Sector

1989–2009: EIA, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." 2010 forward: Estimated by EIA as the average of the three previous annual values.

# Percentage of Commercial Sector

1987–2006: 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.

2007 forward: EIA, NGM, October 2012, Table 3.

# Percentage of Industrial Sector

1982–2006: 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. 2007 forward: EIA, NGM, October 2012, 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).

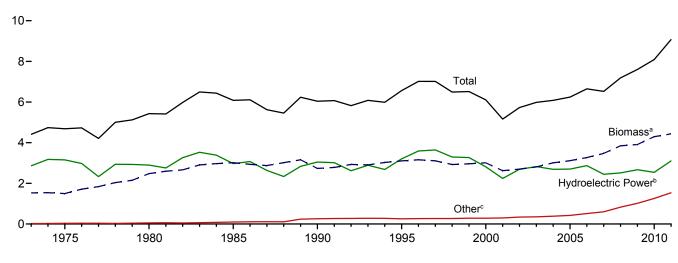
2002–2007: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants," and EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report,"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

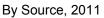
2008 forward: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form EIA-923, "Power Plant Operations Report," divided by the quantity of natural gas consumed by the electric power sector (see *Monthly Energy Review*, Table 7.4b).

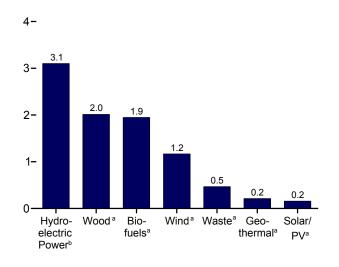
# 10. Renewable Energy

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

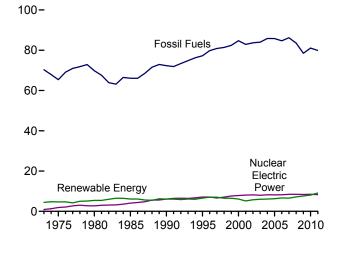
Total and Major Sources, 1973-2011



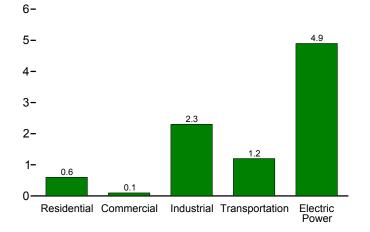




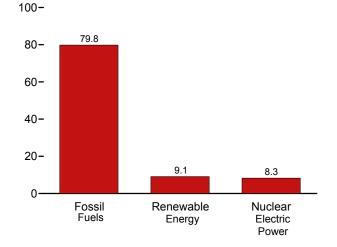
Compared With Other Resources, 1973-2011



By Sector, 2011



Compared With Other Resources, 2011



Web Page: http://www.eia.gov/totalenergy/data/monthly/#renewable.

Sources: Tables 1.3 and 10.1-10.2c.

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

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

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

#### Table 10.1 Renewable Energy Production and Consumption by Source

(Trillion Btu)

		Production	a					Consumpti	on			
	Bio	mass	Total	Under					Bior	nass		Total
	Bio- fuels <sup>b</sup>	Totalc	Renew- able Energy <sup>d</sup>	Hydro- electric Power <sup>e</sup>	Geo- thermal <sup>f</sup>	Solar/ PV <sup>g</sup>	Wind <sup>h</sup>	Wood <sup>i</sup>	Waste <sup>j</sup>	Bio- fuels <sup>k</sup>	Total	Renew- able Energy
1973 Total	NA	1,529	4,411	2,861	20	NA	NA	1,527	2	NA	1,529	4,411
1975 Total	NA	1,499	4,687	3,155	34	NA	NA	1,497	2	NA	1,499	4,687
1980 Total	NA	2,475	5,428	2,900	53	NA	NA	2,474	2	NA	2,475	5,428
1985 Total	93	3,016	6,084	2,970	97	(s) 59	(s) 29	2,687	236	93	3,016	6,084
1990 Total 1995 Total	111 198	2,735 3,099	6,041 6,558	3,046 3,205	171 152	59 69	29	2,216 2,370	408 531	111 200	2,735 3,101	6,041 6,560
1996 Total	141	3,099	7,012	3,205	163	70	33	2,370	577	143	3,101	7.014
1997 Total	186	3,108	7,018	3,640	167	70	34	2,371	551	184	3,105	7.016
1998 Total	202	2,929	6,494	3,297	168	69	31	2,184	542	201	2,927	6,493
1999 Total	211	2,965	6,517	3,268	171	68	46	2,214	540	209	2,963	6,516
2000 Total	233	3,006	6,104	2,811	164	66	57	2,262	511	236	3,008	6,106
2001 Total	254	2,624	5,164	2,242	164	64	70	2,006	364	253	2,622	5,163
2002 Total	308	2,705	5,734	2,689	171	63	105	1,995	402	303	2,701	5,729
2003 Total 2004 Total	402 487	2,805 2,998	5,982 6,070	2,825 2,690	175 178	62 63	115 142	2,002 2,121	401 389	404 499	2,807 3,010	5,983 6,082
2004 Total 2005 Total	407 564	2,998	6,070	2,690	1/0	63	142	2,121	403	499	3,010	6,082
2005 Total	720	3,216	6,599	2,703	181	68	264	2,137	397	771	3,267	6,649
2007 Total	978	3,461	6,509	2,446	186	76	341	2,070	413	991	3,474	6,523
2008 Total	1,387	3,864	7,202	2,511	192	89	546	2,040	436	1,372	3,849	7,186
2009 Total	1,584	3,928	7,616	2,669	200	98	721	1,891	453	1,568	3,912	7,600
2010 January	152	359	672	218	18	10	67	168	39	142	349	662
February	142	332	610	201	16	9	53	154	35	136	326	605
March	158	366	682	204	18	10	84	168	40	149	357	673
April	152	351	661	186	17	10	95	160	39	149	348	657
May	157 152	358 355	717 753	245 291	18 17	11 11	85 79	162 164	39 39	155 155	356 357	715 755
June July	152	367	701	239	17	11	66	170	40	155	368	701
August	160	371	662	196	18	11	65	170	40	159	370	660
September	156	360	626	168	17	11	69	166	38	153	357	622
October	163	369	646	173	17	10	77	166	39	160	366	643
November	164	369	682	191	17	10	95	165	40	157	363	676
December	168	383	726	226	18	10	88	174	41	163	377	720
Total	1,884	4,341	8,136	2,539	208	126	923	1,988	469	1,837	4,294	8,090
2011 January	169	<sup>R</sup> 385	R 747	<sup>R</sup> 248	<sup>R</sup> 19	12	<sup>R</sup> 83	R 177	<sup>R</sup> 39	153	<sup>R</sup> 369	<sup>R</sup> 731
February	151	<sup>R</sup> 346 <sup>R</sup> 380	<sup>R</sup> 710 <sup>R</sup> 816	<sup>R</sup> 234 <sup>R</sup> 303	<sup>R</sup> 17 <sup>R</sup> 18	12 13	<sup>R</sup> 102 <sup>R</sup> 102	<sup>R</sup> 158 <sup>R</sup> 170	36 <sup>R</sup> 39	145	<sup>R</sup> 339 <sup>R</sup> 369	<sup>R</sup> 703 <sup>R</sup> 805
March	171 163	359	R 813	R 303	<sup>R</sup> 17	13	121	R 160	R 36	160 154	R 349	<sup>R</sup> 805
April May	170	<sup>R</sup> 369	R 832	R 317	<sup>R</sup> 18	14	114	R 161	R 38	164	R 363	R 826
June	168	R 375	<sup>R</sup> 824	R 312	<sup>R</sup> 17	14	R 107	168	R 39	168	R 374	<sup>R</sup> 824
July	171	<sup>R</sup> 384	R 792	<sup>R</sup> 304	<sup>R</sup> 18	14	<sup>R</sup> 73	R 172	R 40	162	374	R 782
August	174	<sup>R</sup> 387	<sup>R</sup> 742	<sup>R</sup> 250	<sup>R</sup> 18	14	<sup>R</sup> 73	<sup>R</sup> 173	<sup>R</sup> 40	174	<sup>R</sup> 386	<sup>R</sup> 741
September	166	<sup>R</sup> 372	R 677	<sup>R</sup> 208	<sup>R</sup> 17	_13	67	<sup>R</sup> 167	<sup>R</sup> 38	160	<sup>R</sup> 365	<sup>R</sup> 670
October	176	R 382	R 708	R 192	<sup>R</sup> 18	R 13	R 102	R 166	40	167	R 373	<sup>R</sup> 699
November	178	<sup>R</sup> 386 <sup>R</sup> 405	<sup>R</sup> 738 <sup>R</sup> 770	<sup>R</sup> 201 <sup>R</sup> 231	<sup>R</sup> 18 <sup>R</sup> 18	<sup>R</sup> 13	121 <sup>R</sup> 104	R 167	41	167	<sup>R</sup> 375 <sup>R</sup> 395	<sup>R</sup> 727 <sup>R</sup> 760
December Total	186 <b>2,044</b>	R 405	R 9,169	R 3,103	R 213	13 <b>158</b>	<b>1,168</b>	<sup>R</sup> 177 <sup>R</sup> 2,014	42 R <b>469</b>	176 <b>1,948</b>	R 4,432	R 9,073
2012 January	177	R 390	<sup>R</sup> 785	<sup>R</sup> 227	19	15	<sup>R</sup> 134	<sup>R</sup> 174	<sup>R</sup> 39	154	367	<sup>R</sup> 763
February	164	362	<sup>R</sup> 701	R 198	18	15	108	R 162	R 36	152	R 351	R 690
March	172	R 373	R 795	<sup>R</sup> 250	19	R 17	<sup>R</sup> 135	<sup>R</sup> 162	40	163	R 365	<sup>R</sup> 786
April	164	<sup>R</sup> 356	<sup>R</sup> 770	<sup>R</sup> 254	18	17	<sup>R</sup> 124	<sup>R</sup> 155	<sup>R</sup> 38	160	353	<sup>R</sup> 767
May	173	<sup>R</sup> 378	<sup>R</sup> 816	R 277	19	19	<sup>R</sup> 122	<sup>R</sup> 166	_ 40	172	<sup>R</sup> 378	<sup>R</sup> 816
June	165	<sup>R</sup> 368	<sup>R</sup> 780	<sup>R</sup> 259	19	19	<sup>R</sup> 116	<sup>R</sup> 164	R 39	164	<sup>R</sup> 366	<sup>R</sup> 779
July	157	<sup>R</sup> 368	751	R 260	19	19	<sup>R</sup> 85	R 171	R 40	158	<sup>R</sup> 369	753
August 8-Month Total	163 <b>1,334</b>	370 <b>2,966</b>	713 <b>6,113</b>	225 1,950	19 <b>150</b>	19 <b>141</b>	81 <b>906</b>	169 <b>1,322</b>	39 <b>311</b>	168 <b>1,292</b>	375 <b>2,924</b>	719 <b>6,071</b>
2011 8-Month Total	1,338	2,983		,	142	106	774		307		2,924	6.217
2011 8-Month Total	1,338	2,983 2,860	6,276 5,457	2,271 1,781	142 139	106	774 593	1,338 1,317	307 311	1,279 1,203	2,924 2,831	6,217 5,428

<sup>a</sup> Production equals consumption for all renewable energy sources except biofuels.

<sup>b</sup> Total biomass inputs to the production of fuel ethanol and biodiesel.
 <sup>c</sup> Wood and wood-derived fuels, biomass waste, and total biomass inputs to the production of fuel ethanol and biodiesel.
 <sup>d</sup> Hydroelectric power, geothermal, solar thermal/photovoltaic, wind, and

biomass.

biomass. <sup>e</sup> Conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6). <sup>f</sup> Geothermal electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6), and geothermal heat pump and direct use energy. <sup>g</sup> Solar thermal and photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6), and solar thermal direct use energy. <sup>h</sup> Wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6). <sup>i</sup> Wood and wood-derived fuels.

<sup>j</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>k</sup> Fuel ethanol (minus denaturant) and biodiesel consumption, plus losses and co-products from the production of fuel ethanol and biodiesel.
 R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu. Notes: • Most data for the residential, commercial, industrial, and transportation sectors are estimates. See notes and sources for Tables 10.2a and 10.2b. • See Note, "Renewable Energy Production and Consumption," at end of section.
 • Totals may not equal sum of components due to independent rounding.
 • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/dat/amonthi/#renewable for all

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1973. Sources: Tables 10.2a–10.4.

#### Table 10.2a Renewable Energy Consumption: Residential and Commercial Sectors (Trillion Btu)

		Reside	ntial Sector					Co	ommercial	Sector <sup>a</sup>			
			Biomass		Undra					Bio	mass		
	Geo- thermal <sup>b</sup>	Solar/ PV <sup>c</sup>	Wood <sup>d</sup>	Total	Hydro- electric Power <sup>e</sup>	Geo- thermal <sup>b</sup>	Solar/ PV <sup>f</sup>	Wind <sup>g</sup>	Wood <sup>d</sup>	Wasteh	Fuel Ethanol <sup>i</sup>	Total	Total
1973 Total	NA	NA	354	354	NA	NA	NA	NA	7	NA	NA	7	7
1975 Total	NA	NA	425	425	NA	NA	NA	NA	8	NA	NA	8	8
1980 Total 1985 Total	NA NA	NA NA	850 1,010	850 1,010	NA NA	NA NA	NA NA	NA NA	21 24	NA NA	NA (s)	21 24	21 24
1990 Total	6	56	580	641	1	3	- NA	- NA	66	28	(s) (s)	24 94	24 98
1995 Total	7	64	520	591	1	5	_	_	72	40	(s)	113	118
1996 Total	7	65	540	612	1	5	-	-	76	53	(s)	129	135
1997 Total	8	64	430	502	1	6	-	-	73	58	(s)	131	138
1998 Total	8 9	64 63	380 390	452 461	1	7	_	_	64 67	54 54	(s)	118 121	127 129
1999 Total 2000 Total	9	61	420	461		8	-	-	71	54 47	(s) (s)	121	129
2001 Total	9	59	370	438	i	8	_	-	67	25	(s)	92	101
2002 Total	10	57	380	448	(s)	9	-	-	69	26	(s)	95	104
2003 Total	13	57	400	470	1	11	-	-	71	29	1	101	113
2004 Total	14	57	410	481	1	12	Ξ	Ξ	70 70	34 34	1	105 105	118
2005 Total 2006 Total	16 18	58 63	430 380	504 462	1	14 14	_	_	70 65	34 36	1	105	120 118
2007 Total	22	70	410	502		14	_	_	70	30	2	103	118
2008 Total	26	80	450	557	1	15	(s)	-	73	34	2	109	125
2009 Total	33	89	430	552	1	17	(s)	(s)	72	36	3	112	129
2010 January	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
February	3	9	32	44	(s)	1	(s)	(s)	5	3	(s)	8	10
March	3 3	10 9	36 35	48 47	(s) (s)	2 2	(s) (s)	(s) (s)	6 6	3 3	(s) (s)	9	11 11
April May	3	10	36	47	(S)	2	(s) (s)	(s) (s)	6	4	(s) (s)	10	12
June	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	11
July	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
August	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	10	11
September	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	11
October	3 3	10 9	36 35	48 47	(s)	2 2	(s)	(s)	6 6	3 3	(s)	9 9	11 10
November December	3	10	36	47	(s) (s)	2	(s) (s)	(s) (s)	6	3	(s) (s)	9	10
Total	37	114	420	571	1	19	(s)	(s)	72	36	3	111	130
2011 January	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	<sup>R</sup> 10	11
February	3	11	33	47	(s)	2	(s)	(s)	5	3	(s)	9 R 10	10
March	3 3	12 12	37 35	52 50	(s) (s)	2 2	(s) (s)	(s) (s)	6 6	3 3	(s) (s)	<sup>R</sup> 10 9	11 <sup>R</sup> 11
April May	3	12	35	52	(S) (S)	2	(s) (s)	(s) (s)	6	R 4	(s) (s)	<sup>R</sup> 10	<sup>R</sup> 12
June	3	12	35	50	(3) (s)	2	(s)	(s)	6	R 4	(s)	<sup>R</sup> 10	R 12
July	3	12	37	52	(s)	2	(s)	(s)	6	R 4	(s)	<sup>R</sup> 10	<sup>R</sup> 12
August	3	12	37	52	(s)	2	(s)	(s)	6	R 4	(s)	<sup>R</sup> 10	<sup>R</sup> 12
September	3	12	35	50	(s)	2	(s)	(s)	6	R 4 R 4	(s)	<sup>R</sup> 10 <sup>R</sup> 10	11 R 12
October November	3 3	12 12	37 35	52 50	(s) (s)	2 2	(s) (s)	(s) (s)	6 6	™4 R4	(s) (s)	<sup>►</sup> 10 <sup>R</sup> 10	<sup>R</sup> 12 <sup>R</sup> 12
December	3	12	35	52	(S)	2	(s) (s)	(s) (s)	6	R 4	(s) (s)	10	R 12
Total	40	140	430	610	R (S)	20	R 1	(s)	71	<sup>R</sup> 43	3	R 117	R 138
2012 January	3	14	36	54	(s)	2	(s)	(s)	6	R 4	(s)	<sup>R</sup> 10	<sup>R</sup> 12
February	3	13	34	51	(s)	2	(s)	(s)	6	R 4	(s)	<sup>R</sup> 10	R 11
March	3	14	36	54	(s)	2	(s)	(s)	6	R 4	(s)	<sup>R</sup> 10 <sup>R</sup> 10	R 12
April May	3 3	14 14	35 36	52 54	(s) (s)	2 2	(s) (s)	(s) (s)	6 6	3 R 4	(s) (s)	™ 10 <sup>R</sup> 10	11 <sup>R</sup> 12
June	3	14	36	54 52	(S) (S)	2	(S) (S)	(S) (S)	6	R 3	(S) (S)	Rg	R 11
July	3	14	36	54	(S)	2	(s)	(s)	6	R 4	(s)	R 10	<sup>R</sup> 12
August	3	14	36	54	(s)	2	(s)	(s)	6	3	(s)	10	12
8-Month Total	26	113	287	426	(s)	13	1	(s)	47	29	2	78	93
2011 8-Month Total 2010 8-Month Total	26 24	94 76	286 280	406 380	(s) 1	13 12	1 (s)	(s) (s)	47 48	28 25	2 2	77 75	92 88

<sup>a</sup> Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.
 <sup>b</sup> Geothermal heat pump and direct use energy.
 <sup>c</sup> Solar thermal direct use energy, and photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6). Includes distributed solar thermal and PV energy used in the commercial, industrial, and electric power sectors.

Includes distributed solar mermai and PV energy used in the commercial, industrial, and electric power sectors. <sup>d</sup> Wood and wood-derived fuels. <sup>e</sup> Conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6). <sup>f</sup> Photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6) at commercial plants with capacity of 1

<sup>9</sup> Wind\_electricity net generation (converted to Btu using the fossil-fuels heat rate-see Table A6)

<sup>h</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>i</sup> The fuel ethanol (minus denaturant) portion of motor fuels, such as E10, consumed by the commercial sector. R=Revised. NA=Not available. – =No data reported. (s)=Less than 0.5 trillion

Btu. Notes:

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1973. Sources: See end of section.

#### Table 10.2b Renewable Energy Consumption: Industrial and Transportation Sectors

(Trillion Btu)

					Industri	al Sector <sup>a</sup>					Trans	portation \$	Sector
							Biomass					Biomass	
	Hydro- electric Power <sup>b</sup>	Geo- thermal <sup>c</sup>	Solar/ PV <sup>d</sup>	Wind <sup>e</sup>	Wood <sup>f</sup>	Wasteg	Fuel Ethanol <sup>h</sup>	Losses and Co- products <sup>i</sup>	Total	Total	Fuel Ethanol <sup>j</sup>	Bio- diesel	Total
1973 Total         1975 Total         1985 Total         1985 Total         1990 Total         1995 Total         1995 Total         1996 Total         1997 Total         1997 Total         1998 Total         1999 Total         2000 Total         2001 Total         2001 Total         2002 Total         2003 Total         2004 Total         2005 Total         2006 Total         2007 Total         2008 Total         2009 Total	35 32 33 31 55 61 58 55 49 42 33 39 43 32 29 16 17 18	<b>NAAA2333344553444554</b>	NA NA - - - - - - - - - - - - - - - - -	NA NA - - - - - - - - - - - - - - - - -	1,165 1,063 1,645 1,442 1,652 1,683 1,731 1,620 1,636 1,443 1,396 1,363 1,376 1,472 1,472 1,472 1,405 1,340 1,208	NA NA 230 192 195 224 184 184 181 145 129 146 142 132 148 148 144 155	NA NA NA 1 2 1 1 1 1 3 3 4 6 7 00 10 12 13	NA NA 42 49 86 61 80 99 108 130 169 203 230 285 377 532 617	1,165 1,063 1,600 1,918 1,684 1,934 1,996 1,872 1,882 1,881 1,676 1,679 1,817 1,837 1,837 1,837 1,837 1,837 1,837 1,936	1,200 1,096 1,633 1,951 1,717 1,992 2,057 1,929 1,934 1,928 1,719 1,720 1,726 1,873 1,873 1,873 1,930 1,930 1,930 1,930	NA NA 50 60 112 113 118 135 141 168 228 327 442 557 786 894	NA NA NA NA NA NA NA 12 23 12 33 40 40	NA NA 50 60 112 113 113 113 113 113 113 123 142 230 290 339 475 602 826 935
2010 January February March May June July August September October November December December Total	2 2 2 2 2 2 1 1 1 1 1 1 1 <b>16</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)		109 100 110 105 106 107 111 111 110 110 108 114 <b>1,301</b>	15 13 15 14 13 14 14 15 15 15 <b>169</b>	1 1 1 2 2 2 1 2 1 2 1 2 7	60 56 62 60 62 63 61 64 65 67 <b>742</b>	185 170 188 181 183 182 188 190 185 190 190 198 <b>2,230</b>	187 172 190 183 185 183 190 191 187 192 191 199 <b>2,250</b>	81 76 83 84 89 90 91 91 86 91 88 92 <b>1,040</b>	(s) 3 2 4 3 2 3 3 4 3 3 3 4 3 3 <b>34</b>	81 79 85 87 92 93 94 94 90 94 91 94 <b>1,074</b>
2011 January February March April June July August September October Docember December Total	1 2 2 2 1 1 1 1 2 R <b>17</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	R 117 R 104 R 112 R 106 105 R 111 R 113 R 113 R 113 R 113 R 111 R 109 R 112 R 118 R 1,332	15 14 R 15 R 13 14 14 14 15 15 R <b>171</b>	1 1 1 2 1 2 1 1 1 2 7	66 59 62 64 63 64 65 65 66 69 <b>771</b>	R 200 R 178 R 193 R 183 R 185 R 189 R 192 R 193 R 188 R 191 R 195 R 204 R <b>2,291</b>	R 202 R 180 R 196 R 185 187 R 191 R 194 R 195 R 194 R 195 R 193 R 197 R 206 R <b>2,313</b>	82 80 87 82 90 92 86 95 83 89 86 91 <b>1,044</b>	3 4 6 8 10 12 13 11 13 14 <b>113</b>	86 84 93 90 98 102 96 107 96 100 99 105 <b>1,157</b>
2012 January February April May June July August 8-Month Total	2 2 2 2 1 1 1 <b>12</b>	(S) (S) (S) (S) (S) (S) (S) (S) <b>3</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) (s) <sup>R</sup> (s) (s) (s) (s) (s)	R 116 R 108 R 106 R 103 R 110 R 108 R 112 110 <b>871</b>	15 14 14 14 14 <sup>R</sup> 15 15 <b>114</b>	1 1 2 2 1 2 <b>12</b>	67 61 64 61 64 61 58 60 <b>496</b>	R 199 R 184 R 185 R 179 R 190 R 185 R 186 186 <b>1,494</b>	R 201 R 186 R 187 R 181 R 192 R 186 R 188 187 <b>1,508</b>	81 82 87 86 93 90 88 95 <b>702</b>	5 8 10 11 14 11 10 11 <b>80</b>	86 89 98 107 101 98 106 <b>782</b>
2011 8-Month Total 2010 8-Month Total	12 12	3 3	(s) (s)	(s) -	882 859	112 112	12 11	509 485	1,514 1,467	1,528 1,481	695 684	61 21	756 705

<sup>a</sup> Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.
 <sup>b</sup> Conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).
 <sup>c</sup> Geothermal heat pump and direct use energy.
 <sup>d</sup> Photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6) at industrial plants with capacity of 1 menawattor creater

tossil-tuels heat rate—see Table A6) at industrial plants with capacity of 1 megawatt or greater. <sup>e</sup> Wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6). <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> The fuel ethanol (minus denaturant) portion of motor fuels, such as E10,

consumed by the industrial sector. <sup>1</sup> Losses and co-products from the production of fuel ethanol and biodiesel. Does not include natural gas, electricity, and other non-biomass energy used in the production of fuel ethanol and biodiesel—these are included in the industrial sector consumption statistics for the appropriate energy source. <sup>1</sup> The fuel ethanol (minus denaturant) portion of motor fuels, such as E10 and ESE consumed by the transportation sector.

E85, consumed by the transportation sector. R=Revised. NA=Not available. – =No data reported. (s)=Less than 0.5 trillion Btu.

Notes: • Data are estimates, except for industrial sector hydroelectric power in 1973-1978 and 1989 forward, solar/PV, and wind. • Totals may not equal sum of components due to independent rounding. 

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1973.

Sources: See end of section.

