# December 2011 Monthly Energy Review





## **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.

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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.

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

## **Electronic Access**

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

- Full report and sections: PDF files
- Report tables: PDF files
- Table data (unrounded): Excel and CSV files
- Graphs: PDF files

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

**Timing of Release:** The MER is posted on the EIA website by the last work day of the month at http://www.eia.gov/totalenergy/data/monthly.

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## Monthly Energy Review December 2011

**U.S. Energy Information Administration** 

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

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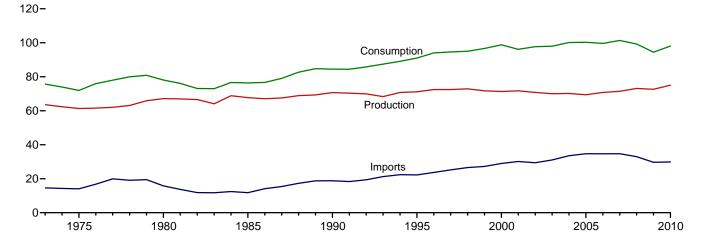
## **Energy Overview**



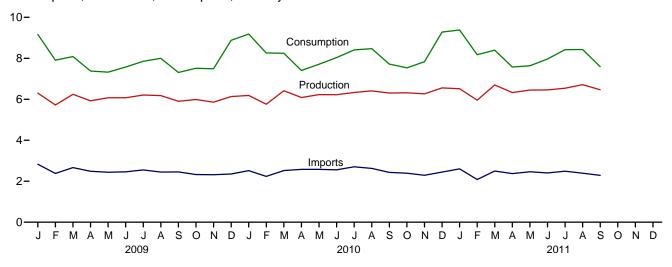
The continental United States at night from orbit. Source: National Oceanic and Atmospheric Administration satellite imagery; mosaic provided by U.S. Geological Survey.

Figure 1.1 Primary Energy Overview (Quadrillion Btu)

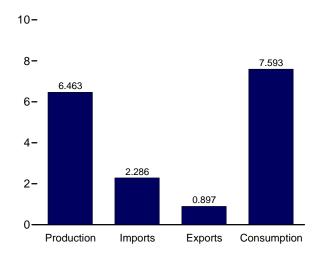
Consumption, Production, and Imports, 1973-2010



Consumption, Production, and Imports, Monthly

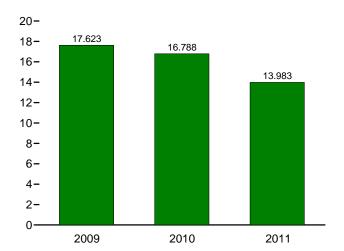


Overview, September 2011



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

Net Imports, January-September



**Table 1.1 Primary Energy Overview** 

(Quadrillion Btu)

		Produ	uction			Trade		04	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	6.494	72.876	26.581	4.299	22.281	140	81.369	7.068	6.493	95.018
1999 Total	57.614	7.610	6.517	71.742	27.252	3.715	23.537	1.372	82.427	7.610	6.516	96.652
2000 Total	57.366	7.862	6.104	71.332	28.973	4.006	24.967	2.515	84.731	7.862	6.106	98.814
2001 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	56.894	8.145	5.734	70.773	29.408	3.669	25.739	1.181	83.747	8.145	5.729	97.693
2003 Total	56.099	7.959	5.982	70.040	31.061	4.054	27.007	.931	84.014	7.959	5.983	97.978
2004 Total	55.895	8.222	6.070	70.188	33.544	4,434	29.110	.850	85.805	8.222	6.082	100.148
2005 Total	55.038	8.161	6.229	69.427	34.709	4.560	30.149	.701	85.790	8.161	6.242	100.277
2006 Total	55.968	8.215	6.608	70.792	34.679	4.872	29.806	974	84.687	8.215	6.659	99.624
2007 Total	56.447	8.455	6.537	71.440	34.703	5.482	29.221	.703	86.251	8.455	6.551	101.363
2008 Total	57.482	8.427	7.205	73.114	32.992	7.060	25.932	.222	83.540	8.427	7.190	99.268
2009 January	4.898	.775	.627	6.300	2.829	.598	2.231	.633	7.760	.775	.622	9.165
February	4.506	.672	.545	5.722	2.379	.505	1.874	.312	6.691	.672	.537	7.908
March	4.913	.703	.624	6.240	2.666	.558	2.107	261	6.757	.703	.621	8.086
April	4.654	.621	.649	5.924	2.487	.507	1.980	528	6.097	.621	.653	7.377
May	4.701	.684	.690	6.075	2.437	.537	1.900	651	5.936	.684	.694	7.324
June	4.663	.729	.683	6.075	2.458	.566	1.892	394	6.149	.729	.685	7.573
July	4.799	.763	.643	6.205	2.552	.620	1.932	283	6.433	.763	.643	7.853
August	4.807	.756	.615	6.178	2.447	.596	1.851	028	6.614	.756	.615	8.001
September	4.647	.688	.568	5.903	2.455	.600	1.855	450	6.043	.688	.567	7.308
October	4.756	.607	.627	5.990	2.327	.648	1.679	156	6.268	.607	.627	7.513
November	4.599	.618	.642	5.859	2.317	.601	1.716	087	6.224	.618	.637	7.488
December	4.701	.740	.692	6.133	2.353	.629	1.724	1.023	7.443	.740	.686	8.879
Total	56.644	8.356	7.603	72.603	29.706	6.965	22.741	869	78.415	8.356	7.587	94.475
2010 January	4.759	R .758	.670	6.188	2.516	.590	1.926	R <sub>1.069</sub>	R 7.749	R .758	R .661	R 9.183
February	4.465	.682	R .609	R 5.756	2.237	.556	1.681	R .823	R 6.964	.682	R .603	R 8.261
March	5.062	.676	R .680	R 6.418	2.519	.654	1.865	R038	R 6.888	.676	R .671	R 8.245
April	4.822	R .602	R .659	R 6.084	2.580	.686	1.894	R571	R 6.140	R .602	R .656	R 7.407
May	4.812	.697	R .715	R 6.224	2.578	.704	1.874	R388	R 6.296	.697	.714	R 7.710
June	4.755	.714	R .751	R 6.220	2.556	.684	1.872	R059	R 6.557	.714	R .754	R 8.033
July	4.880	.752	R .700	R 6.331	2.705	.716	1.989	R .087	R 6.946	.752	R .700	R 8.407
August	5.002	R .748	R .660	R 6.409	2.627	.698	1.929	R .133	R 7.059	R .748	R .658	R 8.472
September	4.957	R .725	<sup>R</sup> .623 <sup>R</sup> .644	R 6.305	2.431	.675	1.757	R345 R458	R 6.370	R .725	<sup>R</sup> .620 <sup>R</sup> .641	R 7.717
October	5.015	.656	* .644 R .600	R 6.315	2.390	.714	1.676		R 6.234	.656	**.641 R 674	R 7.533
November	4.930	.655 R .770	R .680 R .723	R 6.265	2.289 2.447	.760 R .797	1.529	R .037 1.076	<sup>R</sup> 6.500 7.784	.655 R .770	<sup>R</sup> .674 <sup>R</sup> .718	<sup>R</sup> 7.831 <sup>R</sup> 9.281
December Total	5.062 <b>58.522</b>	R <b>8.434</b>	R 8.116	<sup>R</sup> 6.555 <sup>R</sup> <b>75.072</b>	R 29.877	R 8.234	1.650 <b>21.643</b>	R 1.366	R <b>81.488</b>	R <b>8.434</b>	R <b>8.069</b>	R 98.081
2011 January	5.008	R .760	R .748	<sup>R</sup> 6.516	2.603	.837	1.766	R 1.098	<sup>R</sup> 7.878	R .760	R .733	9.381
2011 January	5.008 4.570	R.677	R.711	R 5.957	2.603	.837 .755	1.766	R .888	R 6.784	R.677	R.733	9.381 R 8.173
February	R 5.197	R .686	R .815	R 6.699	2.063	.755	1.622	R .078	R 6.899	R .686	R .805	R 8.399
March	4.942	R .570	R .814	R 6.326	2.496	.857	1.622	R269	R 6.191	R .570	R .805	R 7.574
April May	R 5.021	.596	R .833	R 6.450	2.373	.837	1.624	R437	R 6.202	.596	R .827	R 7.637
June	4.955	R .682	.833 R .821	R 6.458	2.401	.806	1.596	437	6.450	R .682	R .820	R 7.963
July	R 4.993	R .756	R .790	R 6.539	2.488	.838	1.650	R .229	6.866	R .756	R .780	R 8.419
August	R 5.229	.746	R .739	R 6.714	R 2.390	.898	R 1.492	R .223	R 6.930	.746	R .737	R 8.429
September	5.092	.699	.673	6.463	2.286	.897	1.389	259	6.217	.699	.666	7.593
9-Month Total	45.006	6.173	6.944	58.123	21.582	7.599	13.983	1.460	60.417	6.173	6.878	73.566
2010 9-Month Total	43.514	6.354	6.068	55.936	22.750	5.962	16.788	.711	60.970	6.354	6.037	73,436
2009 9-Month Total	42.588	6.392	5.643	54.622	22.709	5.086	17.623	-1.650	58.481	6.392	5.637	70.595

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.

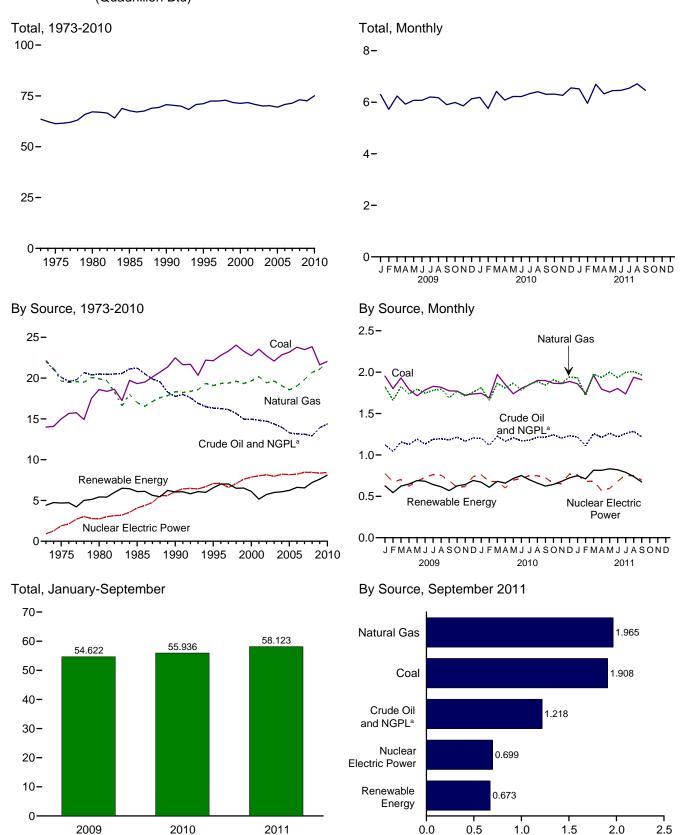
Sources: • Production: Table 1.2. • Trade: Tables 1.4a and 1.4b. • Stock Change and Other: Calculated as consumption minus production and net imports. • Consumption: Table 1.3.

<sup>a Coal, natural gas (dry), crude oil, and natural gas plant liquids.
b 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.
c Net imports equal imports minus exports.
d Includes petroleum stock change and adjustments; natural gas net storage withdrawals and balancing item; coal stock change, losses, and unaccounted for; fuel ethanol stock change; and bindiesel stock change and balancing item.</sup> fuel ethanol stock change; and biodiesel stock change and balancing item.

e Coal, coal coke net imports, natural gas, and petroleum.

f Also includes electricity net imports.

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)

		Fo	ssil Fuels						Renewabl	e Energy <sup>a</sup>			
	Coal <sup>b</sup>	Natural Gas (Dry)	Crude Oil <sup>c</sup>	NGPL <sup>d</sup>	Total	Nuclear Electric Power	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total
1973 Total	13.992	22.187	19.493	2.569	58.241	0.910	2.861	0.020	NA	NA	1.529	4.411	63.563
1975 Total	14.989	19.640	17.729	2.374	54.733	1.900	3.155	.034	NA NA	NA NA	1.499	4.687	61.320
1980 Total	18.598	19.908	18.249	2.254	59.008	2.739	2.900	.053	NA	NA NA	2.475	5.428	67.175
1985 Total	19.325	16.980	18.992	2.241	57.539	4.076	2.970	.033	(s)	(s)	3.016	6.084	67.173
1990 Total	22.488	18.326	15.571	2.175	58.560	6.104	3.046	.171	.059	.029	2.735	6.041	70.705
1995 Total	22.130	19.082	13.887	2.442	57.540	7.075	3.205	.152	.069	.033	3.099	6.558	71.174
1996 Total	22.790	19.344	13.723	2.530	58.387	7.087	3.590	.163	.070	.033	3.155	7.012	72.486
1997 Total	23.310	19.394	13.658	2.495	58.857	6.597	3.640	.167	.070	.034	3.108	7.018	72.472
1998 Total	24.045	19.613	13.235	2.420	59.314	7.068	3.297	.168	.069	.031	2.929	6.494	72.876
1999 Total	23.295	19.341	12.451	2.528	57.614	7.610	3.268	.171	.068	.046	2.965	6.517	71.742
2000 Total	22.735	19.662	12.358	2.611	57.366	7.862	2.811	.164	.065	.057	3.006	6.104	71.332
2001 Total	23.547	20.166	12.282	2.547	58.541	8.029	2.242	.164	.064	.070	2.624	5.164	71.735
2002 Total	22.732	19.439	12.163	2.559	56.894	8.145	2.689	.171	.063	.105	2.705	5.734	70.773
2003 Total	22.094	19.633	12.026	2.346	56.099	7.959	2.825	.175	.062	.115	2.805	5.982	70.040
2004 Total	22.852	19.074	11.503	2.466	55.895	8.222	2.690	.178	.063	.142	2.998	6.070	70.188
2005 Total	23.185	18.556	10.963	2.334	55.038	8.161	2.703	.181	.063	.178	3.104	6.229	69.427
2006 Total	23.790	19.022	10.801	2.356	55.968	8.215	2.869	.181	.068	.264	3.226	6.608	70.792
2007 Total	23.493	19.825	10.721	2.409	56.447	8.455	2.446	.186	.076	.341	3.489	6.537	71.440
2008 Total	23.851	20.703	10.509	2.419	57.482	8.427	2.511	.192	.089	.546	3.867	7.205	73.114
2009 January	1.953	1.823	.927	.196	4.898	.775	.229	.017	.008	.058	.315	.627	6.300
February	1.802	1.661	.854	.189	4.506	.672	.174	.016	.007	.057	.291	.545	5.722
March	1.932	1.825	.940	.216	4.913	.703	.213	.017	.008	.069	.316	.624	6.240
April	1.791	1.737	.918	.209	4.654	.621	.252	.016	.008	.073	.300	.649	5.924
May	1.715	1.795	.967	.224	4.701	.684	.289	.017	.009	.061	.315	.690	6.075
June	1.785	1.746	.919	.213	4.663	.729	.285	.016	.008	.055	.318	.683	6.075
July	1.829	1.780	.971	.218	4.799	.763	.228	.017	.009	.048	.340	.643	6.205
August	1.818	1.795	.974	.220	4.807	.756	.191	.017	.009	.053	.345	.615	6.178
September	1.774	1.690	.965	.217	4.647	.688	.169	.016	.008	.045	.329	.568	5.903
October	1.771	1.770	.989	.226	4.756	.607	.192	.016	.008	.067	.343	.627	5.990
November	1.722	1.711	.944	.221	4.599	.618	.205	.017	.008	.067	.345	.642	5.859
December	1.737	1.760	.980	.224	4.701	.740	.241	.018	.008	.067	.357	.692	6.133
Total	21.627	21.095	11.348	2.574	56.644	8.356	2.669	.200	.098	.721	3.915	7.603	72.603
2010 January	1.745	E 1.812	.972	.230	4.759	R .758	R .218	.018	.008	R .067	.359	.670	6.188
February	1.688	E 1.661	.906	.210	4.465	.682	R .201	.016	.008	R .053	R .332	R .609	R 5.756
March	1.971	E 1.865	.990	.236	5.062	.676	R .204	.018	.009	R .084	R .366	R .680	R 6.418
April	1.849	E 1.808	.938	.227	4.822	R .602	R .186	.017	.009	R .095	R .352	R .659	R 6.084
May	1.738	E 1.867	.969	.238	4.812	.697	R .245	.018	.010	.085	R .358	R .715	R 6.224
June	1.804	E 1.782	.944	.226	4.755	.714	R .291	R .017	.010	R .079	.355	R .751	R 6.220
July	1.848	E 1.854	.951	.227	4.880	.752	R .239 R .196	R .017	.010	R .066	.368	R .700	R 6.331
August	1.900	E 1.888	.978	.236	5.002	R .748		.018	.010	.065	.371 R 250	R .660	R 6.409
September	1.898	E 1.843 E 1.906	.983	.232	4.957	R .725	<sup>R</sup> .168 <sup>R</sup> .173	.017	.009	.069 R .077	R .359 R .368	R .623 R .644	R 6.305
October November	1.866 1.862	E 1.866	1.002 .966	.242 .235	5.015 4.930	.656 .655	R.173	.017 R .017	.009 .009	R .077	R .368	R .680	R 6.315
December	1.888	E 1.942	.990	.235	5.062	.000 R .770	.226	R .018	.009	R .088	R .382	R .723	R 6.555
Total	22.056	E 22.095	11.589	2.781	58.522	R <b>8.434</b>	R <b>2.539</b>	R .208	.109	R .923	R <b>4.337</b>	R 8.116	R 75.072
2011 January	R 1.859	E 1.932	E .986	.230	5.008	R .760	R .255	.019	.009	R .084	R .381	R .748	<sup>R</sup> 6.516
February	1.741	E 1.720	E .911	.197	4.570	R .677	R .241	R .018	.003	R .103	R .341	R.711	R 5.957
March	1.963	E 1.975	E 1.013	.247	R 5.197	R .686	R .310	.019	.009	R .103	R .374	R .815	R 6.699
April	R 1.794	E 1.936	E.973	.238	4.942	R .570	R .309	.018	.010	R .121	R .357	R .814	R 6.326
May	1.760	E 1.999	E 1.009	.253	R 5.021	.596	R .323	.019	.010	R .114	R .367	R .833	R 6.450
June	1.803	E 1.933	E.979	.240	4.955	R .682	R .315	.018	.010	.106	R .371	R .821	R 6.458
July	R 1.736	E 1.998	E 1.009	.250	R 4.993	R .756	R .308	.018	.010	.072	R .381	R.790	R 6.539
August	R 1.938	RE 2.006	E 1.034	.251	R 5.229	.746	R .257	R .019	.011	.072	R .382	R .739	R 6.714
September	1.908	E 1.965	E.982	.236	5.092	.699	.210	.018	.010	.067	.368	.673	6.463
9-Month Total	16.503	E 17.465	E 8.896	2.142	45.006	6.173	2.526	.166	.087	.842	3.323	6.944	58.123
2010 9-Month Total	16.441	E 16.381	8.631	2.062	43.514	6.354	1.949	.156	.082	.662	3.219	6.068	55.936
2009 9-Month Total	16.397	15.853	8.435	1.902	42.588	6.392	2.030	.149	.074	.520	2.870	5.643	54.622

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

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

c Includes lease condensate.

d Natural gas plant liquids.

e Conventional hydroelectric power.

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

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

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

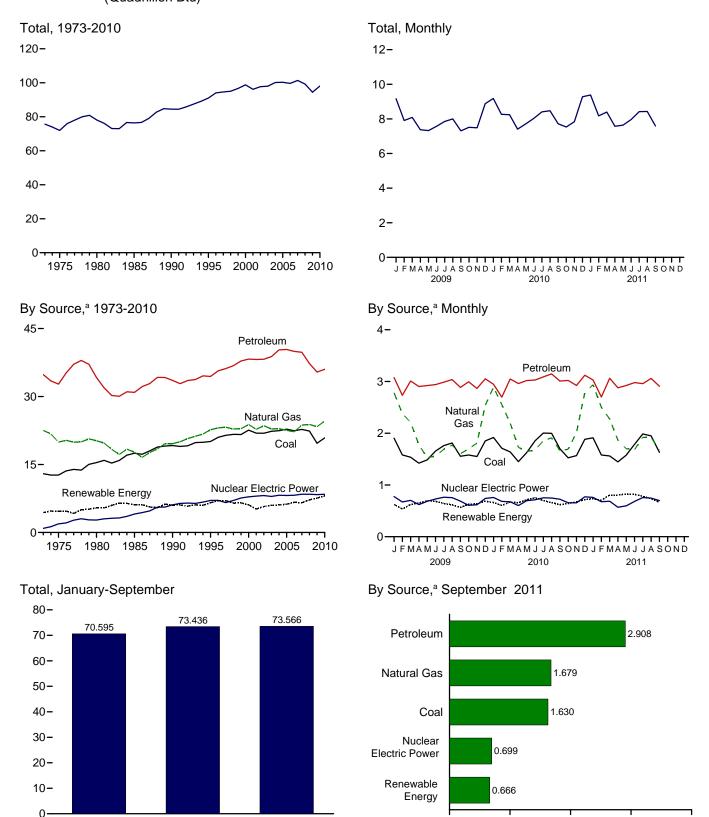
available data beginning in 1973.

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).

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

Figure 1.3 Primary Energy Consumption (Quadrillion Btu)



<sup>&</sup>lt;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.

2010

2011

0

1

2

2009

**Table 1.3 Primary Energy Consumption by Source** 

(Quadrillion Btu)

(Qu	aurillion	Diu)										
		Fossi	Fuels					Renewable	Energy <sup>a</sup>			
	Coal	Natural Gas <sup>b</sup>	Petro- leum <sup>c</sup>	Totald	Nuclear Electric Power	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total <sup>f</sup>
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 .046	2.927	6.493	95.018
1999 Total	21.623 22.580	22.909 23.824	37.838 38.262	82.427 84.731	7.610 7.862	3.268 2.811	.171 .164	.068 .065	.046	2.963 3.008	6.516 6.106	96.652 98.814
2000 Total 2001 Total	21.914	23.624	38.186	82.902	8.029	2.242	.164	.063	.070	2.622	5.163	96.168
2002 Total	21.904	23.558	38.224	83.747	8.145	2.689	.171	.063	.105	2.701	5.729	97.693
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	22.909	40.292	85.805	8.222	2.690	.178	.063	.142	3.010	6.082	100.148
2005 Total	22.797	22.561	40.388	85.790	8.161	2.703	.181	.063	.178	3.116	6.242	100.277
2006 Total	22.447	22.224	39.955	84.687	8.215	2.869	.181	.068	.264	3.276	6.659	99.624
2007 Total	22.749	23.702	39.774	86.251	8.455	2.446	.186	.076	.341	3.502	6.551	101.363
2008 Total	22.385	23.834	37.280	83.540	8.427	2.511	.192	.089	.546	3.852	7.190	99.268
2009 January	1.904	2.783	3.075	7.760	.775	.229	.017	.008	.058	.310	.622	9.165
February	1.582	2.378	2.732	6.691	.672	.174	.016	.007	.057	.283	.537	7.908
March	1.536	2.212	3.010	6.757	.703	.213	.017	.008	.069	.314	.621	8.086
April	1.422	1.774	2.904	6.097	.621	.252	.016	.008	.073	.304	.653	7.377
May	1.486	1.531	2.921	5.936	.684	.289	.017	.009	.061	.319	.694	7.324
June	1.655	1.556	2.939	6.149	.729	.285	.016	.008	.055	.320	.685	7.573
July	1.760	1.689	2.987 3.038	6.433	.763	.228	.017	.009 .009	.048	.340	.643	7.853
August	1.811	1.769 1.604	2.886	6.614 6.043	.756 .688	.191 .169	.017	.008	.053 .045	.346 .327	.615	8.001
September October	1.555 1.580	1.698	2.994	6.268	.607	.109	.016 .016	.008	.043	.344	.567 .627	7.308 7.513
November	1.550	1.810	2.866	6.224	.618	.205	.017	.008	.067	.340	.637	7.488
December	1.852	2.541	3.052	7.443	.740	.241	.018	.008	.067	.352	.686	8.879
Total	19.692	23.344	35.403	78.415	8.356	2.669	.200	.098	.721	3.899	7.587	94.475
2010 January	1.918	R 2.889	2.947	R 7.749	R .758	R .218	.018	.008	R .067	.349	R .661	R 9.183
February	R 1.710	R 2.552	2.698	<sup>R</sup> 6.964	.682	R .201	.016	.008	R .053	R .326	R .603	<sup>R</sup> 8.261
March	R 1.639	<sup>R</sup> 2.198	3.048	<sup>R</sup> 6.888	.676	<sup>R</sup> .204	.018	.009	R .084	<sup>R</sup> .357	R.671	R 8.245
April	R 1.452	1.728	2.960	R 6.140	R .602	R .186	.017	.009	R .095	348	R .656	<sup>R</sup> 7.407
May	R 1.626	R 1.648	3.020	R 6.296	.697	R .245	.018	.010	.085	R .356	.714	R 7.710
June	R 1.853	R 1.675	3.029	R 6.557	.714	R .291	R .017	.010	R .079	R .357	R .754	R 8.033
July	R 2.002	R 1.854	3.089	R 6.946	.752 <sup>R</sup> .748	R .239	R .017	.010	R .066	.368	R .700	R 8.407
August September	1.999 <sup>R</sup> 1.701	<sup>R</sup> 1.912 1.662	3.148 3.008	<sup>R</sup> 7.059 <sup>R</sup> 6.370	R .725	<sup>R</sup> .196 <sup>R</sup> .168	.018 .017	.010 .009	.065 .069	.369 R .356	<sup>R</sup> .658 <sup>R</sup> .620	<sup>R</sup> 8.472 <sup>R</sup> 7.717
October	R 1.526	R 1.690	3.020	R 6.234	.656	R .173	.017	.009	R .077	R .365	R .641	R 7.533
November	R 1.568	R 2.015	2.923	R 6.500	.655	R .191	R .017	.009	R .095	R .362	R .674	R 7.831
December	R 1.883	R 2.786	3.120	7.784	R .770	.226	R .018	.009	R .088	R .377	R.718	R 9.281
Total	R 20.877	R 24.608	36.010	R 81.488	R 8.434	R 2.539	R .208	.109	R .923	R 4.291	R 8.069	R 98.081
2011 January	R 1.911	R 2.937	3.030	R 7.878	R .760	R .255	.019	.009	R .084	R .365	R .733	9.381
February	R 1.580	2.503	2.701	<sup>R</sup> 6.784	R .677	R .241	R .018	.008	R .103	R .335	R .704	R 8.173
March	1.561	R 2.274	3.062	R 6.899	R .686	R .310	.019	.009	R .103	R .364	R .805	R 8.399
April	1.446	R 1.866	2.878	<sup>R</sup> 6.191	R .570	R .309	.018	.010	R .121	R .348	R .805	<sup>R</sup> 7.574
May	R 1.576	R 1.701	2.923	R 6.202	.596	R .323	.019	.010	R .114	R .361	R .827	R 7.637
June	1.786	R 1.684	2.979	6.450	R .682	R .315	.018	.010	.106	R .370	R .820	R 7.963
July	R 1.986	R 1.921	2.959	6.866	R .756	R .308	.018	.010	.072	R .371	R .780	R 8.419
August	R 1.949	R 1.918	3.059	R 6.930	.746	R .257	R .019	.011	.072	R .380	R .737	R 8.429
September	1.630	1.679	2.908	6.217	.699	.210	.018	.010	.067	.362	.666	7.593
9-Month Total	15.424	18.483	26.500	60.417	6.173	2.526	.166	.087	.842	3.256	6.878	73.566
2010 9-Month Total 2009 9-Month Total	15.901 14.710	18.117 17.296	26.946 26.492	60.970 58.481	6.354 6.392	1.949 2.030	.156 .149	.082 .074	.662 .520	3.187 2.864	6.037 5.637	73.436 70.595
ZOUS S-WOULLI TOTAL	14.7 10	17.290	20.432	J0.40 I	0.332	2.030	.143	.074	.520	2.004	5.057	10.595

<sup>&</sup>lt;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 settleleum biofuels are included in "Biomass".

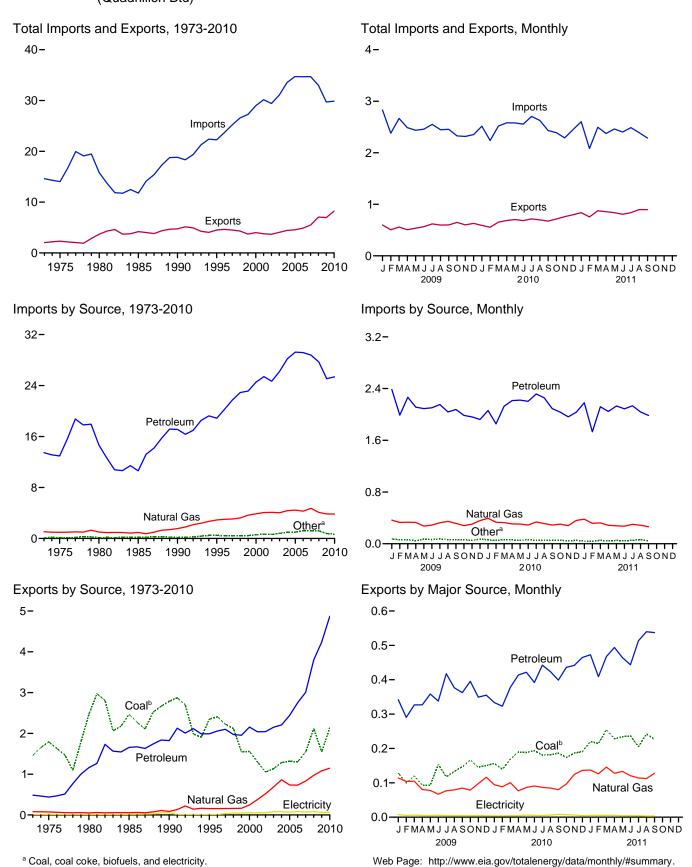
petroleum—biofuels are included in "Biomass."

d Includes coal coke net imports. See Tables 1.4a and 1.4b.
e Conventional hydroelectric power.

Conventional hydroelectric power.
 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)



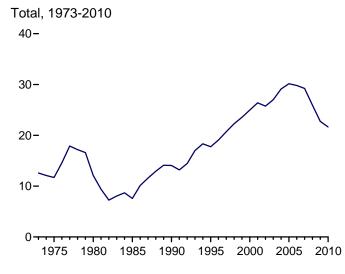
<sup>&</sup>lt;sup>a</sup> Coal, coal coke, biofuels, and electricity.

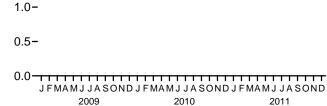
Sources: Tables 1.4a and 1.4b.

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

Figure 1.4b Primary Energy Net Imports

(Quadrillion Btu, Except as noted)





By Major Source, Monthly

Total, Monthly

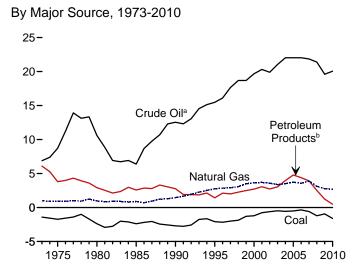
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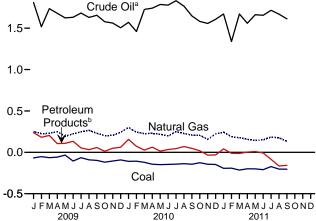
2.5-

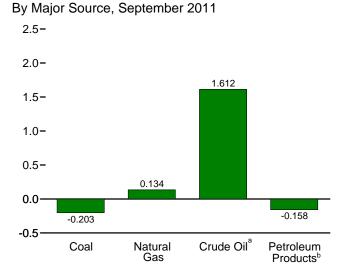
2.0-

1.5-

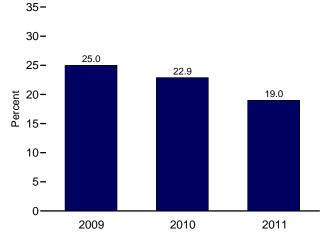
2.0-







As Share of Consumption, January-September



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

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

<sup>&</sup>lt;sup>b</sup> Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include biofuels.

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
1973 Total	0.003	0.027	1.060	6.887	6.578	13.466	NA	0.057	14.613
1975 Total	.024	.045	.978	8.721	4.227	12.948	NA	.038	14.032
1980 Total	.030	.016	1.006	11.195	3.463	14.658	NA	.085	15.796
1985 Total	.049	.014	.952	6.814	3.796	10.609	NA	.157	11.781
1990 Total	.067	.019	1.551	12.766	4.351	17.117	NA	.063	18.817
1995 Total	.237	.095	2.901	15.669	3.211	18.881	.001	.146	22.260
1996 Total	.203	.063	3.002	16.341	3.943	20.284	.001	.148	23.702
1997 Total	.187	.078	3.063	17.876	3.864	21.740	(s)	.147	25.215
1998 Total	.218	.095	3.225	18.916	3.992	22.908	(s)	.135	26.581
1999 Total	.227	.080	3.664	18.935	4.198	23.133	(s)	.147	27.252
2000 Total	.313	.094	3.869	19.783	4.749	24.531	(s)	.166	28.973
2001 Total	.495	.063	4.068	20.348	5.051	25.398	.002	.131	30.157
2002 Total	.422	.080	4.104	19.920	4.754	24.674	.002	.125	29.408
2003 Total	.626	.068	4.042	21.060	5.159	26.219	.002	.104	31.061
2004 Total	.682	.170	4.365	22.082	6.114	28.197	.013	.117	33.544
2005 Total	.762	.088	4.450	22.091	7.157	29.248	.012	.150	34.709
2006 Total	.906	.101	4.291	22.085	7.084	29.169	.066	.146	34.679
2007 Total	.909	.061	4.723	21.914	6.868	28.781	.054	.175	34.703
2008 Total	.855	.089	4.084	21.448	6.237	27.685	.084	.195	32.992
2009 January	.058	.001	.366	1.815	.572	2.387	.003	.015	2.829
February	.046	(s)	.330	1.521	.467	1.989	.001	.013	2.379
March	.054	(s)	.333	1.741	.525	2.266	.002	.010	2.666
April	.033	(s)	.330	1.684	.428	2.112	.001	.011	2.487
May	.057	.001	.272	1.633	.457	2.090	.002	.014	2.437
June	.046	.001	.289	1.641	.462	2.103	.003	.016	2.458
July	.050	.001	.325	1.688	.465	2.153	.004	.019	2.552
August	.039	(s)	.345	1.636	.402	2.038	.004	.020	2.447
September	.046	.001	.315	1.662	.413	2.076	.002	.015	2.455
October	.044	(s)	.280	1.590	.395	1.985	.002	.016	2.327
November	.038	.001	.302	1.570	.391	1.961	.002	.013	2.317
December	.054	.002	.358	1.517	.405	1.921	.001	.016	2.353
Total	.566	.009	3.845	19.699	5.383	25.082	.026	.178	29.706
2010 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
May	.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	.039	(s)	.361	1.614	.420	2.034	(s)	R .013	_ 2.447
Total	.484	.030	3.834	20.140	5.231	25.371	.004	.154	R 29.877
2011 January	.025	.001	.380	1.684	.497	2.181	(s)	.015	2.603
February	.021	.002	.316	1.344	.387	1.731	(s)	.013	2.083
March	.038	.004	.322	1.677	.441	2.118	(s)	.014	2.496
April	.028	.001	.285	1.566	.480	2.045	(s)	.013	2.373
May	.033	.004	.278	1.669	.462	2.131	(s)	.017	2.461
June	.024	.004	.272	1.661	.424	2.086	.001	.015	2.402
July	.030	.003	.300	1.728	.405	2.133	.001	.021	2.488
August	.039	.005	.286	1.675	.364	2.039	.002	.019	R 2.390
September	.021	.003	.262	1.618	.365	1.983	.003	.014	2.286
9-Month Total	.260	.028	2.701	14.622	3.824	18.446	.008	.139	21.582
2010 9-Month Total 2009 9-Month Total	.364 .430	.028 .005	2.892 2.904	15.377 15.022	3.963 4.192	19.340 19.214	.004 .022	.123 .133	22.750 22.709

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

b Petroleum products, unfinished oils, pentanes plus, and gasoline blending

omponents. 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 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. • Natural Gas: Tables 4.1 and A4. • Crude Oil and Petroleum Products: Tables 3.3b, 10.3, 10.4, and A2. • Biofuels: Tables 10.3 and 10.4. • Electricity: Tables 7.1 and A6.

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

(Quadrillion Btu)

					Exports					Net Imports
					Petroleum					
	Coal	Coal Coke	Natural Gas	Crude Oil <sup>b</sup>	Petroleum Products <sup>c</sup>	Total	Biofuelsd	Electricity	Total	Total
973 Total	1.425	0.035	0.079	0.004	0.482	0.486	NA	0.009	2.033	12.580
975 Total	1.761	.032	.074	.012	.427	.439	NA	.017	2.323	11.709
980 Total	2.421	.051	.049	.609	.551	1.160	NA	.014	3.695	12.101
985 Total	2.438 2.772	.028 .014	.056	.432	1.225 1.594	1.657	NA NA	.017	4.196 4.752	7.584 14.065
990 Total 995 Total	2.772	.014	.087 .156	.230 .200	1.791	1.824 1.991	NA NA	.055 .012	4.752 4.511	17.75
996 Total	2.368	.040	.155	.233	1.825	2.059	NA NA	.012	4.633	19.06
997 Total	2.193	.031	.159	.228	1.872	2.100	NA	.031	4.514	20.70
998 Total	2.092	.028	.161	.233	1.740	1.972	NA	.047	4.299	22.28
999 Total	1.525	.022	.164	.250	1.705	1.955	NA	.049	3.715	23.537
000 Total	1.528	.028	.245	.106	2.048	2.154	NA	.051	4.006	24.967
001 Total	1.265	.033	.377	.043	1.996	2.039	(s)	.056	3.771	26.386
002 Total	1.032	.020	.520	.019	2.023	2.042	(s)	.054	3.669	25.739
003 Total	1.117	.018	.686	.026	2.124	2.151	.001	.082	4.054	27.007
004 Total 005 Total	1.253 1.273	.033 .043	.862 .735	.057 .067	2.151 2.374	2.208 2.442	.001 .001	.078 .065	4.434 4.560	29.110 30.149
006 Total	1.264	.040	.730	.052	2.699	2.751	.004	.083	4.872	29.806
007 Total	1.507	.036	.830	.058	2.949	3.007	.035	.069	5.482	29.22
008 Total	2.071	.049	.972	.061	3.739	3.800	.086	.083	7.060	25.93
<b>009</b> January	.126	.003	.114	.007	.335	.342	.006	.008	.598	2.23
February	.098	.001	.104	.005	.286	.290	.006	.005	.505	1.87
March	.118	.002	.105	.005	.321	.327	.001	.006	.558	2.10
April	.090 .091	.003 .002	.081 .078	.005 .009	.322 .349	.327 .358	.001 .002	.005 .005	.507 .537	1.98 1.90
May June	.151	.002	.067	.010	.328	.338	.002	.005	.566	1.89
July	.115	.002	.077	.006	.412	.418	.002	.005	.620	1.932
August	.130	.003	.079	.006	.371	.377	.002	.005	.596	1.85
September	.144	.003	.085	.007	.355	.362	.001	.005	.600	1.85
October	.163	.004	.079	.013	.382	.395	.002	.005	.648	1.679
November	.143	.002	.098	.008	.341	.349	.004	.004	.601	1.716
December Total	.146 <b>1.515</b>	.004 <b>.032</b>	.116 <b>1.082</b>	.012 <b>.093</b>	.343 <b>4.147</b>	.355 <b>4.240</b>	.002 <b>.034</b>	.005 <b>.062</b>	.629 <b>6.965</b>	1.724 22.74
<b>010</b> January	.151	.006	.094	.006	.327	.332	.003	.004	.590	1.92
February	.138	.001	.089	.009	.312	.321	.003	R .003	.556	1.68
March	.169	(s)	.100	.008	.366	.374	.006	R .004	.654	1.86
April	.189	.001	.077	.006	.404	.411	.005	.004	.686	1.89
May	.186	.003	.086	.007	.414	.420	.003	.006	.704	1.87
June	.190	.004	.091	.005	.385	.391	.003	.005	.684	1.87
July	.178	.003	.087	.012	.428	.440	.003	.005	.716	1.98
August	.180	.002	.085	.006	.415	.421	.004	.006	.698	1.92
September October	.184 .170	.003 .003	.080 .097	.011 .004	.385 .429	.396 .433	.004 .004	.008 .007	.675 .714	1.75 1.67
November	.170	.003	.125	.004	.433	.433 .439	.004	.007	.714	1.52
December	.186	.005	.136	.007	.452	.459	.007	.005	R .797	1.65
Total	2.101	.036	1.147	.088	4.750	4.838	.046	R .065	R 8.234	21.64
<b>)11</b> January	.219	.001	.137	.013	.455	.468	.006	.005	.837	1.76
February	.213	.002	.126	.005	.399	.404	.005	.005	.755	1.32
March	.253	.001	.146	.007	.454	.461	.008	.005	.874	1.62
April	.227 .232	.001 .002	.128 .133	.007 .007	.477 .452	.484 .458	.011 .007	.005 .004	.857 .837	1.51 1.62
May June	.232	.002	.133	.007	.452 .432	.438	.007	.004	.83 <i>1</i> .806	1.52
July	.202	.003	.114	.000	.490	.503	.011	.004	.838	1.65
August	.241	.003	.112	.006	.529	.536	.005	.003	.898	R 1.49
September	.224	.003	.128	.006	.522	.529	.010	.003	.897	1.38
9-Month Total	2.046	.017	1.146	.070	4.210	4.280	.069	.041	7.599	13.98
010 9-Month Total 009 9-Month Total	1.565 1.062	.022 .022	.789 .789	.071 .060	3.436 3.080	3.507 3.140	.033 .025	.047 .048	5.962 5.086	16.78 17.62

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

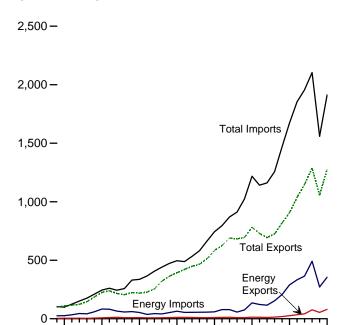
Sources: • Coal: Tables 6.1 and A5. • Coal Coke: 1973-1975—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter. 1976-1980—U.S. Energy Information Administration (EIA), *Energy Data Report*, "Coke and Coal Chemicals," annual reports. 1981 forward—EIA,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

 <sup>&</sup>lt;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.

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

Imports and Exports, 1974-2010

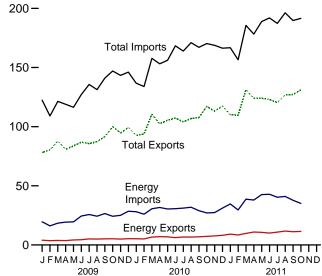


1975 1980 1985 1990 1995 2000

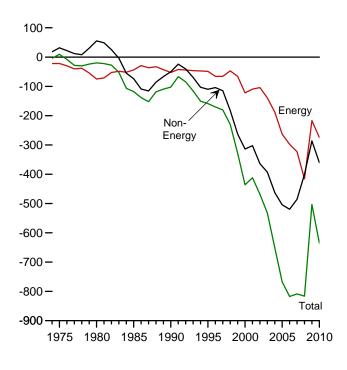
Imports and Exports, Monthly

250 <del>-</del>

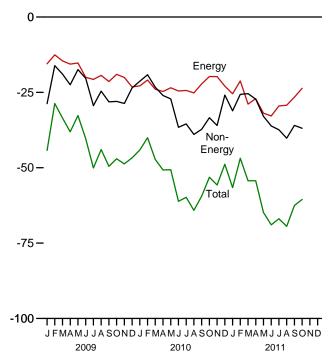
2005 2010



Trade Balance, 1974-2010



## Trade Balance, Monthly



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

		Petroleum	b		Energy		_Non-	Т	otal Merchandis	e
	Exports	Imports	Balance	Exports	Imports	Balance	Energy Balance	Exports	Imports	Balance
1974 Total	792	24,668	-23.876	3,444	25,454	-22.010	18,126	99,437	103,321	-3.884
1975 Total	907	25,197	-24,289	4,470	26,476	-22,006	31,557	108,856	99,305	9,551
1980 Total	2.833	78,637	-75,803	7.982	82,924	-74,942	55,246	225,566	245.262	-19.696
1985 Total	4,707	50,475	-45,768	9,971	53,917	-43,946	-73,765	218,815	336,526	-117,712
1990 Total	6,901	61.583	-54,682	12,233	64,661	-52,428	-50,068	393,592	496.088	-102,496
1995 Total	6,321	54,368	-48,047	10,358	59,109	-48,751	-110,050	584,742	743,543	-158,801
1996 Total	7,984	72,022	-64,038	12,181	78,086	-65,905	-104,309	625,075	795,289	-170,214
1997 Total	8,592	71,152	-62,560	12,682	78,277	-65,595	-114,927	689,182	869,704	-180,522
1998 Total	6,574	50,264	-43,690	10,251	57,323	-47,072	-182,686	682,138	911,896	-229,758
1999 Total	7,118	67,173	-60,055	9,880	75,803	-65,923	-262,898	695,797	1,024,618	-328,821
2000 Total	10,192	119,251	-109,059	13,179	135,367	-122,188	-313,916	781,918	1,218,022	-436,104
2001 Total	8,868	102,747	-93,879	12,494	121,923	-109,429	-302,470	729,100	1.140.999	-411.899
2002 Total	8,569	102,663	-94,094	11,541	115,748	-104,207	-364,056	693,103	1,161,366	-468,263
2003 Total	10,209	132,433	-122,224	13,768	153,298	-139,530	-392,820	724,771	1,257,121	-532,350
2004 Total	13,130	179,266	-166,136	18,642	206,660	-188,018	-462,912	818,775	1,469,704	-650,930
2005 Total	19,155	250,068	-230,913	26,488	289,723	-263,235	-504,242	905,978	1,673,455	-767,477
2006 Total	28,171	299,714	-271,543	34,711	332,500	-297,789	-519,515	1,036,635	1,853,938	-817,304
2007 Total	33,293	327,620	-294,327	41,725	364,987	-323,262	-485,501	1,148,199	1,956,962	-808.763
2008 Total	61,695	449,847	-388,152	76,075	491,885	-415,810	-400,389	1,287,442	2,103,641	-816,199
2009 January	3,029	16,924	-13,895	4,037	19,559	-15,522	-28,742	78,151	122,415	-44,264
February	2,549	14,006	-11,457	3,589	16,120	-12,531	-16,132	80,349	109,012	-28,663
March	2,878	16,658	-13,780	3,835	18,398	-14,563	-18,948	87,848	121,359	-33,511
April	2,988	17,884	-14,896	3,664	19,275	-15,611	-22,462	80,822	118,896	-38,073
May	3,596	18,179	-14,583	4,227	19,484	-15,257	-17,433	83,651	116,341	-32,690
June	3,625	23,119	-19,494	4,459	24,467	-20,008	-20,336	86,830	127,173	-40,344
July	4,390	24,295	-19,905	5,077	25,754	-20,677	-29,384	85,635	135,696	-50,061
August	4,234	23,026	-18,792	4,947	24,312	-19,365	-24,591	87,315	131,272	-43,956
September	4.329	25,259	-20,930	5,152	26,546	-21,394	-28,152	91,458	141,004	-49.546
October	4,359	22,826	-18,467	5,230	24,255	-19,025	-27,996	100,005	147,027	-47,021
November	4,140	23,393	-19,253	4,994	25,047	-20,053	-28,665	94,607	143,324	-48,718
December	4,391	26,264	-21,873	5,326	28,521	-23,195	-23,539	99,372	146,106	-46,734
Total	44,509	251,833	-207,324	54,536	271,739	-217,203	-286,379	1,056,043	1,559,625	-503,582
2010 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
September	5,482	27,479	-21,997	6,802	28,992	-22,190	-37,244	107,644	167,078	-59,434
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	6,694	29,892	-23,198	8,182	31,107	-22,925	-25,888	117,480	166,293	-48,813
Total	64,778	333,465	-268,687	80,460	354,968	-274,508	-360,389	1,278,263	1,913,160	-634,897
<b>2011</b> January	7,330	32,982	-25,652	9,153	34,630	-25,477	-31,114	110,155	166,745	-56,591
February	6,682	27,856	-21,174	8,404	29,597	-21,193	-25,654	109,640	156,487	-46,847
March	7,717	37,076	-29,359	9,803	38,682	-28,879	-25,424	131,315	185,618	-54,303
April	8,934	36,347	-27,413	10,908	37,982	-27,074	-27,246	123,901	178,221	-54,320
May	8,680	40,797	-32,117	10,670	42,582	-31,912	-32,940	124,000	188,852	-64,852
June	7,974	41,151	-33,177	10,015	42,824	-32,809	-36,132	122,913	191,854	-68,941
July	9,097	38,626	-29,529	10,873	40,368	-29,495	-37,418	120,376	187,289	-66,913
August	9,766	39,142	-29,376	11,760	41,012	-29,252	-40,187	126,765	196,204	-69,439
September	9,250	36,252	-27,002	11,165	37,754	-26,589	<sup>R</sup> -35,935	<sup>R</sup> 127,219	<sup>R</sup> 189,744	<sup>R</sup> -62,524
October 10-Month Total	9,630 <b>85,060</b>	33,631 <b>363,860</b>	-24,001 <b>-278,800</b>	11,470 <b>104,221</b>	35,097 <b>380,528</b>	-23,627 <b>-276,307</b>	-36,901 <b>-328,951</b>	131,033 <b>1,227,318</b>	191,562 <b>1,832,576</b>	-60,528 <b>-605,259</b>
	•	,	ŕ		ŕ	•	•			•
2010 10-Month Total 2009 10-Month Total	51,813 35,977	277,592 202,176	-225,779 -166,199	64,669 44,217	296,498 218,170	-231,829 -173,953	-298,537 -234,176	1,047,738 862,065	1,578,102 1,270,195	-530,365 -408,130

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.

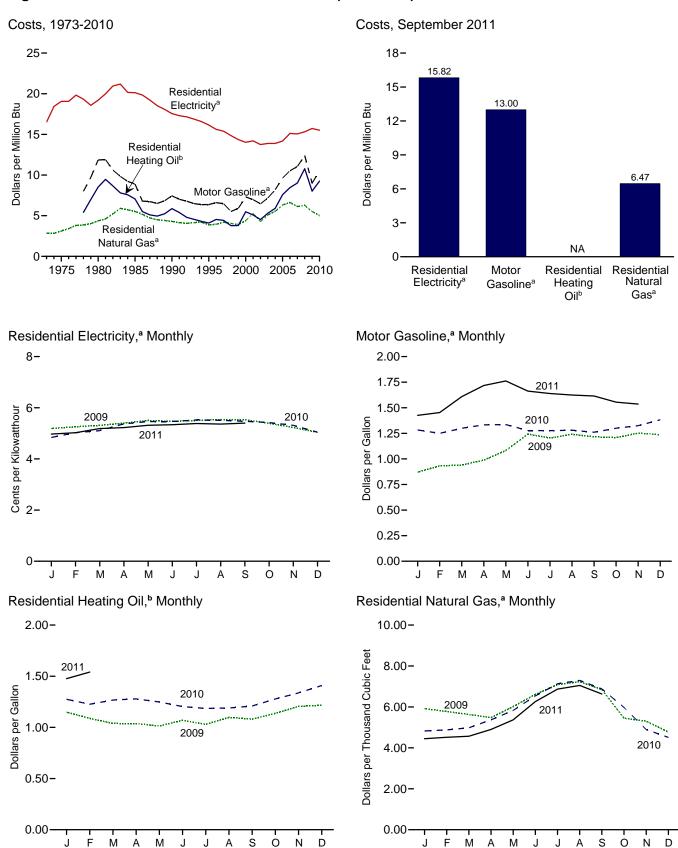
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1974.

Sources: See end of section.

 <sup>&</sup>lt;sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
 <sup>b</sup> Crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels.
 <sup>c</sup> Petroleum, coal, natural gas, and electricity.

R=Revised.

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



<sup>&</sup>lt;sup>a</sup> Includes taxes. Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
<sup>b</sup> Excludes taxes. Source: Table 1.6.

Note: See "Real Dollars" in Glossary.

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

	Consumer Price Index, All Urban Consumers <sup>a</sup>	Motor G	asoline <sup>b</sup>		dential ng Oil <sup>c</sup>		lential Il Gas <sup>b</sup>	Resid Electr	
	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 per Million Btu
1973 Average	44.4	NA	NA	NA	NA	2.91	2.85	5.6	16.50
1975 Average	53.8	NA	NA	NA	NA	3.18	3.12	6.5	19.07
1980 Average	82.4	1.482	11.85	1.182	8.52	4.47	4.36	6.6	19.21
1985 Average	107.6	1.112	8.89	0.979	7.06	5.69	5.52	6.87	20.13
1990 Average	130.7	0.931	7.44	0.813	5.86	4.44	4.31	5.99	17.56
1995 Average	152.4	0.791	6.37	0.569	4.10	3.98	3.87	5.51	16.15
1996 Average	156.9	0.821	6.61	0.630	4.54	4.04	3.94	5.33	15.62
1997 Average	160.5	0.804	6.48	0.613	4.42	4.32	4.21	5.25	15.39
1998 Average	163.0	0.684	5.51	0.523	3.77	4.18	4.05	5.07	14.85
1999 Average	166.6	0.733	5.91	0.526	3.79	4.02	3.91	4.90	14.36
2000 Average	172.2	0.908	7.32	0.761	5.49	4.51	4.39	4.79	14.02
2001 Average	177.1	0.864	6.97	0.706	5.09	5.44	5.28	4.84	14.20
2002 Average	179.9	0.801	6.46	0.628	4.52	4.39	4.26	4.69	13.75
2003 Average	184.0	0.890	7.18	0.736	5.31	5.23	5.09	4.74	13.89
2004 Average	188.9	1.018	8.20	0.819	5.91	5.69	5.55	4.74	13.89
2005 Average	195.3	1.197	9.64	1.051	7.58	6.50	6.33	4.84	14.18
2006 Average	201.6	1.307	10.52	1.173	8.46	6.81	6.63	5.16	15.12
2007 Average 2008 Average	207.342 215.303	1.374 1.541	11.06 12.40	1.250 1.495	9.01 10.78	6.31 6.45	6.12 6.28	5.14 5.23	15.05 15.33
_									
2009 January	211.143	0.871	7.01	1.149	8.28	5.92	5.77	5.19	15.20
February	212.193	0.933	7.51	1.088	7.85	5.78	5.64	5.25	15.40
March	212.709	0.940	7.57	1.039	7.49	5.63	5.49	5.31	15.57
April	213.240	0.988	7.95	1.037	7.48	5.48	5.34	5.40	15.82
May	213.856	1.082	8.71	1.013	7.31	6.01	5.87	5.50	16.13
June	215.693	1.243	10.00	1.070	7.71	6.61	6.45	5.47	16.03
July	215.351	1.205	9.70	1.030	7.43	7.09	6.92	5.50	16.13
August	215.834	1.240	9.98	1.098	7.91	7.23	7.06	5.54	16.24
September	215.969	1.216	9.79	1.081	7.79	6.85	6.69	5.53	16.22
October	216.177	1.209	9.73	1.137	8.20	5.45	5.32	5.39	15.81
November	216.330	1.252	10.08	1.206	8.69	5.31	5.18	5.22	15.31
December Average	215.949 <b>214.537</b>	1.237 <b>1.119</b>	9.96 <b>9.01</b>	1.217 <b>1.112</b>	8.77 <b>8.02</b>	4.77 <b>5.66</b>	4.65 <b>5.52</b>	5.04 <b>5.37</b>	14.78 <b>15.72</b>
_	040.007	4 000	40.00	4.075	0.40	4.00	4.74	P 4 0 4	R 14.19
2010 January	216.687 216.741	1.282	10.32 10.06	1.275 1.226	9.19 8.84	4.83 4.88	4.71 4.76	<sup>R</sup> 4.84 <sup>R</sup> 5.02	R 14.19
February	217.631	1.250 1.300	10.06	1.226	8.8 <del>4</del> 9.13	4.88 4.98	4.76 4.86	R 5.02	R 14.73
March	218.009	1.333	10.73	1.278	9.13	5.37	5.24	R 5.37	R 15.74
April May	218.178	1.336	10.75	1.278	9.00	5.83	5.69	R 5.46	R 16.00
June	217.965	1.277	10.75	1.203	8.68	6.54	6.38	R 5.46	R 16.01
July	218.011	1.277	10.27	1.185	8.55	7.13	6.96	5.52	R 16.19
August	218.312	1.280	10.27	1.190	8.58	7.30	7.12	R 5.51	R 16.15
September	218.439	1.261	10.15	1.209	8.72	6.88	6.71	R 5.47	R 16.03
October	218.711	1.300	10.46	1.278	9.21	5.98	5.83	R 5.42	R 15.89
November	218.803	1.325	10.66	1.337	9.64	4.90	4.78	R 5.31	R 15.56
December	219.179	1.383	11.13	1.409	10.16	4.51	4.40	R 5.05	R 14.79
Average	218.056	1.301	10.47	1.283	9.25	5.14	5.02	R <b>5.29</b>	R 15.51
	220.223	1.425	11.47	1.476	10.64	4.45	4.34	<sup>R</sup> 4.97	<sup>R</sup> 14.57
2011 January	220.223	1.425	11.47	1.476	10.64	4.45 4.52	4.34 4.41	R 5.02	R 14.73
February	221.309 223.467	1.453 1.608	11.69 12.95	1.540 NA	11.11 NA	4.52 4.57	4.41 4.46	<sup>R</sup> 5.19	R 15.20
March	223.467 224.906	1.718	12.95	NA NA	NA NA	4.57 4.90	4.46 4.78	R 5.19	R 15.20
April May	224.906	1.718	13.83	NA NA	NA NA	4.90 5.37	4.78 5.24	5.32	R 15.58
	225.964	1.762	13.38	NA NA	NA NA	5.37 6.26	5.24 6.11	5.32 5.34	R 15.65
June	225.722	1.639	13.38	NA NA	NA NA	6.87	6.70	5.3 <del>4</del> R 5.38	R 15.77
July August	226.545	1.624	13.19	NA NA	NA NA	7.05	6.70	R 5.36	R 15.72
September	226.545	1.624	13.07	NA NA	NA NA	7.05 R 6.63	6.88 R 6.47	R 5.40	R 15.72
October	226.421	1.555	12.52	NA NA	NA NA	NA	NA	NA	NA

Data are U.S. city averages for all items, and are not seasonally adjusted.
 Includes 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

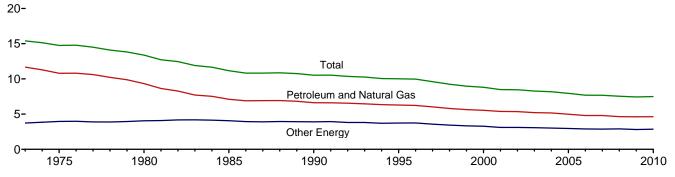
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all

available data beginning in 1973.

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

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

Figure 1.7 Primary Energy Consumption per Real Dollar of Gross Domestic Product, 1973-2010 (Thousand Btu per Chained (2005) Dollar)



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 Consumptior	1	Gross Domestic	Energy Consum	ption per Real Do	llar of GDF		
	Petroleum and Natural Gas	Other Energy <sup>a</sup>	Total	Product (GDP)	Petroleum and Natural Gas	Other Energy <sup>a</sup>	Total		
		Quadrillion Btu		Billion Chained (2005) Dollars	Thousand Btu per Chained (2005) Dollar				
73 Year	57.350	18.334	75.684	4,912.8	11.67	3.73	15.41		
774 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		
77 Year	57.054	20.432	77.961	5,373.1	10.62	3.89	14.73		
78 Year	57.963	21.987	79.950	5,672.8	10.22	3.88	14.09		
79 Year	57.788	23.070	80.859	5,850.1	9.88	3.94	13.82		
30 Year	54.440	23.627	78.067	5,834.0	9.33	4.05	13.38		
31 Year	51.680	24.426	76.106	5,982.1	8.64	4.08	12.72		
82 Year	48.588	24.511	73.099	5,865.9	8.28	4.18	12.46		
33 Year	47.273	25.698	72.971	6,130.9	7.71	4.19	11.90		
34 Year	49.447	27.185	76.632	6,571.5	7.52	4.14	11.60		
35 Year	48.628	27.764	76.392	6,843.4	7.11	4.06	11.1		
36 Year	48.790	27.857	76.647	7,080.5	6.89	3.93	10.8		
87 Year	50.504	28.551	79.054	7,307.0	6.91	3.91	10.8		
38 Year	52.671	30.038	82.709	7,607.4	6.92	3.95	10.8		
39 Year	53.811	30.975	84.786	7,879.2	6.83	3.93	10.7		
00 Year	53.155	31.330	84.485	8,027.1	6.62	3.90	10.5		
91 Year	52.879	31.559	84,438	8,008.3	6.60	3.94	10.5		
2 Year	54.239	31,544	85.783	8,280.0	6.55	3.81	10.3		
3 Year	54.973	32.450	87.424	8,516.2	6.46	3.81	10.2		
04 Year	56.289	32.803	89.091	8,863.1	6.35	3.70	10.0		
95 Year	57.110	33.920	91.029	9.086.0	6.29	3.73	10.0		
96 Year	58.760	35.262	94.022	9,425.8	6.23	3.74	9.9		
77 Year	59.382	35.221	94.602	9,845.9	6.03	3.58	9.6		
08 Year	59.646	35.372	95.018	10,274.7	5.81	3.44	9.2		
	60.747	35.905	96.652	10,274.7	5.64	3.33	8.9		
99 Year	62.086	36.729	98.814	-, -	5.54 5.54	3.33 3.27	8.8		
00 Year				11,216.4					
01 Year	60.958	35.210	96.168	11,337.5	5.38	3.11	8.4		
02 Year	61.783	35.911	97.693	11,543.1	5.35	3.11	8.40		
3 Year	61.642	36.336	97.978	11,836.4	5.21	3.07	8.2		
14 Year	63.201	36.947	100.148	12,246.9	5.16	3.02	8.18		
05 Year	62.950	37.328	100.277	12,623.0	4.99	2.96	7.9		
06 Year	62.179	37.445	99.624	12,958.5	4.80	2.89	7.69		
07 Year	63.476	37.887	101.363	13,206.4	4.81	2.87	7.6		
18 Year	61.114	38.155	99.268	13,161.9	4.64	2.90	7.5		
9 Year	58.747	35.728	94.475	12,703.1	4.62	2.81	7.4		
10 Year	R 60.618	R 37.463	R 98.081	13,088.0	4.63	2.86	7.49		

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

R=Revised.

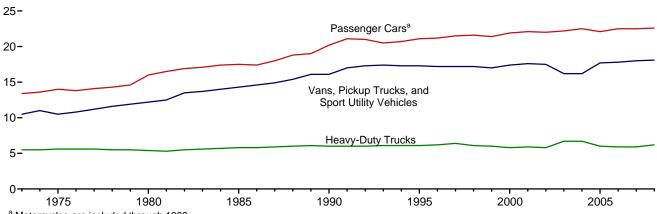
Columbia.

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 (November 22, 2011), Table 1.1.6.

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

Figure 1.8 Motor Vehicle Fuel Economy, 1973-2008 (Miles per Gallon)



<sup>&</sup>lt;sup>a</sup> Motorcycles are included through 1989.

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

Source: Table 1.8.

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

		Passenger Cars	a		ns, Pickup Truc Sport Utility Veh		Н	eavy-Duty Truck	(S <sup>C</sup>	All Motor Vehicles			
	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	<sup>a</sup> 10,157	<sup>a</sup> 533	<sup>a</sup> 19.0	11,676	724	16.1	22,926	3,776	6.1	10,932	688	15.9	
1990 1991	10,504	520 504	20.2	11,902	738	16.1	23,603	3,953	6.0	11,107	677	16.4	
1991	10,571	501 517	21.1 21.0	12,245 12,381	721 717	17.0	24,229	4,047	6.0	11,294	669 683	16.9 16.9	
1992	10,857 10,804	517 527	20.5	12,381	717 714	17.3 17.4	25,373 26,262	4,210 4,309	6.0 6.1	11,558 11,595	693	16.9	
1994	10,804	531	20.5	12,450	701	17.4	25,838	4,202	6.1	11,683	698	16.7	
1995	11,203	530	21.1	12,130	694	17.3	26,514	4,315	6.1	11,793	700	16.7	
1996	11,330	534	21.2	11,811	685	17.3	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	711 721	16.9	
1999	11,848	553	21.4	11,957	701	17.0	26,014	4,352	6.0	12,206	732	16.7	
2000	11,976	547	21.9	11,672	669	17.4	25,617	4,391	5.8	12,164	720	16.9	
2001	11,831	534	22.1	11,204	636	17.6	26,602	4,477	5.9	11,887	695	17.1	
2002	12,202	555	22.0	11,364	650	17.5	27,071	4,642	5.8	12,171	719	16.9	
2003	12,325	556	22.2	11,287	697	16.2	28,093	4,215	6.7	12,208	718	17.0	
2004	12,460	553	22.5	11,184	690	16.2	27,023	4,057	6.7	12,200	714	17.1	
2005	12,510	567	22.1	10,920	617	17.7	26,235	4,385	6.0	12,082	706	17.1	
2006	12,485	554	22.5	10,920	612	17.8	25,231	4,304	5.9	12,017	698	17.2	
2007	12,304	547	22.5	10,962	609	18.0	25,152	4,275	5.9	11,920	693	17.2	
2008 <sup>P</sup>	11,788	522	22.6	10,951	605	18.1	25,254	4,075	6.2	11,619	667	17.4	

a Through 1989, includes motorcycles.