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

(Trillion Btu)

	Hydro- electric	Geo-				Biomass		
	Powera	thermalb	Solar/PV <sup>c</sup>	Wind <sup>d</sup>	Wood <sup>e</sup>	Wastef	Total	Total
73 Total	2,827	20	NA	NA	1	2	3	2,851
975 Total	3,122	34	NA	NA	(s)	2	2	3,158
980 Total	2.867	53	NA	NA	3	2	4	2,925
985 Total	2.937	97	(s)	(s)	8	7	14	3.049
990 Total <sup>g</sup>	3,014	161	4	29	129	188	317	3,524
95 Total	3,149	138	5	33	125	296	422	3,747
96 Total	3.528	148	5	33	138	300	438	4.153
97 Total	3,581	150	5	34	137	309	446	4,216
998 Total	3,241	151	5	31	137	308	444	3,872
999 Total	3,218	152	5	46	138	315	453	3,874
00 Total	2.768	144	5	57	134	318	453	3.427
001 Total	2,209	142	6	70	126	211	337	2.763
002 Total	2,650	147	6	105	150	230	380	3,288
03 Total	2,050	147	5	115	167	230	397	3,200
	2,656	148	6	142	165	230	388	3,445
04 Total								
05 Total	2,670	147	6	178	185	221	406	3,406
06 Total	2,839	145	5	264	182	231	412	3,665
007 Total	2,430	145	6	341	186	237	423	3,345
08 Total	2,494	146	9	546	177	258	435	3,630
09 Total	2,650	146	9	721	180	261	441	3,967
10 January	217	13	(s)	67	17	21	39	335
February	199	11	(s)	53	16	20	36	300
March	202	13	1	84	16	22	39	338
April	184	12	1	95	15	21	36	329
May	243	13	1	85	14	22	36	378
June	290	12	2	79	16	23	39	421
July	238	12	2	66	17	23	40	358
August	195	13	2	65	18	23	41	315
September	168	12	1	69	16	22	38	288
October	171	12	1	77	15	22	37	298
November	190	12	1	95	16	23	39	337
December	225	13	(s)	88	17	23	41	367
Total	2,521	148	12	923	196	264	459	4,064
11 January	<sup>R</sup> 247	<sup>R</sup> 13	(s)	<sup>R</sup> 83	<sup>R</sup> 17	21	<sup>R</sup> 37	<sup>R</sup> 381
February	R 233	R 12	1	R 102	R 16	R 19	35	R 382
March	R 301	R 13	1	R 102	15	R 21	<sup>R</sup> 36	R 453
April	R 301	R 12	2	121	12	R 20	R 32	R 467
May	R 315	R 13	2	R 114	13	R 21	R 34	R 477
June	<sup>R</sup> 311	<sup>R</sup> 12	2	<sup>R</sup> 107	<sup>R</sup> 16	R 22	R 37	R 469
July	R 303	R 12	2	R 73	<sup>R</sup> 17	R 22	R 39	<sup>R</sup> 429
August	R 249	R 12	2	R 73	R 17	R 22	39	R 376
	R 207	<sup>R</sup> 12	2	67	15	R 21	39	R 323
September	<sup>R</sup> 191	<sup>R</sup> 12	∠ R1	<sup>R</sup> 102	<sup>R</sup> 14	R 22		R 343
October	<sup>R</sup> 199	R 12		<sup>R</sup> 121	<sup>R</sup> 14	R 22	36	R 369
November			1				36	
December Total	<sup>R</sup> 229 <sup>R</sup> 3,085	<sup>R</sup> 13 <sup>R</sup> 149	1 <sup>R</sup> 17	<sup>R</sup> 103 <sup>R</sup> 1,167	16 <sup>R</sup> 182	23 <sup>R</sup> <b>255</b>	39 <sup>R</sup> <b>437</b>	<sup>R</sup> 386 <sup>R</sup> <b>4,855</b>
	-,							
12 January	R 225	14	1	<sup>R</sup> 134	16	R 21	R 37	R 410
February	R 196	13	1	108	15	R 19	<sup>R</sup> 34	R 353
March	R 249	14	2	<sup>R</sup> 135	14	R 21	R 35	<sup>R</sup> 435
April	R 252	13	ຼ3	<sup>R</sup> 124	11	R 20	R 31	R 424
May	<sup>R</sup> 276	_ 14	<sup>R</sup> 5	<sup>R</sup> 122	13	R 22	<sup>R</sup> 35	<sup>R</sup> 451
June	<sup>R</sup> 257	<sup>R</sup> 13	_ 5	<sup>R</sup> 116	15	R 21	<sup>R</sup> 36	<sup>R</sup> 428
July	<sup>R</sup> 259	14	<sup>R</sup> 5	<sup>R</sup> 85	16	<sup>R</sup> 22	<sup>R</sup> 38	<sup>R</sup> 401
August	224	13	4	80	16	21	38	360
8-Month Total	1,938	108	27	905	116	168	284	3,262
11 8-Month Total	2,259	100	11	774	123	167	290	3,434
10 8-Month Total	1.768	99	9	593	131	175	305	2,774

<sup>a</sup> Conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).
 <sup>b</sup> Geothermal electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).
 <sup>c</sup> Solar thermal and photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).
 <sup>d</sup> Wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

rate—see Table A6). <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

<sup>9</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: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1973. Sources: • **Biomass:** Table 7.4b. • **All Other Data:** Tables 7.2b and A6.

	Feed- stock <sup>a</sup>	Losses and Co- products <sup>b</sup>	Dena- turant <sup>c</sup>	P	roductiond		Trade <sup>d</sup> Net Imports <sup>e</sup>	Stocks <sup>d,f</sup>	Stock Change <sup>d,g</sup>	Со	nsumption	d	Consump- tion Minus Denaturant <sup>*</sup>
	TBtu	TBtu	Mbbl	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu	TBtu
1981 Total	13	6	40	1,978	83	7	NA	NA	NA	1,978	83	7	7
1985 Total	93	42 49	294	14,693 17,802	617	52	NA	NA	NA	14,693 17,802	617 748	52	51
1990 Total 1995 Total	111 198	49 86	356 647	32,325	748 1,358	63 115	NA 387	NA 2,186	NA -207	32,919	1,383	63 117	62 114
1996 Total	141	61	464	23,178	973	83	313	2,065	-121	23,612	992	84	82
1997 Total 1998 Total	186 202	80 86	613 669	30,674 33,453	1,288 1,405	109 119	85 66	2,925 3,406	860 481	29,899 33,038	1,256 1,388	107 118	104 115
1999 Total	202	90	698	34,881	1,405	124	87	4,024	618	34,350	1,300	122	119
2000 Total	233	99	773	38,627	1,622	138	116	3,400	-624	39,367	1,653	140	137
2001 Total 2002 Total	253 307	108 130	841 1,019	42,028 50,956	1,765 2,140	150 182	315 306	4,298 6,200	898 1,902	41,445 49,360	1,741 2,073	148 176	144 171
2002 Total	400	169	1,335	66,772	2,140	238	292	5,978	-222	67,286	2,826	240	233
2004 Total	484	203	1,621	81,058	3,404	289	3,542	6,002	24	84,576	3,552	301	293
2005 Total 2006 Total	552 688	230 285	1,859 2,326	92,961 116,294	3,904 4,884	331 414	3,234 17,408	5,563 8,760	-439 3,197	96,634 130,505	4,059 5,481	344 465	335 453
2007 Total	914	376	3,105	155,263	6,521	553	10,457	10,535	1,775	163,945	6,886	584	569
2008 Total 2009 Total	1,300 1,517	531 616	4,433 5,688	221,637 260,424	9,309 10,938	790 928	12,610 4,720	14,226 16,594	3,691 2,368	230,556 262,776	9,683 11,037	821 936	800 910
2010 January	149	60	541	25,625	1,076	91	-234	18,251	1,657	23,734	997	85	82
February	138	56	496	23,802	1,000	85	-482	19,297	1,046	22,274	936	79	77
March April	154 147	62 59	537 522	26,486 25,384	1,112 1.066	94 90	-1,104 -927	20,222 20.042	925 -180	24,457 24,637	1,027 1.035	87 88	85 85
May	152	61	534	26,244	1,000	93	-368	19,851	-191	24,037	1,035	93	90
June	149	60	522	25,632	1,077	91	-341	18,565	-1,286	26,577	1,116	95	92
July August	154 157	62 63	543 538	26,584 26,964	1,117 1,132	95 96	-578 -695	17,809 17,380	-756 -429	26,762 26,698	1,124 1,121	95 95	93 93
September	152	61	533	26,221	1,101	93	-924	17,437	57	25,240	1,060	90	88
October	160	64	563	27,471	1,154	98	-830	17,278	-159	26,800	1,126	95	93
November December	161 165	65 67	585 592	27,747 28,457	1,165 1,195	99 101	-923 -1,711	18,150 17,941	872 -209	25,952 26,955	1,090 1,132	92 96	90 93
Total	1,839	742	6,506	316,617	13,298	1,127	-9,115	17,941	1,347	306,155	12,858	1,090	1,061
2011 January February	165 146	66 59	581 535	28,467 25,300	1,196 1,063	101 90	-1,359 -1,425	20,826 21,016	2,885 190	24,223 23,685	1,017 995	86 84	84 82
March	163	65	548	28,178	1,183	100	-2,003	21,593	577	25,598	1,075	91	89
April	154	62	508	26,538	1,115	94	-2,865	21,065	-528	24,201	1,016	86	84
May June	160 158	64 63	550 540	27,720 27,224	1,164 1,143	99 97	-1,743 -1,533	20,609 19,217	-456 -1,392	26,433 27,083	1,110 1,137	94 96	92 94
July	159	64	555	27,541	1,157	98	-2,731	18,788	-429	25,239	1,060	90	88
August	162	65	575	27,976	1,175	100	-665	18,123	-665	27,976	1,175	100	97
September October	154 162	62 65	525 557	26,588 28.013	1,117 1,177	95 100	-1,745 -2,388	18,465 18,038	342 -427	24,501 26,052	1,029 1.094	87 93	85 90
November	164	66	573	28,383	1,192	101	-2,911	18,308	270	25,202	1,058	90	87
December Total	172 1,919	69 <b>769</b>	602 <b>6,649</b>	29,718 <b>331,646</b>	1,248 <b>13,929</b>	106 <b>1,181</b>	-2,997 <b>-24,365</b>	18,238 18,238	-70 <b>297</b>	26,791 <b>306,984</b>	1,125 <b>12,893</b>	95 1, <b>093</b>	93 <b>1,065</b>
2012 January	167	67	583	29,063	1,221	103	-1,789	21,753	<sup>i</sup> 3,492	23,782	999	85	82
February	154	61	528	26,653	1,119	95	-1,785	22,572	819	24,049	1,010	86	83
March April	160 152	64 61	522 494	27,706 26,368	1,164 1,107	99 94	-1,626 -1,549	22,952 22,370	380 -582	25,700 25,401	1,079 1.067	91 90	89 88
May	160	64	520	27,718	1,164	99	-1,013	21,851	-519	27,224	1,143	97	95
June	154	61	503	26,611	1,118	95	-613	21,456	-395	26,393	1,109	94	92
July August	146 151	58 60	504 526	25,329 26,194	1,064 1,100	90 93	-502 654	20,373 19,369	-1,083 -1.004	25,910 27,852	1,088 1,170	92 99	90 97
8-Month Total	1,243	495	4,180	215,642	9,057	768	-8,223	19,369	1,108	206,311	8,665	734	716
2011 8-Month Total 2010 8-Month Total	1,267 1,201	508 484	4,392 4,233	218,944 206,721	9,196 8,682	779 736	-14,324 -4,728	18,123 17,380	182 786	204,438 201,207	8,586 8,451	728 716	709 697

#### Table 10.3 Fuel Ethanol Overview

<sup>a</sup> Total corn and other biomass inputs to the production of undenatured ethanol used for fuel ethanol.

<sup>b</sup> Losses and co-products from the production of fuel ethanol. Does not include natural gas, electricity, and other non-biomass energy used in the production of fuel ethanol—these are included in the industrial sector consumption statistics for the properties access. appropriate energy source.

The amount of denaturant in fuel ethanol produced.

d Includes denaturant.

e Through 2009, data are for fuel ethanol imports only; data for fuel ethanol exports are not available. Beginning in 2010, data are for fuel ethanol imports minus fuel ethanol exports.

<sup>f</sup> Stocks are at end of period.
 <sup>g</sup> A negative value indicates a decrease in stocks and a positive value indicates

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

 $^{\rm i}$  Derived from the preliminary 2011 stocks value (18,261 thousand barrels), not the final 2011 value (18,238 thousand barrels) that is shown under "Stocks."

the final 2011 value (18,238 thousand barrels) that is shown under "Stocks." NA=Not available. Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Fuel ethanol data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by the approximate heat content of fuel ethanol—see Table A3. • Through 1980, data are not available. For 1981-1992, data are estimates. For 1993-2008, only data for feedstock, losses and co-products, and denaturant are estimates. Beginning in 2009, only data for feedstock, and losses and co-products, are estimates. • See "Denaturant," "Ethanol," "Fuel Ethanol," and "Fuel Ethanol Minus Denaturant" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1981. Sources: See end of section.

							Trade							
	Feed- stock <sup>a</sup>	Losses and Co- products <sup>b</sup>	Р	roduction		Imports	Exports	Net Imports <sup>c</sup>	Stocksd	Stock Change <sup>e</sup>	Bal- ancing Item <sup>f</sup>	Co	nsumptio	n
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu
2001 Total	1	(s)	204	9	1	78	39	39	NA	NA	NA	243	10	1
2002 Total	1	(s)	250	10	1	191	56	135	NA	NA	NA	385	16	2
2003 Total	2	(s)	338	14	2	94	110	-16	NA	NA	NA	322	14	2
2004 Total	4	(s)	666	28	4	97	124	-26	NA	NA	NA	640	27	3
2005 Total	12	(s)	2,162	91	12	207	206	1	NA	NA	NA	2,163	91	12
2006 Total	32	(s)	5,963	250	32	1,069	828	242	NA	NA	NA	6,204	261	33
2007 Total	63	1	11,662	490	62	3,342	6,477	-3,135	NA	NA	NA	8,528	358	46
2008 Total	88	1	16,145	678	87	7,502	16,128	-8,626	NA	NA	NA	7,519	316	40
2009 Total	67	1	12,281	516	66	1,844	6,332	-4,489	711	711	669	7,750	326	42
2010 January	3	(s)	633	27	3	41	296	-256	1,049	338	0	40	2	(s) 3
February	4	(s)	696 804	29 34	4 4	31 60	139 433	-108 -374	1,039 1.057	-10 18	0	599 412	25 17	
March	4	(s)	804 814	34 34	4	45	433	-374 -182	1,057	-48	0	680	29	2
April	4	(s) (s)	760	34 32	4	45 80	227	-102	1,009	-40 7	0	582	29 24	4
May	4	(S) (S)	644	27	4	54	304	-249	968	-48	0	443	24 19	2
June July	4	(S) (S)	657	28	4	32	199	-249	830	-40	0	628	26	2
August	4	(S) (S)	653	20	4	52	225	-173	771	-138	0	539	20	3
September	4	(S) (S)	723	30	4	69	131	-62	682	-39	0	749	23 31	4
October	4	(s)	676	28	4	18	132	-114	650	-32	0 0	594	25	3
November	3	(s)	528	20	3	30	57	-27	676	26	0 0	475	20	3
December	3	(s)	588	25	3	34	109	-75	672	-4	0 0	517	20	3
Total	44	(3)	8,177	343	44	546	2,503	-1,958	672	-39	ŏ	6,258	263	34
2011 January	5	(s)	842	35	5	49	217	-169	1,016	g 39	0	634	27	3
February	5	(s)	961	40	5	37	88	-51	1,217	201	0	709	30	4
March	8	(s)	1,419	60	8	53	197	-144	1,381	164	0	1,111	47	6
April	9	(s)	1,692	71	9	52	222	-169	1,408	27	0	1,495	63	8
May	10	(s)	1,838	77	10	48	192	-144	1,576	168	0	1,526	64	8
June	11	(s)	1,938	81	10	48	117	-69	1,524	-53	0	1,922	81	10
July	12	(s)	2,183	92	12	62	142	-80	1,748	224	0	1,879	79	10
August	12	(s)	2,273	95	12	65	71	-7	1,834	86	0	2,181	92	12
September	12	(s)	2,284	96	12	65	193	-127	1,617	-216	0	2,373	100	13
October	14	(s)	2,508	105	13	82	132	-49	1,965	347	0	2,111	89	11
November	14	(s)	2,494	105	13	66	131	-65	1,877	-88	0	2,517	106	13
December	14	(s)	2,604	109	14	234	_39	195	2,012	135	0	2,664	112	14
Total	125	2	23,035	967	123	861	1,740	-879	2,012	<sup>g</sup> 1,035	0	21,122	887	113
2012 January	9	(s)	1,700	71	9	44	248	-204	2,527	<sup>h</sup> 625	0	872	37	5
February	10	(s)	1,837	77	10	58	119	-62	2,869	342	0	1,433	60	8
March	12	(s)	2,193	92	12	55	149	-93	3,053	184	0	1,915	80	10
April	12	(s)	2,180	92	12	49	221	-171	2,932	-121	0	2,130	89	11
May	13	(s)	2,373	100	13	94	306	-212	2,514	-418	0	2,579	108	14
June	12	(s)	2,162	91	12	102	375	-273	2,363	-151	0	2,039	86	11
July	11	(s)	2,065	87	11	160	408	-248	2,253	-110	0	1,927	81	10
August	12	(s)	2,140	90	11	43	386	-342	2,003	-250	0	2,048	86	11
8-Month Total	90	1	16,650	699	89	606	2,212	-1,606	2,003	101	0	14,943	628	80
2011 8-Month Total 2010 8-Month Total	71 31	1 (s)	13,145 5.662	552 238	70 30	414 395	1,246 2.074	-832 -1,680	1,834 771	857 60	0	11,456 3,923	481 165	61 21

#### Table 10.4 **Biodiesel Overview**

 <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> Net imports equal imports minus exports. <sup>d</sup> Stocks are at end of period. Through 2010, includes stocks at bulk terminals only. Beginning in 2011, includes stocks at bulk terminals and biodiesel production plants. <sup>e</sup> A negative value indicates a decrease in stocks and a positive value indicates

<sup>9</sup> A negative value indicates a decrease in stocks and a positive value indicates an increase.
<sup>1</sup> Beginning in 2009, because of incomplete data coverage and different data sources, "Balancing Item" is used to balance biodiesel supply and disposition.
<sup>9</sup> Derived from the final 2010 stocks value for bulk terminals and biodiesel production plants (977 thousand barrels), not the final 2010 value for bulk terminals

only (672 thousand barrels) that is shown under "Stocks." <sup>h</sup> Derived from the preliminary 2011 stocks value (1,902 thousand barrels), not the final 2011 value (2,012 thousand barrels) that is shown under "Stocks."

the final 2011 value (2,012 thousand barrels) that is shown under "Stocks." NA=Not available. (s)=Less than 0.5 trillion Btu. Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Biodiesel data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by 5.359 million Btu per barrel (the approximate heat content of biodiesel—see Table A3). • Through 2000, data are not available. Beginning in 2001, data not from U.S. Energy Information Administration (EIA) surveys are estimates. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available data beginning in 2001. Sources: See end of section.

#### **Renewable Energy**

Note. Renewable Energy Production and Consumption. In Tables 1.1, 1.3, and 10.1, renewable energy consumption consists of: conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate-see Table A6); geothermal electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fuels heat rate ---see Table A6), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossilfuels heat rate-see Table A6); wood and wood-derived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; fuel ethanol (minus denaturant) and biodiesel consumption; and losses and co-products from the production of fuel ethanol and biodiesel. In Tables 1.1, 1.2, and 10.1, renewable production is assumed to equal consumption for all renewable energy sources except biofuels (biofuels production comprises biomass inputs to the production of fuel ethanol and biodiesel).

#### **Table 10.2a Sources**

#### **Residential Sector, Geothermal**

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

#### **Residential Sector, Solar/PV**

1989–2009: U.S. Energy Information Administration (EIA) estimates based on Form EIA-63A, "Annual Solar Thermal Collector Manufacturers Survey," and Form EIA-63B, "Annual Photovoltaic Module/Cell Manufacturers Survey." Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

2010 forward: EIA estimates based on Form EIA-63B, "Annual Photovoltaic Cell/Module Shipments Report"; Form EIA-63A, "Annual Solar Thermal Collector Manufacturers Survey" (pre-2010 data); and SEIA/GTM Research, *U.S. Solar Market Insight: 2010 Year in Review*. 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 2012 is derived using the average annual growth rate for 2009–2011.)

#### **Residential Sector, Wood**

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

1980 forward: EIA, Form EIA-457, "Residential Energy Consumption Survey"; and EIA estimates based on Form EIA-457 and regional heating degree-day data. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

#### **Commercial Sector, Hydroelectric Power**

1989 forward: Commercial sector conventional hydroelectricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," and predecessor forms, are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

#### **Commercial Sector, Geothermal**

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

#### **Commercial Sector, Solar/PV**

2008 forward: Commercial sector solar thermal and photovoltaic (PV) electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

#### **Commercial Sector, Wind**

2009 forward: Commercial sector wind electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

#### **Commercial Sector, Wood**

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

1980–1983: EIA, Estimates of U.S. Wood Energy Consumption 1980-1983, Table ES1.

1984: EIA estimate based on the 1983 value.

1985–1988: Values interpolated.

1989 forward: EIA, *Monthly Energy Review (MER)*, Tables 7.4a–7.4c; and EIA estimates based on Form EIA-871, "Commercial Buildings Energy Consumption Survey." Data for wood consumption at commercial combined-heatand-power (CHP) plants are calculated as total wood consumption at electricity-only and CHP plants (MER, Table 7.4a) minus wood consumption in the electric power sector (MER, Table 7.4b) and at industrial CHP plants (MER, Table 7.4c). Annual estimates for wood consumption at other commercial plants are based on Form EIA-871 (the annual estimate for the current year is set equal to that of the previous year); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

#### **Commercial Sector, Biomass Waste**

EIA, MER, Table 7.4c.

**Commercial Sector, Fuel Ethanol (Minus Denaturant)** EIA, MER, Tables 3.5, 3.7a, and 10.3. Calculated as commercial sector motor gasoline consumption (Table 3.7a) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol (minus denaturant) consumption (Table 10.3).

#### **Table 10.2b Sources**

#### **Industrial Sector, Hydroelectric Power**

Industrial sector conventional hydroelectricity net generation data from Table 7.2c are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

#### **Industrial Sector, Geothermal**

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

#### **Industrial Sector, Solar/PV**

2010 forward: Industrial sector solar thermal and photovoltaic (PV) electricity net generation data from the U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

#### **Industrial Sector, Wind**

2011 forward: Industrial sector wind electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

#### **Industrial Sector, Wood**

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

1980–1983: EIA, Estimates of U.S. Wood Energy Consumption 1980-1983, Table ES1.

1984: EIA, Estimates of U.S. Biofuels Consumption 1990, Table 1.

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of Biofuels Consumption in the United States During 1987*, Table 2.

1988: Value interpolated.

1989 forward: EIA, *Monthly Energy Review (MER)*, Table 7.4c; and EIA estimates based on Form EIA-846, "Manufacturing Energy Consumption Survey." Data for wood consumption at industrial combined-heat-and-power (CHP) plants are from MER, Table 7.4c. Annual estimates for wood consumption at other industrial plants are based on Form EIA-846 (the annual estimate for the current year is set equal to that of the previous year); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

#### Industrial Sector, Biomass Waste

1981: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, MER, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1982 and 1983: EIA estimates for total waste consumption based on *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, MER, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, MER, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, MER, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1988: Value interpolated.

1989 forward: EIA, MER, Table 7.4c; and EIA estimates based on information presented in Government Advisory Associates, *Resource Recovery Yearbook* and *Methane Recovery Yearbook*, and information provided by the U.S. Environmental Protection Agency, Landfill Methane Outreach Program. Data for waste consumption at industrial CHP plants are from MER, Table 7.4c. Annual estimates for waste consumption at other industrial plants are based on the non-EIA sources listed above (the annual estimate for the current year is set equal to that of the previous year); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

#### Industrial Sector, Fuel Ethanol (Minus Denaturant)

EIA, MER, Tables 3.5, 3.7b, and 10.3. Calculated as industrial sector motor gasoline consumption (Table 3.7b) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol (minus denaturant) consumption (Table 10.3).

#### Industrial Sector, Losses and Co-products

Calculated as fuel ethanol losses and co-products (Table 10.3) plus biodiesel losses and co-products (Table 10.4).

# **Transportation Sector, Fuel Ethanol (Minus Denaturant)**

EIA, MER, Tables 3.5, 3.7c, and 10.3. Calculated as transportation sector motor gasoline consumption (Table 3.7c) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol (minus denaturant) consumption (Table 10.3).

#### **Transportation Sector, Biodiesel**

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

#### **Table 10.3 Sources**

#### Feedstock

Calculated as fuel ethanol production (in thousand barrels) minus denaturant, and then multiplied by the fuel ethanol feedstock factor—see Table A3.

#### **Losses and Co-products**

Calculated as fuel ethanol feedstock plus denaturant minus fuel ethanol production.

#### Denaturant

1981–2008: Data in thousand barrels for petroleum denaturant in fuel ethanol produced are estimated as 2 percent of fuel ethanol production; these data are converted to Btu by multiplying by 4.645 million Btu per barrel (the estimated quantity-weighted factor of pentanes plus and conventional motor gasoline used as denaturant).

2009–2011: U.S. Energy Information Administration (EIA), *Petroleum Supply Annual (PSA)*, annual reports, Table 1. Data in thousand barrels for net production of pentanes plus at renewable fuels and oxygenate plants are multiplied by -1; these data are converted to Btu by multiplying by 4.620 million Btu per barrel (the approximate heat content of pentanes plus). Data in thousand barrels for net production of conventional motor gasoline and motor gasoline blending components at renewable fuels and oxygenate plants are multiplied by -1; these data are converted to Btu by multiplying by 5.253 million Btu per barrel (the approximate heat content of conventional motor gasoline). Total denaturant is the sum of the values for pentanes plus, conventional motor gasoline, and motor gasoline blending components.

2012: EIA, *Petroleum Supply Monthly (PSM)*, monthly reports, Table 1. Data in thousand barrels for net production of pentanes plus at renewable fuels and oxygenate plants are multiplied by -1; these data are converted to Btu by multiplying by 4.620 million Btu per barrel (the approximate

heat content of pentanes plus). Data in thousand barrels for net production of conventional motor gasoline and motor gasoline blending components at renewable fuels and oxygenate plants are multiplied by -1; these data are converted to Btu by multiplying by 5.253 million Btu per barrel (the approximate heat content of conventional motor gasoline). Total denaturant is the sum of the values for pentanes plus, conventional motor gasoline, and motor gasoline blending components.

#### Production

1981–1992: Fuel ethanol production is assumed to equal fuel ethanol consumption—see sources for "Consumption."

1993–2004: Calculated as fuel ethanol consumption plus fuel ethanol stock change minus fuel ethanol net imports. These data differ slightly from the original production data from EIA, Form EIA-819, "Monthly Oxygenate Report," and predecessor form, which were not reconciled and updated to be consistent with the final balance.

2005–2008: EIA, Form EIA-819, "Monthly Oxygenate Report."

2009–2011: EIA, PSA, annual reports, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.

2012: EIA, PSM, monthly reports, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.

#### Trade, Stocks, and Stock Change

1992-2011: EIA, PSA, annual reports, Table 1.

2012: EIA, PSM, monthly reports, Table 1.

#### Consumption

1981–1989: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10; and interpolated values for 1982, 1983, 1985, 1986, and 1988.

1990–1992: EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table D2; and interpolated value for 1991.

1993–2004: EIA, PSA, annual reports, Tables 2 and 16. Calculated as 10 percent of oxygenated finished motor gasoline field production (Table 2), plus fuel ethanol refinery input (Table 16).

2005–2008: EIA, PSA, annual reports, Tables 1 and 15. Calculated as motor gasoline blending components adjustments (Table 1), plus finished motor gasoline adjustments (Table 1), plus fuel ethanol refinery and blender net inputs (Table 15). 2009–2011: EIA, PSA, annual reports, Table 1. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

2012: EIA, PSM, monthly reports, Table 1. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

#### **Consumption Minus Denaturant**

Calculated as fuel ethanol consumption minus the amount of denaturant in fuel ethanol consumed. Denaturant in fuel ethanol consumed is estimated by multiplying denaturant in fuel ethanol produced by the fuel ethanol consumption-to-production ratio.

#### **Table 10.4 Sources**

#### Feedstock

Calculated as biodiesel production in thousand barrels multiplied by 5.433 million Btu per barrel (the biodiesel feedstock factor—see Table A3).

#### Losses and Co-products

Calculated as biodiesel feedstock minus biodiesel production.

#### Production

2001–2005: U.S. Department of Agriculture, Commodity Credit Corporation, Bioenergy Program records. Annual data are derived from quarterly data. Monthly data are estimated by dividing the annual data by the number of days in the year and then multiplying by the number of days in the month.

2006: U.S. Department of Commerce, Bureau of the Census, "M311K—Fats and Oils: Production, Consumption, and Stocks," data for soybean oil consumed in methyl esters (biodiesel). In addition, the U.S. Energy Information Administration (EIA) estimates that 14.4 million gallons of yellow grease were consumed in methyl esters (biodiesel).

2007: U.S. Department of Commerce, Bureau of the Census, "M311K—Fats and Oils: Production, Consumption, and Stocks," data for all fats and oils consumed in methyl esters (biodiesel).

2008: EIA, *Monthly Biodiesel Production Report*, December 2009 (release date October 2010), Table 11. Monthly data for 2008 are estimated based on U.S. Department of

Commerce, Bureau of the Census, M311K data, multiplied by the EIA 2008 annual value's share of the M311K 2008 annual value.

2009 forward: EIA, *Monthly Biodiesel Production Report*, monthly reports, Table 1.

#### Trade

For imports, U.S. Department of Agriculture, data for the Harmonized Tariff following Schedule codes: 3824.90.40.20, "Fatty Esters Animal/Vegetable Mixture" (data through June 2010); 3824.90.40.30, "Biodiesel/Mixes" (data for July 2010-2011); 3826.00.00.00, "Biodiesel B30-99" (data for 2012); and 3826.00.10.00, "Biodiesel B100" (data for 2012). For exports, U.S. Department of Agriculture, data for the following Schedule B codes: 3824.90.40.00, "Fatty Substances Animal/ Vegetable/Mixture" (data through 2010); 3824.90.40.30, "Biodiesel <70%" (data for 2011); and 3826.00.00.00, "Biodiesel B=>30" (data for 2012). Although these categories include products other than biodiesel (such as biodiesel coprocessed with petroleum feedstocks; and products destined for soaps, cosmetics, and other items), biodiesel is the largest component. In the absence of other reliable data for biodiesel trade, EIA sees these data as good substitutes.

#### Stocks and Stock Change

2009–2011: EIA, *Petroleum Supply Annual (PSA)*, annual reports, Table 1, data for renewable fuels except fuel ethanol.

2012: EIA, *Petroleum Supply Monthly*, monthly reports, Table 1, data for renewable fuels except fuel ethanol.

#### **Balancing Item**

Calculated as biodiesel consumption and biodiesel stock change minus biodiesel production and biodiesel net imports.

#### Consumption

2001–2008: Calculated as biodiesel production plus biodiesel net imports.

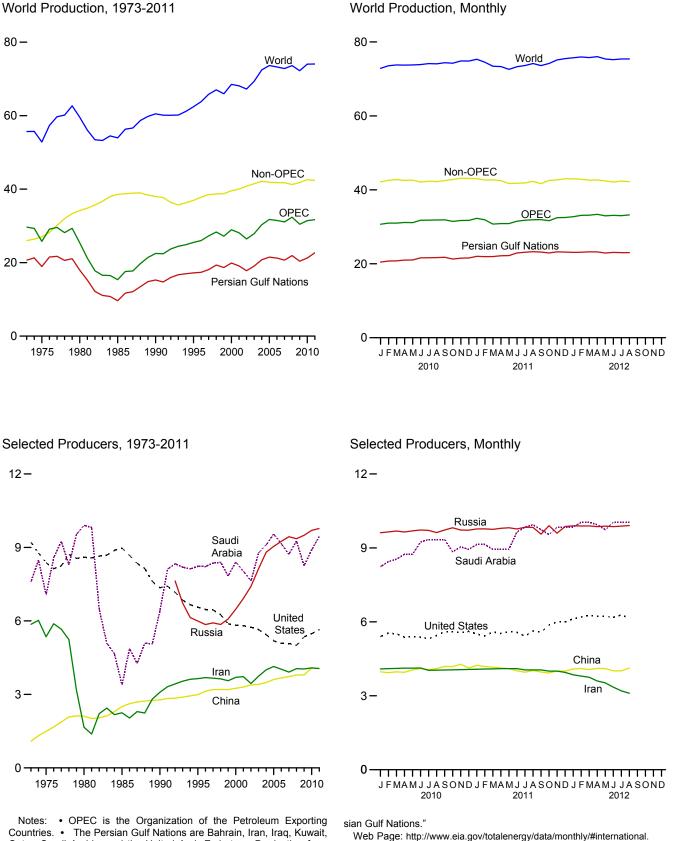
January and February 2009: EIA, PSA, Table 1, data for refinery and blender net inputs of renewable fuels except fuel ethanol.

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

# 11. International Petroleum

### Figure 11.1a World Crude Oil Production Overview

(Million Barrels per Day)

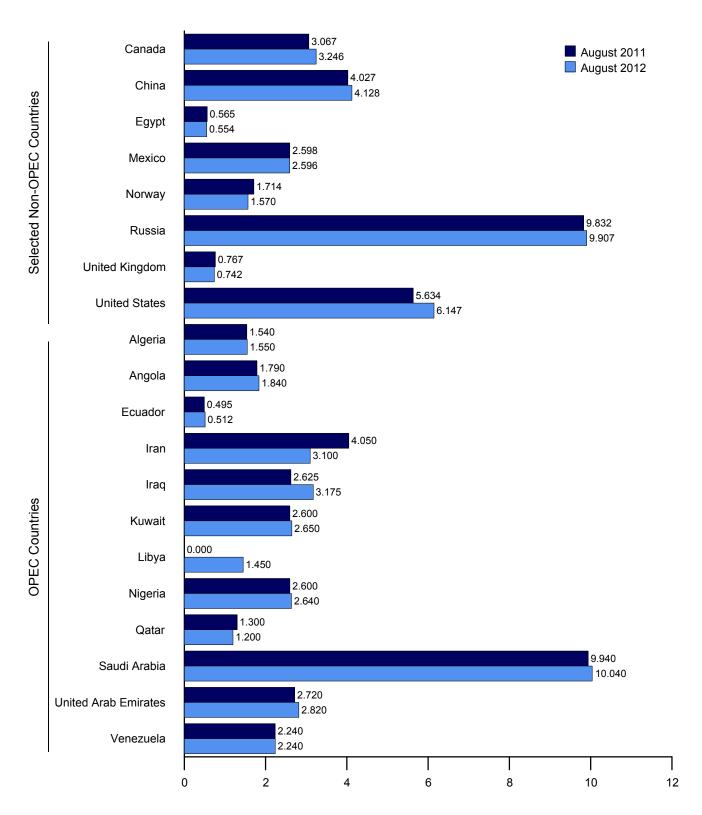


Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Per-

Web Page: http://www.eia.gov/totalenergy/data/monthly/#international. Sources: Tables 11.1a and 11.1b.

## Figure 11.1b World Crude Oil Production by Selected Country

(Million Barrels per Day)



Note: OPEC is the Organization of the Petroleum Exporting Countries. Web Page: http://www.eia.gov/totalenergy/data/monthly/#international. Sources: Tables 11.1a and 11.1b.

#### Table 11.1a World Crude Oil Production: OPEC Members

(Thousand Barrels per Day)

1973 Average           1975 Average           1980 Average           1980 Average           1990 Average           1990 Average           1990 Average           1996 Average           1997 Average           1998 Average           1999 Average           1999 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2007 Average           2008 Average           2007 Average           2008 Average	983 983 1,106 1,036 1,180 1,162 1,227 1,259 1,259 1,259 1,259 1,277 1,177 1,214 1,265 1,177 1,214 1,265 1,516 1,582 1,692 1,699	Angola 162 165 150 231 475 646 709 714 735 745 746 746 742 896 8903	Ecuador 209 161 204 281 285 392 396 388 375 373 373 395 412	Iran 5,861 5,350 1,662 2,250 3,088 3,643 3,664 3,664 3,664 3,634 3,557	Iraq 2,018 2,262 2,514 1,433 2,040 560 579 1,155 2,150	Kuwait <sup>a</sup> 3,020 2,084 1,656 1,023 1,175 2,057 2,062	Libya 2,175 1,480 1,787 1,059 1,375	Nigeria 2,054 1,783 2,055 1,495	Qatar 570 438 472 301	Arabia <sup>a</sup> 7,596 7,075 9,900	Emirates 1,533 1,664 1,709	zuela 3,366 2,346 2,168	29,661 25,790 25,383
1975 Average           1980 Average           1985 Average           1990 Average           1990 Average           1995 Average           1996 Average           1997 Average           1998 Average           1999 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2006 Average           2005 Average           2007 Average           2008 Average           2008 Average	983 1,106 1,036 1,108 1,180 1,180 1,227 1,259 1,226 1,177 1,214 1,265 1,177 1,214 1,265 1,177 1,214 1,265 1,1516 1,516 1,569 1,699	165 150 231 475 646 709 714 735 745 746 742 896	161 204 281 285 392 396 388 375 373 395	5,350 1,662 2,250 3,088 3,643 3,643 3,686 3,664 3,634 3,557	2,262 2,514 1,433 2,040 560 579 1,155	2,084 1,656 1,023 1,175 2,057	1,480 1,787 1,059	1,783 2,055	438 472	7,075 9,900	1,664	2,346	25,790
1980 Average           1985 Average           1995 Average           1995 Average           1996 Average           1997 Average           1997 Average           1998 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2007 Average           2007 Average           2008 Average	1,106 1,036 1,180 1,162 1,227 1,229 1,226 1,226 1,226 1,214 1,244 1,245 1,542 1,542 1,699	150 231 475 646 709 714 735 745 745 746 742 896	204 281 285 392 396 388 375 373 395	1,662 2,250 3,088 3,643 3,686 3,664 3,634 3,557	2,514 1,433 2,040 560 579 1,155	1,656 1,023 1,175 2,057	1,787 1,059	2,055	472	9,900			
1985 Average           1990 Average           1995 Average           1995 Average           1997 Average           1998 Average           1999 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2007 Average           2007 Average           2008 Average	1,036 1,180 1,162 1,227 1,259 1,226 1,277 1,214 1,265 1,349 1,516 1,582 1,692 1,699	231 475 646 709 714 735 745 745 746 742 896	281 285 392 396 388 375 373 395	2,250 3,088 3,643 3,686 3,664 3,634 3,557	1,433 2,040 560 579 1,155	1,023 1,175 2,057	1,059				1,709	2,168	25.383
1990 Average           1995 Average           1995 Average           1996 Average           1997 Average           1998 Average           1999 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2007 Average           2007 Average           2008 Average	1,180 1,162 1,227 1,259 1,226 1,177 1,214 1,265 1,349 1,582 1,692 1,699	475 646 709 714 735 745 746 742 896	285 392 396 388 375 373 395	3,088 3,643 3,686 3,664 3,634 3,557	2,040 560 579 1,155	1,175 2,057		1,495	301			4 077	
1995 Average           1996 Average           1997 Average           1998 Average           1999 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2005 Average           2006 Average           2007 Average           2008 Average	1,162 1,227 1,259 1,256 1,177 1,214 1,265 1,349 1,516 1,582 1,692 1,699	646 709 714 735 745 746 742 896	392 396 388 375 373 395	3,643 3,686 3,664 3,634 3,557	560 579 1,155	2,057	1.3/3	1,810	406	3,388 6,410	1,193 2,117	1,677 2,137	15,367 22,498
1996 Average           1997 Average           1998 Average           1999 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2006 Average           2007 Average           2007 Average           2008 Average	1,227           1,259           1,226           1,177           1,214           1,245           1,214           1,214           1,349           1,516           1,582           1,692           1,699	709 714 735 745 746 742 896	396 388 375 373 395	3,686 3,664 3,634 3,557	579 1,155		1,390	1,993	400	8.231	2,117	2,137	25,500
1997 Average           1998 Average           1999 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2006 Average           2006 Average           2007 Average           2008 Average	1,259 1,226 1,177 1,214 1,265 1,349 1,516 1,692 1,699	714 735 745 746 742 896	388 375 373 395	3,664 3,634 3,557	1,155		1,401	2,001	510	8,218	2,233	2,938	26,003
1998 Average           1999 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2006 Average           2006 Average           2007 Average           2007 Average           2008 Average	1,226 1,177 1,214 1,265 1,349 1,516 1,582 1,692 1,699	735 745 746 742 896	375 373 395	3,634 3,557		2.007	1,446	2,132	550	8.362	2,316	3,280	27,274
1999 Average           2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2007 Average           2007 Average           2008 Average	1,177 1,214 1,265 1,349 1,516 1,582 1,692 1,699	745 746 742 896	373 395	3,557	2.130	2,085	1,390	2,153	696	8,389	2,345	3,167	28,346
2000 Average           2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2006 Average           2007 Average           2008 Average	1,214           1,265           1,349           1,516           1,582           1,692           1,699	742 896			2,508	1,898	1,319	2,130	665	7,833	2,169	2,826	27,199
2001 Average           2002 Average           2003 Average           2004 Average           2005 Average           2006 Average           2007 Average           2007 Average           2008 Average	1,265 1,349 1,516 1,582 1,692 1,699	896	412	3,696	2,571	2,079	1,410	2,165	737	8,404	2,368	3,155	28,940
2003 Average           2004 Average           2005 Average           2006 Average           2007 Average           2008 Average	1,516 1,582 1,692 1,699			3,724	2,390	1,998	1,367	2,256	714	8,031	2,205	3,010	28,114
2004 Average           2005 Average           2006 Average           2007 Average           2008 Average	1,582 1,692 1,699	903	393	3,444	2,023	1,894	1,319	2,118	679	7,634	2,082	2,604	26,435
2005 Average 2006 Average 2007 Average 2008 Average	1,692 1,699		411	3,743	1,308	2,136	1,421	2,275	715	8,775	2,348	2,335	27,885
2006 Average 2007 Average 2008 Average	1,699	1,052	528	4,001	2,011	2,376	1,515	2,329	783	9,101	2,478	2,557	30,313
2007 Average		1,250	532	4,139	1,878	2,529	1,633	2,627	835	9,550	2,535	2,565	31,766
2008 Average		1,413	536	4,028	1,996	2,535	1,681	2,440	850	9,152	2,636	2,511	31,476
		1,744 1,981	511 505	3,912 4,050	2,086 2,375	2,464 2,586	1,702 1,736	2,350 2,165	851 924	8,722 9,261	2,603 2,681	2,433 2,394	31,085 32,363
		1,907	486	4,030	2,373	2,350	1,650	2,103	927	8,250	2,001	2,239	30,442
2009 Average	1,000	1,001	400	4,001	2,001	2,000	1,000	2,200	021	0,200	2,410	2,200	00,442
2010 January		2,040	464	4,088	2,475	2,250	1,650	2,480	969	8,240	2,414	2,090	30,699
February		2,060	470	4,100	2,475	2,250	1,650	2,420	1,036	8,440	2,414	2,140	30,995
March		2,070	478 480	4,112 4,120	2,375	2,250 2,250	1,650	2,430 2,360	1,055 1.072	8,540 8,740	2,414 2.414	2,090	31,004
April	,	2,070 2.030	460	4,120	2,375 2,375	2,250	1,650 1,650	2,360	1,072	8,740 8,740	2,414	2,110 2.140	31,181 31,138
May June		2,030	478	4,120	2,375	2,250	1,650	2,310	1,113	9,240	2,415	2,140	31,780
July		1,970	492	4,033	2,325	2,250	1,650	2,410	1,136	9,340	2,415	2,140	31,801
August	,	1,890	485	4,040	2,325	2,350	1,650	2,510	1,164	9,340	2,415	2,140	31,849
September		1,790	490	4,047	2,375	2,350	1,650	2,550	1,193	9,340	2,415	2,140	31,880
October		1,790	497	4,053	2,375	2,350	1,650	2,580	1,216	8,840	2,415	2,140	31,446
November		1,790	508	4,060	2,375	2,350	1,650	2,510	1,235	9,040	2,415	2,240	31,713
December		1,790	499	4,068	2,525	2,350	1,650	2,490	1,235	8,940	2,415	2,240	31,742
Average	1,540	1,939	486	4,080	2,399	2,300	1,650	2,455	1,127	8,900	2,415	2,146	31,437
2011 January	1.540	1.790	500	4.076	2.625	2.350	1.650	2.580	1.280	9.140	2.520	2.240	32.291
February		1,790	509	4,084	2,525	2,350	1,340	2,570	1,280	9,140	2,520	2,240	31,888
March		1,790	501	4,092	2,525	2,450	300	2,450	1,290	8,940	2,620	2,240	30,738
April	1,540	1,740	504	4,100	2,525	2,550	200	2,500	1,300	8,940	2,720	2,240	30,859
May		1,640	497	4,100	2,575	2,550	200	2,570	1,300	8,940	2,720	2,240	30,872
June		1,690	495	4,100	2,575	2,550	100	2,570	1,300	9,640	2,720	2,240	31,520
July		1,740	492	4,050	2,625	2,550	100	2,570	1,300	9,840	2,720	2,240	31,767
August		1,790	495	4,050	2,625	2,600	0	2,600	1,300	9,940	2,720	2,240	31,900
September		1,840	496	4,050	2,725	2,600	100	2,600	1,300	9,740	2,720	2,240	31,951
October November		1,790 1,940	502 504	4,000 4,000	2,725 2,725	2,600 2,600	300 550	2,400 2,500	1,300 1,300	9,540 9,840	2,720 2,720	2,240 2,240	31,657 32,459
December		1,940	504 501	4,000 3,950	2,725	2,600	550 800	2,500	1,300	9,840 9,840	<sup>R</sup> 2,720	2,240 2,240	<sup>8</sup> 32,459
Average	,	1,786	500	4,054	2,725	2,000 2,530	465	2,400	1,300 1,296	9,458	R 2,679	2,240 2,240	<sup>R</sup> 31,699
-	4	1 005	50/	0.050		0.050	4 000	0.500	1.000	0.046	P o Toc	0.045	P 00 705
2012 January		1,890 1,940	504 503	3,850 3,800	2,675 2.575	2,650 2,650	1,000 1,200	2,520 2,580	1,300 1,300	9,840 <sup>R</sup> 10.040	R 2,720	2,240 2.240	R 32,739
February	,	1,940 1,790	503 499	3,800	2,575 2,725	2,650	1,200 1,350	2,580 2,520	1,300	10,040	<sup>R</sup> 2,720 2,820	2,240 2,240	<sup>R</sup> 33,098 33,134
March April		1,790	499 500	3,600	2,725	2,650	1,350	2,520	1,200	<sup>R</sup> 9,940	2,820	2,240 2,240	<sup>R</sup> 33,385
May		1,830	498	3,525	2,905	2,650	1,400	2,580	1,200	<sup>R</sup> 9.740	2,820	2,240	<sup>R</sup> 32.968
June		1,790	502	3,350	2,975	2,650	1,400	2,580	1,200	<sup>R</sup> 10,040	2,820	2,240	R 33,097
July	,	1,740	508	3,200	3,075	2,650	1,400	2,580	1,200	10,040	2,820	2,240	33,003
August	,	1,840	512	3,100	3,175	2,650	1,450	2,640	1,200	10,040	2,820	2,240	33,217
8-Month Average		1,839	503	3,520	2,888	2,650	1,325	2,580	1,223	9,964	2,795	2,240	33,079
2011 8-Month Average .	1,540	1,746	499	4,081	2,576	2,495	478	2,551	1,294	9,317	2,659	2,240	31,477
2010 8-Month Average .		2,013	499 480	4,081	2,376	2,495	478	2,551	1,294	9,317 8,831	2,059	2,240	31,477

<sup>a</sup> Except for the period from August 1990 through May 1991, includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. In August 2012, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 600 thousand barrels per day. Data for Saudi Arabia include approximately 150 thousand barrels per day from the Abu Safah field produced on behalf of Bahrain.

ber day. Data to Sadu Ataba include approximately 150 thosand barles per day from the Abu Safah field produced on behalf of Bahrain. <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" for all years; and Indonesia left OPEC at the end of 2008, and is thus included in "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.gov/totalenergy/data/monthly/#international for all available data beginning in 1973.

Sources: See end of section.