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

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

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

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

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

d Includes buses and motorcycles, which are not shown separately. P=Preliminary.

Table 1.9 Heating Degree-Days by Census Division

			November				July t	Cumulative hrough Nov		
				Percent	Change				Percent	Change
Census Divisions	Normala	2010	2011	Normal to 2011	2010 to 2011	Normal <sup>a</sup>	2010	2011	Normal to 2011	2010 to 2011
New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	727	712	582	-20	-18	1,384	1,270	1,081	-22	-15
Middle Atlantic New Jersey, New York, Pennsylvania	667	640	534	-20	-17	1,193	1,036	952	-20	-8
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	757	711	614	-19	-14	1,337	1,203	1,187	-11	-1
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	840	776	731	-13	-6	1,447	1,277	1,299	-10	2
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	339	339	287	-15	-15	528	473	482	-9	2
East South Central Alabama, Kentucky, Mississippi, Tennessee	449	407	378	-16	-15	695	596	670	-9	12
West South Central Arkansas, Louisiana, Oklahoma, Texas	293	259	251	-14	-3	385	335	352	-9	5
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	676	687	660	-2	-4	1,219	1,051	1,045	-14	-1
Pacific <sup>b</sup> California, Oregon, Washington	396	432	435	10	1	690	690	637	-8	-8
U.S. Average <sup>b</sup>	539	523	469	-13	-10	922	829	806	-13	-3

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

 $\mbox{NM=Not}$  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 rises above 65° F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, a weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days). If a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree days).

Web Pages: • See http://www.eia.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.

b Excludes Alaska and Hawaii.

Table 1.10 Cooling Degree-Days by Census Division

			November				Cumulative January through November						
				Percent	Change				Percent	Change			
Census Divisions	Normala	2010	2011	Normal to 2011	2010 to 2011	Normala	2010	2011	Normal to 2011	2010 to 2011			
New England Connecticut, Maine, Massachusetts, New Hampshire,													
Rhode Island, Vermont	0	0	0	NM	NM	417	710	607	46	-15			
Middle Atlantic New Jersey, New York, Pennsylvania	0	0	0	NM	NM	656	988	886	35	-10			
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	0	0	0	NM	NM	709	978	897	27	-8			
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	0	0	0	NM	NM	927	1,090	1,118	21	3			
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia,	55	40	54	NIM	NIM	4 024	2 244	2 202	40				
West Virginia	55	46	54	NM	NM	1,931	2,311	2,292	19	-1			
East South Central Alabama, Kentucky, Mississippi, Tennessee	6	3	7	NM	NM	1,544	2,006	1,818	18	-9			
West South Central Arkansas, Louisiana, Oklahoma, Texas	31	45	50	NM	NM	2,439	2,748	3,166	30	15			
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	4	8	2	NM	NM	1,243	1,320	1,368	10	4			
Pacific <sup>b</sup> California, Oregon, Washington	4	10	0	NM	NM	703	678	716	2	6			
U.S. Average <sup>b</sup>	15	16	16	NM	NM	1,209	1,459	1,469	22	1			

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

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

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Cooling degree-days are the number of degrees that the daily average temperature 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.

b Excludes Alaska and Hawaii.

## **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," FT410, December issues. 1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.

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

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

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

### **Petroleum Imports**

1974-1987: "U.S. Merchandise Trade," FT900, December issues, 1975-1988.

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

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

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

2008 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.

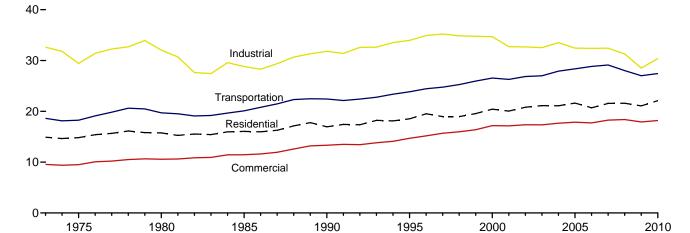
## **Energy Consumption by Sector**



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

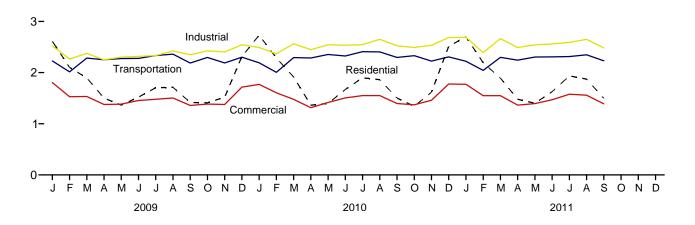
Figure 2.1 Energy Consumption by Sector (Quadrillion Btu)

Total Consumption by End-Use Sector, 1973-2010

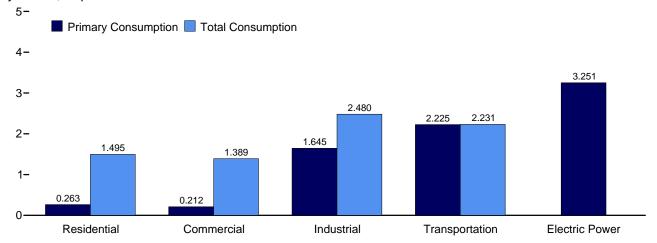


Total Consumption by End-Use Sector, Monthly

4-







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		
	Reside	ential	Comm	erciala	Indus	strial <sup>b</sup>	Transpo	ortation	Power Sector <sup>c,d</sup>		
	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Balancing Item <sup>g</sup>	Primary Total <sup>h</sup>
1973 Total	8,225	14,897	4,423	9,543	24,720	32,623	18,577	18,613	19,731	7	75,684
1975 Total	7,990	14,813	4,059	9,492	21,434	29,413	18,210	18,245	20,270	1	71,965
1980 Total	7,439	15,753	4,105	10,578	22,595	32,039	19,659	19,697	24,269	-1	78,067
1985 Total	7,148	16,041	3,732	11,451	19,443	28,816	20,041	20,088	26,032	-4	76,392
1990 Total	6,557	16,945	3,896	13,320	21,180	31,810	22,366	22,420	30,495	-9	84,485
1995 Total	6,936	18,519	4,101	14,690	22,719	33,971	23,791	23,846	33,479	3	91,029
1996 Total	7,466	19,504	4,273	15,172	23,410	34,904	24,383	24,437	34,485	4	94,022
1997 Total	7,033	18,965	4,295	15,681	23,686	35,200	24,695	24,750	34,886	6	94,602
1998 Total	6,413	18,955	4,005	15,968	23,177	34,843	25,201	25,256	36,225	-3	95,018
1999 Total	6,775	19,557	4,053	16,376	22,950	34,764	25,891	25,949	36,976	6	96,652
2000 Total	7,159	20,425	4,278	17,175	22,824	34,664	26,489	26,548	38,062	2	98,814
2001 Total	6,868	20,042	4,084	17,137	21,794	32,720	26,213	26,275	37,215	-6	96,168
2002 Total	6,931	20,810	4,144	17,358	21,813	32,676	26,784	26,845	38,016	5	97,693
2003 Total	7,211	21,110	4,283	17,343	21,503	32,532	26,920	26,994	38,062	-1	97,978
2004 Total	6,993	21,093	4,232	17,659	22,398	33,506	27,817	27,895	38,713	-6	100,148
2005 Total	6,909	21,626	4,051	17,856	21,407	32,442	28,272	28,353	39,638	(s)	100,277
2006 Total	6,178	20,698	3,746	17,710	21,521	32,386	28,751	28,830	39,428	(s)	99,624
2007 Total	6,633	21,565	3,931	18,264	21,395	32,419	29,031	29,119	40,377	-3	101,363
2008 Total	6,817	21,596	4,073	18,381	20,474	31,284	27,925	28,008	39,978	(s)	99,268
2009 January	1,151	2,610	631	1,805	1,717	2,521	2,219	2,227	3,446	1	9,165
February	932	2,101	523	1,528	1,545	2,266	2,009	2,016	2,901	-3	7,908
March	774	1,896	453	1,534	1,598	2,376	2,277	2,284	2,988	-4	8,086
April	538	1,500	325	1,377	1,475	2,250	2,245	2,251	2,795	-1	7,377
May	330	1,364	228	1,383	1,476	2,302	2,269	2,275	3,022	(s)	7,324
June	261	1,521	192	1,456	1,488	2,317	2,271	2,278	3,359	2	7,573
July	247	1,704	191	1,478	1,507	2,333	2,327	2,334	3,578	3	7,853
August	245 255	1,711	194 200	1,504	1,551	2,423 2.349	2,354 2.180	2,361 2,186	3,653	3	8,001
September	∠55 397	1,416 1.409	200 268	1,357 1,385	1,544 1.607	2,349 2.425	2,180	2,186	3,130	(s) -2	7,308
October November	528	1,409	324	1,305	1,507	2,425	2,290	2,296	2,952 2,860	- <u>-</u> 2 -1	7,513 7,488
December	962	2,315	534	1,717	1,699	2,545	2,102	2,302	3,389	1	8,879
Total	6,619	21,063	4,061	17,899	18,801	28,513	26,916	26,998	38,077	(s)	94,475
<b>2010</b> January	1,182	R 2,731	635	R 1,769	R 1,697	R 2,490	2,183	2,191	R 3,483	2	R 9,183
February	1,020	R 2,285	_ 568	R 1,605	_ 1,603	R 2,367	1,998	R 2,005	R 3,072	-1	R 8,261
March	765	R 1,915	<sup>R</sup> 431	<sup>R</sup> 1,477	R 1,758	R 2,563	2,287	2,294	R 3,007	-3	R 8,245
April	455	R 1,364	285	1,315	R 1,637	R 2,448	2,279	2,285	2,754	-4	<sup>R</sup> 7,407
May	340	R 1,397	233	_ 1,417	R 1,629	R 2,544	R 2,348	2,354	R 3,163	-2	<sup>R</sup> 7,710
June	278	R 1,668	R 203	R 1,505	R 1,624	R 2,533	R 2,318	R 2,325	R 3,610	1	R 8,033
July	249	R 1,897	187	R 1,550	R 1,633	R 2,547	R 2,402	R 2,409	R 3,933	R 3	R 8,407
August	239	R 1,862	R 191	R 1,551	R 1,726	R 2,652	R 2,397	R 2,404	<sup>R</sup> 3,916 <sup>R</sup> 3,305	3	R 8,472
September	246	R 1,502	193	R 1,395	R 1,684	R 2,525	R 2,290	R 2,296		-2	R 7,717
October	355 620	<sup>R</sup> 1,343 <sup>R</sup> 1,617	263	R 1,371	<sup>R</sup> 1,653 <sup>R</sup> 1,681	R 2,491 R 2,533	2,324	R 2,331	R 2,941 R 2,943	-3 -4	<sup>R</sup> 7,533 <sup>R</sup> 7,831
November	1,091	R 2,512	373 597	1,460 R 1,778	R 1,808	R 2,685	2,218 2,300	2,224 2,307	R 3,487	-4 -1	R 9,281
December  Total	6,839	R <b>22,093</b>	R <b>4,157</b>	R 18,193	R <b>20,133</b>	R <b>30,377</b>	R <b>27,345</b>	R <b>27,426</b>	R 39,615	-9	R 98,081
<b>2011</b> January	1,172	R 2,700	633	R 1,770	R 1,857	R 2,690	R 2,214	R 2,221	R 3,505	(s)	9,381
February	960	R 2,193	533	R 1,548	R 1,623	R 2,391	2,036	R 2,043	R 3,024	-3	R 8,173
March	772	R 1,891	447	R 1,549	R 1,805	R 2,666	2,291	2,298	R 3,088	-4	R 8,399
April	477	R 1,480	297	R 1,364	R 1,646	R 2,490	R 2,236	2,243	R 2,921	-3	<sup>R</sup> 7,574
May	326	1,400	220	R 1,393	<sup>R</sup> 1,656	R 2,542	2,298	R 2,305	3,139	-3	<sup>R</sup> 7,637
June	258	1,626	193	R 1,469	R 1,661	R 2,560	R 2,301	R 2,308	R 3,551	(s)	R 7,963
July	238	R 1,934	186	R 1,578	R 1,650	R 2,591	2,307	2,314	R 4,036	2	R 8,419
August	249	R 1,872	204	R 1,558	R 1,726	R 2,650	R 2,342	R 2,349	R 3,908	(s)	R 8,429
September	263	1,495	212	1,389	1,645	2,480	2,225	2,231	3,251	-2	7,593
9-Month Total	4,716	16,592	2,924	13,618	15,267	23,060	20,249	20,310	30,424	-14	73,566
2010 9-Month Total 2009 9-Month Total	4,775 4,733	16,621 15,823	2,925 2,936	13,584 13,422	14,992 13,901	22,668 21,137	20,502 20,150	20,564 20,212	30,244 28,874	-1 2	73,436 70,595

 <sup>&</sup>lt;sup>a</sup> Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
 <sup>b</sup> Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
 <sup>c</sup> Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.
 <sup>d</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.
 <sup>e</sup> See "Primary Energy Consumption" in Glossary.
 <sup>f</sup> Total energy consumption in the end-use sectors consists of primary energy consumption, electricity retail sales, and electrical system energy losses. See Note 2, "Electrical System Energy Losses," at end of section. 2, "Electrical System Energy Losses," at end of section.

<sup>&</sup>lt;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,

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.

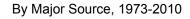
<sup>h</sup> Primary energy consumption total. See Table 1.3.

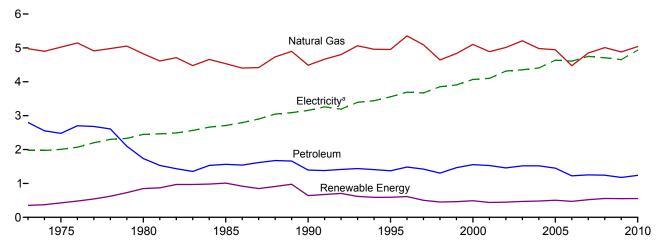
R=Revised. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu. Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent 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.

Sources: Tables 1.3 and 2.2-2.6.

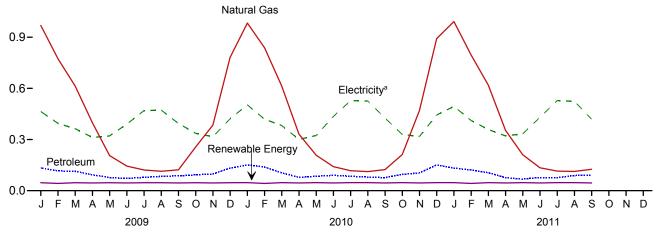
Figure 2.2 Residential Sector Energy Consumption (Quadrillion Btu)

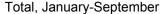


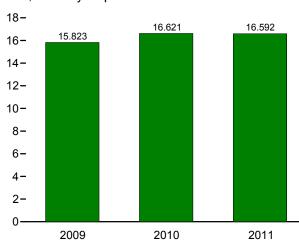


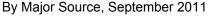
By Major Source, Monthly

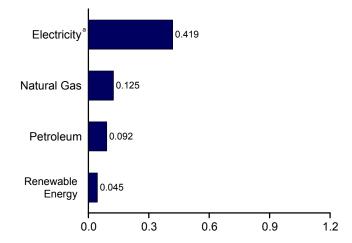












Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.

Source: Table 2.2.

<sup>&</sup>lt;sup>a</sup> Electricity retail sales.

**Table 2.2 Residential Sector Energy Consumption** 

(Trillion Btu)

	IIION Dic	-/										Τ
-				Prima	ry Consum <sub>l</sub> │					_		
		1	Fuels				ole Energy <sup>b</sup>			Electricity	Electrical System	
	Coal	Natural Gas <sup>c</sup>	Petro- leum	Total	Geo- thermal	Solar/ PV	Bio- mass	Total	Total Primary	Retail Sales <sup>d</sup>	Energy Losses <sup>e</sup>	Total
1973 Total	94	4,977	2,800	7,871	NA	NA	354	354	8,225	1,976	4,696	14,897
1975 Total	63	5,023	2,479	7,564	NA	NA	425	425	7,990	2,007	4,817	14,813
1980 Total	31	4,825	1,734	6,589	NA	NA	850	850	7,439	2,448	5,866	15,753
1985 Total	39	4,534	1,565	6,138	NA	NA	1,010	1,010	7,148	2,709	6,184	16,041
1990 Total	31	4,491	1,394	5,916	6	56	580	641	6,557	3,153	7,235	16,945
1995 Total	17 17	4,954 5,354	1,374 1,484	6,345 6,854	7 7	64 65	520 540	591 612	6,936	3,557 3,694	8,026 8,344	18,519 19,504
1996 Total 1997 Total	16	5,354 5,093	1,404	6,531	8	64	430	502	7,466 7,033	3,694 3,671	8,261	18,965
1998 Total	12	4,646	1,304	5,962	8	64	380	452	6,413	3,856	8,686	18,955
1999 Total	14	4,835	1,465	6,314	9	63	390	461	6,775	3,906	8.875	19,557
2000 Total	11	5,105	1,554	6,670	9	60	420	489	7,159	4,069	9,197	20,425
2001 Total	12	4,889	1,529	6,430	9	59	370	438	6,868	4,100	9,074	20,042
2002 Total	12	5,014	1,457	6,484	10	57	380	448	6,931	4,317	9,562	20,810
2003 Total	12	5,209	1.519	6.741	13	57	400	470	7.211	4,353	9.546	21,110
2004 Total	11	4,981	1,520	6,513	14	57	410	481	6,993	4,408	9,691	21,093
2005 Total	8	4,946	1,451	6,406	16	58	430	504	6,909	4,638	10,079	21,626
2006 Total	6	4,476	1,224	5,706	18	63	390	472	6,178	4,611	9,909	20,698
2007 Total	8	4,850	1,254	6,111	22	70	430	522	6,633	4,750	10,182	21,565
2008 Total	8	5,010	1,243	6,261	26	80	450	556	6,817	4,708	10,071	21,596
2009 January	1	969	134	1,104	3	8	37	47	1,151	464	995	2,610
February	1	773	116	890	3	7	33	42	932	394	774	2,101
March	1	614	113	727	3	8	37	47	774	364	758	1,896
April	1	399	93	492	3	7	35	45	538	312	650	1,500
May	(s)	206	77	283	3	8	37	47	330	321	713	1,364
June	`1	144	71	216	3	7	35	45	261	390	869	1,521
July	1	121	78	200	3	8	37	47	247	470	988	1,704
August	. 1	114	84	198	3	8	37	47	245	472	993	1,711
September	(s)	122	87	210	3	7	35	45	255	394	767	1,416
October	1	256	93	350	3	8	37	47	397	336	676	1,409
November	1	385	98	483	3	7	35	45	528	316	674	1,519
December	1	781	133	915	3	8	37	47	962	422	931	2,315
Total	8	4,883	1,176	6,067	33	89	430	552	6,619	4,656	9,789	21,063
<b>2010</b> January	1	983	151	1,135	3	8	36	47	1,182	R 503	R 1,045	R 2,731
February	1	838	139	978	3	7	32	42	1,020	R 419	R 845	R 2,285
March	1	613	105	718	3	8	36	47	765	R 381	R 768	R 1,915
April	(s)	331	78 84	410	3	8	35	45	455	R 300	<sup>R</sup> 608 <sup>R</sup> 734	R 1,364
May	(s)	208 141	90	293 232	3 3	8 8	36 35	47 45	340 278	324 <sup>R</sup> 435	R 956	<sup>R</sup> 1,397 <sup>R</sup> 1,668
June July	(s)	117	90 84	202	3	8	36	45 47	276 249	R 528	R 1,121	R 1,897
August	(5)	112	80	192	3	8	36	47	239	R 526	R 1,097	R 1,862
September	(s)	124	76	200	3	8	35	45	246	R 425	R 831	R 1,502
October	1	212	96	308	3	8	36	47	355	330	R 658	R 1,343
November	1	470	104	574	3	8	35	45	620	318	R 680	R 1 617
December	1	892	151	1.044	3	8	36	47	1,091	R 444	R 978	R 2,512
Total	7	5,039	1,239	6,285	37	97	420	554	6,839	R <b>4,933</b>	R 10,322	R 22,093
<b>2011</b> January	1	992	132	1,125	3	8	36	47	1,172	R 494	R 1,033	R 2,700
February	1	796	121	917	3	7	32	42	960	R 412	R 822	R 2,193
March	1	619	105	725	3	8	36	47	772	R 358	R 760	R 1,891
April	(s)	354	76	431	3	8	35	45	477	R 321	R 683	R 1,480
May	(2)	211	68 77	279	3	8	36	47	326	R 334	R 740	1,400
June	(s)	134	77 76	212	3	8	35	45	258	R 430	R 939	1,626
July	(s)	115	76	191 202	3 3	8	36	47	238	<sup>R</sup> 528 <sup>R</sup> 524	R 1,168	R 1,934 R 1,872
August September	(s)	113 125	89 92	202	3	8 8	36 35	47 45	249 263	^ 524 419	R 1,099 813	1,495
9-Month Total	(s) <b>5</b>	3,459	92 <b>838</b>	4,302	28	72	314	45 <b>414</b>	4, <b>716</b>	3,821	8,055	1,495 <b>16,592</b>
	_											
2010 9-Month Total 2009 9-Month Total	5 6	3,467 3,462	888 853	4,361 4,320	28 25	72 67	314 322	414 413	4,775 4,733	3,841 3,581	8,005 7,508	16,621 15,823

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.

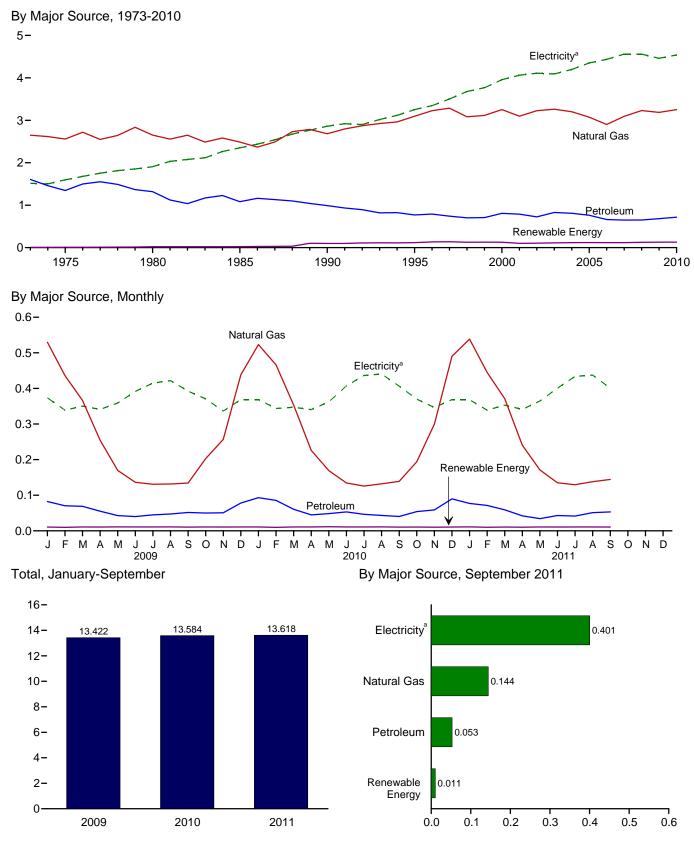
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

a See "Primary Energy Consumption" in Glossary.
 b Data are estimates. See Table 10.2a for notes on series components.
 c Natural gas only, excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
 d Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1006 above constructions.

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

Figure 2.3 Commercial Sector Energy Consumption (Quadrillion Btu)



<sup>&</sup>lt;sup>a</sup> Electricity retail sales.

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

Source: Table 2.3.

**Table 2.3 Commercial Sector Energy Consumption** 

(Trillion Btu)

					Primary (	Consump	tiona							
		Fossi	I Fuels			R	enewab	le Energy	<b>y</b> b			-1	=1	
	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	Elec- tricity Retail Sales <sup>f</sup>	Electrical System Energy Losses	Total
1973 Total 1975 Total 1980 Total 1985 Total 1995 Total 1995 Total 1996 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2005 Total 2007 Total 2007 Total 2007 Total	160 147 115 137 122 117 122 129 93 103 92 97 90 82 103 97 65 70 69	2,649 2,558 2,651 2,488 2,682 3,096 3,226 3,285 3,083 3,115 3,252 3,097 3,225 3,201 3,073 2,902 3,094 3,228	1,607 1,346 1,318 1,083 991 769 743 702 707 807 790 726 827 809 761 663 649 651	4,416 4,051 4,084 3,708 3,798 3,982 4,138 4,157 3,878 3,925 4,150 4,170 3,984 4,040 4,170 3,932 3,632 3,638 4,153 3,932 3,638 4,153	NA N	NA N	NA N	NA N	7 8 21 24 94 113 129 131 118 121 119 92 95 101 105 102 102	7 8 8 21 24 98 118 135 129 128 101 104 113 118 119 117 118 125	4,423 4,059 4,105 3,732 3,896 4,101 4,273 4,095 4,053 4,278 4,084 4,144 4,283 4,051 3,746 3,931 4,073	1,517 1,598 1,906 2,351 2,860 3,252 3,344 3,508 3,766 3,956 4,062 4,110 4,090 4,198 4,351 4,456 4,558	3,604 3,835 4,567 5,368 6,564 7,338 7,555 7,883 8,285 8,557 8,942 8,990 9,104 8,990 9,229 9,455 9,529 9,773 9,749	9,543 9,492 10,578 11,451 13,320 14,690 15,172 15,681 15,968 16,376 17,175 17,137 17,358 17,358 17,343 17,659 17,856 17,710 18,264 18,381
Page 3 January	8 7 6 4 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	530 436 366 255 170 136 131 132 134 203 257 438 <b>3,187</b>	82 70 69 55 43 40 45 47 52 50 51 78 <b>682</b>	620 513 442 314 217 181 180 183 190 258 313 523 <b>3,932</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	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)	9 8 9 9 10 10 9 9 9 9	11 10 11 11 11 11 11 11 10 11 11 11	631 523 453 325 228 192 191 194 200 268 324 534 <b>4,061</b>	374 339 350 341 359 392 415 422 392 371 337 369 <b>4,460</b>	801 666 731 711 796 872 872 887 765 745 717 814 <b>9,378</b>	1,805 1,528 1,534 1,377 1,383 1,456 1,478 1,504 1,357 1,385 1,377 1,717
2010 January	7 6 6 4 4 4 4 4 4 5 6 <b>5</b> 8	523 466 353 226 169 134 126 132 139 194 300 490 <b>3,252</b>	93 85 60 45 48 53 46 43 40 54 59 90 <b>718</b>	624 558 420 274 221 192 176 180 183 252 363 586 <b>4,028</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 2 2 2 2 2 2	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	9 8 9 9 9 9 9 9 9 9 8 7	11 10 11 11 11 R 12 11 11 R 11 11 10 11 R 129	635 568 R 431 285 233 R 203 187 R 191 193 263 373 597 R 4,157	369 R 344 347 340 R 362 407 R 436 R 441 R 406 370 346 R 369 R 4,539	R 766 R 693 R 699 R 689 R 821 R 895 R 927 920 R 795 R 738 R 812 R 812	R 1,769 R 1,605 R 1,477 1,315 R 1,417 R 1,505 R 1,550 R 1,550 R 1,395 R 1,395 R 1,371 1,460 R 1,778 R 18,193
2011 January	7 6 6 4 4 4 4 3 <b>42</b>	538 445 371 241 171 135 130 138 144 <b>2,314</b>	77 71 59 42 34 43 41 51 53 <b>472</b>	622 523 436 287 209 182 175 193 201 2,828	(S) (S) (S) (S) (S) (S) (S) (S) (S)	2 1 2 2 2 2 2 2 2 2 2 14	(s) (s) (s) (s) (s) (s) (s) (s) (s)	R (S) R (S) (S) (S) (S) (S) (S) (S) (S) (S)	9 R 9 9 9 9 9 9 9 81 83	11 10 11 10 11 11 11 11 11 96	633 533 447 297 220 193 186 204 212 <b>2,924</b>	368 339 353 R 341 365 401 434 R 437 401 <b>3,439</b> <b>3,454</b>	R 769 R 677 R 749 R 726 R 808 R 875 R 958 R 916 777 <b>7,255</b>	R1,770 R1,548 R1,549 R1,364 R1,393 R1,469 R1,578 R1,558 1,389 13,618
2009 9-Month Total	46	2,289	504	2,839	i	12	(s)	(s)	84	97	2,936	3,384	7,102	13,422

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

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.

 <sup>&</sup>lt;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.