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

					Selected	Non-OPE	C <sup>a</sup> Produce	rs				
	Persian Gulf Nations <sup>b</sup>	Canada	China	Egypt	Mexico	Norway	Former U.S.S.R.	Russia	United Kingdom	United States	Total Non- OPEC <sup>a</sup>	World
1973 Average	20,668	1,798	1,090	165	465	32	8,324	NA	2	9,208	26,018	55,679
1975 Average	18.934	1,730	1,030	235	705	189	9,523	NA	12	8,375	27.039	52,828
1980 Average	17.961	1,435	2,114	595	1,936	486	11,706	NA	1,622	8,597	34,175	59.558
1985 Average	9,630	1,471	2,505	887	2,745	773	11,585	NA	2,530	8,971	38,598	53,965
1990 Average	15,278	1,553	2,774	873	2,553	1,630	10,975	NA	1,820	7,355	37,999	60,497
1995 Average	17,208	1,805	2,990	920	2,711	2,766		5,995	2,489	6,560	36,934	62,434
1996 Average	17,367	1,837	3,131	922	2,944	3,091		5,850	2,568	6,465	37,815	63,818
1997 Average	18,095	1,922	3,200	856	3,104	3,142		5,920	2,518	6,452	38,532	65,806
1998 Average	19,337	1,981	3,198	834	3,160	3,011		5,854	2,616	6,252	38,685	67,032
1999 Average	18,667	1,907	3,195	852	2,998	3,019		6,079	2,684	5,881	38,768	65,967
2000 Average	19,892	1,977	3,249	768	3,104	3,222		6,479	2,275	5,822	39,583	68,522
2001 Average	19,098	2,029	3,300	720	3,218	3,226		6,917	2,282	5,801	40,003	68,116
2002 Average	17,794	2,171	3,390	715	3,263	3,131		7,408	2,292	5,744	40,825	67,260
2003 Average	19,063	2,306	3,409	713	3,459	3,042		8,132	2,093	5,644	41,478	69,363
2004 Average	20,787	2,398	3,485	673	3,476	2,954		8,805	1,845	5,435	42,149	72,462
2005 Average	21,501	2,369	3,609	623	3,423	2,698		9,043	1,649	5,186	41,878	73,644
2006 Average	21,232	2,525	3,673	535	3,345	2,491		9,247	1,490	5,089	41,793	73,269
2007 Average	20,672	2,628	3,729	530	3,143	2,270		9,437	1,498	5,077	41,730	72,815
2008 Average	21,913	2,579	3,790	566	2,839	2,182		9,357	1,391	5,000	41,265	73,628
2009 Average	20,402	2,579	3,796	587	2,646	2,067		9,495	1,328	5,353	<sup>R</sup> 41,786	<sup>R</sup> 72,228
2010 January	20,471	2,499	3,971	579	2,660	2,060		9,615	1,379	5,399	<sup>R</sup> 42,170	<sup>R</sup> 72,869
February	20,750	2,714	3,940	578	2,655	2,038		9,648	1,274	5,546	<sup>R</sup> 42,570	<sup>R</sup> 73,565
March	20,781	2,621	3,973	577	2,641	1,983		9,683	1,429	5,513	<sup>R</sup> 42,769	<sup>R</sup> 73,773
April	21,007	2,693	3,953	576	2,639	1,967		9,646	1,378	5,377	<sup>R</sup> 42,564	<sup>R</sup> 73,746
Мау		2,742	4,049	576	2,639	1,921		9,691	1,297	5,398	<sup>R</sup> 42,637	73,775
June		2,770	4,105	575	2,592	1,611		9,727	1,076	5,384	<sup>R</sup> 42,101	<sup>R</sup> 73,881
July	21,634	2,762	4,060	575	2,618	1,864		9,710	1,055	5,313	42,347	<sup>R</sup> 74,148
August	21,669	2,779	4,104	574	2,604	1,648		9,623	1,070	5,445	42,222	74,071
September	21,755	2,646	4,187	574	2,615	1,637		9,725	1,194	5,608	42,497	74,377
October	21,284	2,688	4,186	573	2,615	1,952		9,816	1,195	5,596	<sup>R</sup> 42,801	74,247
November	21,510 21,568	2,937 2,929	4,281 4,126	573 572	2,556 2,620	1,868 1,886		9,723 9,719	1,248 1,207	5,558 5,614	<sup>R</sup> 43,143 43,089	<sup>R</sup> 74,856 74,831
December Average	21,508 21,257	2,929 2,732	4,120 4,078	572	2,620 2,621	1,869		9,719 9,694	1,207	5,614 5,479	43,089 42,576	74,031 74,013
2011 January	22,026	2,869	4,238	572	2,632	1,905		9,769	1,316	<sup>R</sup> 5,506	<sup>R</sup> 43,016	<sup>R</sup> 75,307
February	21,934	2,906	4,188	571	2,602	1,861		9,773	1,085	5,422 <sup>R</sup> 5,591	<sup>R</sup> 42,635	<sup>R</sup> 74,523
March April	21,952 22,170	2,854 2,848	4,160 4,127	570 569	2,620 2,621	1,808 1,874		9,753 9,795	1,073 1,164	<sup>R</sup> 5,591	<sup>R</sup> 42,697 <sup>R</sup> 42,488	<sup>R</sup> 73,435 <sup>R</sup> 73,346
		2,848 2,564	4,127	568	2,621	1,674		9,795	1,164	<sup>R</sup> 5,604	<sup>R</sup> 41,707	<sup>R</sup> 72,579
May June		2,564	4,106	567	2,603	1,660		9,818	1,017	5,570	<sup>R</sup> 41,707	<sup>R</sup> 73,303
July	22,920	2,004	3,956	566	2,592	1,737		9,837	946	<sup>R</sup> 5,419	<sup>R</sup> 41,763	<sup>R</sup> 73,624
August		3.067	<sup>R</sup> 4,027	565	2,598	1,737		9,832	767	<sup>R</sup> 5,634	<sup>R</sup> 42,263	<sup>R</sup> 74,164
September	-, -	2,987	3,964	564	2,530	1,636		9,557	890	<sup>R</sup> 5,575	<sup>R</sup> 41.663	<sup>R</sup> 73.613
October		3,030	3,926	563	2,598	1,756		9,902	998	<sup>R</sup> 5,872	<sup>R</sup> 42,544	<sup>R</sup> 74,200
November		3,021	4,006	562	2,573	1,764		9,595	1,039	R 5,992	R 42,677	<sup>R</sup> 75,136
December	R 23,170	3,121	3,998	561	2,601	1,713		9,869	1,010	<sup>R</sup> 6.000	R 42,982	<sup>R</sup> 75,488
Average		2,904	4,059	566	2,596	1,752		9,774	1,026	<sup>R</sup> 5,644	<sup>R</sup> 42,359	<sup>R</sup> 74,058
2012 January	<sup>R</sup> 23,070	3.105	4.089	560	2.562	1.761		9.894	999	<sup>RE</sup> 6.119	<sup>R</sup> 42.994	<sup>R</sup> 75,733
2012 January February	R 23 120	3,105	4,089	560 560	2,562	1,761		9,894 9,889	1,016	RE 6,119	<sup>R</sup> 42,994	<sup>R</sup> 75,951
March	23,120	3,042	4,109	560	2,588	1,745		9,889	968	<sup>RE</sup> 6,268	<sup>R</sup> 42,637	<sup>R</sup> 75,772
April	R 23 200	3,145	4,000	560	2,586	1,713		9,861	981	RE 6,229	<sup>R</sup> 42,652	<sup>R</sup> 76,037
May		3,078	4,105	560	2,587	1,699		9,882	893	RE 6,230	R 42,434	<sup>R</sup> 75,402
June	R 23.070	R 3,002	4,015	556	2,584	1,583		9,861	949	RE 6,181	R 42,106	<sup>R</sup> 75,203
July	23,020	<sup>R</sup> 3,119	4,010	<sup>R</sup> 554	2,568	1,553		9,882	954	RE 6.282	R 42,390	<sup>R</sup> 75,393
August	23,020	3,246	4.128	554	2,596	1,570		9,902	742	E 6.147	42,000	75,393
8-Month Average	23,076	3,121	4,079	558	2,583	1,668		9,884	937	E 6,206	42,529	75,608
2011 8-Month Average	22 457	2,836	4,102	568	2,606	1,770		9,794	1,047	5,535	42,303	73,780
2010 8-Month Average	22,457 21,120	2,836 2,697	4,102	508	2,606	1,770		9,794 9,668	1,047	5,535 5,421	42,303 42,421	73,780

<sup>a</sup> See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. On Tables 11.1a and 11.1b, countries are classified as "OPEC" or "Non-OPEC" in all years based on their status in the most current year. For example, Ecuador rejoined OPEC in 2007, and is thus included in "Total OPEC" for all years; and Indonesia left OPEC at the end of 2008, and is thus included in "Total Non-OPEC" for all years. <sup>b</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and

<sup>b</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

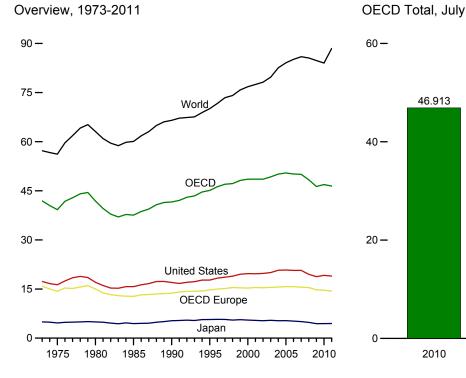
R=Revised. NA=Not available. --=Not applicable. E=Estimate.

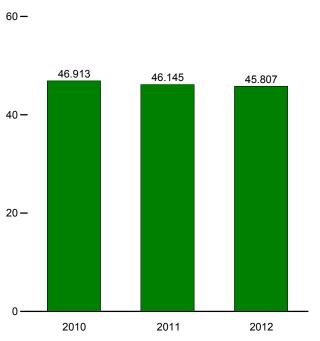
Notes: • Data are for crude oil and lease condensate; they exclude natural gas plant liquids. • Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available. • Data for countries may not sum to World totals due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#international for all available data beginning in 1973.

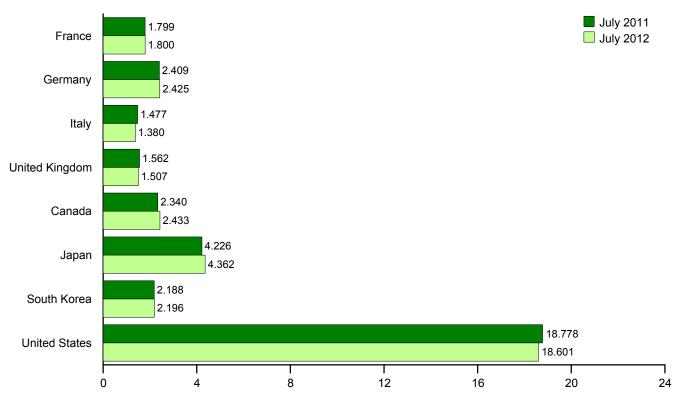
Sources: See end of section.

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





#### By Selected OECD Country



Note: OECD is the Organization for Economic Cooperation and Web Page: http://www.eia.gov/totalenergy/data/monthly/#international. Source: Table 11.2.

#### Table 11.2 Petroleum Consumption in OECD Countries

(Thousand Barrels per Day)

	France	Germany <sup>a</sup>	Italy	United Kingdom	OECD Europe <sup>b</sup>	Canada	Japan	South Korea	United States	Other OECD <sup>c</sup>	OECDd	World
		-		-								1
1973 Average	2,601	3,324	2,068	2,341	15,879	1,729	4,949	281	17,308	1,768	41,913	57,237
1975 Average	2,252	2,957	1,855	1,911	14,314	1,779	4,621	311	16,322	1,885	39,232	56,198
1980 Average	2,256	3,082	1,934	1,725	14,995	1,873	4,960	537	17,056	2,449	41,870	63,113
1985 Average	1,753	2,651	1,705	1,617	12,772	1,514	4,436	552	15,726	2,564	37,565	60,074
1990 Average	1,826	2,682	1,868	1,776	13,726	1,722	5,315	1,048	16,988	2,786	41,585	66,517
1995 Average	1,920	2,882	1,942	1,816	14,714	1,799	5,693	2,008	17,725	3,184	45,123	70,099
1996 Average	1,949	2,922	1,920	1,852	14,999	1,853	5,739	2,101	18,309	3,247	46,248	71,689
1997 Average	1,969	2,917	1,934	1,810	15,140	1,940	5,702	2,255	18,620	3,355	47,013	73,450
1998 Average	2,043	2,923	1,943	1,792	15,448	1,931	5,507	1,917	18,917	3,486	47,206	74,105
1999 Average	2,031	2,836	1,891	1,811	15,357	2,016	5,642	2,084	19,519	3,567	48,185	75,819
2000 Average	2,000	2,767	1,854	1,765	15,276	2,014	5,515	2,135	19,701	3,902	48,543	76,788
2001 Average	2,054	2,807	1,832	1,747	15,447	2,043	5,412	2,132	19,649	3,892	48,575	77,481
2002 Average	1,985	2,710	1,870	1,739	15,386	2,065	5,319	2,149	19,761	3,873	48,553	78,175
2003 Average	2,001	2,662	1,860	1,759	15,494	2,191	5,428	2,175	20,034	3,918	49,241	79,720
2004 Average	2,009	2,649	1,829	1,785	15,598	2,282	5,319	2,155	20,731	4,015	50,100	82,583
2005 Average	1,991	2,621	1,781	1,820	15,716	2,315	5,328	2,191	20,802	4,093	50,445	84,089
2006 Average	1,991	2,639	1,777	1,806	15,723	2,229	5,197	2,180	20,687	4,128	50,144	85,156
2007 Average	1,979	2,416	1,729	1,753	15,546	2,283	5,037	2,241	20,680	4,250	50,037	85,944
2008 Average	1,945	2,542	1,667	1,727	15,457	2,225	4,795	2,142	19,498	4,237	48,355	85,554
2009 Average	1,868	2,453	1,544	1,641	14,715	2,153	4,406	2,188	18,771	<sup>R</sup> 4,095	46,328	<sup>R</sup> 84,781
2010 January	1,756	2,161	1,369	1,586	13,588	2,128	4,779	2,361	18,652	<sup>R</sup> 3.840	<sup>R</sup> 45,347	NA
February	1,955	2,454	1,535	1,688	14,812	2,120	5,002	2,383	18,850	<sup>R</sup> 4,217	<sup>R</sup> 47,520	NA
March	1,913	2,505	1,563	1,683	14,884	<sup>R</sup> 2,149	4,738	2,253	19,099	R 4,030	47,153	NA
April	1,845	2,260	1,520	1,646	14,334	<sup>R</sup> 2,180	4,327	2,249	19,044	<sup>R</sup> 4,120	<sup>R</sup> 46,253	NA
May	1,693	2,354	1,451	1,615	13,966	R 2,202	3,841	2,240	18,866	R 4,047	<sup>R</sup> 45.091	NA
June	1,836	2,510	1,578	1,599	14,775	<sup>R</sup> 2,346	3,967	2,177	19,537	<sup>R</sup> 4,200	<sup>R</sup> 47,002	NA
	1,829	2,571	1,658	1,631	14,980	<sup>R</sup> 2,205	4,170	2,111	19,319	<sup>R</sup> 4,128	<sup>R</sup> 46,913	NA
July	1,741	2,547	1,506	1,643	14,616	R 2,378	4,388	2,221	19,662	R 4,007	<sup>R</sup> 47,272	NA
August	1,945		1,624	1,640		R 2,325	4,300	2,221	19,438	R 4,007	<sup>R</sup> 47,864	NA
September October	1,753	2,747 2,622	1,532	1,667	15,438 15,006	R 2,249	4,441	2,192	18,974	<sup>R</sup> 4,030	<sup>R</sup> 46,497	NA
	1,733	2,022	1,567	1,647		<sup>R</sup> 2,317	4,035	2,225	18,974	<sup>R</sup> 4,110	R 47,473	NA
November	,	,			15,083	<sup>R</sup> 2,317				<sup>R</sup> 4,204		
December	1,939	2,324	1,630	1,526	14,669	R 2,360	5,005	2,495	19,722		<sup>R</sup> 48,455	
Average	1,831	2,470	1,544	1,630	14,676	<sup>R</sup> 2,258	4,437	2,268	19,180	<sup>R</sup> 4,077	<sup>R</sup> 46,896	<sup>R</sup> 84,035
2011 January	1,773	2,230	1,352	1,600	13,688	2,258	4,899	2,429	18,993	3,821	46,088	NA
February	1,916	2,433	1,554	1,652	14,819	2,316	5,067	2,349	18,873	4,261	47,685	NA
March	1,789	2,393	1,445	1,635	14,360	2,390	4,551	2,295	19,329	4,270	47,196	NA
April	1,747	2,258	1,461	1,621	13,996	2,144	3,994	2,011	18,650	4,079	44,874	NA
May	1,734	2,403	1,425	1,555	14,070	2,184	3,787	2,022	18,479	4,092	44,634	NA
June	1,786	2,270	1,510	1,687	14,468	2,340	3,943	2,112	19,253	4,218	<sup>R</sup> 46,334	NA
July	1,799	2,409	1,477	1,562	14,447	2,340	4,226	2,188	18,778	4,166	46,145	NA
August	1,804	2,638	1,400	1,617	14,765	2,447	4,425	2,212	19,415	4,230	47,494	NA
September	1,919	2,551	1,541	1,671	15,066	2,306	4,278	2,241	18,892	4,216	46,998	NA
October	1,777	2,508	1,465	1,578	14,420	2,196	4,394	2,216	18,844	4,016	46,086	NA
November	1,730	2,447	1,405	1,595	14,224	2,292	4,602	2,252	19,080	4,288	46,738	NA
December	1.737	2,262	1.423	1,531	13.809	2,299	5,429	2,436	18,803	4,316	47.092	NA
Average	1,792	2,400	1,454	1,608	14,339	2,293	4,464	2,230	18,949	4,163	46,439	88,480
2012 January	1.745	2.133	1,263	1,440	13.138	2,142	5,161	2,366	18,280	<sup>R</sup> 4,110	<sup>R</sup> 45.196	NA
2012 January	1,745	2,133	1,263	1,440	14,460	2,142	5,161	2,300	18,760	<sup>R</sup> 4,110	<sup>R</sup> 47,603	NA
February	1,950	2,483 2,219		1,565		<sup>R</sup> 2,386	5,550 5,156	2,410		<sup>R</sup> 4,287	<sup>R</sup> 47,603	NA
March			1,316		13,697	- 2,300 R 2 266			18,213	<sup>R</sup> 4,342	<sup>R</sup> 45,947	
April	1,686	2,231	1,293	1,600	13,620 B 12,660	R 2,266	4,390	2,099	18,330			NA
May	1,671	2,305	1,304	1,517	R 13,660	R 2,308	4,367	2,181	18,707	<sup>R</sup> 4,205	<sup>R</sup> 45,429	NA
June	1,780	2,466	1,367	1,526	R 14,128	R 2,384	4,129	2,304	18,915	<sup>R</sup> 4,220	R 46,080	NA
July	1,800	2,425	1,380	1,507	14,033	2,433	4,362	2,196	18,601	4,183	45,807	NA
7-Month Average	1,764	2,321	1,319	1,538	13,813	2,295	4,727	2,243	18,541	4,211	45,830	NA
2011 7-Month Average	1,791	2,342	1,459	1,615	14,256	2,282	4,346	2,200	18,908	4,128	46,120	NA
2010 7-Month Average	1.831	2,402	1,525	1,635	14,471	2,208	4,397	2,242	19,053	4,081	46,452	NA

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

Germany. <sup>b</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, <sup>b</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Norway, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom; for 1984 forward, Czech Republic, Hungary, Poland, and Slovakia; and, for 2000 forward, Slovenia.

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

for 1984 forward, Mexico; and, for 2000 forward, Chile, Estonia, and Israel. <sup>d</sup> The Organization for Economic Cooperation and Development (OECD) consists of "OECD Europe," Canada, Japan, South Korea, the United States, and "Other OECD."

R=Revised. NA=Not available.

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

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

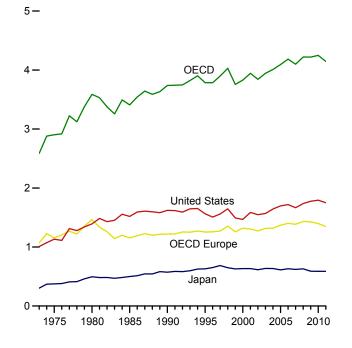
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#international for

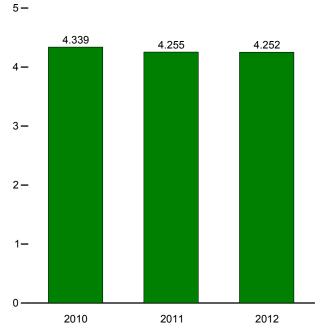
all available data beginning in 1973. Sources: • United States: Table 3.1. • Chile, East Germany, Former Czechoslovakia, Hungary, Mexico, Poland, South Korea, Non-OECD Countries, U.S. Territories, and World: 1973-1979–U.S. Energy Information Administration (EIA), International Energy Database. • Countries Other Than United States: 1980-2008—EIA, International Energy Statistics (IES). • OECD Countries, and U.S. Territories: 2009 forward—EIA, IES. • World: 2009 forward—EIA, Short Term Energy Outlook, November 2012, Table 3a. • All Other Data:—International Energy Agency (IEA), Quarterly Oil Statistics and Energy Balances in OECD Countries, various issues.

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

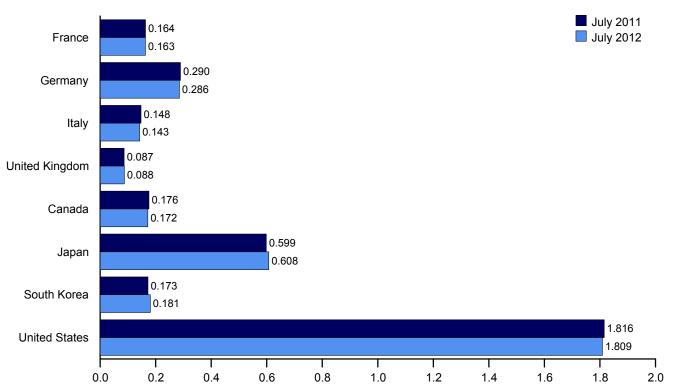
Overview, End of Year, 1973-2011

OECD Stocks, End of Month, July





#### By Selected OECD Country, End of Month



Note: OECD is the Organization for Economic Cooperation and Development. Web Page: http://www.eia.gov/totalenergy/data/monthly/#international. Source: Table 11.3.

#### Table 11.3 Petroleum Stocks in OECD Countries

(Million Barrels)

	_			United	OECD			South	United	Other	
	France	Germany <sup>a</sup>	Italy	Kingdom	Europeb	Canada	Japan	Korea	States	OECDC	OECD
73 Year	201	181	152	156	1.070	140	303	NA	1.008	67	2.588
75 Year	225	187	143	165	1,154	174	375	NA	1,133	67	2,903
80 Year	243	319	170	168	1,464	164	495	NA	1,392	72	3,587
85 Year	139	277	156	131	1,154	112	500	13	1.519	110	3.40
90 Year	143	280	171	103	1,221	143	572	64	1,621	117	3,73
95 Year	155	302	162	101	1,254	132	631	92	1.563	113	3.78
96 Year	154	303	152	103	1,258	127	651	123	1,507	118	3,78
97 Year	161	299	147	100	1,270	144	685	124	1,560	115	3,89
98 Year	169	323	153	100	1,354	139	649	124	1,500	111	4.02
99 Year	169	290	148	104	1,256	139	629	129	1,493	105	3,75
00 Year	170	290	140	100	1,250	141	634	132	1,493	126	3,82
	165	272	157	113		143	634	140		120	3,94
01 Year	105				1,306				1,586		
02 Year		253 273	155	104	1,272	155	615	140	1,548	112	3,84
03 Year	179		153	100	1,316	165	636	155	1,568	105	3,94
04 Year	177	267	153	101	1,318	154	635	149	1,645	108	4,00
05 Year	185	283	149	95	1,369	168	612	135	1,698	112	4,09
06 Year	182	283	151	103	1,401	169	631	152	1,720	113	4,18
07 Year	180	275	150	90	1,386	163	621	143	1,665	121	4,09
08 Year	179	279	145	99	1,435	162	630	135	1,737	124	4,22
009 Year	175	284	143	94	1,426	157	589	155	1,776	117	4,220
10 January	182	295	144	95	1,466	160	593	162	1,786	122	4,28
February	175	290	151	99	1,451	161	587	163	1,785	128	4,27
March	172	289	147	93	1,432	167	581	164	1,787	127	4,25
April	172	284	152	95	1,441	168	590	166	1,810	123	4,29
May	173	286	149	99	1,449	164	599	166	1,830	120	4,32
June	170	280	150	96	1,432	166	597	167	1,842	131	4,33
July	168	282	144	96	1,417	173	598	170	1,855	127	4,33
August	171	289	151	93	1,432	182	597	169	1,862	127	4,36
September	163	286	144	95	1,392	180	582	174	1,861	123	4.31
October	161	285	147	94	1,402	183	599	170	1.847	125	4.32
November	170	287	143	92	1,394	184	604	171	1,827	121	4,302
December	168	287	151	89	1,398	184	588	165	1,794	119	4,24
11 January	173 170	291 288	158 149	97 95	1,439 1,410	174 169	596 591	168 162	1,809 1,780	117 121	4,304 4,234
February	167	286	149	95 93		172	591	162	,	121	4,23
March			149	93	1,398	172	575 601		1,776		
April	163	291 288			1,384		599	173	1,779	123	4,23 4,26
May	168	288	147	91	1,387	177	599 593	170	1,807	122 120	
June	167		147	85	1,379	177		175	1,809		4,25
July	164	290	148	87	1,370	176	599	173	1,816	122	4,25
August	162	283	149	89	1,374	176	598	171	1,796	123	4,23
September	160	277	148	85	1,353	176	601	174	1,781	119	4,20
October	165	278	147	86	1,342	179	599	174	1,769	118	4,18
November	164	277	148	93	1,357	180	603	170	1,770	116	4,19
December	165	279	146	88	1,347	178	589	167	1,750	116	4,14
12 January	166	284	150	90	1,369	179	594	164	1,772	119	4,19
February	165	283	149	90	1,367	179	583	171	1,765	110	4,17
March	165	281	148	89	1,375	171	580	164	1,778	111	4,17
April	163	280	148	91	1,368	176	592	174	1,777	113	4,20
	162	281	148	88	1,351	177	597	183	1,794	115	R 4,21
June	164	280	145	89	1,354	<sup>R</sup> 173	601	177	1,808	112	R 4,22
July	163	286	143	88	1,365	172	608	181	1,809	117	4,25

<sup>a</sup> Through December 1983, the data for Germany are for the former West Germany only. Beginning with January 1984, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.
 <sup>b</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France,

<sup>b</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom; for 1984 forward, Czech Republic, Hungary, Poland, and Slovakia; and, for 2000 forward, Slovenia.

Slovenia. <sup>c</sup> "Other OECD" consists of Australia, New Zealand, and the U.S. Territories; for 1984 forward, Mexico; and, for 2000 forward, Chile, Estonia, and Israel.

1984 forward, Mexico; and, for 2000 forward, Chile, Estonia, and Israel. <sup>d</sup> The Organization for Economic Cooperation and Development (OECD) consists of "OECD Europe," Canada, Japan, South Korea, the United States, and "Other OECD."

R=Revised. NA=Not available.

Notes: • Stocks are at end of period. • Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined

products. • In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, thereby affecting subsequent stocks reported. New-basis end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

 
 Web Page:
 See http://www.eia.gov/totalenergy/data/monthly/#international for all available data beginning in 1973.

 Sources:
 United States:
 Table 3.4.
 U.S. Territories:
 1983

Sources: • United States: Table 3.4. • U.S. Territories: 1983 forward—U.S. Energy Information Administration, International Energy Database. • All Other Data: 1973-1982—International Energy Agency (IEA), *Quarterly Oil Statistics and Energy Balances*, various issues. 1983—IEA, Monthly Oil and Gas Statistics Database. 1984 forward—IEA, Monthly Oil Data Service, October 12, 2012.