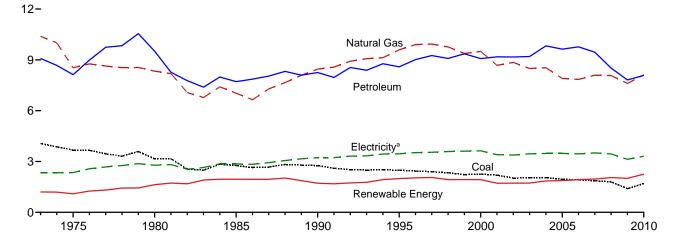
C Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

Does not include biofuels that have been blended with petroleum—biofuels

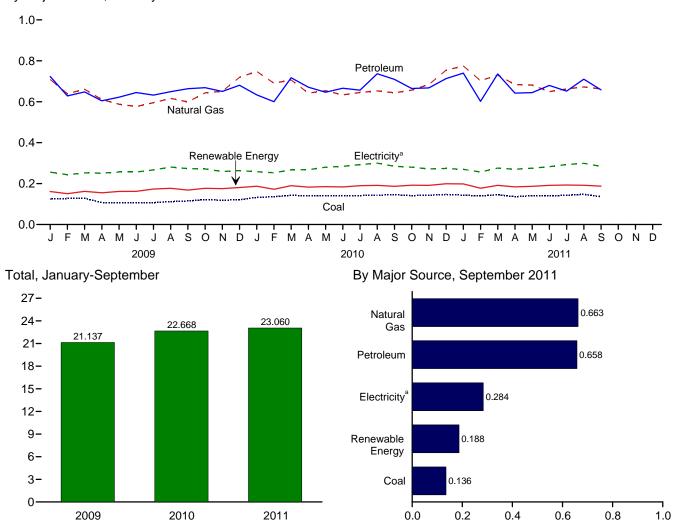
Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."
 Conventional hydroelectric power.
 Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
 Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

Figure 2.4 Industrial Sector Energy Consumption (Quadrillion Btu)

By Major Source, 1973-2010



By Major Source, Monthly



<sup>&</sup>lt;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)

				Pri	imary Con	sumption	ı						
		Fossi	l Fuels			Rene	ewable En	ergy <sup>b</sup>					
	Coal	Natural Gas <sup>c</sup>	Petro- leum <sup>d</sup>	Totale	Hydro- electric Power <sup>f</sup>	Geo- thermal	Solar/ PV	Bio- mass	Total	Total Primary	Elec- tricity Retail Sales <sup>9</sup>	System Energy Lossesh	Totale
1973 Total	4,057	10,388	9,083	23,521	35	NA	NA	1,165	1,200	24,720	2,341	5,562	32,623
1975 Total	3,667	8,532	8,127	20,339	32	NA	NA	1,063	1,096	21,434	2,346	5,632	29,413
1980 Total	3,155 2.760	8,333	9,509	20,962	33 33	NA	NA	1,600	1,633	22,595	2,781 2.855	6,664	32,039 28.816
1985 Total 1990 Total	2,756	7,032 8,451	7,714 8,251	17,492 19,463	33 31	NA 2	NA_	1,918 1,684	1,951 1,717	19,443 21,180	3,226	6,518 7,404	31,810
1995 Total	2,488	9,592	8,586	20,727	55	3	_	1,934	1,992	22,719	3,455	7,796	33,971
1996 Total	2,434	9,901	9,019	21,377	61	3	_	1,969	2,033	23,410	3,527	7,968	34,904
1997 Total	2,395	9,933	9,255	21,629	58	3	-	1,996	2,057	23,686	3,542	7,972	35,200
1998 Total	2,335	9,763	9,082	21,248	55	3	-	1,872	1,929	23,177	3,587	8,079	34,843
1999 Total	2,227	9,375	9,356	21,016	49	4	-	1,882	1,934	22,950	3,611	8,203	34,764
2000 Total	2,256	9,500	9,075 9,178	20,896 20,075	42 33	4 5	-	1,881	1,928 1,719	22,824 21,794	3,631 3,400	8,208 7,526	34,664 32,720
2001 Total 2002 Total	2,192 2,019	8,676 8,845	9,178 9,168	20,075	33 39	5 5	_	1,681 1,676	1,719	21,794	3,400 3,379	7,526 7,484	32,720 32,676
2003 Total	2,041	8,488	9,197	19,777	43	3	_	1,679	1,726	21,503	3,454	7,575	32,532
2004 Total	2,047	8,536	9,825	20,545	33	4	_	1,817	1,853	22,398	3,473	7,635	33,506
2005 Total	1,954	7,903	9,633	19,534	32	4	-	1,837	1,873	21,407	3,477	7,557	32,442
2006 Total	1,914	7,846	9,770	19,591	29	4	-	1,897	1,930	21,521	3,451	7,415	32,386
2007 Total	1,865	8,090	9,451	19,431	16	5	-	1,944	1,964	21,395	3,507	7,517	32,419
2008 Total	1,796	8,074	8,511	18,422	17	5	-	2,031	2,053	20,474	3,444	7,365	31,284
2009 January	125	709	724	1.555	2	(s)	_	159	161	1,717	256	548	2,521
February	127	639	628	1,394	1	(s)	_	149	151	1,545	243	478	2,266
March	128	661	648	1,435	2	(s)	_	160	162	1,598	252	526	2,376
April	107	611	605	1,320	2	(s)	-	153	155	1,475	251	523	2,250
May	106	588	622	1,314	2	(s)	_	160	162	1,476	257	569	2,302
June	107	576	645	1,326	2	(s)	-	160	162	1,488	257	572	2,317
July	107 112	596 616	632 649	1,333 1,374	1	(s) (s)	_	172 175	173 177	1,507 1,551	266 281	560 591	2,333 2,423
August September	115	599	663	1,374	1	(s)	_	167	168	1,544	273	532	2,423
October	122	643	669	1,430	1	(s)	_	175	177	1,607	272	546	2,425
November	118	651	650	1,419	1	(s)	_	174	175	1,594	259	552	2,405
December	121	719	681	1,518	2	(s)	_	179	181	1,699	264	582	2,545
Total	1,396	7,609	7,816	16,796	18	4	-	1,982	2,005	18,801	3,130	6,582	28,513
2010 January	133	748	634	R 1,510	2	(s)	(s)	R 185	R 187	R 1.697	R 258	R 535	R 2.490
February	136	691	R 600	1.431	2	(s)	(s)	R 170	R 172	1.603	R 253	R 510	R 2.367
March	143	706	717	1,568	2	(s)	(s)	188	R 190	R 1,758	R 267	R 538	R 2,563
April	141	642	671	1,455	2	(s)	(s)	181	183	R 1,637	R 268	R 542	R 2,448
May	141	654	R 646	R 1,444	2	(s)	(s)	R 183	R 185	R 1,629	R 280	R 635	R 2,544
June	140	633	<sup>R</sup> 666 <sup>R</sup> 656	R 1,441 R 1,443	1 1	(s)	(s)	<sup>R</sup> 182 <sup>R</sup> 188	<sup>R</sup> 183 <sup>R</sup> 190	R 1,624	<sup>R</sup> 284 <sup>R</sup> 292	<sup>R</sup> 625 <sup>R</sup> 621	R 2,533
July August	142 143	645 653	R 737	R 1,535	1	(s) (s)	(s) (s)	R 190	R 190	R 1,633 R 1,726	R 300	R 626	<sup>R</sup> 2,547 <sup>R</sup> 2,652
September	143	644	R 709	R 1,498	1	(s)	(s)	R 185	187	R 1,684	R 284	R 556	R 2,525
October	141	657	665	1,461	1	(s)	(s)	R 190	R 192	R 1.653	R 280	R 558	R 2,491
November	143	684	668	R 1,489	1	(s)	(s)	R 190	191	R 1,681	R 272	<sup>R</sup> 580	R 2,533
December	147	754	713	1,609	1	(s)	(s)	R 198	R 199	R 1,808	R 274	R 604	R 2,685
Total	1,696	8,112	R <b>8,082</b>	R 17,883	16	4	(s)	R 2,230	R 2,251	<sup>R</sup> 20,133	<sup>R</sup> 3,313	<sup>R</sup> 6,931	R 30,377
2011 January	144	775	740	R 1,658	1	(s)	(s)	R 197	R 198	R 1,857	R 270	R 563	R 2,690
February	140	703	602	R 1,445	2	(s)	(s)	R 175	R 177	R 1,623	R 257	R 512	R 2.391
March	146	730	736	1,614	2	(s)	(s)	<sup>R</sup> 189	R 192	R 1,805	R 276	R 585	R 2,666
April	136	684	R 642	1,462	2	(s)	(s)	R 182	R 184	R 1,646	R 270	R 574	R 2,490
May	141	682	<sup>R</sup> 644	1,469	2	(s)	(s)	R 184	R 187	R 1,656	R 275	R 611	R 2,542
June	140	649	679	1,470	1	(s)	(s)	R 189	R 191	R 1,661	R 282	617	R 2,560
July	143	662	652	1,457	1	(s)	(s)	R 191 R 190	R 193	R 1,650	R 293	R 648	R 2,591
August September	148 136	672 663	710 658	1,534 1,457	1	(s)	(s)	^ 190 186	R 192 188	R 1,726 1,645	<sup>R</sup> 299 284	626 551	R 2,650 2,480
9-Month Total	1,272	6,220	6,064	1,457 <b>13,566</b>	13	(s) <b>3</b>	(s) <b>(s)</b>	1,685	1,701	1,645 <b>15,267</b>	2,506	5,287	2,480 <b>23,060</b>
J-month rotal	1,212	0,220	0,004	10,000	13	3	(3)	1,000	1,701	13,201	2,500		20,000
2010 9-Month Total 2009 9-Month Total	1,264 1,035	6,016 5,595	6,037 5,816	13,324 12,429	13 14	3 3	(s) -	1,652 1,455	1,668 1,472	14,992 13,901	2,487 2,336	5,189 4,900	22,668 21,137

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

R=Revised. NA=Not available. - =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.

 <sup>&</sup>lt;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

Most data are estimates. See Table 10.2b for notes on series components and estimation.
 Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
 Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."
 Includes coal coke net imports, which are not separately displayed. See Tables 1.4a and 1.4b.
 Conventional hydroelectric power.

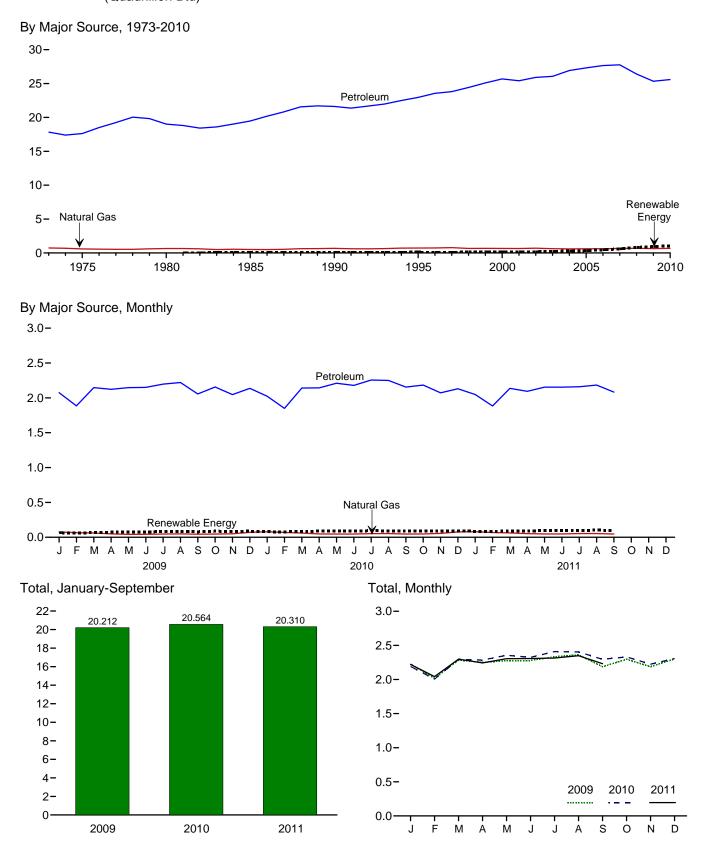
Conventional hydroelectric power.

<sup>&</sup>lt;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>1</sup> Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are

Figure 2.5 Transportation Sector Energy Consumption (Quadrillion Btu)



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

**Table 2.5 Transportation Sector Energy Consumption** 

(Trillion Btu)

			Primary Co	nsumption <sup>a</sup>					
		Fossi	l Fuels		Renewable Energy <sup>b</sup>	Total	Electricity Retail	Electrical System Energy	
	Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Total	Biomass	Primary	Sales	Lossesf	Total
1973 Total	3	743	17,832	18,577	NA	18,577	11	25	18,613
1975 Total	1	595	17,615	18,210	NA	18,210	10	24	18,245
1980 Total	(g)	650	19,009	19,659	NA	19,659	11	27	19,697
1985 Total	(g)	519	19,472	19,992	50	20,041	14	32	20,088
1990 Total	(g) (g)	680	21,626	22,306	60	22,366	16	37	22,420
1995 Total	(9)	724 737	22,955	23,679	112 81	23,791	17 17	38 38	23,846
1996 Total	(9)	780	23,565 23,813	24,302 24,593	102	24,383 24,695	17	36 38	24,437 24,750
1997 Total 1998 Total	(g)	666	24,422	25,088	113	25,201	17	38	25,256
1999 Total	(g)	675	25,098	25,774	118	25,891	17	40	25,949
2000 Total	(9)	672	25,682	26,354	135	26,489	18	42	26,548
2001 Total	\g\	658	25,412	26,070	142	26,213	20	43	26,275
2002 Total	}g∫	702	25,913	26,614	170	26,784	19	42	26,845
2003 Total	(g)	627	26,063	26,690	230	26,920	23	51	26,994
2004 Total	(g)	602	26,925	27,527	290	27,817	25	54	27,895
2005 Total	(g)	624	27,309	27,933	339	28,272	26	56	28,353
2006 Total	(g)	625	27,651	28,276	475	28,751	25	54	28,830
2007 Total	(g)	665	27,763	28,429	602	29,031	28	60	29,119
2008 Total	(g)	692	26,407	27,099	826	27,925	26	56	28,008
2009 January	(g)	77	2,075	2,151	67	2,219	3	6	2,227
February	( g )	66	1,885	1,951	58	2,009	2	5	2,016
March	(9)	61	2,146	2,207	70	2,277	2	5	2,284
April	(g)	49	2,123	2,172	73	2,245	2	4	2,251
May	(g)	42	2,147	2,189	79	2,269	2	5	2,275
June	(g) (g)	43	2,150	2,193	78	2,271	2 2	5 5	2,278
July	(9)	47 49	2,197 2.220	2,243 2,269	83 85	2,327 2.354	2	5 5	2,334 2.361
August	(9)	49	2,220	2,209	80	2,35 <del>4</del> 2,180	2	4	2,361
September October	(9)	47	2,156	2,100	88	2,180	2	4	2,186
November	(9)	50	2,047	2,097	85	2,182	2	4	2,188
December	(9)	70	2.137	2,207	87	2.294	2	5	2.302
Total	(g)	643	25,339	25,982	934	26,916	27	56	26,998
2010 January	( <sup>9</sup> )	79	R 2,024	2,102	81	2,183	R <sub>2</sub>	5	2,191
February	(g)	70	1,850	1,919	79	1,998	2	5	R 2,005
March	(g)	61	2,141	R 2,202	86	2,287	2	5	2,294
April	(9)	48	2,143	2,191	88	2,279	2	4	2,285
May	(9)	46	R 2,210	R 2,256	92	R 2,348	2	5	2,354
June	(g) (g)	47	R 2,179	R 2,225	93	R 2,318	2	5	R 2,325
July	(9)	52	R 2,256	R 2,308 R 2,304	95	R 2,402 R 2,397	2	5	R 2,409 R 2,404
August	(9)	53 46	R 2,250 2,154	R 2,201	93 89	R 2,290	2 2	4 4	R 2,404
September October	(9)	46 47	2,154 R 2,184	2,201	89 94	2,290	2	4	R 2,296
November	( 9 )	56	2,072	2,128	90	2,218	2	4	2,224
December	(9)	76	R 2,131	R 2,207	94	2.300	2	5	2,307
Total	(g)	680	R 25,593	R 26,273	1,072	R 27,345	26	55	R 27,426
2011 January	(9)	80	2,047	R 2,128	86	R 2,214	2	5	R 2,221
February	(g)	68	R 1,884	1.952	84	2,036	2	4	R 2,043
March	(g)	63	2,136	R 2,199	92	2,291	2	5	2,298
April	(g)	52	R 2,094	<sup>R</sup> 2,146	90	R 2,236	2	4	2,243
May	(g)	48	2,154	R 2,202	96	2,298	2	5	R 2,305
June	(9)	47	R 2,154	R 2,201	100	R 2,301	2	5	R 2,308
July	(9)	53	2,159	R 2,213	95	2,307	2	5	2,314
August	(9)	53	R 2,184	2,237	R 105	R 2,342	2	4	R 2,349
September	(g)	47	2,083	2,129	95	2,225	2	4	2,231
9-Month Total	(g)	511	18,895	19,406	843	20,249	20	41	20,310
2010 9-Month Total 2009 9-Month Total	( <sup>g</sup> )	502 476	19,206 18,999	19,708 19,476	795 674	20,502 20,150	20 20	42 42	20,564 20,212

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

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.

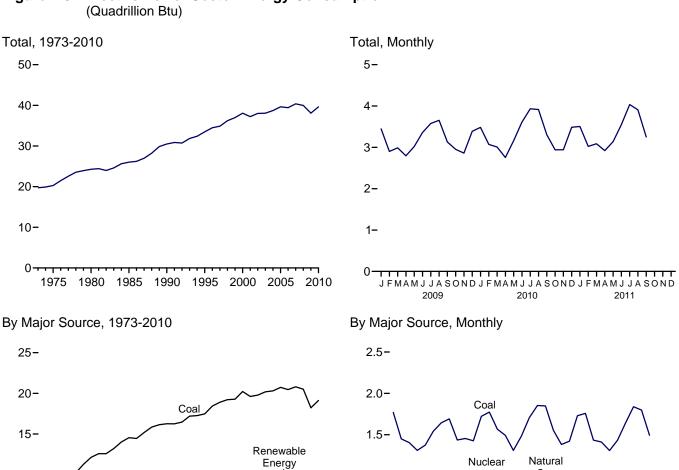
a See "Primary Energy Consumption" in Glossary.
 b Data are estimates. See Table 10.2b for notes on series components.
 c Natural gas only; does not include supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
 d Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."
 e Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
 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

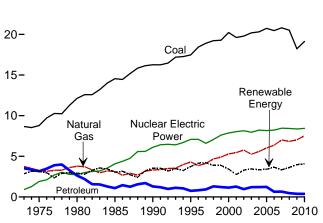
power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

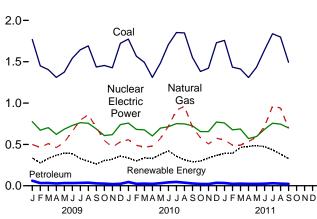
section.

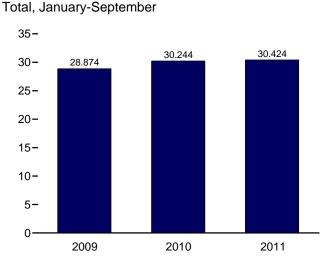
<sup>g</sup> Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

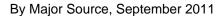
**Electric Power Sector Energy Consumption** Figure 2.6

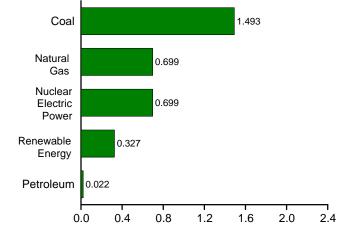












Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption. Source: Table 2.6.

Table 2.6 **Electric Power Sector Energy Consumption** 

(Trillion Btu)

						Prima	ry Consum	ptiona					
		Fossil	Fuels					Renewabl	e Energy <sup>b</sup>			Elec-	
	Coal	Natural Gas <sup>c</sup>	Petro- leum	Total	Nuclear Electric Power	Hydro- electric Power <sup>d</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	tricity Net Imports	Total Primary
1973 Total	8,658	3,748	3,515	15,921	910	2,827	20	NA	NA	3	2,851	49	19,731
1975 Total	8,786	3,240	3,166	15,191	1,900	3,122	34	NA	NA	2	3,158	21	20,270
1980 Total	12,123	3,778	2,634 1,090	18,534	2,739	2,867	53 97	NA (a)	NA (a)	4 14	2,925	71 140	24,269
1985 Total 1990 Total <sup>e</sup>	16,261	3,135 3,309	1,090	18,767 20,859	4,076 6,104	2,937 3,014	161	<u>(s)</u> 4	<u>(s)</u> 29	317	3,049 3,524	140 8	26,032 30,495
1995 Total	17,466	4,302	755	22,523	7,075	3,149	138	5	33	422	3,747	134	33,479
1996 Total	18,429	3,862	817	23,109	7,087	3,528	148	5	33	438	4,153	137	34,485
1997 Total	18,905	4,126	927	23,957	6,597	3,581	150	5	34	446	4,216	116	34,886
1998 Total	19,216	4,675	1,306	25,197	7,068	3,241	151	5	31	444	3,872	88	36,225
1999 Total	19,279	4,902	1,211	25,393	7,610	3,218	152	5	46	453	3,874	99	36,976
2000 Total	20,220	5,293	1,144	26,658	7,862 8,029	2,768 2,209	144 142	5 6	57 70	453 337	3,427	115 75	38,062 37,215
2001 Total 2002 Total	19,614 19,783	5,458 5,767	1,277 961	26,348 26,511	8,029 8,145	2,209 2,650	142	6	70 105	337 380	2,763 3,288	75 72	38,016
2002 Total	20,185	5,246	1,205	26,636	7,959	2,781	148	5	115	397	3,445	22	38,062
2004 Total	20,305	5,595	1,212	27,112	8.222	2,656	148	6	142	388	3,340	39	38,713
2005 Total	20,737	6,015	1,235	27,986	8,161	2,670	147	6	178	406	3,406	85	39,638
2006 Total	20,462	6,375	648	27,485	8,215	2,839	145	5	264	412	3,665	63	39,428
2007 Total	20,808	7,005	657	28,470	8,455	2,430	145	6	341	423	3,345	107	40,377
2008 Total	20,513	6,829	468	27,810	8,427	2,494	146	9	546	435	3,630	112	39,978
2009 January	1,769	499	61	2,329	775	228	13	(s)	58	37	336	7	3,446
February	1,450	464	33	1,946	672	172	11	(s)	57	34	276	8	2,901
March	1,404	511	34	1,949	703	211	13	1	69	38	332	4	2,988
April	1,310	461 526	28 32	1,799 1,933	621 684	250 287	12 12	1 1	73 61	33 34	369 395	6 9	2,795 3,022
May June	1,375 1,541	656	33	2,230	729	28 <i>1</i>	12	1	55	3 <del>4</del> 37	388	11	3,359
July	1,645	795	34	2,473	763	227	12	i	48	39	328	14	3,578
August	1,691	858	37	2,587	756	190	12	1	53	39	296	15	3,653
September	1,436	705	29	2,169	688	168	12	1	45	36	262	11	3,130
October	1,455	548	26	2,029	607	191	12	. 1	67	35	305	11	2,952
November	1,426	467	20	1,913	618	204	12	(s)	67	37	320	9	2,860
December Total	1,723 <b>18,225</b>	532 <b>7,022</b>	24 <b>390</b>	2,278 <b>25,638</b>	740 <b>8,356</b>	240 <b>2,650</b>	13 <b>146</b>	(s) <b>9</b>	67 <b>721</b>	40 <b>441</b>	360 <b>3,967</b>	11 <b>116</b>	3,389 <b>38,077</b>
2010 January	R 1.774	<sup>R</sup> 557	45	R 2,375	<sup>R</sup> 758	<sup>R</sup> 217	13	(s)	<sup>R</sup> 67	R 39	R 335	14	R 3.483
February	R 1,774	R 489	23	R 2,079	682	R 199	R 11	(s)	R 53	R 36	R 300	12	R 3,072
March	1 102	R 465	25	R 1,983	676	R 202	13	1	R 84	R 39	R 338	10	R 3,007
April	R 1,311	480	23	R 1,814	R 602	<sup>R</sup> 184	12	1	<sup>R</sup> 95	36	R 329	9	2,754
May	<sup>R</sup> 1,483	R 570	31	R 2,084	697	R 243	13	R 1	85	R 36	R 378	R 5	R 3,163
June	R 1,707	R 718	41	R 2,466	714	R 290 R 238	R 12 R 12	2	<sup>R</sup> 79 <sup>R</sup> 66	R 39 R 40	<sup>R</sup> 421 <sup>R</sup> 358	R 9	R 3,610 R 3.933
July August	R 1,854 R 1.848	<sup>R</sup> 914 <sup>R</sup> 960	46 37	R 2,814 R 2,846	752 <sup>R</sup> 748	R 195	13	2	65	R 41	R 315	10 6	R 3,933
September	R 1,553	709	28	R 2,290	R 725	R 168	12	1	69	R 38	R 288	2	R 3,305
October	R 1,382	<sup>R</sup> 581	22	R 1,985	656	R 171	12	1	R 77	R 37	R 298	1	R 2,941
November	R 1,422	<sup>R</sup> 506	21	R 1,949	655	R 190	R 12	1	R 95	R 39	R 337	3	R 2,943
December	R 1.730	R 575	36	2,341	R 770	R 225	R 13	_(s)	_R 88	_R 41	R 367	_ 9	R 3,487
Total	R 19,123	<sup>R</sup> 7,527	378	27,028	<sup>R</sup> 8,434	R 2,521	<sup>R</sup> 148	R 12	R <b>923</b>	<sup>R</sup> <b>459</b>	<sup>R</sup> 4,064	R <b>89</b>	R 39,615
2011 January	R 1,759	R 553	R 33	R 2,345	R 760	R 254	14	(s)	R 84	R 38	R 391	9	R 3,505
February	R 1,435	492	23	R 1,949	<sup>R</sup> 677	R 239	13	` 1	R 103	R 35	R 390	8	R 3,024
March	1,412	R 492	26	R 1,930	R 686	R 308	14	1	R 103	R 38	R 463	8	R 3,088
April	1,309 R 1,434	R 536	R 23	R 1,868	R 570	R 307	13	2	R 121	<sup>R</sup> 33 <sup>R</sup> 35	R 476	7	R 2,921
May	<sup>R</sup> 1,434 <sup>R</sup> 1,642	<sup>R</sup> 589 <sup>R</sup> 718	22 R 25	R 2,045 R 2,385	596 <sup>R</sup> 682	<sup>R</sup> 321 <sup>R</sup> 313	14 13	2 2	113 106	<sup>R</sup> 35	<sup>R</sup> 486 <sup>R</sup> 473	12 11	3,139 R 3,551
June July	R 1,838	R 960	31	2,385	R 756	R 307	13	2	72	R 40	R 434	16	R 4,036
August	R 1,798	R 941	R 25	R 2,764	746	R 256	13	R 2	72	R 39	R 383	16	R 3,908
September	1,493	699	22	2,215	699	209	13	2	67	37	327	10	3,251
9-Month Total	14,119	5,980	231	20,329	6,173	2,512	122	14	842	334	3,824	98	30,424
2010 9-Month Total 2009 9-Month Total	14,589 13,622	5,864 5,474	300 320	20,752 19,415	6,354 6,392	1,936 2,016	111	10	662	343	3,063	76	30,244

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

 <sup>&</sup>lt;sup>a</sup> See "Primary Energy Consumption" in Glossary.
 <sup>b</sup> See Table 10.2c for notes on series components.
 <sup>c</sup> Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
 <sup>d</sup> Conventional hydroelectric power.
 <sup>e</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities only.

for electric utilities and independent power producers. R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

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

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

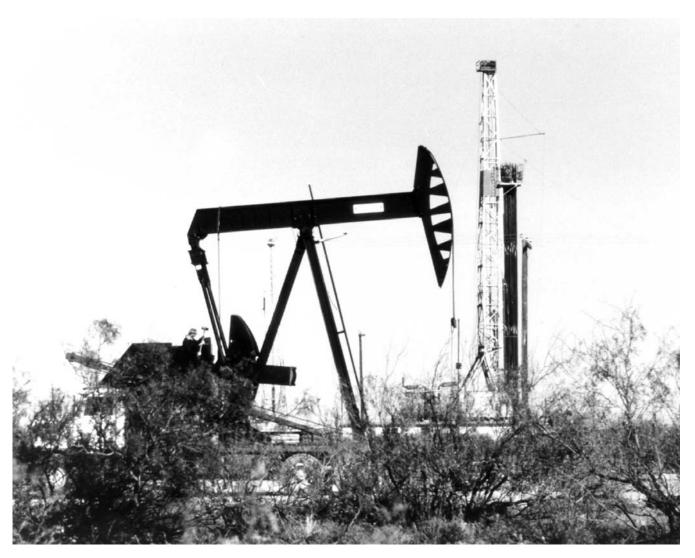
**Note 1. Energy Consumption Data and Surveys.** Most of the data in this section of the *Monthly Energy Review (MER)* are developed from a group of energy-related surveys, typically called "supply surveys," conducted by the U.S. Energy Information Administration (EIA). Supply surveys are directed to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

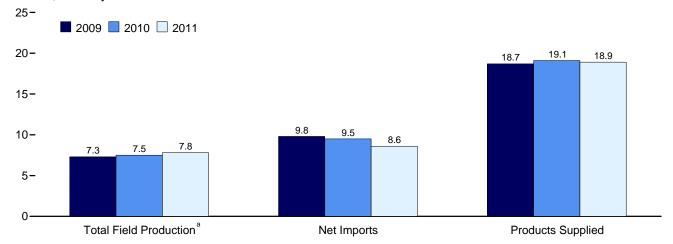
# Petroleum

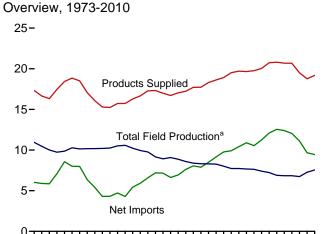


Oil pumping unit and drilling rig, Texas. Source: U.S. Department of Energy.

Figure 3.1 Petroleum Overview (Million Barrels per Day)

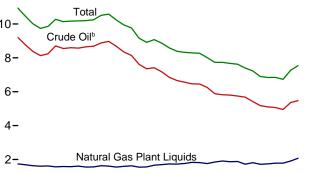






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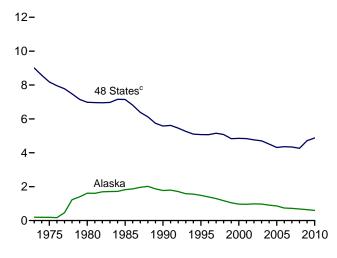
1995 2000 2005 2010



1975 1980 1985 1990 1995 2000 2005 2010

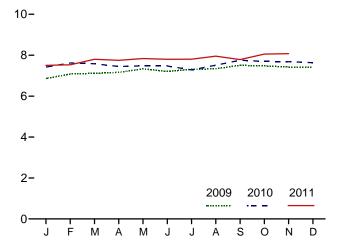
Crude Oil<sup>b</sup> Field Production, 1973-2010

1975 1980 1985 1990



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

Total Field Production, 1973-2010



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

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

<sup>&</sup>lt;sup>c</sup> United States excluding Alaska and Hawaii. Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum. Source: Table 3.1.

Table 3.1 **Petroleum Overview** 

`		Fie	ld Produc	tiona					Trade				
	48 States <sup>c</sup>	Crude Oil Alaska	Total	NGPL <sup>d,e</sup>	Total	Renew- able Fuels and Oxy- genates <sup>f</sup>	Process- ing Gain <sup>g</sup>	Im- ports <sup>h</sup>	Ex- ports <sup>e</sup>	Net Imports <sup>i</sup>	Stock Change <sup>j</sup>	Adjust- ments <sup>k</sup>	Petroleum Products Supplied
1973 Average 1975 Average 1980 Average 1980 Average 1998 Average 1995 Average 1996 Average 1997 Average 1998 Average 2000 Average 2001 Average 2002 Average 2003 Average 2004 Average 2005 Average 2006 Average 2006 Average 2007 Average 2008 Average 2008 Average	9,010 8,183 6,980 7,146 5,582 5,076 5,077 4,851 4,851 4,761 4,706 4,510 4,314 4,361 4,362 4,268	198 191 1,617 1,825 1,773 1,484 1,393 1,296 1,175 1,050 970 963 984 974 908 864 741 722 683	9,208 8,375 8,597 8,971 7,560 6,465 6,452 6,252 5,801 5,746 5,681 5,419 5,119 5,102 5,064 4,950	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 1,717 1,739 1,739 1,739 1,783	10,946 10,007 10,170 10,581 8,322 8,295 8,011 7,731 7,672 7,626 7,400 7,228 6,895 6,841 6,734	NA NA NA NA NA NA NA NA NA NA NA NA NA	453 460 597 557 683 774 837 850 886 886 948 903 957 974 1,051 989 994 996	6,256 6,056 6,909 5,067 8,018 8,835 9,0162 10,708 11,459 11,871 11,530 12,264 13,144 13,145 13,145 13,145 13,145 13,145	231 209 544 781 857 949 981 1,003 945 940 1,040 971 1,048 1,165 1,317 1,802	6,025 5,846 6,365 4,286 7,886 8,498 9,764 9,764 10,419 10,900 10,546 11,238 12,097 12,549 12,396 11,114	135 32 140 -103 107 -246 -151 143 239 -422 -69 325 -105 56 209 145 60 -148 195	18 41 64 200 338 496 528 487 495 567 532 501 527 478 548 513 522 653 852	17,308 16,322 17,056 15,726 16,988 17,725 18,309 18,620 18,917 19,519 19,701 19,649 19,761 20,034 20,731 20,680 19,498
2009 January February March April May June July August September October November December Average	4,621	679 708 709 653 678 571 551 572 652 658 662 655 <b>645</b>	5,154 5,260 5,227 5,273 5,379 5,281 5,402 5,418 5,547 5,501 5,427 5,451 <b>5,451</b>	1,711 1,824 1,891 1,888 1,954 1,927 1,908 1,920 1,962 1,976 1,959 1,910	6,865 7,083 7,118 7,161 7,333 7,208 7,310 7,337 7,509 7,477 7,423 7,411 <b>7,270</b>	663 686 684 681 714 741 773 783 771 785 833 838 <b>746</b>	950 931 912 982 974 1,038 986 1,003 1,027 961 945 1,030 <b>979</b>	13,127 12,095 12,446 11,962 11,477 11,936 11,830 11,183 11,756 10,878 11,105 10,534 11,691	1,922 1,808 1,838 1,900 2,015 1,963 2,348 2,119 2,105 2,223 2,029 1,996 <b>2,024</b>	11,205 10,287 10,609 10,061 9,461 9,973 9,482 9,064 9,651 8,655 9,076 8,538 <b>9,667</b>	933 394 839 445 488 441 180 -525 488 -748 -749 -1,213	290 229 236 231 217 308 256 238 124 177 103 208 218	19,040 18,822 18,719 18,672 18,211 18,828 18,626 18,949 18,594 18,803 18,753 19,237 18,771
2010 January February March April May June July August September October November December Average	4,766 4,943 4,859 4,750 4,821 4,892 4,743 4,902 5,038 4,952 4,947 4,896 <b>4,875</b>	640 635 646 640 569 533 545 538 614 618 606 612 <b>599</b>	5,406 5,578 5,505 5,390 5,425 5,288 5,440 5,652 5,571 5,553 5,507 <b>5,474</b>	2,017 2,043 2,076 2,061 2,091 2,046 1,994 2,071 2,104 2,125 2,136 2,124 <b>2,074</b>	7,423 7,621 7,581 7,451 7,480 7,471 7,281 7,511 7,756 7,696 7,689 7,632 <b>7,548</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 1,085 1,109 1,123 1,062 1,012 1,051 1,187 1,068	11,300 11,230 11,621 12,526 12,141 12,444 12,675 12,356 11,823 11,142 11,096 11,132 11,793	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	326 52 163 356 343 308 304 384 205 228 105 386 <b>265</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 19,180
2011 January February March April May June July August September October November 11-Month Average	E 5,000 E 5,022 E 4,987 E 5,030 E 5,071 E 5,157 E 5,227 RE 5,056 E 5,300	E 464 E 611 E 611 E 606 E 582 E 553 E 526 RE 585 E 563 E 593 E <b>558</b>	E 5,483 E 5,612 E 5,633 E 5,594 E 5,612 E 5,624 E 5,610 E 5,754 RE 5,641 E 5,863 E 5,874 E 5,664	2,022 1,920 2,168 2,157 2,222 2,176 2,193 2,201 E 2,145 E 2,194 E 2,201 E 2,147	E 7,504 E 7,531 E 7,801 E 7,750 E 7,835 E 7,801 E 7,804 E 7,954 RE 7,786 E 8,057 E 8,075 E 7,811	957 941 956 941 934 935 936 958 8 937 E 967 E 1,021 E 954	1,067 980 1,027 1,001 1,083 1,101 1,125 1,132 E 1,056 E 1,072 E 1,071	11,954 10,503 11,593 11,592 11,669 11,794 11,667 11,145 R 11,209 E 10,726 E 11,089 E 11,365	2,687 2,575 2,660 2,903 2,642 2,607 2,919 3,071 R 3,158 E 2,726 E 2,859 E 2,802	9,266 7,929 8,933 8,689 9,028 9,187 8,748 8,074 E 7,999 E 8,230 E 8,564	318 -1,069 -126 218 926 399 -623 R -659 E -593 E -112 E -103	645 418 405 450 409 340 343 412 R 230 E 152 E 184 E 363	19,121 18,869 19,248 18,613 18,363 19,277 18,555 19,153 R 18,795 E 18,824 E 18,695 E 18,865
2010 11-Month Average 2009 11-Month Average	4,873 4,708	598 644	5,471 5,352	2,069 1,905	7,541 7,257	901 738	1,057 974	11,855 11,798	2,326 2,027	9,529 9,771	152 231	254 219	19,130 18,728

<sup>&</sup>lt;sup>a</sup> Crude oil production on leases, and natural gas liquids (liquefied petroleum gases, pentanes plus, and a small amount of finished petroleum products) production at natural gas processing plants. Excludes what was previously classified as "Field Production" of finished motor gasoline, motor gasoline blending components, and other hydrocarbons and oxygenates; these are now included in "Adjustments."

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

k An adjustment for crude oil, hydrogen, oxygenates, renewable fuels, other hydrocarbons, motor gasoline blending components, finished motor gasoline, and distillate fuel oil. See U.S. Energy Information Administration (EIA), Petroleum Supply Monthly, Appendix B, "PSM Explanatory Notes," for further information.

R=Revised. 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/.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: EIA, Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2010: EIA, Petroleum Supply Annual, annual reports. • 2011: EIA, Petroleum Status Report data system and Monthly Energy Review data system calculations.

Adjustments."

Includes lease condensate.

United States excluding Alaska and Hawaii.

Natural gas plant liquids.

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

Renewable fuels and oxygenate plant net production.

Refinery and blender net production minus refinery and blender net inputs.

Table 3.2. See Table 3.2.

h Includes Strategic Petroleum Reserve imports. See Table 3.3b.

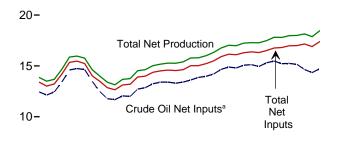
Net imports equal imports minus exports.

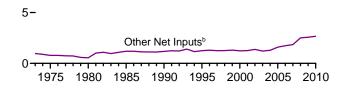
I Net imports equal imports minus exports.

I 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

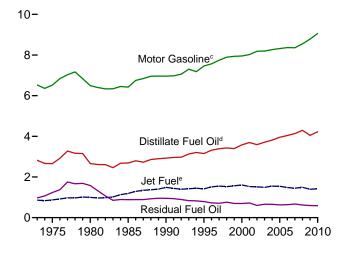
Figure 3.2 Refinery and Blender Net Inputs and Net Production (Million Barrels per Day)

Net Inputs and Net Production, 1973-2010



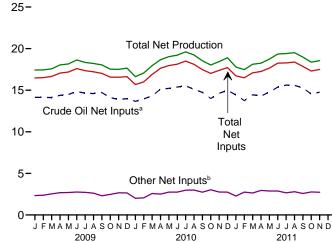


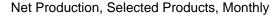
Net Production, Selected Products, 1973-2010

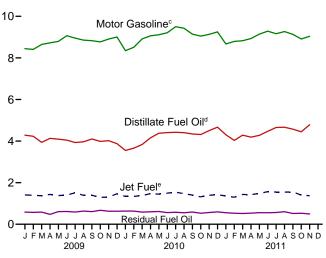


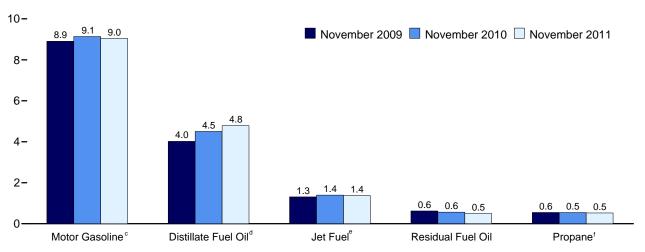
Net Production, Selected Products











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

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

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

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

<sup>&</sup>lt;sup>d</sup> Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

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

f Includes propylene.

Table 3.2 Refinery and Blender Net Inputs and Net Production

	Refin	ery and Ble	ender Net I	nputsa			Refinery	and Blen	der Net Pro	ductionb		
	110						LPC					
	Crude Oil <sup>d</sup>	NGPLe	Other Liquids <sup>f</sup>	Total	Distillate Fuel Oil <sup>9</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	467	713	14,589	2,925	1,488	404	499	6,959	950	2,452	15,272
1995 Average	13,973	471	775	15,220	3,155	1,416	503	654	7,459	788	2,522	15,994
1996 Average	14,195	450	843	15,487	3,316	1,515	520	662	7,565	726	2,541	16,324
1997 Average	14,662	416	832	15,909	3,392	1,554	565	691	7.743	708	2,671	16,759
1998 Average	14,889	403	853	16,144	3,424	1,526	550	674	7,892	762	2,753	17,030
1999 Average	14,804	372	927	16,103	3,399	1,565	569	684	7,934	698	2,709	16,989
2000 Average	15,067	380	849	16,295	3,580	1,606	583	705	7,951	696	2,705	17,243
2001 Average	15,128	429	825	16,382	3,695	1,530	556	667	8.022	721	2,651	17,285
2002 Average	14,947	429	941	16,316	3,592	1,514	572	671	8,183	601	2,712	17,273
2003 Average	15.304	419	791	16,513	3,707	1,488	570	658	8,194	660	2,780	17,487
2004 Average	15.475	422	866	16,762	3,814	1,547	584	645	8,265	655	2,887	17,814
2005 Average	15,220	441	1,149	16,811	3,954	1,546	540	573	8,318	628	2,782	17,800
2006 Average	15,242	501	1,238	16,981	4,040	1,481	543	627	8,364	635	2,827	17,975
2007 Average	15,156	505	1,337	16,999	4,133	1,448	562	655	8,358	673	2,728	17,994
2008 Average	14,648	485	2,019	17,153	4,294	1,493	519	630	8,548	620	2,561	18,146
2000 Average	,		2,010			•			,			,
2009 January	14,146	552	1,777	16,476	4,284	1,409	479	383	8,445	585	2,321	17,426
February	14,134	493	1,883	16,509	4,231	1,391	483	471	8,408	571	2,367	17,440
March	14,118	447	2,089	16,654	3,939	1,373	519	618	8,646	583	2,407	17,566
April	14,382	416	2,264	17,062	4,132	1,432	542	782	8,724	475	2,499	18,044
May	14,483	432	2,266	17,181	4,093	1,378	554	798	8,793	605	2,488	18,155
June	14,850	429	2,323	17,602	4,047	1,404	566	847	9,068	613	2,662	18,641
July	14,636	437	2,279	17,352	3,929	1,515	554	809	8,952	586	2,546	18,337
August	14,593	404	2,218	17,214	3,965	1,389	554	838	8,856	631	2,537	18,218
September	14,710	482	1,825	17,018	4,099	1,396	559	624	8,829	604	2,493	18,045
October	14,095	545	1,933	16,573	3,984	1,291	527	476	8,770	672	2,341	17,535
November	13,898	609	2,051	16,558	4,018	1,311	550	379	8,905	624	2,264	17,502
December	13,983	580	2,066	16,629	3,877	1,465	554	442	9,006	624	2,246	17,660
Average	14,336	485	2,082	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	2,349	18,127	4,408	1,495	572	870	9,211	559	2,670	19,212
July	15,519	384	2,595	18,498	4,425	1,542	574	860	9,500	576	2,704	19,607
August	15,110	390	2,607	18,107	4,404	1,463	552	778	9,426	554	2,605	19,230
September	14,740	443	2,294	17,477	4,341	1,404	551	614	9,143	588	2,449	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	14,446	543	1,732	16,721	4,305	1,362	560	439	8,671	552	2,459	17,788
February	13.745	517	2,229	16,491	4.032	1,298	513	490	8,793	529	2,329	17,471
March	14.453	454	2,183	17,090	4,284	1,435	525	632	8,824	519	2,424	18,117
April	14,302	452	2,494	17,248	4,187	1,422	540	773	8,931	535	2,402	18,249
May	14,776	427	2,457	17,660	4,277	1,483	561	805	9,142	557	2,477	18,742
June	15,365	443	2,440	18,248	4,469	1,568	566	840	9,286	553	2,632	19,349
July	15.617	417	2.247	18,281	4.655	1,550	557	814	9.165	562	2.659	19,405
August	15 592	437	2,353	18,382	4.667	1,543	550	784	9.265	604	2,652	19.514
September		R 494	R 2,092	R 17,855	R 4,574	R 1,553	R 569	R 608	R 9,132	R 516	R 2,604	R 18,987
October	E 14.545	F 517	RE 2,252	RF 17,314	E 4.444	E 1,403	RE 497	F 503	E 8,910	E 527	RE 2,582	RE 18,370
November		F 565	E 2,164	F 17,489	E 4,786	E 1,372	E 524	F 385	E 9,039	E 493	E 2,487	E 18,561
11-Month Average		E 478	E 2,240	E 17,532	E 4,428	E 1,455	E 542	E 644	E 9,015	E <b>541</b>	E 2,520	E 18,604
-		40:								<b>50</b> :		
2010 11-Month Average 2009 11-Month Average	14,700 14,369	431 477	2,222 2,084	17,353 16,929	4,182 4,064	1,418 1,390	558 535	680 640	9,041 8,765	584 596	2,505 2,448	18,410 17,903
2005 I I-WOILLI Average	14,309	4//	2,004	10,929	4,004	1,390	333	040	0,703	290	2,440	17,903

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. • 1981-2010: EIA, Petroleum Supply Annual, annual reports. • 2011: 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.

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

Includes lease condensate.

Natural gas plant liquids (liquefied petroleum gases and pentanes plus). Unfinished oils (net), other hydrocarbons, and hydrogen. Beginning in 1981,

also includes aviation and motor gasoline blending components (net). Beginning in 1981, also includes aviation and motor gasoline blending components (net). Beginning in 1993, also includes oxygenates (net), including fuel ethanol. Beginning in 2009, also includes renewable diesel fuel (including biodiesel).

<sup>g</sup> 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 jet fuel. Beginning in

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

Includes propylene.

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

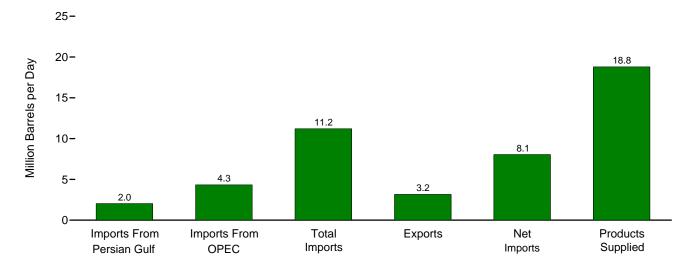
<sup>&</sup>lt;sup>k</sup> Asphalt and road oil, finished aviation gasoline, kerosene, lubricants, petrochemical feedstocks, petroleum coke, special naphthas, still gas, waxes, and miscellaneous products. Beginning in 2005, also includes naphtha-type jet fuel. R=Revised. E=Estimate. F=Forecast.

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

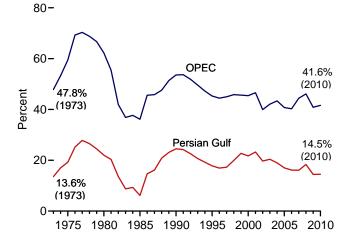
Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/totalenergy/data/monthly/#petroleum.

Figure 3.3a Petroleum Trade: Overview

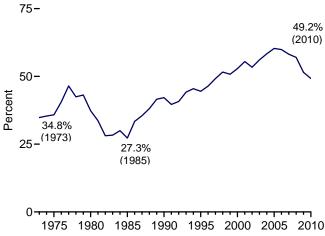
Overview, September 2011



Imports From OPEC and Persian Gulf as Share of Total Imports, 1973-2010

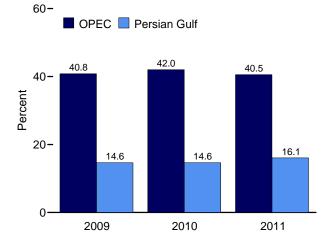


Net Imports as Share of Products Supplied, 1973-2010



Note: OPEC=Organization of the Petroleum Exporting Countries. Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum. Source: Table 3.3a.

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



Net Imports as Share of Products Supplied, January-November

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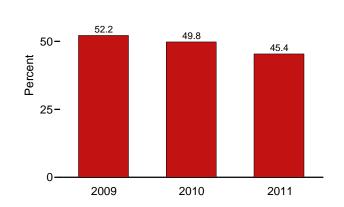


Table 3.3a Petroleum Trade: Overview

									are of Supplied			nare of mports
	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>	Imports	Exports	Net Imports	Products Supplied	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>	Imports	Net Imports	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>
			Thousand Ba	arrels per Da	у				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	4,296	8,018	857	7,161	16,988	11.6	25.3	47.2	42.2	24.5	53.6
1995 Average	1,573	4,002	8,835	949	7,886	17,725	8.9	22.6	49.8	44.5	17.8	45.3
1996 Average	1,604	4,211	9,478 10,162	981	8,498	18,309	8.8	23.0	51.8	46.4	16.9	44.4 45.0
1997 Average	1,755 2,136	4,569 4.905	10,162	1,003 945	9,158 9,764	18,620 18,917	9.4 11.3	24.5 25.9	54.6 56.6	49.2 51.6	17.3 19.9	45.0 45.8
1998 Average	2,130	4,953	10,755	940	9,912	19,519	12.6	25.4	55.6	50.8	22.7	45.6
2000 Average	2,488	5,203	11,459	1,040	10,419	19,701	12.6	26.4	58.2	52.9	21.7	45.4
2001 Average	2,761	5,528	11,871	971	10,900	19,649	14.1	28.1	60.4	55.5	23.3	46.6
2002 Average	2,269	4,605	11,530	984	10,546	19,761	11.5	23.3	58.3	53.4	19.7	39.9
2003 Average	2,501	5,162	12,264	1,027	11,238	20,034	12.5	25.8	61.2	56.1	20.4	42.1
2004 Average	2,493	5,701	13,145	1,048	12,097	20,731	12.0	27.5	63.4	58.4	19.0	43.4
2005 Average	2,334	5,587	13,714	1,165	12,549	20,802	11.2	26.9	65.9	60.3	17.0	40.7
2006 Average	2,211	5,517	13,707	1,317	12,390	20,687	10.7	26.7	66.3	59.9	16.1	40.2
2007 Average 2008 Average	2,163 2,370	5,980 5,954	13,468 12,915	1,433 1,802	12,036 11,114	20,680 19,498	10.5 12.2	28.9 30.5	65.1 66.2	58.2 57.0	16.1 18.4	44.4 46.1
2009 January	2,218	5,689	13,127	1,922	11,205	19,040	11.6	29.9	68.9	58.9	16.9	43.3
February	1,974	4,958	12,095	1,808	10,287	18,822	10.5	26.3	64.3	54.7	16.3	41.0
March		5,212	12,446	1,838	10,609	18,719	9.7	27.8	66.5	56.7	14.6	41.9
April		4,803	11,962	1,900	10,061	18,672	9.3	25.7	64.1	53.9	14.5	40.2
May		4,372	11,477	2,015	9,461	18,211	8.5	24.0	63.0	52.0	13.5	38.1
June		4,825	11,936	1,963	9,973	18,828	8.5	25.6	63.4	53.0	13.4	40.4
July		4,554 4,530	11,830 11,183	2,348 2,119	9,482 9,064	18,626 18,949	9.3 7.5	24.4 23.9	63.5 59.0	50.9 47.8	14.6 12.8	38.5 40.5
August September	1,718	5,052	11,756	2,119	9,651	18,594	9.2	27.2	63.2	51.9	14.6	43.0
October	1,545	4,581	10,878	2,223	8,655	18,803	8.2	24.4	57.9	46.0	14.2	42.1
November	1,606	4,585	11,105	2,029	9,076	18,753	8.6	24.5	59.2	48.4	14.5	41.3
December	1,362	4,171	10,534	1,996	8,538	19,237	7.1	21.7	54.8	44.4	12.9	39.6
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
2010 January	1,563	4,554 4,659	11,300	1,897	9,404 9,197	18,652	8.4 8.8	24.4 24.7	60.6 59.6	50.4 48.8	13.8	40.3 41.5
February March	1,666 1,842	5,084	11,230 11,621	2,034 2,149	9,197	18,850 19,099	9.6	26.6	60.8	46.6 49.6	14.8 15.9	43.7
April	2,026	5,376	12,526	2,143	10,093	19,044	10.6	28.2	65.8	53.0	16.2	42.9
May	1,724	5,055	12,141	2,399	9,742	18,866	9.1	26.8	64.4	51.6	14.2	41.6
June	1,972	5,297	12,444	2,304	10,140	19,537	10.1	27.1	63.7	51.9	15.8	42.6
July	1,679	5,178	12,675	2,516	10,159	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 1.662	4,305 4.525	11,142 11,096	2,480 2,598	8,662 8,498	18,974 18.977	7.9 8.8	22.7 23.8	58.7 58.5	45.7 44.8	13.4 15.0	38.6 40.8
November December	1,564	4,525 4.614	11,096	2,596	8,488	19,722	7.9	23.6	56.5 56.4	44.6	14.0	40.6
Average	1,711	4,906	11,793	2,353	9,441	19,180	8.9	25.6	61.5	49.2	14.5	41.6
<b>2011</b> January	1,719	4,872	11,954	2,687	9,266	19,121	9.0	25.5	62.5	48.5	14.4	40.8
February	1,495	4,504	10,503	2,575	7,929	18,869	7.9	23.9	55.7	42.0	14.2	42.9
March	1,651 1,704	4,588 4,509	11,593 11,592	2,660 2,903	8,933 8,689	19,248 18,613	8.6 9.2	23.8 24.2	60.2 62.3	46.4 46.7	14.2 14.7	39.6 38.9
April May	1,704	4,509 4,572	11,592	2,903 2,642	9,028	18,363	10.0	24.2 24.9	63.5	46.7 49.2	14.7	38.9 39.2
June	2,033	4,883	11,794	2,607	9,187	19,277	10.5	25.3	61.2	47.7	17.2	41.4
July	2,167	4,928	11,667	2,919	8,748	18,555	11.7	26.6	62.9	47.1	18.6	42.2
August	1 910	4,648	11,145	3,071	8,074	19,153	10.0	24.3	58.2	42.2	17.1	41.7
September	R 2,039	R 4,326	R 11,209	R 3,158	R 8,051	R 18,795	R 10.8	R 23.0	R 59.6	R 42.8	R 18.2	R 38.6
October	NA	NA	E 10,726	E 2,726	E 7,999	E 18,824	NA	NA	E 57.0	E 42.5	NA	NA
November 11-Month Average	NA <b>NA</b>	NA <b>NA</b>	E 11,089 E <b>11,365</b>	E 2,859 E <b>2,802</b>	E 8,230 E <b>8,564</b>	E 18,695 E <b>18,865</b>	NA <b>NA</b>	NA <b>NA</b>	E 59.3 E <b>60.2</b>	E 44.0 E <b>45.4</b>	NA <b>NA</b>	NA <b>NA</b>
2010 11-Month Average	1,725	4.933	11,855	2,326	9,529	19,130	9.0	25.8	62.0	49.8	14.6	41.6
2009 11-Month Average	1,719	4,832	11,798	2,027	9,771	18,728	9.2	25.8	63.0	52.2	14.6	41.0

District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

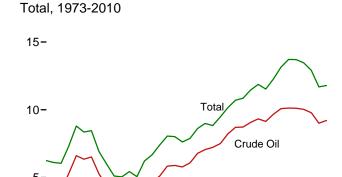
Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information,

ntp://www.eia.gov/totalenergy/data/montnly/#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. • 1981-2010: EIA, Petroleum Supply Annual, annual reports. • 2011: 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.

 <sup>&</sup>lt;sup>a</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).
 <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* See http://www.eia.gov/totalenergy/data/monthly/pdf/historical/imported\_oil.pdf.
 • Beginning in October 1977, data include Strategic Petroleum Reserve imports.
 See Table 3.3b. • Annual averages may not equal average of months due to independent rounding. • U.S. geographic coverage is the 50 States and the

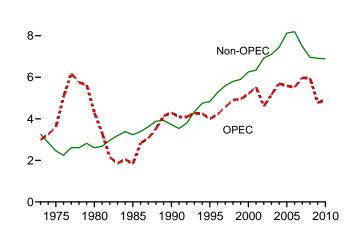
Figure 3.3b Petroleum Trade: Imports (Million Barrels per Day)





1975

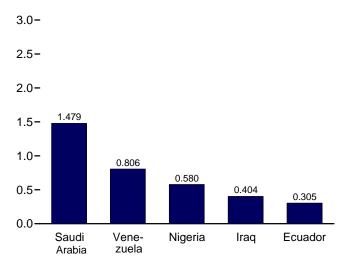
10-



Petroleum Products

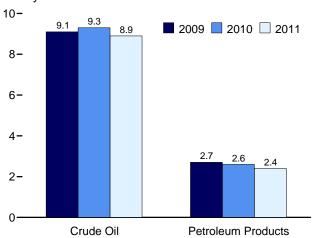
1980 1985 1990 1995 2000 2005 2010

#### From Selected OPEC Countries, September 2011

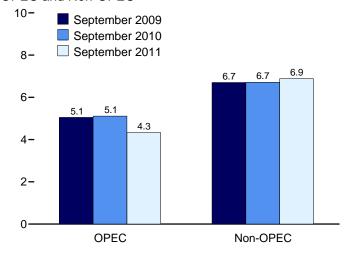


Note: OPEC=Organization of the Petroleum Exporting Countries. Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum. Sources: Tables 3.3b–3.3d.

Crude Oil and Petroleum Products, January-November



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



From Selected Non-OPEC Countries, September 2011

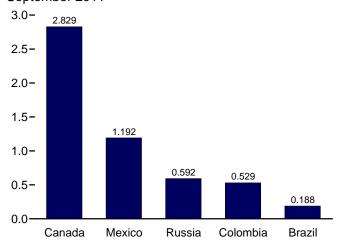


Table 3.3b Petroleum Trade: Imports and Exports by Type

					Im	ports						Export	s
	Cruc	le Oila			LPG								
	SPR <sup>c,d</sup>	Total	Distillate Fuel Oil	Jet Fuel <sup>e</sup>	Propanef	Total	Motor Gasoline <sup>9</sup>	Residual Fuel Oil	Otherh	Total	Crude Oil <sup>a</sup>	Petroleum Products	Total
1973 Average 1975 Average 1980 Average 1980 Average 1990 Average 1995 Average 1996 Average 1997 Average 1998 Average 1998 Average 2000 Average 2001 Average 2002 Average 2003 Average 2004 Average 2005 Average 2006 Average 2007 Average 2007 Average 2008 Average 2007 Average		3,244 4,105 5,263 3,201 5,894 7,230 7,508 8,225 8,706 9,071 9,328 9,140 9,665 10,026 10,118 10,011 10,118	392 155 142 200 278 193 230 228 210 250 295 344 267 333 325 329 365 304 213	212 133 80 39 108 106 111 91 124 128 162 148 107 109 127 190 186 217 103	71 60 69 67 115 102 119 113 137 122 161 145 168 209 233 228 182	132 112 216 187 188 146 169 194 182 215 206 183 225 263 332 247 257	134 184 140 381 342 265 336 309 311 382 427 454 498 518 496 603 475 413 302	1,853 1,223 939 510 504 187 248 194 275 237 352 295 249 327 426 530 350 372 349	290 144 130 550 705 705 708 879 945 888 943 938 1,085 1,087 1,609 1,881 1,881 1,913	6,256 6,056 6,999 5,067 8,018 8,835 9,478 10,162 10,708 10,852 11,459 11,871 11,530 12,264 13,145 13,714 13,707 13,468 12,915	2 6 287 204 109 95 110 118 50 9 12 27 32 25 27	229 204 258 577 748 855 871 896 835 822 990 951 975 1,014 1,021 1,133 1,292 1,405	231 209 544 781 857 949 981 1,003 945 940 1,040 971 984 1,027 1,048 1,165 1,317 1,433 1,802
2009 January	33 34 221 154 52 77 - 16 32 - 35 16	9,779 9,074 9,378 9,374 8,797 9,135 9,094 8,814 9,254 8,566 8,740 8,170 <b>9,013</b>	368 327 269 166 206 245 191 166 205 177 164 224	89 71 92 90 66 65 102 92 91 84 71 55 <b>81</b>	223 207 218 124 105 70 100 63 95 145 206 212	253 234 249 164 172 98 128 105 124 182 238 241 <b>182</b>	236 263 274 227 244 218 230 304 142 161 149 232 223	424 349 381 396 341 363 268 256 309 303 282 307 <b>331</b>	1,978 1,776 1,804 1,545 1,650 1,812 1,818 1,446 1,631 1,404 1,462 1,305 <b>1,635</b>	13,127 12,095 12,446 11,962 11,477 11,936 11,830 11,183 11,756 10,878 11,105 10,534 11,691	36 30 30 27 53 57 31 35 42 72 46 65	1,885 1,778 1,807 1,874 1,962 1,906 2,317 2,084 2,063 2,151 1,983 1,931 1,980	1,922 1,808 1,838 1,900 2,015 1,963 2,348 2,119 2,105 2,223 2,029 1,996 2,024
2010 January February March April May June July August September October November December Average	-	8,492 8,761 9,341 9,726 9,655 9,927 9,932 9,543 9,229 8,540 8,699 8,695 <b>9,213</b>	462 293 179 220 189 237 170 246 189 163 178 219	131 75 79 88 81 114 113 103 122 94 101 73 <b>98</b>	192 217 137 79 82 73 56 62 85 131 132 214	225 242 155 102 108 113 104 107 124 165 165 231 <b>153</b>	179 196 120 178 107 163 114 129 130 86 117 99	376 382 376 480 404 283 400 330 367 337 345 315 366	1,435 1,282 1,370 1,732 1,599 1,607 1,841 1,862 1,758 1,491 1,501 <b>1,600</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 11,793	33 58 45 37 36 31 69 36 61 23 32 40	1,864 1,976 2,104 2,396 2,363 2,273 2,447 2,374 2,283 2,457 2,567 2,604 <b>2,311</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>
2011 January		9,069 8,013 9,033 8,715 8,988 9,247 9,310 9,021 R 9,006 E 8,798 E 8,803 E 8,917	326 206 190 186 167 126 153 148 R 177 E 121 E 135 E 176	65 68 65 80 91 82 95 66 8 58 66 8 60 61 E 72	172 172 136 94 73 58 61 72 R 107 E 86 E 97	204 199 165 113 100 85 84 100 R 130 NA NA	103 119 135 138 137 130 92 106 8 99 6 60 E 66 E 108	456 428 468 519 299 371 246 229 R 276 E 276 E 387 E 359	1,733 1,471 1,538 1,842 1,887 1,753 1,686 1,474 R 1,463 NA NA	11,954 10,503 11,593 11,592 11,669 11,794 11,667 11,145 R 11,209 E 10,726 E 11,089 E 11,365	72 30 36 41 37 36 73 34 R 35 E 36 E 36	2,616 2,544 2,623 2,862 2,605 2,571 2,846 3,037 R 3,123 E 2,690 E 2,823 E 2,759	2,687 2,575 2,660 2,903 2,642 2,607 2,919 3,071 R 3,158 E 2,726 E 2,859 E 2,859
2010 11-Month Average 2009 11-Month Average	- 60	9,261 9,091	229 225	100 83	113 141	146 177	138 223	371 334	1,610 1,666	11,855 11,798	42 42	2,284 1,985	2,326 2,027

Includes lease condensate.

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/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. • 1981-2010: EIA, Petroleum Supply Annual, annual reports. • 2011: 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.

b Liquefied petroleum gases.
c "SPR" is the Strategic Petroleum Reserve, which began in October 1977.
Through 2003, includes crude oil imports by SPR only; beginning in 2004, includes crude oil imports by SPR, and crude oil imports by SPR, and crude oil imports into SPR by others.
d See Note 6, "Petroleum Data Discrepancies," at end of section.
Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005 includes kerosene-type in truel only; naphtha-type jet fuel is included in

<sup>2005,</sup> includes kerosene-type jet fuel only; naphtha-type jet fuel is included in

f Includes propylene.
9 Finished motor gasoline. Through 1980, also includes motor gasoline

blending components.

h Asphalt and road oil, finished aviation gasoline, gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks, petroleum coke, special naphthas, unfinished oils, waxes, other hydrocarbons and oxygenates, and miscellaneous products. Beginning in 2005, also includes

Table 3.3c Petroleum Trade: Imports From OPEC Countries

	Algeria	Angola <sup>a</sup>	Ecuador <sup>b</sup>	Iraq	Kuwait <sup>c</sup>	Libya	Nigeria	Saudi Arabia <sup>c</sup>	Vene- zuela	<b>Other</b> <sup>d</sup>	Total OPEC
973 Average	136	(a)	48	4	47	164	459	486	1,135	514	2,993
975 Average	282	(a)	57	2	16	232	762	715	702	832	3,601
980 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
985 Average	280	(a)	49	518	86	0	800	1.339	1,025	439 199	
990 Average		(a)	(b)	0		-					4,296
995 Average	234	(a)	(b)		218	0	627	1,344	1,480	98	4,002
996 Average	256	(a)	(b)	1	236	0	617	1,363	1,676	62	4,211
997 Average	285	(a)	(b)	89	253	0	698	1,407	1,773	64	4,569
998 Average	290	(a)	(b)	336	301	0	696	1,491	1,719	73	4,905
999 Average	259		(b)	725	248	0	657	1,478	1,493	93	4,953
000 Average	225	(a)		620	272	0	896	1,572	1,546	72	5,203
001 Average	278	(a)	(b)	795	250	0	885	1,662	1,553	105	5,528
002 Average	264	(a)	(b)	459	228	0	621	1,552	1,398	83	4,605
003 Average	382	(a)	(b)	481	220	0	867	1,774	1,376	61	5,162
004 Average	452	(a)	(b)	656	250	20	1,140	1,558	1,554	70	5,701
005 Average	478	(a)	(b)	531	243	56	1,166	1,537	1,529	47	5,587
006 Average	657	(a)	(b)	553	185	87	1,114	1,463	1,419	38	5,517
007 Average	670	`5ó8	(b)	484	181	117	1,134	1.485	1.361	39	5,980
008 Average	548	513	`221	627	210	103	988	1,529	1,189	26	5,954
<b>009</b> January	720	541	278	568	242	64	524	1,362	1,353	38	5,689
February	375	671	243	554	251	60	496	1,118	1,139	51	4,958
March	463	653	215	587	181	61	891	967	1,106	88	5,212
April	626	462	237	484	105	118	733	1,057	891	90	4,803
May	272	505	193	295	106	99	626	1,102	1,141	33	4,372
June	433	447	154	390	179	103	830	959	1,256	75	4,825
July	383	320	198	321	187	69	879	1.046	976	176	4,554
August	551	364	131	500	148	68	917	729	1,070	51	4,530
September	655	414	153	428	246	54	912	1.045	1,146	_	5.052
October	491	450	180	499	104	91	869	943	955	_	4,581
November	400	431	155	461	287	140	980	858	874	_	4,585
December	544	278	86	325	160	23	1,029	877	849	_	4,171
Average	493	460	185	450	182	79	809	1,004	1,063	50	4,776
010 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
	451	324	203	143	215	36	872	1,131	930	-	4,305
October	572	324 276	203 194	340	170	23	856	1,151	930	_	4,505
November	572 484		194	340 336	170			1,152	942 917	9	
December Average	510	319 <b>393</b>	212	415	125 <b>197</b>	66 <b>70</b>	1,070 <b>1,023</b>	1,093 1,096	917 <b>988</b>	<b>3</b>	4,614 <b>4,90</b> 6
011 January	565	316	178	470	147	57	1,007	1,102	1,030	_	4,872
February	394	370	242	263	118	35	978	1.114	989	_	4,504
March	500	280	146	382	161	31	913	1,108	1,067	_	4,588
April	466	277	142	519	78	(s)	922	1,107	997	_	4,509
	400	356	134	407	200	(s)	854	1,203	999	_ 19	4,508
May	293	373	219	559	238	35	853	1,203	1.077	68	4,883
June						35					
July	354	407	172	596	228		884	1,326	943	18	4,928
August	298	331	309	637	165	1	892	1,075	906	32	4,648
September	291	304	305	404	145	2	580	1,479	806	11	4,326
9-Month Average	396	335	205	473	165	18	876	1,187	979	17	4,650
110 9-Month Average	512 498	422 485	217 200	464 458	206 182	80 77	1,053 759	1,086 1,042	1,007 1,120	3 67	5,050 4,887

 $<sup>^{\</sup>rm a}$  Angola joined OPEC in January 2007. For 1973-2006, Angola is included in

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.