#### **International Petroleum**

#### Tables 11.1a and 11.1b Sources

**United States** Table 3.1.

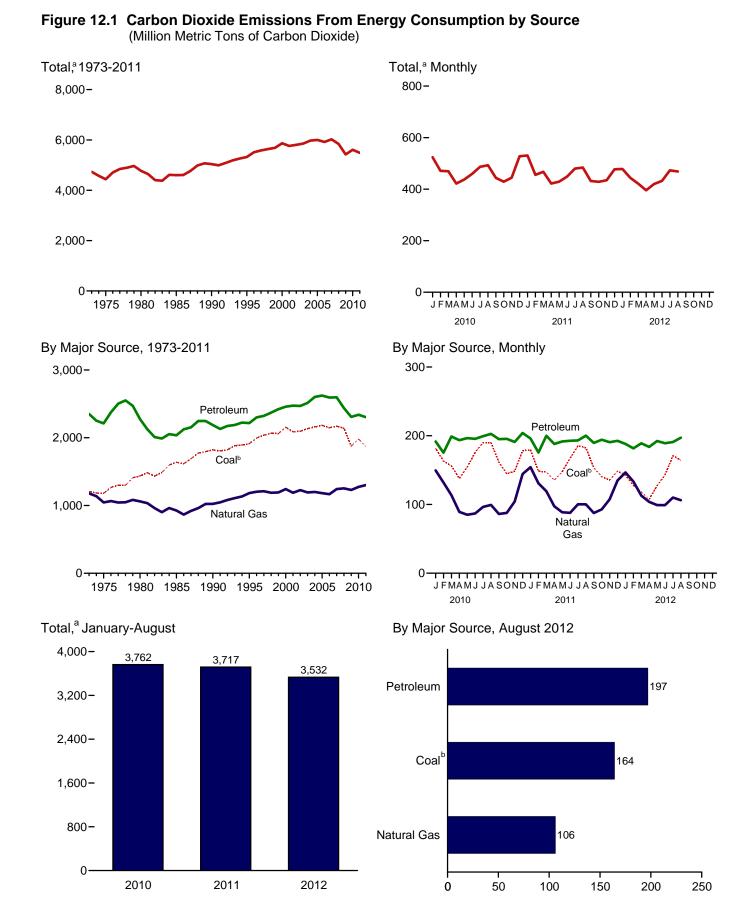
#### All Other Countries and World, Annual Data

1973–1979: U.S. Energy Information Administration (EIA), *International Energy Annual 1981*, Table 8. 1980 forward: EIA, International Energy Database, November 2012.

#### All Other Countries and World, Monthly Data

1973–1980: *Petroleum Intelligence Weekly (PIW)*, *Oil & Gas Journal (OGJ)*, and EIA adjustments. 1981–1993: *PIW*, *OGJ*, and other industry sources. 1994 forward: EIA, International Energy Database, November 2012.

# **12. Environment**



<sup>a</sup> Excludes emissions from biomass energy consumption. <sup>b</sup> Includes coal coke net imports.

Source: Table 12.1.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#environment.

#### Carbon Dioxide Emissions From Energy Consumption by Source Table 12.1 (Million Metric Tons of Carbon Dioxidea)

								Petrole	um					
	Coal <sup>b</sup>	Natural Gas <sup>c</sup>	Aviation Gasoline	Distillate Fuel Oil <sup>d</sup>	Jet Fuel	Kero- sene	LPG <sup>e</sup>	Lubri- cants	Motor Gasoline <sup>f</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>g</sup>	Total	Total <sup>h,i</sup>
1973 Total         1975 Total         1980 Total         1985 Total         1995 Total         1995 Total         1995 Total         1995 Total         1996 Total         1997 Total         1998 Total         1999 Total         2000 Total         2001 Total         2002 Total         2003 Total         2004 Total         2005 Total         2006 Total         2006 Total         2007 Total         2008 Total         2008 Total         2009 Total	1,207 1,181 1,436 1,638 1,821 1,913 2,064 2,062 2,155 2,136 2,088 2,095 2,160 2,160 2,162 2,162 2,172 2,172 2,139 1,876	1,178 1,046 1,061 926 1,024 1,183 1,204 1,189 1,183 1,189 1,183 1,188 1,227 1,193 1,188 1,227 1,193 1,168 1,203 1,253 1,230	6543333222222222222222222222222222222222	480 443 446 445 470 498 525 534 538 555 580 598 587 610 632 640 648 652 615 564	1555 146 156 223 232 234 238 245 254 243 237 231 240 246 240 238 226 204	32 24 24 17 6 8 9 10 12 11 11 6 8 8 10 10 8 5 2 3	92 82 87 87 87 80 86 87 82 90 97 88 91 87 87 87 87 87 87 87 87 87 87	13         11         13         12         13         13         12         13         13         12         13         13         12         13         14         14         13         12         11         12         11         12         11         10	911 900 930 988 1,044 1,063 1,075 1,107 1,127 1,135 1,151 1,183 1,214 1,214 1,224 1,227 1,166 1,157	54 51 49 54 70 76 80 93 96 86 89 96 107 106 100 93 87	508 443 453 216 220 152 152 152 152 152 152 152 153 144 125 165 125 129 129 111 91	100 97 142 93 127 121 139 145 128 133 118 135 130 144 143 152 150 132 112	2,350 2,212 2,275 2,036 2,216 2,303 2,323 2,422 2,452 2,474 2,470 2,514 2,603 2,623 2,593 2,593 2,593 2,593 2,593	4,735 4,439 4,771 4,600 5,039 5,323 5,510 5,584 5,688 5,688 5,688 5,668 5,668 5,761 5,804 5,875 5,975 5,999 5,920 6,023 5,841 5,425
2010 January February April May June July August September October November December Total	182 163 156 138 155 176 190 190 161 145 148 178 <b>1,982</b>	150 132 114 89 85 87 96 99 86 88 104 144 1,274	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	49 46 51 48 48 48 47 50 50 50 50 49 55 <b>590</b>	17 15 18 17 18 19 19 19 18 18 17 17 <b>210</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	9 8 7 5 5 5 6 6 6 7 7 9 <b>79</b>	1 1 1 1 1 1 1 1 1 1 <b>1</b> 1	92 84 95 96 99 97 101 100 96 97 92 96 <b>1,146</b>	5 6 7 7 8 8 6 7 7 <b>8</b> 8 8 7 <b>8</b> 1	9 7 8 9 7 9 7 8 7 8 7 8 <b>96</b>	9 9 11 11 10 10 11 10 9 10 10 122	192 175 199 194 197 196 199 203 195 196 191 204 <b>2,339</b>	524 471 470 422 437 459 487 493 444 429 444 527 <b>5,607</b>
2011 January February March May June July August September October November December Total	179 148 147 135 148 167 8 183 8 183 8 154 140 8 136 8 148 8 8 148	154 131 119 <sup>R</sup> 97 89 88 <sup>R</sup> 100 100 88 93 <sup>R</sup> 107 135 <sup>R</sup> 1, <b>302</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	52 47 53 48 49 50 47 53 50 53 52 51 <b>603</b>	17 15 18 18 19 18 19 17 17 17 209	(s) 1 (s) (s) (s) (s) (s) (s) (s) (s)	10 8 6 6 6 7 6 7 8 9 <b>87</b>	1 1 1 1 1 1 1 1 1 1 1 1 0	91 84 95 92 95 98 96 92 93 89 93 89 94 <b>1,113</b>	7 5 6 8 7 7 8 6 7 7 4 <b>7</b> 8	9 8 7 7 7 5 5 7 6 6 8 8 8 2	10 8 11 10 8 9 11 10 10 10 11 10 <b>118</b>	196 176 200 188 192 193 193 200 194 191 193 <b>2,304</b>	<sup>R</sup> 531 R 456 467 422 429 449 480 484 R 432 R 432 R 429 R 435 R 477 R <b>5,489</b>
2012 January February April June July August 8-Month Total 2011 8-Month Total	R 143 R 128 118 107 127 143 171 164 <b>1,102</b> <b>1,293</b> <b>1,349</b>	147 133 113 104 99 99 110 106 <b>911</b> <b>879</b> <b>852</b>	(s) (s) (s) (s) (s) (s) (s) 1	50 49 47 49 47 47 49 <b>387</b> <b>398</b> <b>386</b>	16 16 17 18 19 18 18 <b>138</b> <b>141</b> 141	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	8 7 6 7 6 7 57 57 57	1 1 1 1 1 1 6 7 7	89 87 93 92 97 94 95 99 <b>746</b> <b>746</b>	7 5 6 7 7 6 7 51 54 54	6 6 4 5 <b>6</b> 5 <b>46</b> 55 65	11 10 9 9 10 10 11 <b>79</b> <b>77</b> <b>83</b>	188 182 189 184 192 189 191 197 <b>1,512</b> <b>1,537</b> <b>1,554</b>	478 R 444 421 R 396 420 432 473 469 <b>3,532</b> <b>3,717</b> <b>3,762</b>

<sup>a</sup> Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44. <sup>b</sup> Includes coal coke net imports.

<sup>c</sup> Natural gas, excluding supplemental gaseous fuels.

d Distillate fuel oil, excluding biodiesel. Liquefied petroleum gases.

е

Finished motor gasoline, excluding fuel ethanol.

<sup>1</sup> Finished motor gasoline, excluding fuel ethanol.
 <sup>9</sup> Aviation gasoline blending components, crude oil, motor gasoline blending components, pentanes plus, petrochemical feedstocks, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products.
 <sup>h</sup> Includes electric power sector use of geothermal energy and non-biomass waste. See Table 12.6.
 <sup>i</sup> Evoludes emissions from biomass energy consumption. See Table 12.7

Excludes emissions from biomass energy consumption. See Table 12.7.

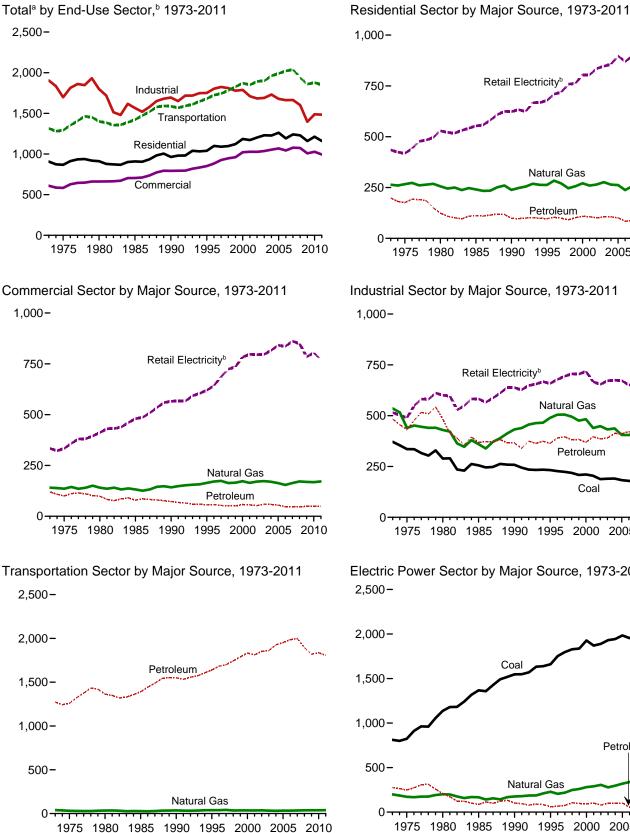
R=Revised. (s)=Less than 0.5 million metric tons.

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

web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.

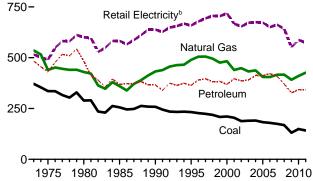
Sources: See end of section.



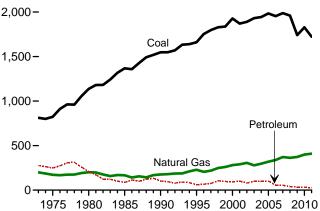


Retail Electricity Natural Gas Petroleum 1975 1980 1985 1990 1995 2000 2005 2010

Industrial Sector by Major Source, 1973-2011



Electric Power Sector by Major Source, 1973-2011



<sup>a</sup> Excludes emissions from biomass energy consumption.

<sup>b</sup> Emissions from energy consumption in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail Sales.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#environment. Sources: Tables 12.2-12.6.

Table 12.2	Carbon Dioxide Emissions From Energy Consumption: Residential Sector
	(Million Metric Tons of Carbon Dioxide <sup>a</sup> )

				Retail				
	Coal	Natural Gas <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Kerosene	LPG <sup>d</sup>	Total	Elec- tricity <sup>e</sup>	Total <sup>f</sup>
973 Total	9	264	147	16	36	199	435	907
75 Total	6	266	132	12	32	176	419	867
80 Total	3	256	96	8	20	124	529	911
35 Total	4	241	80	11	20	111	553	909
90 Total	3	238	72	5	22	98	624	963
95 Total	2	263	66	5	25	96	678	1,039
96 Total	2	284	68	6	30	104	710	1,099
97 Total	2	270	64	7	29	99	719	1,090
98 Total	1	247	56	8	27	91	759	1,097
99 Total	1	257	61	8	33	102	762	1,122
00 Total	1	271	66	7	35	108	805	1,185
01 Total	1	259	66	7	33	106	805	1,172
02 Total	1	265	63	4	34	101	835	1,203
03 Total	1	276	66	5	34	106	847	1,230
04 Total	1	264	68	6	32	106	856	1,228
05 Total	1	262	62	6	32	101	897	1,261
06 Total	1	237	52	5	28	85	869	1,192
07 Total	1	257	53	3	31	87	897	1,241
08 Total	1	266	49	2	35	85	878	1,229
09 Total	1	259	44	2	35	81	819	1,159
0 January	(s)	51	6	(s)	3	10	91	151
February	(s)	43	6	(s)	3	9	74	126
March	(s)	31	4	(s)	3	7	65	103
April	(s)	17	2	(s)	2	5	51	73
May	(s)	11	3	(s)	2	5	59	75
June	(s)	7	3	(s)	2	6	79	92
July	(s)	6	3 3 2 2 2	(s)	3	5	97	108
August	(s)	6	2	(s)	3	5	96	107
September	(s) (s)	6	2	(s)	3	5	72	83
October	(s)	11	33	(s)	3	6	56	73
November	(s)	24	3	(s) (s)	3	7	56	87
December	(s)	46	6	(s)	3	10	81	137
Total	1	259	43	2	33	78	875	1,212
11 January	(s)	53	5	(s)	4	9	87	<sup>R</sup> 148
February	(s)	42	5	(s)	3	8	67	117
March	(s)	33	4	(s)	3	7	59	99
April	(s)	19	3	(s)	3	5	53	_ 77
Мау	(s)	11	2	(s)	3	4	<sup>R</sup> 57	R 73
June	(s)	7	3	(s)	3	5 5	R 75	88
July	(s)	6	3 2 3 2 3	(s)	3	5	R 95	R 106
August	(s)	6	3	(s)	3	6	92 <sup>R</sup> 68	104
September	(s)	7		(s)	3	6		81 R 72
October	(s)	12	4	(s)	3	7	R 53	R 83
November	(s)	23 37	6	(s) (s)	3	7 9	53	
December Total	(s) 1	37 256	6 44	(S) 1	3 35	80	66 <sup>R</sup> 823	113 <sup>R</sup> <b>1,16</b> 0
				I				
2 January	(s)	43 36	6 5	(s)	3 3	9 8	<sup>R</sup> 69 58	121
February	(s)	36 22	5 4	(s)	3	8 7	58	102 80
March	(s) (s)	15		(s)	3	6	45	66
April		15 9	3 3 3 3	(s)	3	6	45	66 70
May	(s)	9	3	(s)	3	6	69	82
June	(s) (s)	6	<u></u>	(s) (s)	3	6	93	82 104
July August	(S) (S)	6	3	(S) (S)	3	67	85	98
8-Month Total	(s) (s)	144	31	(s) (s)	23	54	524	723
11 8-Month Total	(s)	177	27	1	23	51	585	812
10 8-Month Total	(s)	172	28	1	22	51	611	834

<sup>a</sup> Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
 <sup>b</sup> Natural gas, excluding supplemental gaseous fuels.
 <sup>c</sup> Distillate fuel oil, excluding biodiesel.
 <sup>d</sup> Liquefied petroleum gases.
 <sup>e</sup> Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 7.6 and 12.6.
 <sup>b</sup> Excludes emissions from biomass energy consumption. See Table 12.7.

<sup>†</sup> Excludes emissions from biomass energy consumption. See Table 12.7. R=Revised. (s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973. Sources: See end of section.

#### Table 12.3 Carbon Dioxide Emissions From Energy Consumption: Commercial Sector (Million Metric Tons of Carbon Dioxidea)

				Petroleum									
	Coal	Natural Gas <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Kerosene	LPG <sup>d</sup>	Motor Gasoline <sup>e</sup>	Petroleum Coke	Residual Fuel Oil	Total	Retail Elec- tricity <sup>f</sup>	Total <sup>g</sup>		
1973 Total           1975 Total           1980 Total           1985 Total           1985 Total           1995 Total           1995 Total           1995 Total           1995 Total           1995 Total           1997 Total           1998 Total           1999 Total           2000 Total           2001 Total           2002 Total           2003 Total           2004 Total           2005 Total           2006 Total           2007 Total           2008 Total           2008 Total           2008 Total           2008 Total           2008 Total           2008 Total	Coal 15 14 11 13 12 11 12 9 9 10 9 9 9 9 9 8 10 9 9 8 10 9 9 7 7 6	Gas <sup>b</sup> 141 136 141 132 142 164 171 174 165 173 164 173 173 173 163 154 164 171 169	Fuel Oil <sup>c</sup> 47 43 38 46 39 35 32 31 31 32 36 37 32 36 37 32 35 34 34 33 29 28 28 27 30	Kerosene 5 4 3 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	LPG <sup>d</sup> 9 8 6 6 7 8 8 7 9 9 9 9 9 9 10 10 8 8 8 10 9 9	Gasoline <sup>e</sup> 6 6 8 7 8 1 2 3 3 3 2 3 3 3 3 3 4 3 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 4 4 4 4 4 5 4 5	Coke NA NA NA (S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	Fuel Oil 52 39 44 18 11 11 9 7 6 6 6 9 10 9 9 10 9 6 6 6 6 6 6 6	Total 120 100 98 79 73 56 57 54 51 51 58 57 52 59 58 55 48 47 46 49	tricity <sup>r</sup> 334 333 412 480 566 620 643 686 724 735 783 797 795 796 816 842 836 861 850 785	Total <sup>9</sup> 609 583 662 704 793 851 883 926 947 960 1,022 1,027 1,026 1,036 1,054 1,059 1,043 1,074		
2010 January	1 1 (s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	27 24 18 12 9 7 6 7 6 7 10 16 25 <b>168</b>	4 4 3 2 2 2 2 2 2 1 2 2 2 1 2 2 4 <b>30</b>	(5) (5) (5) (5) (5) (5) (5) (5) (5) (5)	1 1 1 1 1 1 1 1 1 1 9	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	(5) (5) (5) (5) (5) (5) (5) (5) (5)	1 1 (s) (s) (s) (s) (s) (s) (s) (s) (s) 1 6	6 6 4 3 3 4 3 3 4 4 4 6 <b>49</b>	66 60 59 57 66 74 80 81 69 63 61 68 <b>805</b>	101 91 82 73 78 85 90 91 79 77 81 100 <b>1,027</b>		
2011 January February April May June July August September October November December Total	1 1 (s)	29 23 20 13 9 7 7 7 8 12 15 22 171	4 3 2 1 2 2 2 3 3 4 <b>31</b>	(5) (5) (5) (5) (5) (5) (5) (5) (5) (5)	1 1 1 1 1 1 1 1 1 1 1 9	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	(s) (s) (s) 0 0 0 0 0 0 (s) (s) (s) (s)	1 (s) (s) (s) (s) (s) (s) (s) (s) 1 5	6 5 4 3 2 3 3 4 4 4 5 6 <b>9</b>	65 55 58 57 63 70 79 77 66 61 57 8 60 8 7 <b>69</b>	100 R 85 83 73 75 81 89 89 87 77 77 77 77 88 88 R <b>994</b>		
2012 January February April May June August 8-Month Total	(s) (s) (s) (s) (s) (s) (s) (s) (s) 3	24 21 14 11 8 7 7 7 7 <b>100</b>	4 3 2 2 2 2 2 3 <b>22</b>	(S) (S) (S) (S) (S) (S) (S) (S)	1 1 1 1 1 1 <b>6</b>	(s) (s) (s) (s) (s) (s) (s) 2	(s) (s) (s) (s) (s) (s) (s) (s)	1 1 (s) (s) (s) (s) (s) (s) 4	6 5 3 4 4 4 <b>3</b> <b>3</b>	57 53 52 51 61 66 77 74 <b>491</b>	88 80 71 66 73 77 87 85 <b>628</b>		
2011 8-Month Total 2010 8-Month Total	4 4	115 110	19 20	(s) (s)	6 6	2 2	(s) (s)	3 4	31 32	525 544	674 690		

<sup>a</sup> Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
 <sup>b</sup> Natural gas, excluding supplemental gaseous fuels.
 <sup>c</sup> Distillate fuel oil, excluding biodiesel.
 <sup>d</sup> Liquefied petroleum gases.
 <sup>e</sup> Finished motor gasoline, excluding fuel ethanol.
 <sup>f</sup> Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 7.6 and 12.6.
 <sup>g</sup> Excludes emissions from biomass energy consumption. See Table 12.7. R=Revised. NA=Not available. (s)=Less than 0.5 million metric tons.

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

Coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973. Sources: See end of section.

#### Table 12.4 Carbon Dioxide Emissions From Energy Consumption: Industrial Sector (Million Metric Tons of Carbon Dioxide<sup>a</sup>)

		Coal Coke					1	Petroleun	<b>ו</b>	1		1	Retail	
	Coal	Net Imports	Natural Gas <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Kero- sene	LPGd	Lubri- cants	Motor Gasoline <sup>e</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>f</sup>	Total	Elec- tricity <sup>g</sup>	Total <sup>h</sup>
1973 Total         1975 Total         1980 Total         1985 Total         1995 Total         1990 Total         1995 Total         1997 Total         1997 Total         1997 Total         1998 Total         1999 Total         2000 Total         2000 Total         2001 Total         2002 Total         2003 Total         2004 Total         2005 Total         2006 Total         2007 Total         2005 Total         2007 Total         2007 Total         2007 Total         2007 Total         2008 Total         2009 Total	371 336 289 256 258 233 227 224 219 208 211 204 188 190 190 183 179 175 168 131	-1 2 -4 -2 1 7 3 5 8 7 7 3 7 6 6 5 7 3 5 -3 -3	536 440 429 360 505 505 475 483 440 448 432 437 405 405 405 416 417 391	106 97 96 81 84 82 87 88 88 88 88 88 83 88 83 83 88 92 92 92 92 93 80	11 9 13 3 1 1 1 1 2 2 3 2 1 (s) (s)	44 39 61 59 37 47 48 50 47 47 52 45 47 42 44 42 43 43 32 33	7 6 7 6 7 7 7 6 7 7 7 7 7 6 6 6 6 6 6 6	18 16 11 15 14 14 15 14 11 21 23 26 25 26 21 17 17	52 51 48 54 67 67 71 80 80 85 76 79 78 84 84 84 84 82 77 72	144 117 105 57 31 25 24 21 16 14 17 14 13 16 18 20 16 13 14 7	100 97 142 93 127 121 139 145 128 135 130 142 143 152 150 132 132	483 431 483 366 364 391 396 386 386 386 386 386 386 386 386 386 38	515 490 601 583 678 679 674 706 704 719 654 672 673 673 650 662 642 551	1,904 1,697 1,798 1,695 1,805 1,803 1,824 1,788 1,778 1,788 1,778 1,690 1,771 1,673 1,662 1,662 1,602 1,397
2010 January February April May July August September October November December Total	12 12 12 12 12 12 13 13 13 13 13 13	(s) (s) (s) (s) (s) (s) (s) (s) (s) -1 -1	38 35 32 33 33 33 33 33 33 35 38 <b>410</b>	6 9 8 6 5 4 7 9 7 8 9 <b>86</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	4 3 2 2 2 2 2 2 3 3 4 <b>35</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	2 1 2 2 2 2 2 2 2 2 2 2 2 2 19	4 6 6 5 6 6 7 7 5 6 6 <b>6</b> 7 7 5 6 6 <b>6</b> 7	1 1 1 1 1 1 1 1 1 8	9 9 11 10 10 11 10 9 10 10 10 <b>122</b>	27 26 30 27 25 30 31 27 30 32 <b>343</b>	46 44 45 51 52 54 55 48 47 48 50 <b>587</b>	122 118 127 120 123 122 124 130 124 120 124 133 <b>1,488</b>
2011 January February March April June June July August September October November December Total	12 12 13 11 12 12 12 12 12 12 12 12 12 12	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	39 36 37 35 33 34 34 34 35 36 39 <b>427</b>	9 7 10 7 7 4 7 7 8 9 6 <b>89</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	5 4 3 3 3 3 3 3 3 4 4 4 4	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	1 2 2 2 2 2 2 2 2 2 2 2 1 2 1 8	54557 85575663 8 <b>63</b>	1 1 1 (s) (s) 1 1 1 7	10 8 11 10 8 9 11 10 10 10 11 10 <b>118</b>	32 25 33 28 27 R 25 30 27 8 25 30 28 29 32 26 R <b>341</b>	R 48 42 R 46 45 50 R 54 53 R 47 R 46 45 R <b>574</b>	R 132 R 129 R 129 122 121 R 124 R 130 R 124 R 130 R 124 R 123 R 124 R 123 R 1485
2012 January February April May June July August 8-Month Total	11 11 12 11 11 10 11 <b>89</b>	(s) (s) (s) (s) (s) (s) (s) (s)	40 37 35 35 34 35 36 <b>288</b>	7 9 7 6 5 3 4 <b>4</b>	(s) (s) (s) (s) (s) (s) (s) (s)	4 3 3 3 3 3 3 3 3 27	(s) (s) (s) (s) (s) (s) (s) (s) 3	1 2 2 2 2 2 2 <b>12</b>	<sup>R</sup> 5 45 56 65 7 <b>45</b>	1 (s) 1 (s) (s) 1 (s) 4	11 10 9 9 10 10 11 <b>79</b>	30 30 27 26 27 26 25 27 <b>217</b>	43 42 41 <sup>R</sup> 46 47 52 50 <b>362</b>	R 124 120 117 113 120 117 R 123 124 <b>957</b>
2011 8-Month Total 2010 8-Month Total	94 98	1 1	282 271	59 53	(s) (s)	27 22	4 4	12 13	43 43	5 5	77 83	227 223	387 393	991 986

<sup>a</sup> Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
 <sup>b</sup> Natural gas, excluding supplemental gaseous fuels.