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. • 1981-2010: EIA, Petroleum Supply Annual, annual reports. • 2011: EIA, Petroleum Supply Monthly, monthly reports.

<sup>&</sup>quot;Total Non-OPEC" on Table 3.3d.

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

November 2007. For 1993-2007, Ecuador is included in "Total Non-OPEC" on Table 3.3d.

C Imports from the Neutral Zone are reported as originating in either Saudi Arabia or Kuwait depending on the country reported to U.S. Customs.

d For all years, includes Iran, Qatar, and United Arab Emirates. For 1973-2008, also includes Indonesia; and for 1975-1994, also includes Gabon.

= No data reported. (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,

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

	Brazil	Canada	Colombia	Mexico	Nether- lands	Norway	Russiaa	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
	5	846	9	71	19	17	14	14	406	1,052	2,454
1975 Average 1980 Average	3	455	4	533	2	144	1	176	388	903	2,609
	61	770	23	816	58		8	310	247	913	
1985 Average		934		755	55	32	8 45		247 282		3,237
1990 Average	49		182			102		189		1,128	3,721
1995 Average	8	1,332	219	1,068	15	273	25	383	278	1,233	4,833
1996 Average	9	1,424	234	1,244	19	313	25	308	313	1,377	5,267
1997 Average	5	1,563	271	1,385	25	309	13	226	300	1,495	5,593
1998 Average	26	1,598	354	1,351	31	236	24	250	293	1,640	5,803
1999 Average	26	1,539	468	1,324	27	304	89	365	280	1,478	5,899
2000 Average	51	1,807	342	1,373	30	343	72	366	291	1,581	6,257
2001 Average	82	1,828	296	1,440	43	341	90	324	268	1,631	6,343
2002 Average	116	1,971	260	1,547	66	393	210	478	236	1,649	6,925
2003 Average	108	2,072	195	1,623	87	270	254	440	288	1,766	7,103
2004 Average	104	2,138	176	1,665	101	244	298	380	330	2,008	7,444
2005 Average	156	2,181	196	1,662	151	233	410	396	328	2,413	8,127
2006 Average	193	2,353	155	1,705	174	196	369	272	328	2,446	8,190
2007 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 January	450	2,549	269	1,377	127	90	516	148	367	1,545	7,438
February	381	2,529	241	1,364	189	74	472	281	337	1,269	7,137
March	338	2,446	283	1,199	141	179	642	208	264	1,534	7,235
April	278	2,287	347	1,289	117	112	759	401	290	1,278	7,158
May	386	2,215	243	1,186	150	179	809	250	313	1,373	7,105
June	299	2,538	313	1,190	157	173	618	268	276	1,279	7,111
July	408	2,664	289	1,076	118	101	758	203	273	1,387	7,276
August	275	2.523	269	1.159	160	52	505	225	223	1.263	6.653
September	268	2,358	301	1,271	122	59	486	295	280	1,263	6,703
October	174	2,367	292	1,136	84	97	385	278	215	1,268	6,297
November	268	2,565	237	1,084	227	110	415	190	205	1,219	6,520
December	184	2,710	231	1,204	99	65	385	199	289	998	6,363
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	<b>272</b>	2,535	365	1,284	108	89	612	<b>256</b>	253	1,112	6,887
<b>2011</b> January	274	2,826	332	1.366	101	85	531	155	276	1.136	7.082
February	177	2,831	211	1,104	129	69	437	110	182	749	5,999
March	161	2,666	399	1,319	91	156	690	197	149	1,177	7,005
April	227	2,625	516	1,077	133	167	704	187	179	1,267	7,083
May	282	2,481	433	1,286	128	101	677	233	194	1,283	7,003
June	285	2,524	309	1,222	175	93	689	146	151	1,319	6,911
	329	2,626	415	1,197	80	58	562	175	192	1,105	6,739
July	329 228	2,626	395	1,197	81	87	585	125	185	988	6,497
August					64						
September	188	2,829	529	1,192		97	592	124	189	1,079	6,883
9-Month Average	240	2,670	395	1,218	109	102	609	162	189	1,126	6,818
2010 9-Month Average 2009 9-Month Average	289 343	2,537 2,456	360 284	1,260 1,233	117 142	95 114	624 620	277 252	261 291	1,150 1,356	6,969 7,091

<sup>&</sup>lt;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.

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.

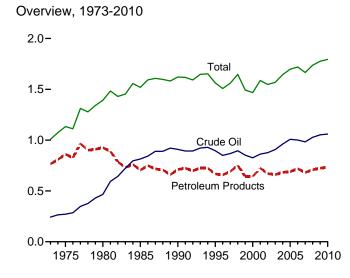
Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information,

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

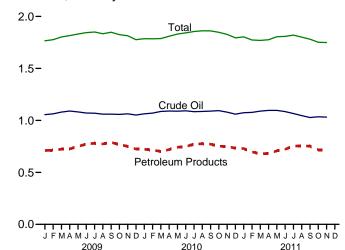
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: U.S. Energy Information Administration (EIA), Energy Data Reports. Petroleum Statement, Annual, annual reports. • 1981-2010: EIA, Petroleum Supply Annual, annual reports. • 2011: EIA, Petroleum Supply Monthly, monthly reports.

Figure 3.4 Petroleum Stocks

(Billion Barrels, Except as Noted)

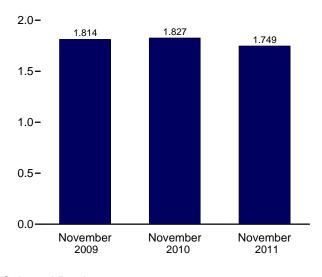


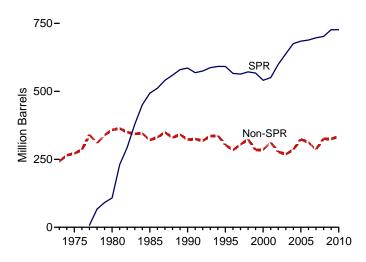
#### Overview, Monthly



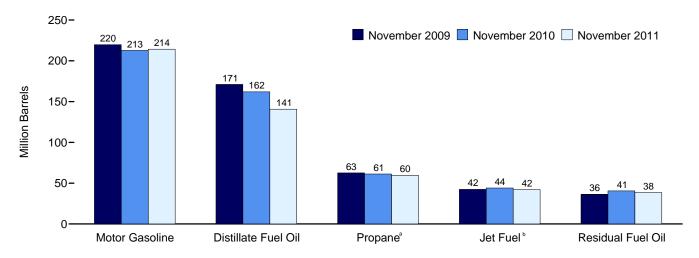
Total Stocks (Crude Oil and Petroleum Products)







#### Selected Products



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

Notes: • SPR= Strategic Petroleum Reserve. • Stocks are at end of

period

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

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

Table 3.4 Petroleum Stocks

(Million Barrels)

		Crude Oila				LPC	<b>3</b> b				
	SPRC	Non-SPRd,e,f	Total <sup>e,f</sup>	Distillate Fuel Oil <sup>f,g</sup>	Jet Fuel <sup>h</sup>	Propane <sup>f,i</sup>	Total <sup>f</sup>	Motor Gasoline <sup>f,j</sup>	Residual Fuel Oil <sup>f</sup>	Other <sup>k</sup>	Total <sup>f</sup>
1973 Year		242	242	196	29	65	99	209	53	179	1,008
1975 Year		271	271	209	30	82	125	235	74	188	1,133
1980 Year	108	358	466	205	42	65	120	261	92	205	1,392
1985 Year	493	321	814	144	40	39	74	223	50	174	1,519
1990 Year		323	908	132	52	49	98	220	49	162	1,621
1995 Year		303	895	130	40	43	93	202	37	165	1,563
1996 Year		284	850	127	40	43	86	195	46	164	1,507
1997 Year		305	868	138	44	44	89	210	40	169	1,560
1998 Year		324	895	156	45	65	115	216	45	176	1,647
1999 Year		284	852	125	41	43	89	193	36	157	1,493
2000 Year		286	826	118	45	41	83	196	36	164	1,468
2001 Year		312	862	145	42	66	121	210	41	166	1,586
2002 Year		278	877	134	39	53	106	209	31	152	1,548
2003 Year		269	907	137	39	50	94	207	38	147	1,568
2004 Year		286	961	126	40	55	104	218	42	153	1,645
2005 Year		324	1,008	136	42	57	109	208	37	157	1,698
2006 Year		312	1,001	144	39	62	113	212	42	169	1,720
2007 Year		286	983	134	39	52	96	218	39	156	1,665
2008 Year		326	1,028	146	38	55	113	214	36	162	1,737
2009 January	704	351	1,055	144	41	46	98	220	34	174	1,766
February	706	358	1,063	148	43	40	89	216	38	178	1,777
March	713	367	1,080	145	43	40	91	217	38	188	1,803
April		371	1,090	150	44	45	100	211	34	187	1,816
May		360	1,081	157	45	56	117	204	38	189	1,831
June	724	347	1,071	163	45	64	133	214	37	182	1,844
July		345	1,070	166	47	70	145	212	35	175	1,850
August	724	336	1,060	169	46	71	153	208	33	165	1,834
September	725	335	1,060	173	46	75	156	214	35	164	1,848
October	725	333	1,058	171	44	72	146	211	35	161	1,825
November		337	1,063	171	42	63	123	220	36	158	1,814
December	727	325	1,052	166	43	50	102	223	37	153	1,776
2010 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		359	1,086	147	42	28	73	225	41	174	1,787
April	727	363	1,090	145	44	35	89	220	44	178	1,810
May	727	362	1,089	150	45	42	105	218	46	178	1,830
June	727 727	365 358	1,092	158 167	45 47	49 55	120 130	216 220	43 41	169	1,842 1,855
July		359	1,084 1,086	170	47 47	59		221	39	166	
August	727	363	1,086	167	47 47	59 61	139 141	219	39 40	159 158	1,862
September			1,069		47				40		1,861
October		368 352	1,094	162	44 44	61 61	138 131	210 213	41	158 158	1,847 1,827
November <b>December</b>		333	1,079 1,060	162 <b>164</b>	43	49	108	213 219	41	158	1,027 <b>1,794</b>
<b>2011</b> January	727	347	1,074	162	41	35	85	235	39	166	1,803
February		350	1,074	154	39	26	71	229	35	168	1,773
March		363	1,077	149	40	24	69	215	37	171	1,773
April		369	1,009	143	39	28	80	205	39	175	1,776
May		370	1,096	145	41	34	92	214	37	180	1,805
June	727	358	1,085	144	42	40	105	215	37	179	1,808
July	718	348	1,066	158	44	47	119	217	37	178	1,820
August		349	1.046	157	43	52	130	212	39	173	1.801
September		R 332	R 1,028	R 154	46	R 57	R 132	R 216	R 35	R 170	R 1,781
	€ 696	E 339	E 1,035	E 138	E 45	€ 60	E 146	€ 205	€ 36	E 147	E 1,752
October											

a Includes lease condensate.

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

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

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

and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.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. • 1981-2010: EIA, Petroleum Supply Annual, annual reports. • 2011: 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.

b Liquefied petroleum gases.
 c "SPR" is the Strategic Petroleum Reserve, which began in October 1977.
 Crude oil stocks in the SPR include non-U.S. stocks held under foreign or

commercial storage agreements.

d All crude oil stocks other than those in "SPR."

Beginning in 1981, includes stocks of Alaskan crude oil in transit. See Note 5, "Stocks of Alaskan Crude Oil," at end of section.

See Note 4, "Petroleum New Stock Basis," at end of section.

g Excludes stocks in the Northeast Heating Oil Reserve. Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

h Through 2004, includes kerosene-type and naphtha-type i

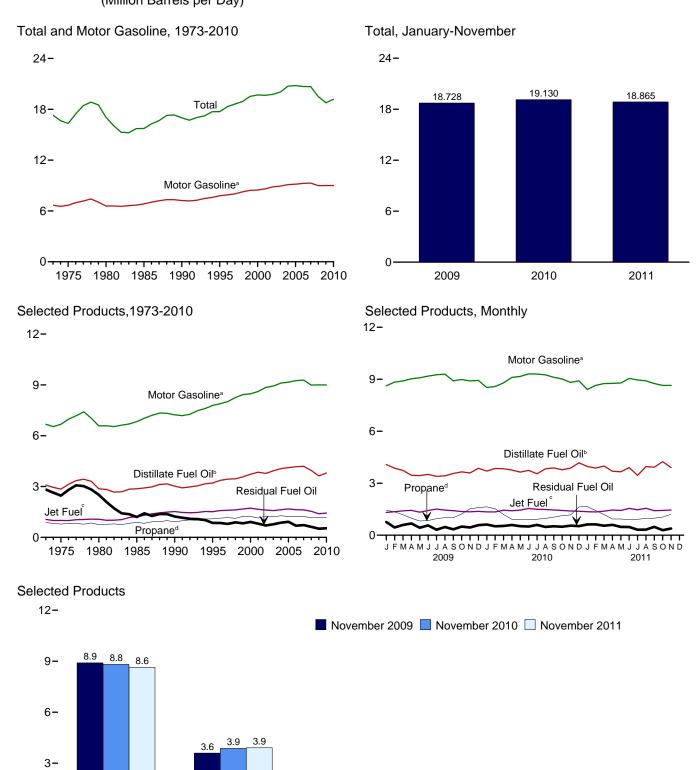
Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in

Includes propylene.

Includes finished motor gasoline and motor gasoline blending components; excludes oxygenates.

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

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



Distillate Fuel Oil<sup>b</sup>

Motor Gasoline<sup>a</sup>

1.5

Note: SPR= Strategic Petroleum Reserve.

1.2 1.2

Propane<sup>d</sup>

Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum. Source: Table 3.5.

0.6 0.4

Residual Fuel Oil

Jet Fuel<sup>c</sup>

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

<sup>&</sup>lt;sup>b</sup> Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

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

d Includes propylene.

Table 3.5 Petroleum Products Supplied by Type

	Asphalt	Aviation	Distillate	la.	Kero-	LPC	<b>3</b> a	Lubri-	Motor	Petro- leum	Desidual		
	and Road Oil	Aviation Gasoline	Distillate Fuel Oil <sup>b</sup>	Jet Fuel <sup>c</sup>	sene	Propaned	Total	cants	Gasoline <sup>e</sup>	Coke	Residual Fuel Oil	Otherf	Total
1973 Average	522	45	3,092	1,059	216	872	1,449	162	6,674	261	2,822	1,005	17,308
1975 Average		39	2,851	1,001	159	783	1,333	137	6,675	247	2,462	1,001	16,322
1980 Average	396	35	2,866	1,068	158	754	1,469	159	6,579	237	2,508	1,581	17,056
1985 Average	425	27	2,868	1,218	114	883	1,599	145	6,831	264	1,202	1,032	15,726
1990 Average	483	24	3,021	1,522	43	917	1,556	164	7,235	339	1,229	1,373	16,988
1995 Average	486	21	3,207	1,514	54	1.096	1,899	156	7,789	365	852	1,381	17,725
1996 Average	484	20	3,365	1,578	62	1,136	2,012	151	7,891	379	848	1,518	18,309
1997 Average	505	22	3,435	1,599	66	1,170	2,038	160	8,017	377	797	1,605	18,620
1998 Average		19	3,461	1,622	78	1,120	1,952	168	8,253	447	887	1,508	18,917
1999 Average	547	21	3,572	1,673	73	1,246	2,195	169	8,431	477	830	1,532	19,519
2000 Average	525	20	3,722	1,725	67	1,235	2,231	166	8,472	406	909	1,458	19,701
2001 Average	519	19	3,847	1,655	72	1,142	2,044	153	8,610	437	811	1,481	19,649
2002 Average	512	18	3,776	1,614	43	1,248	2,163	151	8.848	463	700	1,474	19,761
2003 Average	503	16	3,927	1,578	55	1,215	2.074	140	8,935	455	772	1,579	20,034
2004 Average	537	17	4,058	1,630	64	1,276	2,132	141	9,105	524	865	1,657	20,731
2005 Average		19	4,118	1,679	70	1,229	2,030	141	9,159	515	920	1,605	20,802
2006 Average	521	18	4,169	1,633	54	1,215	2,052	137	9,253	522	689	1,640	20,687
2007 Average	494	17	4,196	1,622	32	1,235	2,085	142	9,286	490	723	1,593	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 January	195	13	4.079	1,312	44	1.444	2.094	120	8,623	426	760	1,373	19,040
February	277	10	3,864	1,356	40	1,341	2,139	96	8,836	425	448	1,330	18,822
March		14	3,744	1,406	16	1,181	2,043	112	8,903	420	591	1,170	18,719
April		15	3,455	1,432	14	981	1,906	125	9,029	498	677	1,222	18,672
May		13	3,436	1,329	14	818	1,774	101	9,084	501	433	1,154	18,211
June		18	3,513	1,425	11	849	1,731	124	9,180	536	566	1,213	18,828
July	495	19	3,395	1,506	'i	955	1,807	122	9,260	369	319	1,333	18,626
August	542	15	3,426	1,449	6	1,012	1.956	138	9,295	407	472	1,244	18,949
September	461	19	3,560	1,414	-4	1,009	1,929	124	8,911	470	340	1,372	18,594
October	377	11	3,654	1.362	21	1,219	2,208	123	8,986	329	495	1,236	18,803
November	287	10	3,596	1,352	22	1,523	2,531	117	8,906	356	445	1,132	18,753
December	204	15	3,861	1,372	26	1,523	2,504	114	8,931	385	582	1,132	19,237
Average	360	14	3,631	1,393	18	1,160	2,051	118	8,997	427	511	1,251	18,771
<b>2010</b> January	203	10	3,701	1,344	15	1,638	2.644	116	8,520	268	615	1,218	18,652
	249	10	3,854	1,344	34	1,526	2,531	137	8,579	334	515	1,218	18,850
February		14	3,835	1,443	11	1,193	2,225	138	8,793	425	531	1,421	19,099
March		17	3,759	1,443	7	916	1,843	132	9,108	385	590	1,463	19,099
April	378		3,639	1,410	11	891	1,843	128		339	519	1,351	18,866
May	517	15 18	3,743	1,543	16	901	1,938	155	9,162 9,311	411	500	1,386	19,537
June	470	20	3,743	1,343	19	915	1,936	141	9,311	385	595	1,373	19,337
July	537	14			9	973		129					
August	463	20	3,830	1,486	8	1,040	2,025 2,084	136	9,255 9,112	434 433	476 513	1,467 1,326	19,662
September	463 434	20 15	3,886	1,457 1.430	8 15		2,084	136	9,112	433 335	489		19,438
October	434 295	15	3,773 3,873	1,430	46	1,135 1,168	2,126	127	9,016 8,816	335	489 552	1,215 1,333	18,974 18,977
November	295 204	12	3,673 4.176	1,383	50	1,168	2,141	113	8,911	369	525	1,301	19,722
December  Average	362	15	3,800	1,432	<b>20</b>	1,160	2,173	131	8,993	376	525 535	1,343	19,722
_	224	14	3,968	1,355	17	1,652	2,660	136	8.412	363	623	1,349	10 124
2011 January	224 248	13		1,355	17 47	1,652	2,660	136	8,412	363 282	623 627	1,349	19,121 18,869
February			3,871					148		339	627 547		
March		19 7	3,993	1,389	25 9	1,189 933	2,291 1,916	148	8,750 8,762	359 352	600	1,468 1,381	19,248 18,613
April	354 354		3,689 3,657	1,451 1.429		933 934	1,916	120	8,784	352 415	478	1,361	18,363
May	354 455	18 17			(s) 4	934 889	1,994			386	478 471	1,114	
June			3,903	1,545	9	918		119	9,046 8.960	386 361			19,277
July	463	18	3,452	1,466		918 974	1,929	112			316	1,470	18,555
August	543 R 463	18 R 42	3,959	1,555	5 R 4 2		1,987	134 R 436	8,907	452 R 260	319 R 402	1,274	19,153 R 40,705
September	R 462	R 13	R 3,929	R 1,417	R 13	R 979	R 2,035	R 126	R 8,753	R 360	R 482	R 1,207	R 18,795
October	F 389	F 14	E 4,242	E 1,429	RF 14	E 1,047	RF 2,112	RF 134	E 8,647	F 358	E 290	RE 1,196	E 18,824
November	F 267	F 12	E 3,903	E 1,452	F 20	E 1,202	F 2,221	F 109	E 8,645	F 380	E 384	E 1,302	E 18,695
11-Month Average	<sup>E</sup> 364	<sup>E</sup> 15	<sup>E</sup> 3,870	E 1,440	E 15	E 1,102	E 2,134	E 126	<sup>E</sup> 8,756	<sup>E</sup> 369	<sup>E</sup> 465	E 1,311	E 18,865
2010 11-Month Average 2009 11-Month Average	377 375	15 14	3,765 3,610	1,436 1,395	17 17	1,116 1,120	2,126 2,009	133 119	9,000 9,003	376 430	536 505	1,347 1,252	19,130 18,728

Liquefied petroleum gases.

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. 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. • 1981-2010: EIA, Petroleum Supply Annual, annual reports. • 2011: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system, Short-Term Integrated Forecasting System, and Monthly Energy Review data system calculations.

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

<sup>2005,</sup> includes kerosene-type jet fuel only; naphtha-type jet ruei is included in "Other."

d Includes propylene.

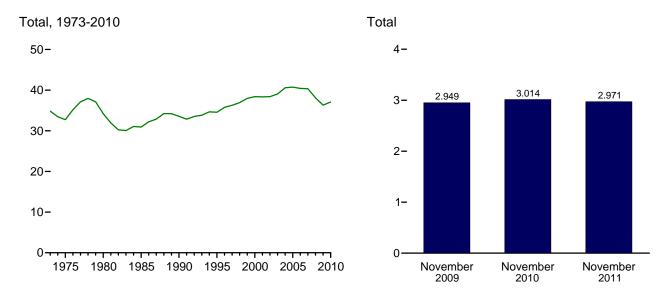
E Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

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.

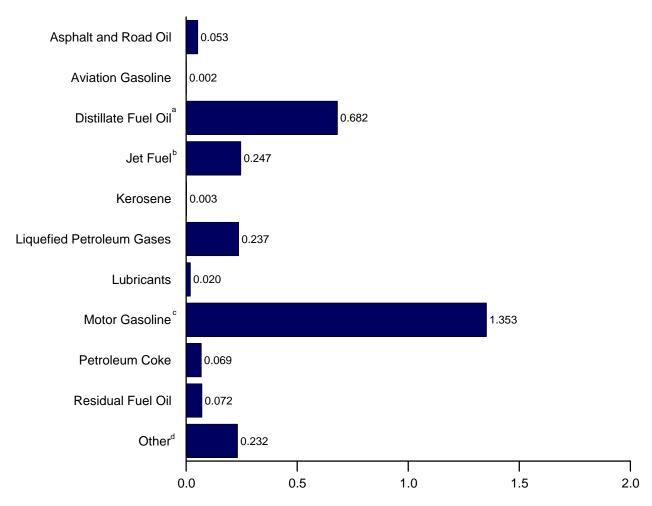
R=Revised. E=Estimate. F=Forecast. (s)=Less than 500 barrels per day and greater than -500 barrels per day.

greater than -500 barrels per day.

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



#### By Product, November 2011



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

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

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

<sup>&</sup>lt;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	alt LPG <sup>a</sup>		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
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	6,818	3,132	112	1,534	2,512	346	14,825	802	1,955	2,837	34,556
1996 Total	1,176	37	7,175	3,274	128	1,594	2,660	335	15,064	837	1,952	3,121	35,759
1997 Total	1,224	40	7,304	3,308	136	1,638	2,690	354	15,254	829	1,828	3,298	36,265
1998 Total	1,263	35	7,359	3,357	162	1,568	2,575	371	15,701	982	2,036	3,093	36,934
1999 Total	1,324	39	7,595	3,462	151	1,745	2,897	375	16,036	1,048	1,905	3,129	37,960
2000 Total	1,276	36	7,935	3,580	140	1,734	2,945	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	1,323	35	8,755	3,475	144	1,721	2,682	312	17,444	1,133	2,111	3,318	40,732
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 January	40	2	736	231	8	172	235	23	1,395	80	148	247	3,144
February	51	1	630	215	6	144	215	16	1,291	72	79	214	2,792
March	62	2	676	247	3	140	226	21	1,440	78	115	208	3,079
April	59	2	604	244	2	113	201	23	1,413	90	128	209	2,976
May	76	2	621	234	2	97	193	19	1,469	94	84	206	3,000
June	102	3	614	242	2	98	183	23	1,437	97	107	208	3,016
July	102	3 2	613	265	(s) 1	114	198	23	1,498	69	62	236	3,069
August	111 92	3	619 622	255 241	-1	120 116	215 205	26	1,504	76 85	92 64	220 234	3,121
September	92 78	2	660	239	-1 4	145	243	23 23	1,395 1,454	61	96	234	2,963 3,078
October November	57	1	628	239	4	175	272	23	1,434	64	84	192	2,949
December	42	2	697	241	5	173	272	22	1,394	72	113	219	3,136
Total	873	27	7,720	2,883	36	1,624	2,664	262	17,135	938	1,173	2,611	36,321
<b>2010</b> 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
<b>2011</b> January	46	2	717	238	3	196	295	26	1,361	68	121	239	3,116
February	46	2	631	213	7	153	241	20	1,263	48	110	202	2,784
March	58	3	721	244	4	141	251	28	1,415	63	107	259	3,152
April	63	1	645	247	, 1	107	201	24	1,372	64	113	234	2,965
May	73	3	660	251	(s)	111	216	23	1,421	78	93	199	3,017
June	91	3	682	263	1	102	204	22	1,416	70	89	236	3,075
July	95	3	623	258	2	109	209	21	1,449	67	62	260	3,049
August	112 R 92	3 R 2	715 <sup>R</sup> 687	273 <sup>R</sup> 241	1 R 2	116 R 113	217	25 R 23	1,441 R 1,370	84 R 65	62 <sup>R</sup> 91	227 R 208	3,160
September	F 80	F2	E 766	E 251	F 2	E 124	215 RF 233	F 25	E 1,399	F 67	E 56	RE 209	R 2,996
October	F 53	F 2	E 682	E 247	F3	E 138	F 233	F 20	E 1,399	F 69	E 72	E 232	E 3,091 E 2,971
November 11-Month Total	E <b>807</b>	E <b>25</b>	E <b>7,529</b>	E <b>2,726</b>	E 28	E 1,412	E <b>2,519</b>	E <b>256</b>	E <b>15,260</b>	E <b>742</b>	E <b>977</b>	E <b>2,506</b>	E 33,376
2010 11-Month Total	836	25	7,326	2,720	32	1,429	2,523	269	15,686	757	1,126	2,567	33,867
2009 11-Month Total	831	25 24	7,326	2,720 2,642	32	1,429	2,523 2,385	240	15,686	866	1,060	2,392	33,867

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

<sup>2005,</sup> includes kerosene-type jet luer only, maphible type jet lost is all controlled of the controlled

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. 

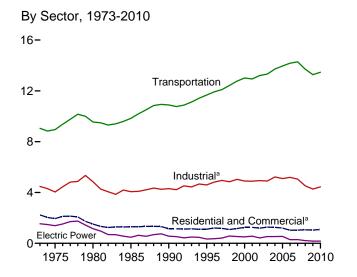
See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. 

Totals may not equal sum of components due 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,

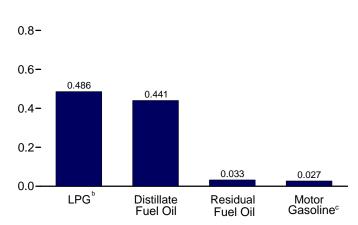
see http://www.eia.gov/petroleum/. Sources: See end of section.

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

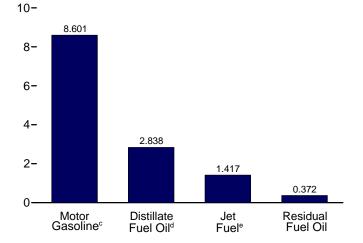


Residential and Commercial Sectors,<sup>a</sup> Selected Products, September 2011

1.0-



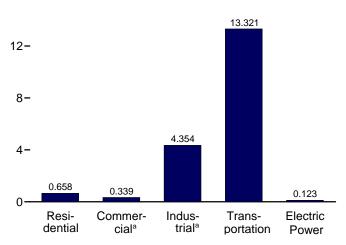
Transportation Sector, Selected Products, September 2011



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

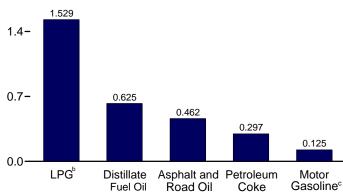
By Sector, September 2011

16-



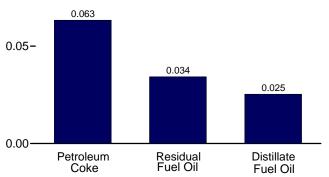
Industrial Sector,<sup>a</sup> Selected Products, September 2011

2.1-



Electric Power Sector, September 2011

0.10 -



distillate fuel oil.