Natural gas, excluding support Distillate fuel oil, excluding biodiesel.
 d Liquefied petroleum gases.

<sup>o</sup> Liquetied petroleum gases.
 <sup>e</sup> Finished motor gasoline, excluding fuel ethanol.
 <sup>f</sup> Aviation gasoline blending components, crude oil, motor gasoline blending components, pentanes plus, petrochemical feedstocks, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products.
 <sup>g</sup> Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 7.6 and 12.6

Tables 7.6 and 12.6. <sup>h</sup> Excludes emissions from biomass energy consumption. See Table 12.7.

R=Revised. (s)=Less than 0.5 million metric tons and greater than -0.5 million metric tons. Notes: •

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973. Sources: See end of section.

#### Table 12.5 Carbon Dioxide Emissions From Energy Consumption: Transportation Sector (Million Metric Tons of Carbon Dioxide<sup>a</sup>)

			Petroleum								Retail	
	Coal	Natural Gas <sup>b</sup>	Aviation Gasoline	Distillate Fuel Oil <sup>c</sup>	Jet Fuel	LPG <sup>d</sup>	Lubri- cants	Motor Gasoline <sup>e</sup>	Residual Fuel Oil	Total	Elec- tricity <sup>f</sup>	Total <sup>g</sup>
1973 Total         1975 Total         1980 Total         1980 Total         1990 Total         1995 Total         1997 Total         1997 Total         1997 Total         1997 Total         1998 Total         1997 Total         1998 Total         2000 Total         2001 Total         2001 Total         2002 Total         2003 Total         2004 Total         2005 Total         2006 Total         2007 Total         2008 Total         2009 Total	()))))))))))))))))))))))))))))))))))))	39 32 34 28 36 39 41 35 36 35 37 33 33 33 33 33 33 33 33 33 33 33 33	6 5 4 3 3 3 3 3 2 3 3 2 2 2 2 2 2 2 2 2 2 2	163 155 204 232 268 307 327 342 352 366 378 387 394 414 434 444 469 472 440 404	152 145 155 178 223 232 234 234 234 234 245 254 243 237 231 240 246 240 238 226 240 238 226 244	3 3 1 1 1 1 1 1 1 1 1 1 1 1 2 2 3 2	666676667776666665555	886 889 881 908 967 1,029 1,047 1,057 1,057 1,155 1,127 1,158 1,161 1,185 1,186 1,194 1,201 1,146 1,137	57 56 110 62 80 72 67 56 53 52 70 46 53 45 58 66 71 78 72 64	1,273 1,258 1,363 1,391 1,548 1,639 1,683 1,699 1,743 1,789 1,813 1,851 1,861 1,953 1,984 1,999 1,895 1,818	2 2 2 3 3 3 3 3 3 3 4 4 4 5 5 5 5 5 5 5 5 5	1,315 1,292 1,400 1,421 1,588 1,681 1,725 1,744 1,828 1,872 1,828 1,872 1,852 1,899 1,962 1,991 2,022 2,040 1,937 1,860
2010 January February March April June July August September October November December Total	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	4 3 3 3 3 3 3 3 3 3 3 4 <b>38</b>	(5) (5) (5) (5) (5) (5) (5) (5) (5) (5)	31 30 35 37 36 38 39 37 37 37 35 35 <b>425</b>	17 15 18 17 19 19 19 18 18 17 17 <b>210</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	91 82 94 97 95 99 98 94 95 90 90 94 <b>1,124</b>	6 5 6 7 6 5 6 6 6 6 5 <b>6</b> 6 5 6 6 6 5 <b>6</b> 7 6 5 6 6 6 5 6 7 6 5 6 7 6 5 6 5 6 7 6 5 6 7 6 5 6 7 6 5 6 7 6 5 6 7 6 7	145 133 154 159 156 162 161 155 157 149 153 <b>1,836</b>	(5) (5) (5) (5) (5) (5) (5) (5) (5) (5)	150 137 157 161 165 165 165 157 160 152 158 <b>1,879</b>
2011 January February March April May June July August September November December Total	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	5 4 3 3 3 3 3 3 3 3 3 4 <b>39</b>	(5) (5) (5) (5) (5) (5) (5) (5) (5) (5)	33 31 36 38 38 40 37 38 36 8 36 8 34 <b>435</b>	17 15 17 18 19 18 19 17 17 17 17 209	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) 1 (s) (s) (s) (s) (s) (s) (s) (s) (s) 5	89 82 90 93 96 94 90 92 87 92 <b>1,091</b>	6 6 5 5 6 5 5 6 6 5 5 6 <b>6 2</b> <b>6 2</b>	146 135 153 150 155 156 157 158 150 152 145 150 <b>1,807</b>	(5) (5) (5) (5) (5) (5) (5) (5) (5) (5)	151 139 157 153 <sup>R</sup> 158 159 160 161 153 155 149 154 <b>1,850</b>
2012 January February April May June July August 8-Month Total	(h) (h) (h) (h) (h) (h) (h)	4 3 3 3 3 3 3 <b>27</b>	(s) (s) (s) (s) (s) (s) (s) (s)	32 31 35 37 37 38 38 38 <b>284</b>	16 16 17 18 19 18 18 18 <b>138</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) 1	(s) (s) (s) (s) (s) (s) (s) (s) 3	87 85 91 90 95 93 93 97 <b>732</b>	5 4 5 3 4 5 4 <b>34</b> <b>34</b>	141 137 149 <sup>R</sup> 147 154 153 155 158 <b>1,194</b>	(s) (s) (s) (s) (s) (s) (s) (s) <b>3</b>	145 142 152 151 157 156 159 161 <b>1,223</b>
2011 8-Month Total 2010 8-Month Total	(h) (h)	26 25	1 1	291 281	141 141	1 1	3 4	731 750	41 46	1,210 1,224	3 3	1,239 1,252

<sup>a</sup> Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
 <sup>b</sup> Natural gas, excluding supplemental gaseous fuels.
 <sup>c</sup> Distillate fuel oil, excluding biodiesel.
 <sup>d</sup> Liquefied petroleum gases.
 <sup>e</sup> Finished motor gasoline, excluding fuel ethanol.
 <sup>f</sup> Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 7.6 and 12.6.
 <sup>g</sup> Excludes emissions from biomass energy consumption. See Table 12.7.
 <sup>h</sup> Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

R=Revised. (s)=Less than 0.5 million metric tons. Notes: • Data are estimates for carbon dioxide emissions from energy consumption, including the nonfuel use of fossil fuels. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973. Sources: See end of section.

#### Table 12.6 Carbon Dioxide Emissions From Energy Consumption: Electric Power Sector (Million Metric Tons of Carbon Dioxide<sup>a</sup>)

	Coal			Petrol	leum				
		Natural Gas <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Residual Fuel Oil	Total	Geo- thermal	Non- Biomass Waste <sup>d</sup>	Total <sup>e</sup>
973 Total	812	199	20	2	254	276	NA	NA	1,286
975 Total	824	172	17	(s)	231	248	NA	NA	1,244
980 Total	1.137	200	12	1	194	207	NA	NA	1,544
985 Total	1,367	166	6	1	79	86	NA	NA	1,619
990 Total	1,548	176	7	3	92	102	(s)	6	1,831
			8	8	45				
95 Total	1,661	228				61	(s)	10	1,960
96 Total	1,752	205	8	8	50	66	(s)	10	2,033
997 Total	1,797	219	8	10	56	75	(s)	10	2,101
998 Total	1,828	248	10	13	82	105	(s)	10	2,192
999 Total	1,836	260	10	11	76	97	(s)	10	2,204
000 Total	1,927	281	13	10	69	91	(s)	10	2,310
001 Total	1,870	290	12	11	79	102	(s)	11	2,273
002 Total	1,890	306	9	18	52	79	(s)	13	2,288
003 Total	1,931	278	12	18	69	98	(s)	11	2,319
004 Total	1,943	297	8	23	69	100	(s)	11	2,352
005 Total	1,984	319	8	25	69	102	(s)	11	2,332
	1,964	338	5	25	28	56	(S)	11	2,417
006 Total									
007 Total	1,987	372	7	17	31	55	(s)	11	2,426
008 Total	1,959	362	5	16	19	40	(s)	12	2,374
009 Total	1,741	373	5	14	14	34	(s)	11	2,159
10 January	170	30	1	1	1	4	(s)	1	204
February	150	26	(S)	1	1	2	(s)	1	179
March	143	25	(s)	1	1	2	(s)	1	171
April	125	25	(s)	1	1	2	(s)	1	154
May	142	30	(s)	1	1	3	(s)	1	176
June	163	38	1	1	2	4	(s)	1	206
July	177	48	1	2	2	4	(s)	1	231
	177	40 51		2	2	3		1	232
August			(s)				(s)		
September	148	38	(s)	1	1	2	(s)	1	189
October	132	31	(s)	1	1	2	(s)	1	166
November	136	27	(s)	1	1	2	(s)	1	166
December	165	31	1	1	1	3	(s)	1	200
Total	1,828	399	6	15	12	33	(s)	11	2,271
11 January	166	29	1	2	1	3	(s)	1	<sup>R</sup> 200
February	<sup>R</sup> 136	26	(s)	1	1	2	(s)	1	<sup>R</sup> 165
March	<sup>R</sup> 134	26	(s)	R 2	1	R 3	(s)	1	163
April	<sup>R</sup> 124	28	(S)	1	1	2	(s)	1	155
	135	31	(S)	1	1	2	(s)	1	169
May						2			
June	155 B 474	38	(s)	1 <sup>R</sup> 2	1		(s)	1	196
July	R 174	51	(s)	-	1	3	(s)	1	228
August	170	50	(s)	1	1	2	(s)	1	223
September	141	37	(s)	1	<sup>R</sup> (s)	2	(s)	1	181
October	128	31	(s)	1	(s)	2	(s)	1	162
November	<sup>R</sup> 124	29	(s)	1	(s)	2	(s)	1	155
December	<sup>R</sup> 136	33	(s)	1	(s)	2	(s)	1	<sup>R</sup> 172
Total	<sup>R</sup> 1,723	R 409	5	<sup>R</sup> 15	7	R 27	(s)	11	<sup>R</sup> 2,170
12 January	<sup>R</sup> 131	35	(s)	1	1	2	(s)	1	<sup>R</sup> 169
February	116	35	(S)	1	(s)	2	(s)	1	153
	106	37		1		1		1	
March			(s)	R ( )	(s)		(s)		145 B 405
April	<sup>R</sup> 96	39	(s)	<sup>R</sup> (s)	(s)	1	(s)	1	<sup>R</sup> 137
Мау	116	44	(s)	1	(s)	1	(s)	1	163
June	132	48	(s)	1	1	2	(s)	1	183
July	160	59	(s)	1	1	2	(s)	1	222
August	153	54	(s)	1	1	2	(s)	1	210
8-Month Total	1,009	351	3	6	4	13	(s)	7	1,380
011 8-Month Total	1,194	279	3	11	5	20	(s)	7	1,500
	1,246	273	4	10	9	23	(s)	7	1,550

<sup>a</sup> Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44. <sup>b</sup> Natural gas, excluding supplemental gaseous fuels. <sup>c</sup> Distillate fuel oil, excluding biodiesel.

<sup>d</sup> Municipal solid waste from non-biogenic sources, and tire-derived fuels.
 <sup>e</sup> Excludes emissions from biomass energy consumption. See Table 12.7.
 R=Revised. NA=Not available. (s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 12 Methodology and Sources" at end of section.

• See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for

all available data beginning in 1973.

Sources: See end of section.

#### Table 12.7 Carbon Dioxide Emissions From Biomass Energy Consumption

			By Source			By Sector						
	Wood <sup>b</sup>	Biomass Waste <sup>c</sup>	Fuel Ethanol <sup>d</sup>	Bio- diesel	Total	Resi- dential	Com- mercial <sup>e</sup>	Indus- trial <sup>f</sup>	Trans- portation	Electric Power <sup>g</sup>	Total	
1973 Total         1975 Total         1980 Total         1985 Total         1990 Total         1995 Total         1995 Total         1996 Total         1997 Total         1998 Total         1998 Total         1998 Total         1998 Total         2000 Total         2001 Total         2002 Total         2003 Total         2003 Total         2004 Total         2005 Total         2006 Total         2007 Total         2008 Total         2009 Total	143 140 232 252 208 229 229 222 205 208 212 188 187 188 199 200 197 194 191 177	(s) (s) 14 30 32 30 30 29 27 33 36 35 37 36 37 36 37 36 40 41	NA NA 3 4 8 6 7 8 8 9 10 12 16 20 23 31 39 55 62	NA A A A A A A A A A A A A A A A A A A	143 141 232 270 266 259 242 245 245 248 231 235 240 255 261 266 274 289 284	33 40 80 95 54 49 51 36 37 39 35 36 38 38 38 38 38 38 40 36 38 42 40	1 2 2 8 9 10 9 9 9 9 9 9 9 9 9 9 9 10 10 9 9 10	109 100 150 168 147 166 172 160 161 161 161 144 141 151 150 151 146 140 128	NA NA 3 4 8 6 7 8 8 9 10 12 16 20 23 33 41 57 64	(s) (s) 1 23 28 30 30 30 30 30 30 30 30 30 37 35 37 36 37 38 39 40 41	143 141 232 270 266 259 242 245 245 248 231 235 240 255 261 266 274 289 284	
2010 January February April May June July August September October November December Total	16 14 15 15 15 16 16 16 15 16 <b>186</b>	4 3 4 4 4 4 4 3 4 4 4 <b>4</b> 3 4 4 <b>4</b> 3	65666666667 <b>73</b>	(5) (5) (5) (5) (5) (5) (5) (5) (5) (5)	25 23 25 25 25 26 26 25 26 25 26 25 27 <b>304</b>	3 3 3 3 3 3 3 3 3 3 3 3 3 <b>3</b> 9	1 1 1 1 1 1 1 1 1 1 1 1 1 0	12 11 12 11 11 12 12 12 12 12 12 12 12 1	65 66 66 66 66 66 74	4 3 4 3 4 4 4 3 3 4 4 4 <b>4</b> 2	25 23 25 25 25 26 26 25 26 25 26 25 27 <b>304</b>	
2011 January February March May June July August September October November December Total	R 17 15 16 15 16 16 R 16 R 16 R 16 R 16 R 17 R <b>189</b>	4 3 8 3 8 3 4 4 4 4 4 4 4 4 3	6 6 6 6 6 6 6 6 6 6 7 3	(S) (S) (S) 1 1 1 1 1 1 8	26 24 25 R 25 R 25 R 27 27 26 26 26 26 28 R <b>313</b>	3 3 3 3 3 3 3 3 3 3 3 3 3 3 40	1 1 1 1 1 1 1 1 8 1	12 11 12 11 12 12 12 R 12 R 12 R 13 R 142	6 6 7 7 7 7 7 7 7 7 80	3 3 3 3 4 4 3 3 4 8 4 8 <b>4</b>	26 24 25 R 25 R 26 R 27 27 26 26 26 28 R <b>313</b>	
2012 January February April May June July August 8-Month Total	16 15 14 <sup>R</sup> 16 15 16 16 <b>124</b>	4 3 4 R 3 4 R 3 4 4 28	6 6 6 6 6 7 <b>49</b>	(s) 1 1 1 1 1 1 <b>6</b>	26 25 26 25 27 26 <sup>R</sup> 27 27 <b>207</b>	3 3 3 3 3 3 3 3 3 27	1 1 1 1 1 1 7	12 11 11 12 11 12 12 <b>93</b>	6 7 7 7 7 7 7 <b>54</b>	<sup>R</sup> 3 3 3 3 3 8 4 3 <b>26</b>	26 25 26 25 27 26 R 27 27 27 207	
2011 8-Month Total 2010 8-Month Total	125 124	28 28	49 48	5 2	206 201	27 26	7 7	94 91	52 48	27 28	206 201	

(Million Metric Tons of Carbon Dioxidea)

<sup>a</sup> Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44. <sup>b</sup> Wood and wood-derived fuels.

<sup>b</sup> Wood and wood-eerived ruels.
 <sup>c</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.
 <sup>d</sup> Fuel ethanol minus denaturant.
 <sup>e</sup> Commercial sector, including commercial combined-heat-and-power (CHP)

and commercial electricity-only plants. <sup>f</sup> Industrial sector, including industrial combined heat-and-power (CHP) and industrial electricity-only plants. <sup>g</sup> The electric power sector comprises electricity-only and

<sup>9</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.

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

R=Revised. NA=Not available. (s)=Less than 0.5 million metric tons. Notes: • Carbon dioxide emissions from biomass energy consumption are excluded from the energy-related carbon dioxide emissions reported in Tables 12.1–12.6. See Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary.
• See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973. Sources: See end of section.

#### Environment

**Note 1. Emissions of Carbon Dioxide and Other Greenhouse Gases.** Greenhouse gases are those gases—such as water vapor, carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride—that are transparent to solar (shortwave) radiation but opaque to long-wave (infrared) radiation, thus preventing long-wave radiant energy from leaving Earth's atmosphere. The net effect is a trapping of absorbed radiation and a tendency to warm the planet's surface.

Energy-related carbon dioxide emissions account for about 98 percent of U.S.  $CO_2$  emissions. The vast majority of  $CO_2$  emissions come from fossil fuel combustion, with smaller amounts from the nonfuel use of fossil fuels, as well as from electricity generation using geothermal energy and nonbiomass waste. Other sources of  $CO_2$  emissions include industrial processes, such as cement and limestone production. Data in the U.S. Energy Information Administration's (EIA) *Monthly Energy Review (MER)* Tables 12.1–12.6 are estimates for U.S.  $CO_2$  emissions from energy consumption, including the nonfuel use of fossil fuels (excluded are estimates for  $CO_2$  emissions from biomass energy consumption, which appear in Table 12.7).

For annual U.S. estimates for emissions of CO<sub>2</sub> from all sources, as well as for emissions of other greenhouse gases, see EIA's *Emissions of Greenhouse Gases Report* at http://www.eia.gov/environment/emissions/ghg\_report/.

Note 2. Accounting for Carbon Dioxide Emissions From **Biomass Energy Combustion.** Carbon dioxide (CO<sub>2</sub>) emissions from the combustion of biomass to produce energy are excluded from the energy-related CO<sub>2</sub> emissions reported in MER Tables 12.1-12.6, but appear in Table 12.7. According to current international convention (see the Intergovernmental Panel on Climate Change's "2006 IPCC Guidelines for National Greenhouse Gas Inventories"), carbon released through biomass combustion is excluded from reported energy-related emissions. The release of carbon from biomass combustion is assumed to be balanced by the uptake of carbon when the feedstock is grown, resulting in zero net emissions over some period of time. (This is not to say that biomass energy is carbon-neutral. Energy inputs are required in order to grow, fertilize, and harvest the feedstock and to produce and process the biomass into fuels.)

However, analysts have debated whether increased use of biomass energy may result in a decline in terrestrial carbon stocks, leading to a net positive release of carbon rather than the zero net release assumed by its exclusion from reported energy-related emissions. For example, the clearing of forests for biofuel crops could result in an initial release of carbon that is not fully recaptured in subsequent use of the land for agriculture.

To reflect the potential net emissions, the international convention for greenhouse gas inventories is to report

biomass emissions in the category "agriculture, forestry, and other land use," usually based on estimates of net changes in carbon stocks over time.

This indirect accounting of  $CO_2$  emissions from biomass can potentially lead to confusion in accounting for and understanding the flow of  $CO_2$  emissions within energy and nonenergy systems. In recognition of this issue, reporting of  $CO_2$  emissions from biomass combustion alongside other energy-related  $CO_2$  emissions offers an alternative accounting treatment. It is important, however, to avoid misinterpreting emissions from fossil energy and biomass energy sources as necessarily additive. Instead, the combined total of direct  $CO_2$  emissions from biomass and energy-related  $CO_2$  emissions implicitly assumes that none of the carbon emitted was previously or subsequently reabsorbed in terrestrial sinks or that other emissions sources offset any such sequestration.

#### Section 12 Methodology and Sources

To estimate carbon dioxide emissions from energy consumption for the *Monthly Energy Review (MER)*, Tables 12.1–12.7, the U.S. Energy Information Administration (EIA) uses the following methodology and sources:

#### **Step 1. Determine Fuel Consumption**

Coal—Coal sectoral (residential, commercial, coke plants, other industrial, transportation, electric power) consumption data in thousand short tons are from MER Table 6.2. Coal sectoral consumption data are converted to trillion Btu by multiplying by the coal heat content factors in MER Table A5.

Coal Coke Net Imports—Coal coke net imports data in trillion Btu are derived from coal coke imports and exports data in MER Tables 1.4a and 1.4b.

Natural Gas (excluding supplemental gaseous fuels)—Natural gas sectoral consumption data in trillion Btu are from MER Tables 2.2–2.6.

Petroleum—Total and sectoral consumption (product supplied) data in thousand barrels per day for asphalt and road oil, aviation gasoline, distillate fuel oil, jet fuel, kerosene, liquefied petroleum gases (LPG), lubricants, motor gasoline, petroleum coke, and residual fuel oil are from MER Tables 3.5 and 3.7a-3.7c. For the component products of LPG (ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene) and "other petroleum" (aviation gasoline blending components, crude oil, motor gasoline blending components, naphthas for petrochemical feedstock use, other oils for petrochemical feedstock use, pentanes plus, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products), consumption (product supplied) data in thousand barrels per day are from EIA's Petroleum Supply Annual (PSA), Petroleum Supply Monthly (PSM), and earlier

publications (see sources for MER Table 3.5). Petroleum consumption data by product are converted to trillion Btu by multiplying by the petroleum heat content factors in MER Table A1 (Table A3 for motor gasoline).

Biomass—Sectoral consumption data in trillion Btu for wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel are from MER Tables 10.2a–10.2c.

#### Step 2. Remove Biofuels From Petroleum

Distillate Fuel Oil—Beginning in 2009, the distillate fuel oil data (for total and transportation sector) in Step 1 include biodiesel, a non-fossil renewable fuel. To remove the biodiesel portion from distillate fuel oil, data in thousand barrels per day for refinery and blender net inputs of renewable diesel fuel (from the PSA/PSM) are converted to trillion Btu by multiplying by the biodiesel heat content factor in MER Table A3, and then subtracted from the distillate fuel oil consumption values.

Motor Gasoline-Beginning in 1993, the motor gasoline data (for total, commercial sector, industrial sector, and transportation sector) in Step 1 include fuel ethanol, a nonfossil renewable fuel. To remove the fuel ethanol portion from motor gasoline, data in trillion Btu for fuel ethanol consumption (from MER Tables 10.2a, 10.2b, and 10.3) are subtracted from the motor gasoline consumption values. (Note that about 2 percent of fuel ethanol is fossilbased petroleum denaturant, to make the fuel ethanol For 1993-2008, petroleum denaturant is undrinkable. double counted in the PSA product supplied statistics, in both the original product category-e.g., pentanes plus-and also in the finished motor gasoline category; for this time period for MER Section 12, petroleum denaturant is removed along with the fuel ethanol from motor gasoline, but left in the original product. Beginning in 2009, petroleum denaturant is counted only in the PSA/PSM product supplied statistics for motor gasoline; for this time period for MER Section 12, petroleum denaturant is left in motor gasoline.)

#### Step 3. Remove Carbon Sequestered by Nonfuel Use

The following fuels have industrial nonfuel uses as chemical feedstocks and other products: coal, natural gas, asphalt and road oil, distillate fuel oil, liquefied petroleum gases (ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene), lubricants (which have industrial and transportation nonfuel uses), naphthas for petrochemical feedstock use, other oils for petrochemical feedstock use, pentanes plus, petroleum coke, residual fuel oil, special naphthas, still gas, waxes, and miscellaneous petroleum products. In the nonfuel use of these fuels, some of the carbon is sequestered, and is thus subtracted from the fuel consumption values in Steps 1 and 2.

Estimates of annual nonfuel use and associated carbon sequestration are developed by EIA using the methodology

detailed in "Documentation for *Emissions of Greenhouse Gases in the United States 2008*" at http://www.eia.gov/oiaf/1605/ggrpt/documentation/pdf/0638(2006).pdf.

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

# Step 4. Determine Carbon Dioxide Emissions From Energy Consumption

Carbon dioxide (CO<sub>2</sub>) emissions data in million metric tons are calculated by multiplying consumption values in trillion Btu from Steps 1 and 2 (minus the carbon sequestered in nonfuel use in Step 3) by the CO<sub>2</sub> emissions factors at http://www.eia.gov/oiaf/1605/ggrpt/excel/CO2\_coeffs\_09\_v2.xls. Beginning in 2010, the 2009 factors are used.

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

Coal Coke Net Imports—CO<sub>2</sub> emissions for coal coke net imports are calculated.

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

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

Geothermal and Non-Biomass Waste—Annual  $CO_2$  emissions data for geothermal and non-biomass waste are EIA estimates based on Form EIA-923, "Power Plant Operations Report" (and predecessor forms). Monthly estimates are created by dividing the annual data by the number of days in the year and then multiplying by the number of days in the month. (Annual estimates for the current year are set equal to those of the previous year.)

Biomass— $CO_2$  emissions for wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel are calculated for each sector. Total emissions for each biomass fuel are the sum of the sectoral emissions. The following factors, in million metric tons  $CO_2$  per quadrillion Btu, are used: wood —93.80; biomass waste—90.70; fuel ethanol—68.44; and biodiesel—73.84. For 1973–1988, the biomass portion of waste in MER Tables 10.2a–10.2c is estimated as 67 percent; for 1989–2000, the biomass portion of waste is estimated as 67 percent in 1989 to 58 percent in 2000, based on the biogenic shares of total municipal solid waste shown in EIA's "Methodolology for Allocating Municipal Solid Waste to Biogenic and Non-Biogenic Energy," Table 1 at http://www.eia.gov/cneaf/solar.renewables/page/mswaste/msw.pdf.

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### **Appendix A**

### **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 butanepropane mixture, the thermal conversion factor for butane is weighted 1.5 times the thermal conversion factor for propane.

In general, the annual thermal conversion factors presented in Tables A2 through A6 are computed from final annual data or from the best available data and labeled "preliminary." Often, the previous year's factor is used as a preliminary value until data become available to calculate the factor appropriate to the year. The source of each factor is described in the section entitled "Thermal Conversion Factor Source Documentation," which follows Table A6 in this appendix.

### Table A1. Approximate Heat Content of Petroleum Products (Million Btu per Barrel)

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

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

<sup>b</sup> Does not include biodiesel. See Table A3 for biodiesel heat contents.

° 70 percent ethane and 30 percent propane.

<sup>d</sup> See Table A3 for motor gasoline weighted heat contents beginning in 1994, and for fuel ethanol heat contents.

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

Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.

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)

	Pro	duction		Imports			Exports	
	Crude Oil <sup>a</sup>	Natural Gas Plant Liquids	Crude Oil <sup>a</sup>	Petroleum Products	Total	Crude Oil <sup>a</sup>	Petroleum Products	Total
973	5.800	4.049	5.817	5.983	5.897	5.800	5.752	5.752
973	5.800	4.049	5.827	5.959	5.884	5.800	5.773	5.774
974 975	5.800	3.984	5.821	5.935	5.858	5.800	5.747	5.748
							••••	
976	5.800	3.964	5.808	5.980	5.856	5.800	5.743	5.745
977	5.800	3.941	5.810	5.908	5.834	5.800	5.796	5.797
978	5.800	3.925	5.802	5.955	5.839	5.800	5.814	5.808
979	5.800	3.955	5.810	5.811	5.810	5.800	5.864	5.832
	5.800	3.914	5.812	5.748	5.796	5.800	5.841	5.820
981	5.800	3.930	5.818	5.659	5.775	5.800	5.837	5.821
982	5.800	3.872	5.826	5.664	5.775	5.800	5.829	5.820
983	5.800	3.839	5.825	5.677	5.774	5.800	5.800	5.800
984	5.800	3.812	5.823	5.613	5.745	5.800	5.867	5.850
985	5.800	3.815	5.832	5.572	5.736	5.800	5.819	5.814
986	5.800	3.797	5.903	5.624	5.808	5.800	5.839	5.832
987	5.800	3.804	5.901	5.599	5.820	5.800	5.860	5.858
	5.800	3.800	5.900	5.618	5.820	5.800	5.842	5.840
	5.800	3.826	5.906	5.641	5.833	5.800	5.869	5.857
990	5.800	3.822	5.934	5.614	5.849	5.800	5.838	5.833
991	5.800	3.807	5.948	5.636	5.873	5.800	5.827	5.823
992	5.800	3.804	5.953	5.623	5.877	5.800	5.774	5.777
993	5.800	3.801	5.954	5.620	5.883	5.800	5.777	5.779
994	5.800	3.794	5.950	5.534	5.861	5.800	5.777	5.779
995	5.800	3.796	5.938	5.483	5.855	5.800	5.740	5.746
96	5.800	3.777	5.947	5.468	5.847	5.800	5.728	5.736
97	5.800	3.762	5.954	5.469	5.862	5.800	5.726	5.734
998	5.800	3.769	5.953	5.462	5.861	5.800	5.710	5.720
999	5.800	3.744	5.942	5.421	5.840	5.800	5.684	5.699
000	5.800	3.733	5.959	5.432	5.849	5.800	5.651	5.658
001	5.800	3.735	5.976	5.443	5.862	5.800	5.751	5.752
002	5.800	3.729	5.971	5.451	5.863	5.800	5.687	5.688
003	5.800	3.739	5.970	5.438	5.857	5.800	5.739	5.740
003	5.800	3.724	5.981	5.475	5.863	5.800	5.753	5.754
005	5.800	3.724	5.977	5.474	5.845	5.800	5.741	5.743
06	5.800	3.712	5.980	5.454	5.842	5.800	5.723	5.743
07	5.800	3.701	5.985	5.503	5.862	5.800	5.749	5.724
07	5.800	3.701	5.985	5.503	5.862	5.800	5.762	5.750
	5.800	3.692	5.988	5.525	5.882	5.800	5.737	5.738
010	5.800	3.674	5.989	5.557	5.894	5.800	5.670	5.672
011	5.800	3.672	6.008	5.507	5.896	5.800	5.596	5.599
)12 <sup>E</sup>	5.800	3.672	6.008	5.507	5.896	5.800	5.596	5.599

<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.gov/totalenergy/data/monthly/#appendices.
 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 Pe	etroleum <sup>a</sup> C	onsumption b	y Sector		Liquefied	Liquefied Petroleum Motor		Fuel Ethanol		Biodiesel
	Resi- dential	Com- mercial <sup>b</sup>	Indus- trial <sup>b</sup>	Trans- portation <sup>b,c</sup>	Electric Power <sup>d,e</sup>	Total <sup>b,c</sup>	Gases Con- sumption <sup>f</sup>	Gasoline Con- sumption <sup>g</sup>	Fuel Ethanol <sup>h</sup>	Feed- stock Factor <sup>i</sup>	Biodiesel	Feed- stock Factor
1973	5.258	5.689	5.557	5.396	6.245	5.515	3.746	5.253	NA	NA	NA	NA
1974	5.253	5.683	5.525	5.394	6.238	5.504	3.730	5.253	NA	NA	NA	NA
1975	5.253	5.649	5.513	5.392	6.250	5.494	3.715	5.253	NA	NA	NA	NA
1976	5.277	5.672	5.523	5.396	6.251	5.504	3.711	5.253	NA	NA	NA	NA
1977	5.285	5.682	5.539	5.401	6.249	5.518	3.677	5.253	NA	NA	NA	NA
1978	5.287	5.665	5.536	5.405	6.251	5.519	3.669	5.253	NA	NA	NA	NA
1979	5.365	5.717	5.409	5.429	6.258	5.494	3.680	5.253	NA	NA	NA	NA
1980	5.305	5.751	5.366	5.441	6.256	5.494	3.674	5.253	3.563	6.586	NA	NA
1980	5.283	5.693	5.299	5.433	6.258		3.643	5.253	3.563		NA	NA
					6.258	5.448		5.253	3.563	6.562 6.539		
1982	5.266	5.698	5.247	5.423		5.415	3.615				NA	NA
1983	5.140	5.591	5.254	5.416	6.255	5.406	3.614	5.253	3.563	6.515	NA	NA
1984	5.307	5.657	5.207	5.418	6.251	5.395	3.599	5.253	3.563	6.492	NA	NA
1985	5.263	5.598	5.199	5.423	6.247	5.387	3.603	5.253	3.563	6.469	NA	NA
1986	5.268	5.632	5.269	5.426	6.257	5.418	3.640	5.253	3.563	6.446	NA	NA
1987	5.239	5.594	5.233	5.429	6.249	5.403	3.659	5.253	3.563	6.423	NA	NA
1988	5.257	5.597	5.228	5.433	_6.250	5.410	3.652	5.253	3.563	6.400	NA	NA
1989	5.194	5.549	5.219	5.438	<sup>d</sup> 6.240	5.410	3.683	5.253	3.563	6.377	NA	NA
1990	5.145	5.553	5.253	5.442	6.244	5.411	3.625	5.253	3.563	6.355	NA	NA
1991	5.094	5.528	5.167	5.441	6.246	5.384	3.614	5.253	3.563	6.332	NA	NA
1992	5.124	5.513	5.168	5.443	6.238	5.378	3.624	5.253	3.563	6.309	NA	NA
1993	5.102	<sup>b</sup> 5.505	<sup>b</sup> 5.178	<sup>b</sup> 5.436	6.230	<sup>b</sup> 5.379	3.606	5.253	3.563	6.287	NA	NA
1994	5.098	5.515	5.150	5.424	6.213	5.361	3.635	5.230	3.563	6.264	NA	NA
1995	5.063	5.478	5.121	5.417	6.188	5.341	3.623	5.215	3.563	6.242	NA	NA
1996	4.998	5.433	5.114	5.420	6.195	5.336	3.613	5.216	3.563	6.220	NA	NA
1997	4.989	5.391	5.120	5.416	6.199	5.336	3.616	5.213	3.563	6.198	NA	NA
1998	4.975	5.365	5.137	5.413	6.210	5.349	3.614	5.212	3.563	6.176	NA	NA
1999	4.902	5.291	5.092	5.413	6.205	5.328	3.616	5.211	3.563	6.167	NA	NA
2000	4.908	5.316	5.057	5.422	6.189	5.326	3.607	5.210	3.563	6.159	NA	NA
2001	4.937	5.325	5.142	5.412	6.199	5.345	3.614	5.210	3.563	6.151	5.359	5.433
2002	4.886	5.293	5.093	5.411	6.173	5.324	3.613	5.208	3.563	6.143	5.359	5.433
2002	4.907	5.307	5.142	5.409	6.182	5.340	3.629	5.200	3.563	6.116	5.359	5.433
2003	4.953	5.328	5.144	5.421	6.192	5.350	3.618	5.215	3.563	6.089	5.359	5.433
2004	4.955 4.916	5.364	5.144	5.421	6.192	5.365	3.610	5.215	3.563	6.063	5.359	5.433 5.433
2005	4.916	5.364	5.170	5.431	6.143	5.353	3.620	5.216	3.563	6.036	5.359	5.433 5.433
2006	4.850	5.298	5.100	5.431	6.143	5.353 5.346	3.605	5.210	3.563	6.009	5.359	5.433 5.433
2008	4.732	5.175	5.149	5.426	6.123	5.339	3.600	5.218	3.563	5.983	5.359	5.433
2009	4.691	5.266	5.018	<sup>c</sup> 5.414	6.105	<sup>c</sup> 5.301	3.558	5.218	3.563	5.957	5.359	5.433
2010	4.692	5.263	4.988	5.421	6.084	5.297	3.557	5.218	3.561	5.931	5.359	5.433
2011	E 4.676	E 5.243	RE 4.952	E 5.424	<sup>R</sup> 6.058	5.286	3.541	5.218	3.560	5.905	5.359	5.433
2012	<sup>E</sup> 4.676	<sup>E</sup> 5.243	<sup>RE</sup> 4.952	<sup>E</sup> 5.424	<sup>RE</sup> 6.058	<sup>E</sup> 5.286	<sup>E</sup> 3.541	<sup>E</sup> 5.218	<sup>E</sup> 3.560	5.880	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 fuel ethanol blended into motor gasoline.
 <sup>c</sup> Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

d Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers. <sup>e</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>f</sup> Quantity-weighted averages of the major components of liquefied petroleum gases are calculated by using heat content values shown in Table A1.

<sup>9</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>h</sup> Includes denaturant (petroleum added to ethanol to make it undrinkable). Fuel ethanol factors are weighted average heat contents for undenatured ethanol (3.539 million Btu per barrel), pentanes plus used as denaturant (4.620 million Btu per barrel), and conventional motor gasoline and motor gasoline blending components used as denaturant (5.253 million Btu per barrel). The factor for 2009 is used as the estimated factor for 1980-2008.

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

<sup>1</sup> Soybean oil input to the production of biodiesel (million Btu soybean oil per barrel biodiesel), used as the factor to estimate total biomass inputs to the production of biodiesel. It is assumed that 7.65 pounds of soybean oil are needed to produce one gallon of biodiesel, and 5.433 million Btu of soybean oil are needed to produce one barrel of biodiesel. Soybean oil is assumed to have a gross heat content of 16,909 Bu per pound, or 5.483 million Btu per barrel. Biodiesel is assumed to have a gross heat content of 17,253 Btu per pound, or 5.359 million Btu per barrel.

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

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

Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices. Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

#### Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Produ	ction		<b>Consumption</b> <sup>a</sup>			
	Marketed	Dry	End-Use Sectors <sup>b</sup>	Electric Power Sector <sup>c</sup>	Total	Imports	Exports
973	1,093	1,021	1,020	1,024	1,021	1,026	1,023
974	1,097	1,024	1,024	1,022	1,024	1,027	1,016
975	1,095	1,021	1,024	1,026	1,021	1,026	1,014
976	1,093	1,020	1,019	1,023	1,020	1,025	1,013
77	1,093	1,021	1,019	1,029	1,021	1,026	1,013
78	1,088	1,019	1,016	1,034	1,019	1,030	1,013
79	1.092	1,021	1,018	1,035	1,021	1,037	1,013
80	1,098	1,026	1,024	1,035	1,026	1,022	1,013
81	1,103	1,027	1,025	1,035	1,027	1,014	1,010
82	1,107	1,028	1,026	1,036	1,028	1,014	1,011
83	1,115	1,031	1,031	1,030	1,031	1,024	1,010
84	1,109	1,031	1,030	1,035	1,031	1,005	1,010
985	1,112	1,032	1,031	1,038	1,032	1,002	1,011
986	1,110	1,030	1,029	1,034	1,030	997	1,008
87	1,112	1,031	1,031	1,032	1,031	999	1,011
88	1,109	1,029	1,029	1,032	1,029	1,002	1,018
89	1,107	1,023	1,031	<sup>c</sup> 1,028	1,023	1,002	1,019
90	1,105	1,029	1,030	1,027	1,029	1,012	1,013
91	1,108	1,029	1,031	1,025	1,029	1,012	1,010
92	1,110	1,030	1,031	1,025	1,030	1,014	1,018
93	1,106	1,030	1,028	1,025	1,030	1,020	1,016
994	1,105	1,028	1,029	1,025	1,027	1,022	1,010
95	1,105	1,026	1,025	1,021	1,026	1,022	1.011
96	1,109	1,026	1,027	1,020	1,026	1,022	1.011
97	1,107	1,026	1,027	1,020	1,026	1,022	1,011
98	1,109	1,020	1,033	1,024	1,020	1,023	1,011
999	1,107	1,027	1,028	1,024	1,027	1,023	1,006
000	1,107	1.025	1,026	1,022	1,027	1,022	1,000
001	1,107	1,025	1,029	1,021	1,025	1,023	1,000
02	1,103	1,028	1,025	1,020	1,028	1,023	1,010
02	1,103	1,024	1,029	1,025	1,024	1,025	1,008
03	1,103	1,026	1,029	1,025	1,028	1,025	1,009
04	1,104	1,028	1,028	1,027	1,028	1,025	1,009
06	1,104	1,028	1,028	1,028	1,028	1,025	1,009
07	1,102	1,028	1,028	1,028	1,028	1,025	1,009
08	1,102	1,027	1,027	1,027	1,027	1,025	1,009
08	1,101	1,027	1,027	,	1,027	1,025	1,009
	1,007	1,025	1,025	1,025 1,022	1,025	1,025	1,009
010	E 1,097	<sup>E</sup> 1,023	E 1,023		E 1.022	E 1,025	<sup>E</sup> 1,009
011	- 1,097 E 4,007			1,021			
012	E 1,097	<sup>E</sup> 1,022	<sup>E</sup> 1,023	<sup>E</sup> 1,021	<sup>E</sup> 1,022	<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.

E=Estimate. Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary. Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices. 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				
				c	onsumption					
		Waste	Residential and	Industria	I Sector	Electric				Imports
	Productiona	Coal Supplied <sup>b</sup>	Commercial Sectors	Coke Plants	Other <sup>c</sup>	Power Sector <sup>d,e</sup>	Total	Imports	Exports	and Exports
1973	23.376	NA	22.831	26.780	22.586	22.246	23.057	25.000	26.596	24.800
1974	23.072	NA	22.479	26.778	22.419	21.781	22.677	25.000	26.700	24.800
975	22.897	NA	22.261	26.782	22.436	21.642	22.506	25.000	26.562	24.800
976	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	22.240	26.788	22.207	21.275	22.100	25.000	26.548	24.800
1979	22.454	NA	22.543	26.790	22.452	21.304	22.100	25.000	26.346	24.800
		NA		26.790	22.690					
1981	22.308		22.474 22.695			21.085	21.713	25.000	26.160	24.800
1982	22.239	NA		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
984	22.010	NA	22.844	26.799	22.543	21.101	21.573	25.000	26.402	24.800
985	21.870	NA	22.646	26.798	22.020	20.959	21.366	25.000	26.307	24.800
986	21.913	NA	22.947	26.798	22.198	21.084	21.462	25.000	26.292	24.800
987	21.922	NA	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
988	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
990	21.822	9.303	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
991	21.681	10.758	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
992	21.682	10.396	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
993	21.418	10.638	22.994	26.800	22.123	20.677	21.010	25.000	26.335	24.800
994	21.394	11.097	23.112	26.800	22.068	20.589	20.929	25.000	26.329	24.800
995	21.326	11.722	23.118	26.800	21.950	20.543	20.880	25.000	26.180	24.800
996	21.322	12.147	23.011	26.800	22.105	20.547	20.870	25.000	26.174	24.800
997	21.296	12.158	22.494	26.800	22.172	20.518	20.830	25.000	26.251	24.800
998	21.418	12.639	21.620	27.426	23.164	20.516	20.881	25.000	26.800	24.800
999	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
003	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	20.340	12.095	22.066	26.273	22.050	19.931	20.240	25.000	25.453	24.800
2007	20.340	12.000	22.000	26.329	22.030	19.909	20.168	25.000	25.466	24.800
2008	20.208	12.090	21.887	26.281	22.371	19.713	19.977	25.000	25.399	24.800
	19.963	12.076	22.059	26.334	22.348	19.521	19.742	25.000	25.633	24.800
							<sup>R</sup> 19.829			
2010	20.173	11.960 P 11.001	21.826 P 20.724	26.296	21.005	19.623		25.000	25.713 P 25.045	24.800
2011	P 20.136	P 11.604	P 20.724	P 26.300	P 20.588	<sup>R</sup> 19.341	<sup>RP</sup> 19.551	P 25.000	P 25.645	P 24.800
2012	<sup>E</sup> 20.136	<sup>E</sup> 11.604	<sup>E</sup> 20.724	<sup>E</sup> 26.300	<sup>E</sup> 20.588	<sup>RE</sup> 19.341	<sup>RE</sup> 19.551	<sup>E</sup> 25.000	<sup>E</sup> 25.645	<sup>E</sup> 24.800

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

materials). <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 <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 <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 <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 <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 <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 <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 <sup>c</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 <sup>c</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 <sup>c</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 <sup>c</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 the slurry dam and the slurry dam anthracite culm, bituminous gob, and the slurry dam anthracite culm, bituminous gob, and the slur <sup>b</sup> Waste coal (including tine coal, coal obtained from a refuse bank or slurry dam, anthractic culm, bituminous gob, and lightle waste) consumed by the electric power i 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.
 R=Revised. P=Preliminary. E=Estimate. NA=Not available.
 Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/month/#/#appendices. 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 <sup>a</sup> for Electricity Net Generation							
		Fossi	Fuels <sup>b</sup>		Noncombustible			
	Coalc	Petroleum <sup>d</sup>	Natural Gas <sup>e</sup>	Total Fossil Fuels <sup>f,g</sup>	Nuclear <sup>h</sup>	Renewable Energy <sup>g,i</sup>	Heat Content <sup>j</sup> o Electricity <sup>k</sup>	
973	NA	NA	NA	10.389	10.903	10.389	3.412	
974	NA	NA	NA	10,389	11,161	10,389	3,412	
975	NA	NA	NA	10,442	11,013	10,406	3,412	
	NA	NA	NA	10,400	11.047	10,400	3,412	
976					10.769		- /	
977	NA	NA	NA	10,435		10,435	3,412	
978	NA	NA	NA	10,361	10,941	10,361	3,412	
979	NA	NA	NA	10,353	10,879	10,353	3,412	
980	NA	NA	NA	10,388	10,908	10,388	3,412	
981	NA	NA	NA	10,453	11,030	10,453	3,412	
982	NA	NA	NA	10,454	11,073	10,454	3,412	
983	NA	NA	NA	10,520	10,905	10,520	3,412	
984	NA	NA	NA	10,440	10,843	10,440	3,412	
985	NA	NA	NA	10,447	10,622	10,447	3,412	
986	NA	NA	NA	10,446	10,579	10,446	3,412	
987	NA	NA	NA	10,419	10,442	10,419	3,412	
988	NA	NA	NA	10,324	10,602	10,324	3,412	
989	NA	NA	NA	10,432	10,583	10,432	3,412	
990	NA	NA	NA	10,402	10,582	10,402	3,412	
991	NA	NA	NA	10.436	10,484	10,436	3.412	
992	NA	NA	NA	10.342	10,471	10.342	3.412	
993	NA	NA	NA	10,309	10,504	10,309	3,412	
994	NA	NA	NA	10,316	10,452	10,316	3,412	
995	NA	NA	NA	10.312	10,507	10.312	3.412	
996	NA	NA	NA	10,340	10,503	10,340	3,412	
997	NA	NA	NA	10,213	10,494	10,213	3.412	
998	NA	NA	NA	10,197	10,491	10,197	3,412	
999	NA	NA	NA	10,226	10,450	10,226	3,412	
000	NA	NA	NA	10,220	10,430	10,201	3,412	
.000	10,378	10,742	10.051	<sup>b</sup> 10.333	10,429	10,333	3,412	
	10,378	10,742	9.533	10,173	10,443	10,333	3,412	
002 003	10,314	10,641	9,533	10,173	10,442	10,173	3,412	
		-,	9,207 8.647	- /	- /	- /		
004	10,331	10,571		10,022 9,999	10,427 10.436	10,022 9,999	3,412	
005	10,373	10,631	8,551		.,		3,412	
006	10,351	10,809	8,471	9,919	10,436	9,919	3,412	
007	10,375	10,794	8,403	9,884	10,485	9,884	3,412	
	10,378	11,015	8,305	9,854	10,453	9,854	3,412	
009	10,414	10,923	8,160	9,760	10,460	9,760	3,412	
	10,415	10,984	8,185	9,756	10,452	9,756	3,412	
	<sup>R</sup> 10,444	<sup>R</sup> 10,829	<sup>R</sup> 8,152	<sup>R</sup> 9,716	<sup>R</sup> 10,464	<sup>R</sup> 9,716	3,412	
2012	<sup>RE</sup> 10,444	<sup>RE</sup> 10,829	<sup>RE</sup> 8,152	<sup>RE</sup> 9,716	RE 10,464	<sup>RE</sup> 9,716	3,412	

 <sup>a</sup> The values in columns 1-6 of this table are for net heat rates. See "Heat Rate" in Glossary.
 <sup>b</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 electricity-only independent power producers.

<sup>c</sup> Includes anthracite, bituminous coal, subbituminous coal, lignite, and, beginning in 2002, waste coal and coal synfuel.

Includes antimatile, bitantinuda coal, substantinuda coal, inginar, and, asguming and and a substantinuda coal, substantinuda coal, inginar, and, asguming and a lincludes distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke, and waste oil.
 Includes natural gas and supplemental gaseous fuels.

f Includes coal, petroleum, natural gas, and, beginning in 2001, other gases (blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels). <sup>g</sup> The fossil-fuels heat rate is used as the thermal conversion factor for electricity net generation from noncombustible renewable energy (hydro, geothermal, solar

thermal, photovoltaic, and wind) 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>h</sup> Used as the thermal conversion factor for nuclear electricity net generation. <sup>i</sup> Technology-based geothermal heat rates are no longer used in Btu calculations in this report. For technology-based geothermal heat rates for 1960–2010, see the

Annual Energy Review 2010, Table A6.

<sup>j</sup> See "Heat Content" in Glossary.
 <sup>k</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. R=Revised. E=Estimate. NA=Not available.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.

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

### Thermal Conversion Factor Source Documentation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Petroleum Consumption, Commercial Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the commercial sector weighted by the estimated quantities consumed by the commercial sector. The quantities of petroleum products consumed by the commercial sector are estimated in the State Energy Data System—see documentation at

http://www.eia.gov/state/seds/sep\_use/notes/use\_petrol.pdf.

Petroleum Consumption, Electric Power Sector. Calculated annually by EIA as the average of the thermal

conversion factors for all petroleum products consumed by the electric power sector weighted by the quantities consumed by the electric power sector. Data are from Form EIA-923, "Power Plant Operations Report," and predecessor forms.

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

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

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

**Petroleum Consumption, Transportation Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the transportation sector weighted by the estimated quantities consumed by the transportation sector. The quantities of petroleum products consumed by the transportation sector are estimated in the State Energy Data System—see documentation at

http://www.eia.gov/state/seds/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 **Petro***leum Products Exports*.

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

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

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

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

### **Approximate Heat Content of Biofuels**

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

**Biodiesel Feedstock.** EIA used soybean oil input to the production of biodiesel (million Btu soybean oil per barrel biodiesel) as the factor to estimate total biomass inputs to the production of biodiesel. EIA assumed that 7.65 pounds

of soybean oil are needed to produce one gallon of biodiesel, and 5.433 million Btu of soybean oil are needed to produce one barrel of biodiesel. EIA also assumed that soybean oil has a gross heat content of 16,909 Btu per pound, or 5.483 million Btu per barrel.

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

Fuel Ethanol (Denatured). 1981-2008: EIA used the 2009 factor. 2009 forward: Calculated by EIA as the annual quantity-weighted average of the thermal conversion factors for undenatured ethanol (3.539 million Btu per barrel), pentanes plus used as denaturant (4.620 million Btu per barrel), and conventional motor gasoline and motor gasoline blending components used as denaturant (5.253 million Btu per barrel). The quantity of ethanol consumed is from EIA's Petroleum Supply Annual (PSA) and Petroleum Supply Monthly (PSM), Table 1, data for renewable fuels and oxygenate plant net production of fuel ethanol. The quantity of pentanes plus used as denaturant is from PSA/PSM, Table 1, data for renewable fuels and oxygenate plant net production of pentanes plus, multiplied by -1. The quantity of conventional motor gasoline and motor gasoline blending components used as denaturant is from PSA/PSM, Table 1, data for renewable fuels and oxygenate plant net production of conventional motor gasoline and motor gasoline blending components, multiplied by -1.