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

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

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

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

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

Table 3.7a Petroleum Consumption: Residential and Commercial Sectors

		Resident	ial Sector				Com	mercial Sect	ora		
	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	850	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	514	77	224	815	297	16	68	50	NA	99	530
1990 Average	460	31	252	742	252	6	73	58	0	100	489
1995 Average	426	36	282	743	225	11	78	10	(s)	62	385
1996 Average	434	43	334	811	227	10	87	14	(s)	60	397
1997 Average	411	45	325	781	209	12	86	22	(s)	48	378
1998 Average	363	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	226 221	9	112	32	(s)	48 53	428
2004 Average	433 402	41 40	364 366	839 809	221	10 10	108 94	23 24	(s)	53 50	416 389
2005 Average	402 335	40 32	318	685	189	7	88	24 26	(s)	33	343
2006 Average2007 Average	342	32 21	345	708	181	4	87	26 32	(s) (s)	33 33	343 337
2008 Average	314	10	394	718	174	2	113	24	(s)	32	345
2009 January	445	33	399	877	306	5	101	27	(s)	52	491
February	413	31	407	851	284	5	103	27	(s)	48	467
March	358	12	389	760	246	2	99	28	(s)	42	416
April	283	11	363	657	195	2	92	28	(0)	33	349
May	191	11	338	540	131	2	86	28	ő	22	269
June	183	9	330	521	126	1	84	29	Ö	21	261
July	205	1	344	550	141	(s)	87	29	ŏ	24	281
August	214	5	373	591	147	`1	95	29	(s)	25	296
September	259	-3	367	623	178	-1	93	28	(s)	30	329
October	223	16	421	659	153	2	107	28	Ô	26	316
November	226	16	482	725	155	3	122	28	(s)	26	335
December	401	20	477	898	275	3	121	28	(s)	47	474
Average	283	13	391	687	194	2	99	28	(s)	33	357
2010 January	496	11	504	1,011	340	2	128	26	(s)	62	558
February	508	26	482	1,016	349	4	122	27	(s)	63	565
March	292	9	424	724	200	1	108	27	(s)	36	373
April	211	5	351	567	145	1	89	28	(s)	26	289
May	223	8	358	589	153	1	91	28	0	28	302
June	263	12	369	644	181	2	94	29	0	33	338
July	204	14 7	377 386	595 575	140 125	2 1	96 98	29 29	0	25 23	292 276
August September	182 169	6	397	575 572	125	1	98 101	29 28	(s) (s)	23 21	268
October	252	11	397 405	668	173	2	103	28 28	(S) (S)	31	337
November	292	35	408	734	200	5	103	27	(s)	36	373
December	466	38	510	1.014	320	6	129	28	(s)	58	541
Average	295	15	414	724	203	2	105	28	(s)	37	375
<b>2011</b> January	387	13	507	907	266	2	129	26	(s)	48	471
February	406	36	458	900	279	5	116	27	(s)	51	478
March	277	19	436	733	190	3	111	27	(s)	34	366
April	191	7	365	562	131	1	93	27	0	24	276
May	126	(s)	380	506	86	(s)	96	27	Ö	16	226
June	195	3	369	568	134	1	94	28	0	24	281
July	174	7	367	549	120	1	93	28	0	22	264
August	239	4	378	621	164	1	96	28	0	30	318
September	261	10	388	658	179	1	98	27	0	33	339
9-Month Average	249	11	405	665	171	2	103	27	(s)	31	334
2010 9-Month Average	281	11	405	697	193	2	103	28	(s)	35	361
2009 9-Month Average	283	12	368	662	194	2	93	28	(s)	33	350

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

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.

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

Commercial sector tuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

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

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

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

					Industria	al Sector <sup>a</sup>				
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>b</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>c</sup>	Total
1973 Average	522	691	75	902	88	133	254	809	1,005	4,479
1975 Average	419	630	58	844	68	116	246	658	1,003	4,038
1980 Average	396	621	87	1,172	82	82	234	586	1,581	4,842
1985 Average	425	526	21	1,285	75	114	261	326	1,032	4,065
1990 Average	483	541	6	1,215	84	97	325	179	1,373	4,304
1995 Average	486	532	7	1,527	80	105	328	147	1,373	4.594
1996 Average	484	557	9	1,580	78	105	343	146	1,518	4,819
1997 Average	505	566	9	1,617	82	111	331	127	1,605	4,953
1998 Average	521	570	11	1,553	86	105	390	100	1,508	4,844
1999 Average	547	558	6	1,709	87	80	426	90	1,532	5,035
2000 Average	525	563	8	1,720	86	79	361	105	1,458	4,903
2001 Average	519	611	11	1,557	79	155	390	89	1,481	4.892
2002 Average	512	566	7	1,668	78	163	383	83	1,474	4,934
2002 Average	503	534	12	1,561	70 72	171	375	96	1,579	4,903
2003 Average 2004 Average	537	570	14	1,646	73	195	423	108	1,657	5,222
2005 Average	546	594	19	1,549	73 72	187	404	123	1,605	5,222
2006 Average	546 521	594 594	14	1,627	72 71	198	404 425	104	1,640	5,100
2006 Average	494	594 595	6	1,627	73	161	425 412	84	1,593	5,056
2008 Average	417	599	2	1,419	67	131	394	86	1,408	4,523
2009 January	195	845	5	1,574	62	123	360	66	1,373	4,602
February	277	676	5	1,608	49	126	358	43	1,330	4,472
March	300	591	2	1,535	58	127	345	55	1,170	4.183
April	299	397	2	1,432	64	129	429	61	1,222	4.034
May	371	440	2	1,333	52	129	434	47	1,154	3,961
June	512	439	1	1,301	64	131	466	51	1,213	4.178
July	495	313	(s)	1,357	63	132	299	27	1,333	4,021
August	542	312	(3)	1,470	71	133	339	38	1,244	4,148
September	461	451	-1	1,449	64	127	400	30	1,372	4,353
October	377	564	3	1.659	63	128	288	42	1,236	4,360
November	287	608	3	1,902	60	127	314	41	1,132	4,474
December	204	621	3	1.881	59	127	331	54	1,241	4.522
Average	360	521	2	1,541	61	128	363	46	1,251	4,274
<b>2010</b> January	203	457	2	1,987	60	121	R 201	R 53	1,218	R 4,302
February	249	R 503	4	1,902	70	122	264	50	1,263	R 4,428
March	264	R 673	1	1,672	71	125	356	R 49	1,421	R 4,633
April	331	<sup>R</sup> 617	1	1,385	68	130	323	<sup>R</sup> 55	1,463	R 4,372
May	378	R 467	1	1,411	66	131	274	R 46	1,351	R 4,126
June	517	421	2	1,456	80	133	333	R 39	1,386	R 4,366
July	470	R 330	2	1,487	73	133	303	<sup>R</sup> 48	1,373	R 4,218
August	537	543	1	1,522	66	132	R 370	R 38	1,467	R 4,675
September	463	698	1	1,566	70	130	<sup>R</sup> 371	<sup>R</sup> 46	1,326	R 4,671
October	434	540	2	1,597	66	129	279	R 47	1,215	R 4,308
November	295	<sup>R</sup> 651	6	1,609	64	126	R 339	_ 52	1,333	R 4,474
December	204	675	6	2,012	58	127	R 307	R 46	1,301	R 4,736
Average	362	548	2	1,633	68	128	310	R 48	1,343	<sup>R</sup> 4,442
2011 January	224	<sup>R</sup> 791	2	1,999	70	120	R 283	<sup>R</sup> 57	1,349	R 4,893
February	248	631	6	1,808	62	123	215	<sup>R</sup> 58	1,264	<sup>R</sup> 4,414
March	280	796	3	1,722	76	125	266	<sup>R</sup> 51	1,468	R 4,786
April	314	587	1	1,439	68	125	304	<sup>R</sup> 56	1,381	R 4,275
May	354	594	(s)	1,498	62	125	366	R 44	1,114	<sup>R</sup> 4,158
June	455	<sup>R</sup> 614	1	1,456	61	129	324	R 43	1,394	<sup>R</sup> 4,476
July	463	305	1	1,450	57	128	286	R 27	1,470	R 4,187
August	543	572	1	1,493	69	127	388	R 27	1,274	R 4,493
September	462	625	2	1,529	65	125	297	43	1,207	4,354
9-Month Average	372	613	2	1,598	66	125	304	45	1,325	4,450
2010 9-Month Average 2009 9-Month Average	380 384	523 495	2 2	1,597 1,450	69 61	129 129	311 381	47 46	1,364 1,267	4,421 4,215

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

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.

Sources: See end of section.

rindustrial sector fuel use, including that at industrial combined-real-and-power (CHP) and industrial electricity-only plants.

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

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

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.

Table 3.7c Petroleum Consumption: Transportation and Electric Power Sectors

1973 Average					Transportat	ion Secto	7			Electric Power Sector <sup>a</sup>				
1975 Average					Petroleum				Total		leum		Total	
1975 Average	1973 Average	45	1.045	1.042	35	74	6.496	317	9.054	129	7	1.406	1,542	
1980 Average 27 1,491 1,218 21 77 6,667 342 9,838 40 3 435 1990 Average 27 1,491 1,218 21 77 1 6,667 342 9,838 40 3 435 1990 Average 22 1,192 1,574 11 77 7,778 342 9,838 40 3 435 1990 Average 22 1,193 1,574 11 77 7,778 342 9,838 40 3 435 1 45 507 1995 Average 22 1,193 1,574 11 77 7,778 342 9,838 40 3 435 1 45 507 1 45 507 1 45 508 1 1,574 1 1 77 7,778 342 9,838 40 3 435 1 45 507 1 45 508 1 1,574 1 1 1 77 7,778 342 1,588 4 1 1 1 507 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1													1,388	
1985 Average													1,151	
1990 Average 21 1,973 1,514 13 76 7,680 443 10,888 45 14 507 1995 Average 21 1,973 1,514 13 76 7,674 397 11,688 51 37 247 1996 Average 22 1,198 1,599 11 78 7,772 370 11,921 51 36 273 1996 Average 22 2,188 1,599 11 78 7,782 370 11,921 51 36 273 1996 Average 22 2,188 1,599 13 82 8,335 240 11,200 24 64 63 31 1997 Average 22 2,188 1,599 13 82 8,335 240 12,765 66 51 418 2000 Average 20 2,424 1,725 8 81 8,370 386 13,012 82 44 53 78 8 2000 Average 21 2,282 1,725 8 81 8,370 386 13,012 82 44 53 78 8 2000 Average 18 2,536 1,614 10 73 8,662 295 13,208 60 80 287 2000 Average 18 2,536 1,614 10 73 8,662 295 13,208 60 80 287 2000 Average 18 2,536 1,614 10 73 8,662 295 13,208 60 80 287 2003 Average 17 2,783 1,630 11 12 68 8,733 249 13,321 76 79 379 379 2004 Average 17 2,783 1,630 11 12 68 8,733 249 13,321 76 79 379 379 2005 Average 17 2,783 1,630 11 12 80 8,887 32 11 13,720 52 101 382 2005 Average 17 2,783 1,630 11 12 80 8,887 32 11 13,720 52 101 382 2005 Average 17 2,783 1,630 11 12 80 8,887 32 11 13,720 52 101 382 2005 Average 17 3,037 1,622 11 6 69 9,003 433 14,287 42 78 1173 2008 Average 17 3,037 1,622 20 58 8,834 400 13,704 34 70 104 2009 January 13 2,422 1,356 21 47 8,683 371 12,840 40 67 85 5 6 7 8 7 4 7 8 8 8 3 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1													478	
1995 Average 21 1,973 1,514 13 76 7674 397 11,668 51 37 247 1996 Average 20 2,096 1,578 11 73 7,772 370 11,921 51 36 273 1996 Average 21 2,138 1,586 15 11 73 7,772 370 11,921 51 36 273 1997 Average 22 2,138 1,593 10 75 7,772 370 11,921 51 36 273 1997 Average 21 2,235 1,673 10 82 8,336 200 12,765 66 51 448 2000 Average 21 2,235 1,673 10 82 8,336 220 12,765 66 51 448 2000 Average 21 9,2489 1,655 10 74 8,435 255 12,938 80 47 437 7202 Average 18 2,536 1,614 10 73 8,662 295 13,208 60 80 2,287 2004 Average 16 2,665 1,578 12 68 8,733 249 13,321 76 79 379 2004 Average 19 2,489 1,655 10 74 8,435 255 12,938 80 47 437 7200 Average 19 2,489 1,655 10 74 8,435 255 12,938 80 47 437 7200 Average 19 2,858 1,679 20 68 8,733 356 13,977 52 101 382 2000 Average 19 2,858 1,679 20 68 8,948 34 365 13,977 54 111 382 2000 Average 19 2,858 1,679 20 68 8,948 34 365 13,977 54 111 382 2000 Average 17 2,337 1,622 16 69 9,983 14,178 35 37 115 2006 Average 17 3,037 1,622 16 69 9,983 14,178 35 37 157 2008 Average 17 3,037 1,622 16 69 9,983 14,178 35 37 157 2008 Average 17 3,037 1,622 16 69 9,983 14,178 35 37 157 2008 Average 17 3,037 1,622 13 13,56 21 47 8,683 271 12,840 40 67 85 85 8473 400 13,704 37 70 10 2,452 13,356 21 47 8,683 271 12,840 40 67 85 85 8473 400 13,704 37 70 10 2,452 13,356 21 47 8,683 271 12,840 40 67 85 85 8473 400 13,704 37 70 77 78 84 8474 30 12,704 30 80 80 80 80 80 80 80 80 80 80 80 80 80	1990 Average	24	1,722	1,522	16	80	7,080	443	10,888	45	14	507	566	
1996 Average	1995 Average	21	1,973	1,514	13	76	7,674	397	11,668	51	37	247	334	
1998 Average	1996 Average												360	
1999 Average													410	
2000 Average													576	
2001 Average													535	
2002 Average													505	
2003 Average 16 2,665 1,578 12 68 8,733 249 13,321 76 79 379 2004 Average 17 2,783 1,630 14 69 8,887 321 13,720 52 101 382 2005 Average 19 2,858 1,679 20 68 8,948 365 13,957 54 111 382 2005 Average 17 3,037 1,622 16 69 9,029 395 14,178 35 97 157 2007 Average 17 3,037 1,622 16 69 9,093 433 14,287 42 78 173 2008 Average 15 2,824 1,539 29 64 8,834 400 13,704 34 70 104 2009 January 13 2,422 1,312 20 58 8,473 450 12,750 60 66 193 56 1909 January 10 2,452 1,356 21 47 8,683 271 12,840 40 67 85 March 11 2,508 1,406 20 55 8,748 429 13,180 40 75 65 April 15 2,555 1,432 19 61 8,872 526 13,480 26 69 57 July 19 2,704 1,425 17 69 9,020 415 13,808 26 69 57 July 19 2,704 1,425 17 69 9,020 415 13,808 32 67 72 June 18 2,704 1,425 17 69 9,020 415 13,808 32 67 72 June 18 2,704 1,425 17 69 9,020 415 13,808 31 70 78 3 August 19 2,720 1,449 19 60 9,020 415 13,808 31 70 78 3 August 19 2,720 1,449 19 60 9,020 415 13,808 31 70 78 83 August 19 2,720 1,449 19 60 9,020 415 13,809 31 70 78 83 August 19 2,720 1,449 19 60 9,020 415 13,809 27 42 42 42 December 10 2,579 1,352 25 57 8,751 335 13,327 33 63 79 201 December 15 2,531 1,372 24 56 8,776 430 13,215 33 54 41 Average 14 2,600 1,393 20 57 8,840 353 13,279 33 63 79 201 July 20 4,245 41 42 56 8,776 440 13,215 33 54 41 Average 14 2,600 1,393 20 57 8,840 8,813 8,909 8,720 8,720 8,720 8,720 1,449 19 69 9,139 8,401 13,215 33 54 41 Average 14 2,600 1,393 20 57 8,840 8,830 38 8,840 8,850 8,	2001 Average												564 427	
2004 Average													534	
2006 Average													535	
2006 Average	2005 Average												547	
2007 Average	2006 Average												289	
2008 January		17			16								293	
February	2008 Average	15	2,824	1,539	29	64	8,834	400	13,704	34	70	104	209	
February	<b>2009</b> January												319	
April 15 2,555 1,432 19 61 8,872 526 13,480 26 69 57 May 13 2,642 1329 17 49 8,96 293 13,269 32 67 72 June 18 2,734 1,425 17 60 9,020 415 13,689 31 70 78 June 19 2,707 1,506 18 59 9,100 185 13,594 22 70 83 August 15 2,723 1,449 19 67 9,133 312 13,719 30 68 97 September 19 2,649 1,414 19 60 8,756 21 13,719 30 68 97 September 11 2,688 1,362 25 60 8,830 358 13,332 26 41 68 November 11 2,688 1,362 25 57 8,751 335 13,109 27 42 42 December 15 2,531 1,372 24 56 8,776 440 13,215 33 54 41 Average 14 2,600 1,393 20 57 8,840 353 13,279 33 63 79  2010 January 10 2,328 1,344 26 57 8,372 8,076 440 13,215 33 54 41 April 17 2,763 1,410 18 64 8,430 8,364 8,127,02 8,30 69 38 8 April 17 2,763 1,410 18 64 8,930 8,364 8,369 8,24 69 41 8,49 1,49 1,49 1,49 1,49 1,49 1,49 1,49 1													191	
May 13 2,642 1,329 17 49 8,926 293 13,269 32 67 72 June 18 2,734 1,425 17 60 9,020 415 13,689 31 70 78 July 19 2,707 1,506 18 59 9,100 185 13,594 28 70 83 August 15 2,723 1,449 19 67 9,133 312 13,719 30 68 97 September 19 2,649 1,414 19 60 8,766 217 13,134 24 69 63 October 11 2,688 1,362 22 60 8,830 358 13,332 26 41 68 November 10 2,579 1,352 25 57 8,751 335 13,109 27 42 42 December 15 2,531 1,372 24 56 8,776 440 13,215 33 54 41 Average 14 2,600 1,393 20 57 8,840 353 13,279 33 63 79  2010 January 10 2,328 1,344 26 57 8,372 8407 812,542 79 867 893 8; February 10 8,2464 1,343 25 66 8,430 8,364 812,702 830 69 38 8 April 17 2,763 1,410 18 64 8,950 8,468 813,690 82 3 862 840 May 15 2,762 1,446 18 62 9,03 8,39 8,39 8,39 8,39 8,39 8,39 8,39 8,3													180	
June 18 2,734 1,425 17 60 9,020 415 13,689 31 70 78 July 19 2,707 1,506 18 59 9,100 185 13,594 28 70 83 August 15 2,723 1,449 19 67 9,133 312 13,719 30 68 97 September 19 2,649 1,414 19 60 8,756 217 13,134 24 69 63 October 111 2,688 1,362 22 60 8,830 358 13,332 26 41 68 November 10 2,579 1,352 25 57 8,751 335 13,109 27 42 42 December 15 2,531 1,372 24 56 8,776 440 13,215 33 54 41 Average 14 2,600 1,393 20 57 8,840 353 13,279 33 63 79  2010 January 10 2,328 1,344 26 57 8,372 R407 R12,542 79 R67 R93 R, February 10 R2,464 1,343 25 66 8,430 R364 R12,702 R30 69 38 R April 177 2,763 1,410 18 64 8,950 R468 R13,690 R23 R62 R40 R April 177 2,763 1,410 18 64 8,950 R368 R13,695 R23 R62 R40 R April 18 2,837 1,543 19 75 9,149 R323 R13,665 R33 R64 R66 R June 18 2,837 1,543 19 75 9,149 R323 R13,665 R33 R64 R66 R June 18 2,837 1,543 19 75 9,149 R323 R13,665 R33 R64 R66 R98 September 20 2,873 1,457 20 66 8,954 R38 R13,754 R93 R98 September 20 2,873 1,457 20 66 8,954 R38 R13,754 R93 R98 September 20 2,873 1,457 20 66 8,954 R38 R13,754 R93 R98 September 20 2,873 1,457 20 66 8,954 R38 R13,754 R93 R98 September 20 2,873 1,457 20 66 8,954 R38 R13,755 R99 R62 R61 October 15 R2,764 1,430 21 62 8,859 R33 R13,643 R55 R62 R61 November 11 2,701 1,396 21 60 8,859 R33 R13,643 R55 R62 R61 November 11 2,701 1,398 21 60 8,856 R33 R13,643 R55 S6 R67  Average 15 R2,716 1,432 21 64 8,836 R344 R13,725 R99 R62 R61 November 11 2,703 1,389 22 72 8,558 R44 R13,221 R90 R33 R13,643 R55 S6 R67  April 7 R2,928 1,4466 19 54 8,886 R38 R33 R64 R65 R37 R13,648 R36 R38 R65 R67  April 7 R2,928 1,545 19 58 8,862 R37 R13,365 29 49 R41 R90 R34 R63 R34 R64 R13,227 27 R33 38 R46 R36 R36 R38 R34 R3,775 R33 R34 R34 R34 R34 R34 R34 R34 R34 R34													152	
July 19 2,707 1,506 18 59 9,100 185 13,594 28 70 83 August 15 2,723 1,449 19 67 9,133 312 13,719 30 68 97 September 19 2,649 1,414 19 60 8,756 217 13,134 24 69 63 October 11 2,688 1,362 22 60 8,830 358 13,332 26 41 68 November 15 2,531 1,372 24 56 8,776 440 13,215 33 54 41 Average 14 2,600 1,393 20 57 8,840 353 13,109 27 42 42 Average 14 2,600 1,393 20 57 8,840 353 13,109 27 42 42 Average 14 2,600 1,393 20 57 8,840 353 13,275 33 54 41 Average 10 R 2,464 1,343 25 66 8,430 R 364 R 12,702 R 30 69 38 R February 10 R 2,464 1,343 25 66 8,430 R 364 R 12,702 R 30 69 38 R Average 11 Average 12 R 30 R 3													171	
August 15 2,723 1,449 19 67 9,133 312 13,719 30 68 97 September 19 2,649 1,414 19 60 8,756 217 13,134 24 69 63 October 11 2,688 1,362 22 60 8,756 217 13,134 24 69 63 October 11 2,688 1,362 22 60 8,830 358 13,332 26 41 68 October 15 2,531 1,372 24 56 8,776 440 13,215 33 54 41 Average 14 2,600 1,393 20 57 8,840 353 13,279 33 63 79   2010 January 10 2,328 1,344 26 57 8,372 R407 R12,542 79 R67 R93 R; February 10 R2,464 1,343 25 66 8,430 R364 R12,702 R30 69 38 R40 April 17 2,763 1,410 18 64 8,950 R468 R13,695 R33 R64 R66 R40 R405 13,235 R24 69 41 R4 R40 R405 R405 R405 R405 R406 R40 R405 R406 R406 R406 R406 R406 R406 R406 R406													179 180	
September													195	
October         11         2,688         1,362         22         60         8,830         358         13,332         26         41         68           November         10         2,579         1,352         25         57         8,751         335         13,109         27         42         42           December         15         2,531         1,372         24         56         8,776         440         13,215         33         54         41           Average         14         2,600         1,393         20         57         8,840         353         13,279         33         63         79           2010 January         10         2,288         1,344         26         57         8,372         R 407         R 12,542         79         R 67         R 93         R 7           February         10         R 2,464         1,343         25         66         8,430         R 804         R 12,542         79         R 67         R 93         R 7           February         10         R 2,464         1,343         22         67         8,640         R 405         13,235         R 24         69         41         R         A9													156	
November 10 2,579 1,352 25 57 8,751 335 13,109 27 42 42 10   December 15 2,531 1,372 24 56 8,776 440 13,215 33 54 41   Average 14 2,600 1,393 20 57 8,840 353 13,279 33 63 79    2010 January 10 2,328 1,344 26 57 8,372 8407 812,542 79 867 893 8;   February 10 82,464 1,343 25 66 8,430 8364 812,702 830 69 38 8 8   April 17 2,763 1,410 18 64 8,950 846 813,235 824 69 41 8   April 17 2,763 1,410 18 64 8,950 846 813,690 823 862 840 8   May 15 2,762 1,446 18 62 9,003 839 813,685 833 864 866 8   June 18 2,837 1,543 19 75 9,149 823 813,965 41 78 8105 ;   July 20 82,827 1,494 19 69 9,139 8401 813,969 42 81 8105 ;   July 20 82,827 1,486 20 63 9,095 8317 813,940 34 863 898   September 20 2,873 1,457 20 66 8,954 8384 813,775 829 862 861   October 15 82,784 1,430 21 62 8,859 8373 813,543 825 56 837 8   November 11 2,7701 1,396 21 60 8,663 849 813,281 820 850 850 836 8   November 12 2,655 1,383 26 55 8,756 8354 813,281 820 850 83   November 12 2,655 1,383 26 55 8,756 8354 813,281 80 63 67 8   Average 15 82,716 1,432 21 64 8,836 838 813,281 830 850 83   March 19 2,773 1,389 22 72 8,598 8424 813,281 83 65 867 8    2011 January 14 2,485 1,355 26 66 8,266 8461 812,277 27 873 38   March 19 2,773 1,389 22 72 8,598 8424 813,227 27 873 38   March 19 2,773 1,389 22 72 8,598 8424 813,227 27 873 38   May 18 2,822 1,429 19 58 8,632 8377 813,355 29 49 841 8   July 18 2,821 1,451 19 64 8,610 8474 813,373 831 49 846 8   March 19 2,773 1,389 22 72 8,598 8424 813,227 27 873 38   May 18 2,822 1,429 19 58 8,632 8377 813,355 29 49 841 8   July 18 2,838 1,417 20 61 8,601 372 13,321 25 63 34    Pebruary 18 2,838 1,417 20 61 8,601 372 13,321 25 63 34   P-Month Average 15 2,760 1,439 21 62 8,628 374 13,300 31 65 44													136	
December													111	
Average 14 2,600 1,393 20 57 8,840 353 13,279 33 63 79  2010 January 10 2,328 1,344 26 57 8,372 R407 R12,542 79 R67 R93 R5 February 10 R2,464 1,343 25 66 8,430 R364 R12,702 R30 69 38 R5 March 14 2,645 1,443 22 67 8,640 R405 13,235 R24 69 41 R4 April 17 2,763 1,410 18 64 8,950 R468 R13,690 R23 R62 R40 R405 May 15 2,762 1,446 18 62 9,003 R379 R13,685 R33 R64 R66 R5 June 18 2,837 1,543 19 75 9,149 R323 R13,965 41 78 R105 M40 M40 M405 M405 M405 M405 M405 M405	December	15			24	56	8,776	440		33	54	41	128	
February 10 R 2,464 1,343 25 66 8,430 R 364 R 12,702 R 30 69 38 R AMarch 14 2,645 1,443 22 67 8,640 R 405 13,235 R 24 69 41 R April 17 2,763 1,410 18 64 8,950 R 468 R 13,690 R 23 R 62 R 40 R May 15 2,762 1,446 18 62 9,003 R 379 R 13,685 R 33 R 64 R 66 R June 18 2,837 1,543 19 75 9,149 R 323 R 13,965 41 78 R 105 July 20 R 2,827 1,494 19 69 9,139 R 401 R 13,969 42 R 81 R 120 R 3 August 14 2,945 1,486 20 63 9,095 R 317 R 13,940 34 R 63 R 88 September 20 2,873 1,457 20 66 8,954 R 384 R 13,775 R 29 R 62 R 61 October 15 R 2,784 1,430 21 62 8,859 R 373 R 13,543 R 25 56 R 37 R November 11 2,701 1,396 21 60 8,663 R 429 R 13,281 R 30 R 50 35 December 12 2,655 1,383 26 55 8,756 R 354 R 13,441 60 63 67 R 6		14	2,600	1,393	20	57	8,840	353	13,279	33	63	79	175	
March       14       2,645       1,443       22       67       8,640       R 405       13,235       R 24       69       41       R. April         April       17       2,763       1,410       18       64       8,950       R 468       R 13,690       R 23       R 62       R 40       R         May       15       2,762       1,446       18       62       9,003       R 379       R 13,685       R 33       R 64       R 66       R         June       18       2,837       1,543       19       75       9,149       R 323       R 13,965       41       78       R 105       2         July       20       R 2,827       1,494       19       69       9,139       R 401       R 13,960       42       R 81       R 105       2         August       14       2,945       1,486       20       63       9,095       R 317       R 13,940       34       R 63       R 98         September       20       2,873       1,457       20       66       8,954       R 384       R 13,775       R 29       R 62       R 61         October       15       R 2,784       1,430       21													R 239	
April       17       2,763       1,410       18       64       8,950       R 468       R 13,690       R 23       R 62       R 40       R R May         May       15       2,762       1,446       18       62       9,003       R 379       R 13,685       R 33       R 64       R 66       R         June       18       2,837       1,543       19       75       9,149       R 323       R 13,965       41       78       R 105       2         July       20       R 2,827       1,494       19       69       9,139       R 401       R 13,969       42       R 81       R 120       R:         August       14       2,945       1,486       20       63       9,095       R 317       R 13,940       34       R 63       R 98         September       20       2,873       1,457       20       66       8,954       R 384       R 13,775       R 29       R 62       R 61         October       15       R 2,784       1,430       21       62       8,859       R 373       R 13,241       R 30       R 25       56       R 37       R         November       12       2,655       1,383 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>K 364</td> <td></td> <td>K 30</td> <td></td> <td></td> <td>R 138</td>								K 364		K 30			R 138	
May       15       2,762       1,446       18       62       9,003       R 379       R 13,685       R 33       R 64       R 66       R 705         June       18       2,837       1,543       19       75       9,149       R 323       R 13,965       41       78       R 105       1         July       20       R 2,827       1,494       19       69       9,139       R 401       R 13,969       42       R 81       R 120       R 28         August       14       2,945       1,486       20       63       9,095       R 317       R 13,940       34       R 63       R 98       September       20       2,873       1,457       20       66       8,954       R 384       R 13,775       R 29       R 62       R 61       October       15       R 2,784       1,430       21       62       8,859       R 373       R 13,543       R 25       56       R 37       R November       11       2,701       1,396       21       60       8,663       R 429       R 13,241       60       63       67       R Average       15       R 2,776       1,432       21       64       8,836       R 34       R 13,468       R 38								N 405		R 24	69 R 60	41 R 40	<sup>R</sup> 134 <sup>R</sup> 125	
June         18         2,837         1,543         19         75         9,149         R 323         R 13,965         41         78         R 105         2           July         20         R 2,827         1,494         19         69         9,139         R 401         R 13,969         42         R 81         R 120         R 2           August         14         2,945         1,486         20         63         9,095         R 317         R 13,940         34         R 63         R 98           September         20         2,873         1,457         20         66         8,954         R 384         R 13,775         R 29         R 62         R 61           October         15         R 2,784         1,430         21         62         8,859         R 373         R 13,543         R 25         56         R 37         R 50         R 25         56         R 37         R 50         R 29         R 62         R 61         R 61         R 62         R 61         R 61         R 62         R 61         R 62         R 61         R 61         R 62         R									R 13,690	R 23	6∠ R.6.4	** 40 R 66	R 164	
July         20         R 2,827         1,494         19         69         9,139         R 401         R 13,969         42         R 81         R 120         R 2,784           August         14         2,945         1,486         20         63         9,095         R 317         R 13,940         34         R 63         R 98           September         20         2,873         1,457         20         66         8,954         R 384         R 13,775         R 29         R 62         R 61           October         15         R 2,784         1,430         21         62         8,859         R 373         R 13,543         R 25         56         R 37         R 50           November         11         2,701         1,396         21         60         8,663         R 429         R 13,281         R 30         R 50         35           December         12         2,655         1,383         26         55         8,756         R 354         R 13,241         60         63         67         R           Average         15         R 2,716         1,432         21         64         8,836         R 384         R 13,468         R 38         65									R 13 065				224	
August 14 2,945 1,486 20 63 9,095 8317 813,940 34 863 898 September 20 2,873 1,457 20 66 8,954 8384 813,775 829 862 861 October 15 82,784 1,430 21 62 8,859 8373 813,543 825 56 837 8 November 11 2,701 1,396 21 60 8,663 8429 813,281 830 850 35 December 12 2,655 1,383 26 55 8,756 8354 813,441 60 63 67 8 Average 15 8,2716 1,432 21 64 8,836 8384 813,468 838 65 867 87 8			R 2 827					R 401	R 13 969		R 81	R 120	R 244	
September         20         2,873         1,457         20         66         8,954         R 384         R 13,775         R 29         R 62         R 61           October         15         R 2,784         1,430         21         62         8,859         R 373         R 13,543         R 25         56         R 37         R 13,043         R 25         56         R 37         R 13,281         R 30         R 50         35         R 50								R 317	R 13,940	34	R 63	R 98	196	
October         15         R2,784         1,430         21         62         8,859         R373         R13,543         R25         56         R37         R. November           November         11         2,701         1,396         21         60         8,663         R 429         R13,281         R 30         R 50         35           December         12         2,655         1,383         26         55         8,756         R 354         R 13,241         60         63         67         R           Average         15         R2,716         1,432         21         64         8,836         R 384         R 13,468         R 38         65         R 67           2011 January         14         2,485         1,355         26         66         8,266         R 461         R 12,673         40         81         R 57         R 5         February         13         2,524         1,343         23         59         8,497         R 482         R 12,943         31         67         R 36         R 6           March         19         2,703         1,389         22         72         8,598         R 424         R 13,227         27         R 73	September	20	2,873		20	66		<sup>R</sup> 384	R 13,775	R 29	R 62	<sup>R</sup> 61	153	
November         11         2,701         1,396         21         60         8,663         R 429         R 13,281         R 30         R 50         35           December         12         2,655         1,383         26         55         8,756         R 354         R 13,281         R 30         R 50         35         R 60         63         67         R 67         R 7           Average         15         R 2,716         1,432         21         64         8,836         R 384         R 13,468         R 83         65         R 67         R 65           2011 January         14         2,485         1,355         26         66         8,266         R 461         R 12,673         40         81         R 57         R 7           February         13         2,524         1,343         23         59         8,497         R 482         R 12,943         31         67         R 36         R 7           March         19         2,703         1,389         22         72         8,598         R 424         R 13,227         27         R 73         38         A 7           April         7         2,749         1,451         19         64	October		R 2,784	1,430	21	62	8,859	R 373	R 13,543	R 25	56		R 118	
Average         15         R 2,716         1,432         21         64         8,836         R 384         R 13,468         R 38         65         R 67           2011 January         14         2,485         1,355         26         66         8,266         R 461         R 12,673         40         81         R 57         R 57           February         13         2,524         1,343         23         59         8,497         R 482         R 12,943         31         67         R 36         R 36         R 36           March         19         2,703         1,389         22         72         8,598         R 424         R 13,227         27         R 73         38           April         7         2,749         1,451         19         64         8,610         R 474         R 13,373         R 31         49         R 46         R 40           May         18         2,822         1,429         19         58         8,632         R 377         R 13,355         29         49         R 41         R 42           July         18         2,816         1,466         19         54         8,894         R 360         R 13,393         37 <td></td> <td>11</td> <td>2,701</td> <td></td> <td></td> <td></td> <td>8,663</td> <td>R 429</td> <td></td> <td>R 30</td> <td>R 50</td> <td>35</td> <td>_ 114</td>		11	2,701				8,663	R 429		R 30	R 50	35	_ 114	
2011 January 14 2,485 1,355 26 66 8,266 R 461 R 12,673 40 81 R 57 R February 13 2,524 1,343 23 59 8,497 R 482 R 12,943 31 67 R 36 R March 19 2,703 1,389 22 72 8,598 R 424 R 13,227 27 R 73 38 April 7 2,749 1,451 19 64 8,610 R 474 R 13,373 R 31 49 R 46 R 40 May 18 2,822 1,429 19 58 8,632 R 377 R 13,355 29 49 R 41 R 2,000 M 17 R 2,928 1,545 19 58 8,889 R 360 R 13,815 R 32 62 44 R 3 July 18 2,816 1,466 19 54 8,804 R 216 R 13,393 37 R 75 52 August 18 2,899 1,555 19 65 8,752 R 217 R 13,586 26 R 65 R 45 R 5 September 13 2,838 1,417 20 61 8,601 372 13,321 25 63 34 9-Month Average 15 2,760 1,439 21 62 8,628 374 13,300 31 65 44			2,655 R <b>2 716</b>					R 354 R <b>384</b>	R 13,241 R <b>13 468</b>	60 R <b>38</b>		67 R <b>67</b>	R 189 <b>170</b>	
February       13       2,524       1,343       23       59       8,497       R 482       R 12,943       31       67       R 36       R         March       19       2,703       1,389       22       72       8,588       R 424       R 13,227       27       R 73       38         April       7       2,749       1,451       19       64       8,610       R 474       R 13,373       R 31       49       R 46       R         May       18       2,822       1,429       19       58       8,632       R 377       R 13,355       29       49       R 41       R         June       17       R 2,928       1,545       19       58       8,889       R 360       R 13,815       R 32       62       44       R         July       18       2,816       1,466       19       54       8,804       R 216       R 13,393       37       R 75       52         August       18       2,959       1,555       19       65       8,752       R 217       R 13,586       26       R 65       R 45       R         September       13       2,838       1,417       20       61 <t< td=""><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	_													
March     19     2,703     1,389     22     72     8,598     R 424     R 13,227     27     R 73     38       April     7     2,749     1,451     19     64     8,610     R 474     R 13,373     R 31     49     R 46     R 4       May     18     2,822     1,429     19     58     8,632     R 377     R 13,355     29     49     R 41     R 2       June     17     R 2,928     1,545     19     58     8,889     R 360     R 13,815     R 32     62     44     R 3       July     18     2,816     1,466     19     54     8,804     R 216     R 13,393     37     R 75     52       August     18     2,959     1,555     19     65     8,752     R 217     R 13,586     26     R 65     R 65     R 65     R 65     R 5       September     13     2,838     1,417     20     61     8,601     372     13,321     25     63     34       9-Month Average     15     2,760     1,439     21     62     8,628     374     13,300     31     65     44	2011 January												R 177	
April       7       2,749       1,451       19       64       8,610       R 474       R 13,373       R 31       49       R 46       R 8         May       18       2,822       1,429       19       58       8,632       R 377       R 13,355       29       49       R 41       R 2         June       17       R 2,928       1,545       19       58       8,889       R 360       R 13,815       R 32       62       44       R 3         July       18       2,816       1,466       19       54       8,804       R 216       R 13,393       37       R 75       52         August       18       2,959       1,555       19       65       8,752       R 217       R 13,586       26       R 65       R 45       R 5         September       13       2,838       1,417       20       61       8,601       372       13,321       25       63       34         9-Month Average       15       2,760       1,439       21       62       8,628       374       13,300       31       65       44								" 482 R 424					R 134	
May     18     2,822     1,429     19     58     8,632     R 377     R 13,355     29     49     R 41     R 2       June     17     R 2,928     1,545     19     58     8,889     R 360     R 13,815     R 32     62     44     R 32       July     18     2,816     1,466     19     54     8,804     R 216     R 13,393     37     R 75     52       August     18     2,959     1,555     19     65     8,752     R 217     R 13,586     26     R 65     R 45     R       September     13     2,838     1,417     20     61     8,601     372     13,321     25     63     34       9-Month Average     15     2,760     1,439     21     62     8,628     374     13,300     31     65     44								·· 424 R л <b>7</b> л	13,221 R 13 272	R 21		38 R 16	137 <sup>R</sup> 126	
June     17     R 2,928     1,545     19     58     8,889     R 360     R 13,815     R 32     62     44     R       July     18     2,816     1,466     19     54     8,804     R 216     R 13,393     37     R 75     52       August     18     2,959     1,555     19     65     8,752     R 217     R 13,586     26     R 65     R 45     R       September     13     2,838     1,417     20     61     8,601     372     13,321     25     63     34       9-Month Average     15     2,760     1,439     21     62     8,628     374     13,300     31     65     44								R 377	R 13 355	29		R <b>41</b>	R 119	
July									R 13,815				R 138	
August     18     2,959     1,555     19     65     8,752     R 217     R 13,586     26     R 65     R 45     R 5       September     13     2,838     1,417     20     61     8,601     372     13,321     25     63     34       9-Month Average     15     2,760     1,439     21     62     8,628     374     13,300     31     65     44									R 13,393			52	163	
September       13       2,838       1,417       20       61       8,601       372       13,321       25       63       34         9-Month Average       15       2,760       1,439       21       62       8,628       374       13,300       31       65       44									R 13,586		R 65	R 45	R 135	
9-Month Average 15 2,760 1,439 21 62 8,628 374 13,300 31 65 44					20					25		34	123	
2040 0 Marsh Average 45 2.740 4.444 24 65 9.002 202 42.500 20 60 74													139	
	2010 9-Month Average	15	2,718	1,441	21	65	8,862	383	13,506	38	68	74	180 192	