**Fuel Ethanol Feedstock.** EIA used corn input to the production of undenatured ethanol (million Btu corn per barrel undenatured ethanol) as the annual factor to estimate total biomass inputs to the production of undenatured ethanol. U.S. Department of Agriculture observed ethanol yields (gallons undenatured ethanol per bushel of corn) were 2.5 in 1980, 2.666 in 1998, 2.68 in 2002, and 2.764 in 2009; EIA estimated the ethanol yields in other years. EIA also assumed that corn has a gross heat content of 0.392 million Btu per bushel.

# Approximate Heat Content of Natural Gas

**Natural Gas Consumption, Electric Power Sector**. Calculated annually by EIA by dividing the heat content of natural gas consumed by the electric power sector by the quantity consumed. Data are from Form EIA-923, "Power Plant Operations Report," and predecessor forms.

**Natural Gas Consumption, End-Use Sectors**. Calculated annually by EIA by dividing the heat content of natural gas consumed by the end-use sectors (residential, commercial,

industrial, and transportation) by the quantity consumed. Data are from Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

**Natural Gas Consumption, Total**. 1973–1979: EIA adopted the thermal conversion factor calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual publication. 1980 forward: Calculated annually by EIA by dividing the total heat content of natural gas consumed by the total quantity consumed.

**Natural Gas Exports.** Calculated annually by EIA by dividing the heat content of natural gas exported by the quantity exported. For 1973–1995, data are from Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Beginning in 1996, data are from U.S. Department of Energy, Office of Fossil Energy, *Natural Gas Imports and Exports*.

**Natural Gas Imports.** Calculated annually by EIA by dividing the heat content of natural gas imported by the quantity imported. For 1973–1995, data are from Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Beginning in 1996, data are from U.S. Department of Energy, Office of Fossil Energy, *Natural Gas Imports and Exports*.

**Natural Gas Production, Dry**. Assumed by EIA to be equal to the thermal conversion factor for dry natural gas consumed. See **Natural Gas Consumption, Total**.

**Natural Gas Production, Marketed**. Calculated annually by EIA by dividing the heat content of dry natural gas produced (see **Natural Gas Production, Dry**) and natural gas plant liquids produced (see **Natural Gas Plant Liquids Production**) by the total quantity of marketed natural gas produced.

# Approximate Heat Content of Coal and Coal Coke

**Coal Coke Imports and Exports**. EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

**Coal Consumption, Electric Power Sector**. Calculated annually by EIA by dividing the heat content of coal consumed by the electric power sector by the quantity consumed. Data are from Form EIA-923, "Power Plant Operations Report," and predecessor forms.

**Coal Consumption, Industrial Sector, Coke Plants.** Calculated annually by EIA by dividing the heat content of coal consumed by coke plants by the quantity consumed. Data are from Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants."

Coal Consumption, Industrial Sector, Other. Calculated annually by EIA by dividing the heat content of coal consumed by manufacturing plants by the quantity consumed. Data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."

**Coal Consumption, Residential and Commercial Sectors**. Calculated annually by EIA by dividing the heat content of coal consumed by the residential and commercial sectors by the quantity consumed. Through 1999, data are from Form EIA-6, "Coal Distribution Report." Beginning in 2000, data are for commercial combined-heat-and-power (CHP) plants from Form EIA-923, "Power Plant Operations Report," and predecessor forms.

**Coal Consumption, Total**. Calculated annually by EIA by dividing the total heat content of coal consumed by all sectors by the total quantity consumed.

**Coal Exports**. Calculated annually by EIA by dividing the heat content of steam coal and metallurgical coal exported by the quantity exported. Data are from U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

**Coal Imports**. Assumed by EIA to be 25.000 million Btu per short ton.

**Coal Production**. Calculated annually by EIA to balance the heat content of coal supply (production and imports) and the heat content of coal disposition (exports, stock change, and consumption).

**Waste Coal Supplied**. Calculated annually by EIA by dividing the total heat content of waste coal supplied by the quantity supplied. For 1989–1997, data are from Form EIA-867, "Annual Nonutility Power Producer Report." For 1998–2000, data are from Form EIA-860B, "Annual Electric Generator Report—Nonutility." For 2001 forward, data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants"; Form EIA-923, "Power Plant Operations Report"; and predecessor forms.

### **Approximate Heat Rates for Electricity**

**Electricity Net Generation, Coal.** 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 electric utilities and electricity-only independent power producers using anthracite, bituminous coal, subbituminous coal, lignite, and beginning in 2002, waste coal and coal synfuel.

**Electricity Net Generation, Natural Gas.** 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 electric utilities and electricity-only independent power producers using natural gas and supplemental gaseous fuels. **Electricity Net Generation, Noncombustible Renewable Energy.** There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydro, geothermal, solar thermal, photovoltaic, and wind 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 (see "Electricity Net Generation, Total Fossil Fuels"). By using that factor it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts.

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

**Electricity Net Generation, Petroleum.** 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 electric utilities and electricity-only independent power producers using distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke, and waste oil.

Electricity Net Generation, Total Fossil Fuels. 1973-1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published in EIA, Electric Plant Cost and Power Production Expenses 1991, Table 9. 1989–2000: Calculated annually by EIA by using the heat rate data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and net generation data reported on Form EIA-759, "Monthly Power Plant Report." The computation includes data for all electric utility steam-electric plants using fossil fuels. 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-923, "Power Plant Operations Report," and predecessor forms. The computation includes data for electric utilities and electricity-only independent power producers using coal, petroleum, natural gas, and other gases (blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels).

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### **Appendix B**

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

Data presented in the *Monthly Energy Review* and in other U.S. Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. 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
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Type of Unit	U.S. Unit		Equivalent in	Metric Units
Mass	1 short ton (2,000 lb)	=	0.907 184 7	metric tons (t)
indoo	1 long ton	=	1.016 047	metric tons (t)
	1 pound (lb)	=	0.453 592 37ª	kilograms (kg)
	1 pound uranium oxide (lb $U_3O_8$ )	=	0.384 647 <sup>b</sup>	kilograms uranium (kgU)
	1 ounce, avoirdupois (avdp oz)	=	28.349 52	grams (g)
Volume	1 barrel of oil (bbl)	=	0.158 987 3	cubic meters (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)
Length	1 mile (mi)	=	1.609 344ª	kilometers (km)
	1 yard (yd)	=	0.914 4ª	meters (m)
	1 foot (ft)	=	0.304 8ª	meters (m)
	1 inch (in)	=	2.54ª	centimeters (cm)
Area	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 04ª	square meters (m <sup>2</sup> )
	1 square inch (in <sup>2</sup> )	=	6.451 6ª	square centimeters (cm <sup>2</sup> )
Energy	1 British thermal unit (Btu) <sup>c</sup>	=	1,055.055 852 62ª	joules (J)
0,	1 calorie (cal)	=	4.186 8ª	joules (J)
	1 kilowatthour (kWh)	=	3.6ª	megajoules (MJ)
Temperature <sup>d</sup>	32 degrees Fahrenheit (°F)	=	0ª	degrees Celsius (°C)
-	212 degrees Fahrenheit (°F)	=	100ª	degrees Celsius (°C)

<sup>a</sup>Exact conversion.

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

<sup>e</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>e</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.gov/totalenergy/data/monthly/#appendices.

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.

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	10-2	centi	с
10 <sup>3</sup>	kilo	k	10 <sup>-3</sup>	milli	m
10 <sup>6</sup>	mega	Μ	10 <sup>-6</sup>	micro	μ
10 <sup>9</sup>	giga	G	10 <sup>-9</sup>	nano	n
10 <sup>12</sup>	tera	Т	10 <sup>-12</sup>	pico	р
10 <sup>15</sup>	peta	Р	<b>10</b> <sup>-15</sup>	femto	f
10 <sup>18</sup>	exa	E	<b>10</b> <sup>-18</sup>	atto	а
10 <sup>21</sup>	zetta	Z	10 <sup>-21</sup>	zepto	Z
10 <sup>24</sup>	yotta	Y	10 <sup>-24</sup>	yocto	у

### **Table B2. Metric Prefixes**

Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices. Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI)*, NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p.10.

### **Table B3. Other Physical Conversion Factors**

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

<sup>a</sup>Exact conversion.

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

Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.

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.

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# Glossary

**Alcohol:** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a **hydrocarbon** plus a hydroxyl group; CH(3)-(CH(2))<sub>n</sub>-OH (e.g., **methanol**, **ethanol**, and tertiary butyl alcohol). See **Fuel Ethanol**.

Alternative Fuel: Alternative fuels, for transportation applications, include the following: methanol; denatured ethanol, and other alcohols; fuel mixtures containing 85 percent or more by volume of methanol, denatured ethanol, and other alcohols with motor gasoline or other fuels; natural gas; liquefied petroleum gas (propane); hydrogen; coal-derived liquid fuels; fuels (other than alcohol) derived from biological materials (biofuels such as soy diesel fuel); electricity (including electricity from solar energy); and "... any other fuel the Secretary determines, by rule, is substantially not petroleum and would yield substantial energy security benefits and substantial environmental benefits." The term "alternative fuel" does not include alcohol or other blended portions of primarily petroleum-based fuels used as oxygenates or extenders, i.e., MTBE, ETBE, other ethers, and the 10-percent ethanol portion of gasohol.

Alternative-Fuel Vehicle (AFV): A vehicle designed to operate on an alternative fuel (e.g., compressed natural gas, methane blend, or electricity). The vehicle could be either a dedicated vehicle designed to operate exclusively on alternative fuel or a nondedicated vehicle designed to operate on alternative fuel and/or a traditional fuel.

Anthracite: The highest rank of coal; used primarily for residential and commercial space heating. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million **Btu** per short ton on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). *Note:* Since the 1980's, anthracite refuse or mine waste has been used for steam-electric power generation. This fuel typically has a heat content of 15 million Btu per ton or less.

Anthropogenic: Made or generated by a human or caused by human activity. The term is used in the context of global climate change to refer to gaseous emissions that are the result of human activities, as well as other potentially climate-altering activities, such as deforestation. **Asphalt:** A dark-brown-to-black cement-like material containing bitumens as the predominant constituents obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

ASTM: The American Society for Testing and Materials.

Aviation Gasoline Blending Components: Naphthas that will be used for blending or compounding into finished aviation gasoline (e.g., straight run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

Aviation Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. *Note:* Data on blending components are not counted in data on finished aviation gasoline.

**Barrel (Petroleum):** A unit of volume equal to 42 U.S. Gallons.

**Base Gas:** The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

**Biodiesel:** A fuel typically made from soybean, canola, or other vegetable oils; animal fats; and recycled grease. It can serve as a substitute for **petroleum**-derived **diesel fuel** or **distillate fuel oil**. For U.S. Energy Information Administration reporting, it is a fuel composed of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of ASTM (American Society for Testing & Materials) D 6751.

**Biofuels:** Liquid fuels and blending components produced from **biomass** (plant) feedstocks, used primarily for transportation. See **Biodiesel** and **Fuel Ethanol**.

**Biogenic:** Produced by biological processes of living organisms. Note: EIA uses the term "biogenic" to refer only to organic nonfossil material of biological origin.

Biomass: Organic non-fossil material of biological origin constituting a renewable energy source. See Biodiesel,

## Biofuels, Biomass Waste, Fuel Ethanol, and Wood and Wood-Derived Fuels.

**Biomass Waste:** Organic non-fossil material of biological origin that is a byproduct or a discarded product. "Biomass waste" includes municipal solid waste from **biogenic** sources, landfill gas, sludge waste, agricultural crop byproducts, straw, and other **biomass** solids, liquids, and gases; but excludes **wood and wood-derived fuels** (including **black liquor**), **biofuels** feedstock, **biodiesel**, and **fuel ethanol**. **Note:** EIA "biomass waste" data also include energy crops grown specifically for energy production, which would not normally constitute waste.

**Bituminous Coal:** A dense **coal**, usually black, sometimes dark brown, often with well-defined bands of bright and dull material, used primarily as fuel in steamelectric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make **coke**. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

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

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

#### Btu: See British Thermal Unit.

Btu Conversion Factor: A factor for converting energy data between one unit of measurement and British thermal units (Btu). Btu conversion factors are generally used to convert energy data from physical units of measure (such as barrels, cubic feet, or short tons) into the energy-equivalent measure of Btu. (See http://www.eia.gov/totalenergy/data/monthly/#appendices for further information on Btu conversion factors.)

**Butane:** A normally gaseous straight-chain or branchedchain hydrocarbon ( $C_4H_{10}$ ). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane. *Isobutane*: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

*Normal Butane*: A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

**Butylene:** An olefinic hydrocarbon  $(C_4H_8)$  recovered from refinery processes.

**Capacity Factor:** The ratio of the electrical energy produced by a generating unit for a given period of time to the electrical energy that could have been produced at continuous full-power operation during the same period.

**Carbon Dioxide (CO<sub>2</sub>):** A colorless, odorless, nonpoisonous gas that is a normal part of Earth's atmosphere. Carbon dioxide is a product of **fossil-fuel** combustion as well as other processes. It is considered a **greenhouse gas** as it traps heat (infrared energy) radiated by the Earth into the atmosphere and thereby contributes to the potential for **global warming**. The **global warming potential** (GWP) of other greenhouse gases is measured in relation to that of carbon dioxide, which by international scientific convention is assigned a value of one (1).

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

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

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

**Climate Change:** A term used to refer to all forms of climatic inconsistency, but especially to significant change from one prevailing climatic condition to another. In some cases, "climate change" has been used synonymously with the term **"global warming"**; scientists, however, tend to use the term in a wider sense inclusive of natural changes in climate, including climatic cooling.

**Coal:** A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time. See **Anthracite**, **Bituminous Coal**, **Lignite**, **Subbituminous Coal**, **Waste Coal**, and **Coal Synfuel**.

Coal Coke: See Coke, Coal.

**Coal Stocks:** Coal quantities that are held in storage for future use and disposition. Note: When coal data are collected for a particular reporting period (month, quarter, or year), coal stocks are commonly measured as of the last day of the period.

**Coal Synfuel:** Coal-based solid fuel that has been processed by a **coal synfuel plant**; and coal-based fuels such as briquettes, pellets, or extrusions, which are formed from fresh or recycled coal and binding materials.

**Coal Synfuel Plant:** A plant engaged in the chemical transformation of **coal** into **coal synfuel**.

**Coke, Coal:** A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000° 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 abovementioned commercial establishments. Various EIA programs differ in sectoral coverage-for more information see http://www.eia.gov/neic/datadefinitions/Guideforwebcom.htm. See End-Use Sectors and Energy-Use Sectors.

**Completion:** The installation of permanent equipment for the production of oil or gas. If a well is equipped to produce only oil or gas from one zone or reservoir, the definition of a well (classified as an oil well or gas well) and the definition of a completion are identical. However, if a well is equipped to produce oil and/or gas separately from more than one reservoir, a well is not synonymous with a completion.

**Conventional Gasoline:** Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. *Note*: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

**Conventional Hydroelectric Power:** Hydroelectric power generated from flowing water that is not created by hydroelectric pumped storage.

**Conversion Factor:** A factor for converting data between one unit of measurement and another (such as between **short tons** and **British thermal units**, or between **barrels** and gallons). (See http://www.eia.gov/totalenergy/data/monthly/#appendices 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 include; 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. Degreeday readings for each region are multiplied by the corresponding population weight for each region and those products are then summed to arrive at the national population-weighted degree-day figure.

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

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

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

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

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

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

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

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

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

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

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

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

under the authority of the Federal Power Act. See Electric Power Sector.

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

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

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

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

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

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

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

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

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

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

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

Energy-Use Sectors: A group of major energy-consuming components of U.S. society developed to measure and

analyze energy use. The sectors most commonly referred to in EIA are: residential, commercial, industrial, transportation, and electric power.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**GT/IC:** Gas turbine and internal combustion plants.

**Heat Content:** The amount of heat energy available to be released by the transformation or use of a specified physical unit of an energy form (e.g., a ton of coal, a barrel of oil, a kilowatthour of electricity, a cubic foot of natural gas, or a pound of steam). The amount of heat energy is commonly expressed in **British thermal units (Btu)**. *Note*: Heat content of combustible energy forms can be expressed in terms of either gross heat content (higher or upper heating value) or net heat content (lower heating value), depending upon whether or not the available heat energy includes or

excludes the energy used to vaporize water (contained in the original energy form or created during the combustion process). The U.S. Energy Information Administration typically uses gross heat content values.

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

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

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

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

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

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

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

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

**Industrial Sector:** An **energy**-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (**NAICS** codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes **generators** that produce **electricity** and/or **useful thermal output** primarily to support the

above-mentioned industrial activities. Various EIA programs differ in sectoral coverage-for more information see

http://www.eia.gov/neic/datadefinitions/Guideforwebind.htm. See End-Use Sectors and Energy-Use Sectors.

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

**Isobutane:** A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of  $10.9^{\circ}$  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 issued 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,  $(CH_3)_3COCH_3$ , 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 sparkignition. 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 selfservice.

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

motor gasoline blending components but excluding stocks of oxygenates.

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

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

http://www.census.gov/eos/www/naics/.

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

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

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

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

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

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

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

Oil: See Crude Oil.

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

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

**Organization for Economic Cooperation and Development (OECD):** An international organization helping governments tackle the economic, social and governance challenges of a globalized economy. Its membership comprises about 30 member countries. With active relationships with some 70 other countries, non-governmental organizations (NGOs) and civil society, it has a global reach. For details about the organization, see http://www.oecd.org.

**Organization of the Petroleum Exporting Countries (OPEC):** An intergovernmental organization whose stated objective is to "coordinate and unify the petroleum policies of member countries." It was created at the Baghdad Conference on September 10–14, 1960. Current members (with years of membership) include Algeria (1969–present), Angola (2007–present), Ecuador (1973–1992 and 2007–present), Iran (1960–present), Iraq (1960–present), Kuwait (1960–present), Libya (1962–present), Nigeria (1971–present), Qatar (1961–present), Saudi Arabia (1960–present), United Arab Emirates (1967–present), and Venezuela (1960–present). Countries no longer members of OPEC include Gabon (1975–1994) and Indonesia (1962–2008).

**Oxygenates:** Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. **Ethanol, Methyl Tertiary Butyl Ether (MTBE),** Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

**PAD Districts:** Petroleum Administration for Defense Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts for the Petroleum Administration for Defense in 1950. The districts were originally instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which were established in 1942.

**Pentanes Plus:** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

**Petrochemical Feedstocks:** Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics.

**Petroleum:** A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum Coke: See Coke, Petroleum.

## Petroleum Consumption: See Products Supplied (Petroleum).

**Petroleum Imports:** Imports of petroleum into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. territories and possessions. Included are imports for the Strategic Petroleum Reserve and withdrawals from bonded warehouses for onshore consumption, offshore bunker use, and military use. Excluded are receipts of foreign petroleum into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.

**Petroleum Products:** Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Petroleum Stocks, Primary:** For individual products, quantities that are held at refineries, in pipelines, and at bulk terminals that have a capacity of 50,000 barrels or more, or that are in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but are included in other oils estimates and total.

**Photovoltaic Energy:** Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

**Pipeline Fuel:** Gas consumed in the operation of pipelines, primarily in compressors.

**Plant Condensate:** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquid at gas inlet separators or scrubbers in processing plants.

**Primary Energy: Energy** in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy. For example, **coal** can be converted to synthetic gas, which can be converted to **electricity**; in this example, coal is primary energy, synthetic gas is secondary energy, and electricity is tertiary energy. See **Primary Energy Production** and **Primary Energy Consumption**.

Primary Energy Consumption: Consumption of primary energy. (Energy sources that are produced from other energy sources-e.g., coal coke from coal-are included in primary energy consumption only if their energy content has not already been included as part of the original energy source. Thus, U.S. primary energy consumption does include net imports of coal coke, but not the coal coke produced from domestic coal.) The U.S. Energy Information Administration includes the following in U.S. primary energy consumption: coal consumption; coal coke net imports; petroleum consumption (petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel); dry natural gas-excluding supplemental gaseous fuels—consumption; nuclear electricity net generation (converted to **Btu** using the nuclear plants heat rate); hydroelectricity conventional net generation (converted to Btu using the fossil-fueled plants heat rate); geothermal electricity net generation (converted to Btu using the fossil-fueled 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 woodderived fuels consumption; biomass waste consumption; fuel ethanol and biodiesel consumption; losses and co-products from the production of fuel ethanol and biodiesel; and electricity net imports (converted to Btu using the electricity heat content of 3,412 Btu per kilowatthour). See Total Energy Consumption.

Primary Energy Production: Production of primary The U.S. Energy Information Administration energy. 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 fossil-fueled plants heat rate), and geothermal heat pump energy and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and wood-derived fuels consumption; biomass waste consumption; and biofuels feedstock.

**Prime Mover:** The engine, turbine, water wheel, or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity directly.

**Products Supplied (Petroleum):** Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas-processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted-for crude oil (plus net receipts when calculated on a PAD District basis) minus stock change, minus crude oil losses, minus refinery inputs, and minus exports.

**Propane:** A normally gaseous straight-chain hydrocarbon ( $C_3H_8$ ). It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

**Propylene:** An olefinic hydrocarbon  $(C_3H_6)$  recovered from refinery or petrochemical processes.

**Real Dollars:** These are dollars that have been adjusted for inflation. See **Real Price**.

**Real Price:** A price that has been adjusted to remove the effect of changes in the purchasing power of the dollar. Real prices, which are expressed in constant dollars, usually reflect buying power relative to a base year.

**Refiner Acquisition Cost of Crude Oil:** The cost of crude oil to the refiner, including transportation and fees. The composite cost is the weighted average of domestic and imported crude oil costs.

Refinery and Blender Net Inputs: Raw materials, unfinished oils, and blending components processed at refineries, or blended at refineries or petroleum storage terminals to produce finished petroleum products. Included are gross inputs of crude oil, natural gas plant liquids, other hydrocarbon raw materials, hydrogen, oxygenates (excluding fuel ethanol), and renewable fuels (including fuel ethanol). Also included are net inputs of unfinished oils, motor gasoline blending components, and aviation gasoline blending components. Net inputs are calculated as gross inputs minus gross production. Negative net inputs indicate gross inputs are less than gross production. Examples of negative net inputs include reformulated gasoline blendstock for oxygenate blending (RBOB) produced at refineries for shipment to blending terminals, and unfinished oils produced and added to inventory in advance of scheduled maintenance of a refinery crude oil distillation unit.

**Refinery and Blender Net Production:** Liquefied refinery gases, and finished **petroleum products** produced at a **refinery** or petroleum storage terminal blending facility. Net production equals gross production minus gross inputs. Negative net production indicates gross production is less than gross inputs for a finished petroleum product. Examples of negative net production include reclassification of one finished product to another finished product, or reclassification of a finished product to **unfinished oils** or blending components.

**Refinery (Petroleum):** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

**Refuse Mine:** A surface site where **coal** is recovered from previously mined coal. It may also be known as a silt bank, culm bank, refuse bank, slurry dam, or dredge operation.

**Refuse Recovery:** The recapture of **coal** from a **refuse mine** or the coal recaptured by that process. The resulting product has been cleaned to reduce the concentration of noncombustible materials.

**Renewable Energy:** Energy obtained from sources that are essentially inexhaustible (unlike, for example, the **fossil fuels**, of which there is a finite supply). Renewable sources of energy include **conventional hydrolectric power**, **biomass**, **geothermal**, **solar**, and **wind**. **Repressuring:** The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.

**Residential Sector:** An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. *Note:* Various EIA programs differ in sectoral coverage for more information see

http://www.eia.gov/neic/datadefinitions/Guideforwebres.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

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

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

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

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

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

Solar Energy: See Solar Thermal Energy and Photovoltaic Energy.

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

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

**Station Use:** Energy that is used to operate an **electric power plant**. It includes energy consumed for plant lighting, power, and auxiliary facilities, regardless of whether the energy is produced at the plant or comes from another source.

Steam Coal: All nonmetallurgical coal.

**Steam-Electric Power Plant:** A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

**Still Gas (Refinery Gas):** Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and, petrochemical feedstock.

Stocks: See Coal Stocks, Crude Oil Stocks, or Petroleum Stocks, Primary.

**Strategic Petroleum Reserve (SPR):** Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

**Subbituminous Coal:** A coal whose properties range from those of lignite to those of bituminous coal and used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million **Btu** per short ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Supplemental Gaseous Fuels:** Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

**Synthetic Natural Gas (SNG):** (Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to **natural gas**, resulting from the conversion or reforming of **hydrocarbons** that may easily be substituted for or interchanged with pipeline-quality natural gas.

Thermal Conversion Factor: A factor for converting data between physical units of measure (such as **barrels**, **cubic feet**, or **short tons**) and thermal units of measure (such as **British thermal units**, calories, or joules); or for converting data between different thermal units of measure. See **Btu Conversion Factor**. **Total Energy Consumption:** Primary energy consumption in the end-use sectors, plus electricity retail sales and electrical system energy losses.

**Transportation Sector:** An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. Note: Various EIA programs differ in sectoral coverage-for more information see

http://www.eia.gov/neic/datadefinitions/Guideforwebtrans.htm See End-Use Sectors and Energy-Use Sectors.

**Underground Storage:** The storage of natural gas in underground reservoirs at a different location from which it was produced.

**Unfinished Oils:** All oils requiring further refinery processing except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

**Unfractionated Stream:** Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

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

**United States:** The 50 States and the District of Columbia. Note: The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 States and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."

**Useful Thermal Output:** The thermal energy made available in a combined-heat-and-power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

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

**Vented Natural Gas:** Gas released into the air on the production site or at processing plants.

**Vessel Bunkering:** Includes sales for the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.

**Waste Coal:** Usable material that is a byproduct of previous **coal** processing operations. Waste coal is usually composed of mixed coal, soil, and rock (mine waste). Most waste coal is burned as-is in unconventional fluidized-bed combustors. For some uses, waste coal may be partially cleaned by removing some extraneous noncombustible constituents. Examples of waste coal include fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste.

#### Waste: See Biomass Waste and Non-Biomass Waste.

Watt (W): The unit of electrical power equal to one ampere under a pressure of one volt. A watt is equal to 1/746 horse-power.

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.