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

<sup>b</sup> 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 int fuel capty participations in field is included in

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.

Sources: See end of section.

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

<sup>d</sup> Finished motor gasoline. Beginning in 1993, also includes fuel ethanol

blended into motor gasoline.

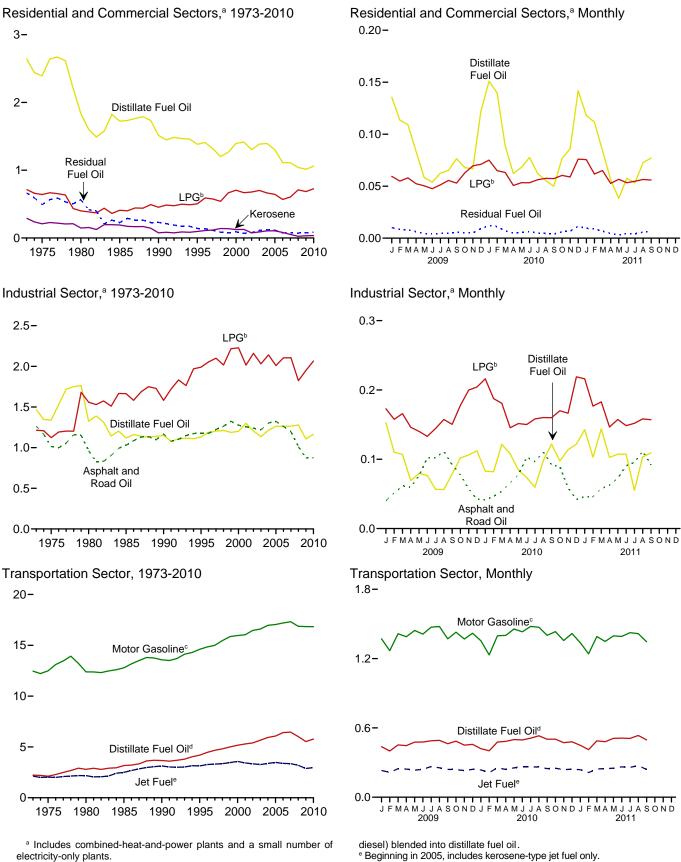
<sup>e</sup> Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small

amounts of kerosene and jet fuel.

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

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

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



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

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.

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

<sup>&</sup>lt;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)

Fuel Oil   Kerosene   Gases   Total   Fuel Oil   Kerosene   Gases   Gasoline <sup>b</sup>   Coke   Fuel Oil   1973 Total   2,003   227   570   2,800   644   65   147   87   NA   665   1875 Total   1,807   161   512   2,479   587   49   129   89   NA   492   1980 Total   1,316   107   311   1,734   518   41   88   107   NA   565   1980 Total   1,902   159   314   1,565   631   33   95   96   NA   228   1990 Total   978   64   352   1,394   536   12   102   111   0   230   1995 Total   995   74   395   1,374   479   22   109   18   (s)   141   1996 Total   926   89   469   1,484   483   21   122   27   (s)   137   1397 Total   874   93   455   444   483   21   122   27   (s)   137   1398 Total   976   9			χιοια	nmercial Sec	Con		ial Sector	Resident				
1975 Total	Total	Residual Fuel Oil			Petroleum	Kerosene		Total	Petroleum	Kerosene		
1975 Total	1.607	CCE	NA	07	147	e E	644	2 900	570	227	2 002	1072 Total
1980 Total	1,346											
1986 Total	1,318											
1990 Total 978 64 352 1,394 556 12 102 111 0 230 1995 Total 995 Total 995 Total 995 Total 996 74 395 1,374 479 22 109 18 (s) 141 1996 Total 926 89 469 1,484 483 21 122 27 (s) 137 1997 Total 877 4 393 455 1,422 444 25 1120 43 (s) 111 1998 Total 772 108 424 1,304 429 31 118 39 (s) 85 1995 Total 905 95 555 1,554 491 30 150 45 (s) 92 2001 Total 905 95 555 1,554 491 30 150 45 (s) 92 2001 Total 906 95 556 1,552 50 1,554 491 30 150 45 (s) 92 2001 Total 906 95 556 1,552 9508 31 143 37 (s) 70 2002 Total 860 60 537 1,457 444 16 141 45 (s) 80 2003 Total 924 85 512 1,520 470 20 152 45 (s) 122 2005 Total 884 451 3 1,451 447 22 131 46 (s) 110 2004 Total 924 85 512 1,520 470 20 152 45 (s) 122 2005 Total 884 513 1,451 447 22 131 46 (s) 116 2006 Total 712 66 446 1,224 401 15 123 49 (s) 75 2007 Total 669 21 553 1,243 372 4 158 46 (s) 73 2009 January 80 6 47 134 555 1 12 4 (s) 8 (s) 73 2009 January 80 6 47 134 155 1 12 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 4 (s) 8 April 49 92 2 42 93 34 (s) 11 5 5 (s) 10 4 (s) 8 April 49 92 2 42 93 34 (s) 11 5 5 (s) 10 4 (s) 8 April 49 92 2 42 93 34 (s) 11 5 5 (s) 10 4 (s) 7 5 April 49 92 2 42 93 34 (s) 11 5 5 (s) 10 4 (s) 8 April 49 92 2 42 93 34 (s) 11 5 5 (s) 10 5 (s) 6 (s) 6 (s) 7 7 6 (s) 6 (s) 7 7 6 (s) 6 (s) 7 7 6 (s) 7 7 6 (s) 7 7 7 7 7	1,083											1985 Total
1995 Total 905 74 395 1,374 479 22 109 18 (s) 141 1996 Total 926 89 469 1,484 483 21 122 27 (s) 137 1997 Total 874 93 455 1,422 444 25 120 43 (s) 111 1998 Total 772 108 424 1,304 429 31 118 39 (s) 85 1999 Total 828 111 526 1,465 438 27 140 28 (s) 73 2000 Total 905 95 555 1,554 491 30 150 45 (s) 92 2001 Total 908 95 526 1,529 508 31 143 37 (s) 80 2003 Total 905 70 544 1,519 481 19 157 60 (s) 111 2004 Total 905 864 45 1,519 481 19 157 60 (s) 111 2004 Total 905 512 12 152 45 (s) 122 2005 Total 854 84 513 1,451 447 22 131 46 (s) 1200 Total 905 70 544 1,519 481 19 157 60 (s) 111 2006 Total 712 66 446 1,224 401 15 123 49 (s) 75 2007 Total 66 466 21 152 44 11 15 123 49 (s) 75 2007 Total 66 46 1,244 401 15 123 49 (s) 75 2007 Total 66 46 47 134 555 1 1 12 4 (s) 80 484 120 14 15 15 15 15 15 15 15 15 15 15 15 15 15	991											
1996 Total 926 89 469 1,484 483 21 122 27 (s) 137 197 Total 874 493 455 1,422 444 25 120 43 (s) 111 1998 Total 772 108 424 1,304 429 31 118 39 (s) 85 1999 Total 828 111 526 1,465 438 27 140 28 (s) 73 2000 Total 905 95 555 1,554 491 30 150 45 (s) 92 201 Total 906 860 60 537 1,457 444 16 141 45 (s) 80 2003 Total 995 70 544 1,519 481 19 157 60 (s) 111 2004 Total 924 85 512 1,520 470 20 152 45 (s) 122 205 Total 8860 460 1537 1,457 444 16 141 45 (s) 80 2005 Total 924 85 512 1,520 470 20 152 45 (s) 112 2005 Total 8864 48 151 1,481 447 22 131 46 (s) 116 2005 Total 712 66 446 1,224 401 15 123 49 (s) 75 2007 Total 669 21 553 1,243 372 4 158 46 (s) 75 2008 January 80 6 47 134 555 1 12 2 4 (s) 10 February 67 5 44 116 46 1 11 4 (s) 8 8 April 49 49 2 42 93 34 4 (s) 11 4 (s) 8 April 49 49 2 42 93 34 4 (s) 11 4 (s) 8 April 49 49 2 42 93 34 4 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 2 42 93 34 (s) 11 4 (s) 8 April 49 49 43 3 55 2 40 77 24 (s) 10 5 0 5 August 39 1 44 4 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 8 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 8 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 8 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 8 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 8 84 27 (s) 11 5 5 (s) 5 5 August 39 1 44 8 8 25 (s) 11 5 5 (s) 5 5 August 39 1 4 4 6 8 8 22 (s) 11 5 5 (s) 5 5 August 39 1 4 4 6 8 8 22 (s) 11 5 5 (s) 6 6 August 39 1 4 4 6 8 8 22 (s) 11 5 5 (s) 6 August 39 1 4 4 6 8 8 22 (s) 11 5 5 (s) 6 August 39 1 4 4 6 8 8 22 (s)	769											
1997 Total	790											
1999 Total	743	111		43	120	25				93	874	
2000 Total 905 95 555 1,554 491 30 150 45 (s) 92 201 Total 908 95 526 1,529 508 31 143 37 (s) 70 202 Total 860 60 537 1,457 444 16 141 45 (s) 80 203 Total 905 70 544 1,519 481 19 157 60 (s) 111 2004 Total 924 85 512 1,520 470 20 152 45 (s) 122 205 Total 864 84 513 1,451 447 22 131 46 (s) 116 2005 Total 712 66 446 1,224 401 15 123 49 (s) 75 2007 Total 772 66 44 484 1,224 401 15 123 49 (s) 75 2007 Total 669 21 553 1,243 372 4 158 46 (s) 156 46 (s) 166 47 134 55 (s) 122 45 (s) 150	702	85	(s)	39	118	31	429	1,304	424	108	772	1998 Total
2000 Total 905 95 555 1,554 491 30 150 45 (s) 92 201 Total 908 95 526 1,529 508 31 143 37 (s) 70 202 Total 860 60 537 1,457 444 16 141 45 (s) 80 2003 Total 905 70 544 1,519 481 19 157 60 (s) 111 2004 Total 924 85 512 1,520 470 20 152 45 (s) 122 2005 Total 864 48 4513 1,451 447 22 131 46 (s) 1206 Total 712 66 446 1,224 401 15 123 49 (s) 75 2007 Total 772 66 44 484 1,254 384 9 121 61 (s) 75 2007 Total 666 46 47 134 55 1 123 49 (s) 75 2008 Total 669 21 553 1,243 372 4 158 46 (s) 73 2009 January 80 66 6 47 134 55 1 12 4 4 (s) 10 February 67 5 44 1116 46 1 11 4 4 (s) 8 April 49 2 42 99 3 34 (s) 11 4 4 (s) 18 April 49 2 2 42 99 3 34 (s) 11 4 4 (s) 14 (s) 18 August 33 5 2 40 77 24 (s) 10 5 0 4 4 July 37 (s) 37 (s) 41 78 25 (s) 10 4 0 4 July 37 (s) 37 (s) 41 78 25 (s) 10 4 0 0 5 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0	707		(s)									1999 Total
2002 Total	807											2000 Total
2003 Total   905   70   544   1,519   481   19   157   60   (s)   111   2004 Total   924   85   512   1,520   470   20   152   45   (s)   122   2005 Total   854   84   513   1,521   447   22   131   46   (s)   116   2006 Total   712   66   446   1,224   401   15   123   49   (s)   75   75   2007 Total   669   21   553   1,243   372   4   158   46   (s)   75   73   75   75   75   75   75   75	790											
2004 Total	726											2002 Total
2005 Total         854         84         513         1,451         447         22         131         46         (s)         116           2006 Total         712         66         446         1,224         401         15         123         49         (s)         75           2007 Total         726         44         484         1,254         384         9         121         61         (s)         75           2009 January         80         6         47         134         55         1         12         4         (s)         10           February         67         5         44         116         46         1         11         4         (s)         8           March         65         2         46         113         44         (s)         12         4         (s)         8           April         49         2         42         93         34         (s)         11         4         (s)         8           April         49         2         42         93         34         (s)         11         4         (s)         8           May         35         5<	828											
2006 Total         712         66         446         1,224         401         15         123         49         (s)         75           2007 Total         669         21         553         1,243         384         9         121         61         (s)         75           2008 Total         669         21         553         1,243         372         4         158         46         (s)         73           2009 January         80         6         47         134         55         1         12         4         (s)         10           February         67         5         44         116         46         1         11         4         (s)         8           April         49         2         42         93         34         (s)         11         4         0         6           May         35         2         40         77         24         (s)         10         5         0         4           June         32         1         38         71         22         (s)         10         5         0         5           August         39         1	810											
2007 Total         726         44         484         1/254         384         9         121         61         (s)         75           2008 Total         669         21         553         1,243         372         4         158         46         (s)         73           2009 January         80         6         47         134         55         1         12         4         (s)         18           March         65         2         46         113         44         (s)         12         4         (s)         8         8           April         49         2         42         29         33         34         (s)         11         4         0         6         May         35         2         40         77         24         (s)         10         5         0         4           July         37         (s)         41         78         25         (s)         10         4         0         4           July         37         (s)         41         78         25         (s)         10         4         0         4         0         4           July	762 664											
2008 Total         669         21         553         1,243         372         4         158         46         (s)         73           2009 January         80         6         47         134         55         1         12         4         (s)         10           February         67         5         44         116         46         1         11         4         (s)         8           March         65         2         46         113         44         (s)         11         4         (s)         8           April         49         2         42         93         34         (s)         11         4         0         6           May         35         2         40         77         24         (s)         10         5         0         4           June         32         1         38         71         22         (s)         10         4         0         4           June         32         1         44         84         27         (s)         11         4         (s)         6           August         39         1         44 <th< td=""><td>651</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	651											
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February 67 5 44 116 46 1 11 4 (s) 8 March 65 2 46 113 44 (s) 12 4 (s) 8 March 65 2 46 113 44 (s) 11 4 0 6 6 May 35 2 40 77 24 (s) 11 4 0 6 4 0 4 4 July 35 2 1 38 71 22 (s) 10 4 0 4 0 4 July 37 (s) 41 78 25 (s) 10 5 0 5 0 5 0 5 0 0 5 0 0 0 0 0 0 0 0	83	10	(0)	4	10	1	55	124	47	6	90	2000 January
March         65         2         46         113         44         (s)         12         4         (s)         8           April         49         2         42         93         34         (s)         11         4         0         6           May         35         2         40         77         24         (s)         10         5         0         4           June         32         1         38         71         22         (s)         10         4         0         4           July         37         (s)         41         78         25         (s)         10         4         0         4           August         39         1         44         84         27         (s)         11         5         (s)         5           September         45         -1         42         87         31         (s)         11         4         (s)         6           October         40         3         55         98         27         (s)         11         4         (s)         5           December         72         4         57         133	71											
April	69											
May         35         2         40         77         24         (s)         10         5         0         4           June         32         1         38         71         22         (s)         10         4         0         4           July         37         (s)         41         78         25         (s)         10         4         0         4           August         39         1         44         84         27         (s)         11         5         (s)         5           September         45         -1         42         87         31         (s)         11         4         (s)         6           October         40         3         55         98         27         (s)         11         4         (s)         6           November         40         3         55         98         27         (s)         14         4         (s)         5           December         72         4         57         133         50         1         14         4         (s)         9           2010 January         90         2         60         1	55											
June         32         1         38         71         22         (s)         10         4         0         4           July         37         (s)         41         78         25         (s)         10         5         0         4           August         39         1         44         84         27         (s)         11         5         (s)         5           September         45         -1         42         87         31         (s)         11         4         (s)         6           October         40         3         50         93         28         (s)         13         5         0         5           November         40         3         55         98         27         (s)         14         4         (s)         5           December         72         4         57         133         50         1         14         4         (s)         9           Total         602         28         547         1,176         413         4         139         53         (s)         76           2010         January         90         2	43											
July         37         (s)         41         78         25         (s)         10         5         0         5           August         39         1         44         84         27         (s)         11         5         (s)         5           September         45         -1         42         87         31         (s)         11         4         (s)         6           October         40         3         50         93         28         (s)         13         5         0         5           November         40         3         55         98         27         (s)         14         4         (s)         5           December         72         4         57         133         50         1         14         4         (s)         5           Total         602         28         547         1,176         413         4         139         53         (s)         76           2010 January         90         2         60         151         61         (s)         15         4         (s)         12           February         83         4         52<	40											
August         39         1         44         84         27         (s)         11         5         (s)         5           September         45         -1         42         87         31         (s)         11         4         (s)         6           October         40         3         50         93         28         (s)         113         5         0         5           November         40         3         55         98         27         (s)         14         4         (s)         5           December         72         4         57         133         50         1         14         4         (s)         9           Total         602         28         547         1,176         413         4         139         53         (s)         76           2010 January         90         2         60         151         61         (s)         15         4         (s)         12           February         83         4         52         139         57         1         13         4         (s)         11           March         53         2         5	45			5								
September         45         -1         42         87         31         (s)         11         4         (s)         6           October         40         3         50         93         28         (s)         13         5         0         5           November         40         3         55         98         27         (s)         14         4         (s)         9           December         72         4         57         133         50         1         14         4         (s)         9           Total         602         28         547         1,176         413         4         139         53         (s)         76           2010 January         90         2         60         151         61         (s)         15         4         (s)         12           February         83         4         52         139         57         1         13         4         (s)         11           March         53         2         50         105         36         (s)         13         4         (s)         11           March         53         4         5	47		(s)	5	11		27	84	44		39	
October         40         3         50         93         28         (s)         13         5         0         5           November         40         3         55         98         27         (s)         14         4         (s)         5           December         72         4         57         133         50         1         14         4         (s)         5           Total         602         28         547         1,176         413         4         139         53         (s)         76           2010 January         90         2         60         151         61         (s)         15         4         (s)         12           February         83         4         52         139         57         1         13         4         (s)         11           March         53         2         50         105         36         (s)         13         4         (s)         17           April         37         1         40         78         25         (s)         10         4         (s)         7           May         40         1         43	52	6		4	11		31	87	42	-1	45	September
December         72         4         57         133         50         1         14         4         (s)         9           Total         602         28         547         1,176         413         4         139         53         (s)         76           2010 January         90         2         60         151         61         (s)         15         4         (s)         12           February         83         4         52         139         57         1         13         4         (s)         11           March         53         2         50         105         36         (s)         13         4         (s)         11           March         53         2         50         105         36         (s)         13         4         (s)         11           May         40         1         43         84         28         (s)         11         5         0         5           June         46         2         42         90         32         (s)         11         5         0         5           June         46         2         42	50	5	Ô	5	13	(s)	28	93	50	3	40	October
Total         602         28         547         1,176         413         4         139         53         (s)         76           2010 January         90         2         60         151         61         (s)         15         4         (s)         12           February         83         4         52         139         57         1         13         4         (s)         11           March         53         2         50         105         36         (s)         13         4         (s)         7           April         37         1         40         78         25         (s)         10         4         (s)         5           May         40         1         43         84         28         (s)         11         5         0         5           June         46         2         42         90         32         (s)         11         5         0         6           July         37         3         45         84         25         (s)         11         5         0         5           August         33         1         46         8	51		(s)			(s)						November
2010 January         90         2         60         151         61         (s)         15         4         (s)         12           February         83         4         52         139         57         1         13         4         (s)         11           March         53         2         50         105         36         (s)         13         4         (s)         7           April         37         1         40         78         25         (s)         10         4         (s)         5           May         40         1         43         84         28         (s)         11         5         0         5           June         46         2         42         90         32         (s)         11         5         0         6           July         37         3         45         84         25         (s)         11         5         0         5           August         33         1         46         80         23         (s)         12         5         (s)         4           September         30         1         46         76 <td>78</td> <td></td> <td></td> <td>•</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>December</td>	78			•		1						December
February         83         4         52         139         57         1         13         4         (s)         11           March         53         2         50         105         36         (s)         13         4         (s)         7           April         37         1         40         78         25         (s)         10         4         (s)         7           May         40         1         43         84         28         (s)         11         5         0         5           June         46         2         42         90         32         (s)         11         5         0         6           July         37         3         45         84         25         (s)         11         5         0         6           August         33         1         46         80         23         (s)         12         5         (s)         4           September         30         1         46         76         20         (s)         12         4         (s)         4           October         45         2         48         96	685	76	(s)	53	139	4	413	1,176	547	28	602	Total
March         53         2         50         105         36         (s)         13         4         (s)         7           April         37         1         40         78         25         (s)         10         4         (s)         5           May         40         1         43         84         28         (s)         11         5         0         5           June         46         2         42         90         32         (s)         11         5         0         6           July         37         3         45         84         25         (s)         11         5         0         5           August         33         1         46         80         23         (s)         12         5         (s)         4           September         30         1         46         76         20         (s)         12         4         (s)         4           October         45         2         48         96         31         (s)         12         4         (s)         7           December         51         6         47         104	93		(s)			(s)					90	2010 January
April       37       1       40       78       25       (s)       10       4       (s)       5         May       40       1       43       84       28       (s)       11       5       0       5         June       46       2       42       90       32       (s)       11       5       0       5         June       46       2       42       90       32       (s)       11       5       0       0       6         June       37       3       45       84       25       (s)       11       5       0       0       6         July       33       1       46       80       23       (s)       11       5       0       0       5         August       30       1       46       76       20       (s)       12       4       (s)       4         September       30       1       46       76       20       (s)       12       4       (s)       4         November       51       6       47       104       35       1       12       4       (s)       7         De	86					1						February
May         40         1         43         84         28         (s)         11         5         0         5           June         46         2         42         90         32         (s)         11         5         0         6           July         37         3         45         84         25         (s)         11         5         0         6           August         33         1         46         80         23         (s)         12         5         (s)         4           September         30         1         46         76         20         (s)         12         4         (s)         4           October         45         2         48         96         31         (s)         12         5         (s)         6           November         51         6         47         104         35         1         12         4         (s)         7           December         84         7         61         151         58         1         15         4         (s)         11           Total         628         31         580         1,239 <td>61</td> <td></td>	61											
June     46     2     42     90     32     (s)     11     5     0     6       July     37     3     45     84     25     (s)     11     5     0     5       August     33     1     46     80     23     (s)     12     5     (s)     4       September     30     1     46     76     20     (s)     12     4     (s)     4       October     45     2     48     96     31     (s)     12     5     (s)     6       November     51     6     47     104     35     1     12     4     (s)     7       December     84     7     61     151     58     1     15     4     (s)     11       Total     628     31     580     1,239     431     5     147     53     (s)     84       2011 January     70     2     60     132     48     (s)     15     4     (s)     9       February     66     6     49     121     45     1     12     4     (s)     9       March     50     3     52     105	45											
July     37     3     45     84     25     (s)     11     5     0     5       August     33     1     46     80     23     (s)     12     5     (s)     4       September     30     1     46     76     20     (s)     12     4     (s)     4       October     45     2     48     96     31     (s)     12     5     (s)     6       November     51     6     47     104     35     1     12     4     (s)     7       December     84     7     61     151     58     1     15     4     (s)     11       Total     628     31     580     1,239     431     5     147     53     (s)     84       2011 January     70     2     60     132     48     (s)     15     4     (s)     9       February     66     6     49     121     45     1     12     4     (s)     9       March     50     3     52     105     34     1     13     4     (s)     7	49		-									
August     33     1     46     80     23     (s)     12     5     (s)     4       September     30     1     46     76     20     (s)     12     4     (s)     4       October     45     2     48     96     31     (s)     12     5     (s)     6       November     51     6     47     104     35     1     12     4     (s)     7       December     84     7     61     151     58     1     15     4     (s)     11       Total     628     31     580     1,239     431     5     147     53     (s)     84       2011 January     70     2     60     132     48     (s)     15     4     (s)     9       February     66     6     49     121     45     1     12     4     (s)     9       March     50     3     52     105     34     1     13     4     (s)     9	53											
September         30         1         46         76         20         (s)         12         4         (s)         4           October         45         2         48         96         31         (s)         12         5         (s)         6           November         51         6         47         104         35         1         12         4         (s)         7           December         84         7         61         151         58         1         15         4         (s)         11           Total         628         31         580         1,239         431         5         147         53         (s)         84           2011 January         70         2         60         132         48         (s)         15         4         (s)         9           February         66         6         49         121         45         1         12         4         (s)         9           March         50         3         52         105         34         1         13         4         (s)         9	47											
October         45         2         48         96         31         (s)         12         5         (s)         6           November         51         6         47         104         35         1         12         4         (s)         7           December         84         7         61         151         58         1         15         4         (s)         11           Total         628         31         580         1,239         431         5         147         53         (s)         84           2011 January         70         2         60         132         48         (s)         15         4         (s)         9           February         66         6         49         121         45         1         12         4         (s)         9           March         50         3         52         105         34         1         13         4         (s)         7	44 41									•		
November         51         6         47         104         35         1         12         4         (s)         7           December         84         7         61         151         58         1         15         4         (s)         11           Total         628         31         580         1,239         431         5         147         53         (s)         84           2011 January         70         2         60         132         48         (s)         15         4         (s)         9           February         66         6         49         121         45         1         12         4         (s)         9           March         50         3         52         105         34         1         13         4         (s)         9	54											
December       84       7       61       151       58       1       15       4       (s)       11         Total       628       31       580       1,239       431       5       147       53       (s)       84         2011 January       70       2       60       132       48       (s)       15       4       (s)       9         February       66       6       49       121       45       1       12       4       (s)       9         March       50       3       52       105       34       1       13       4       (s)       7	59											
Total     628     31     580     1,239     431     5     147     53     (s)     84       2011 January     70     2     60     132     48     (s)     15     4     (s)     9       February     66     6     49     121     45     1     12     4     (s)     9       March     50     3     52     105     34     1     13     4     (s)     7	90									-		December
February         66         6         49         121         45         1         12         4         (s)         9           March         50         3         52         105         34         1         13         4         (s)         7	721			53								
February         66         6         49         121         45         1         12         4         (s)         9           March         50         3         52         105         34         1         13         4         (s)         7	77	a	(e)	А	15	(e)	18	132	60	2	70	2011 January
March	72											February
	59											
AVIII	42	4	0	4	11	(s)	23	76	42	1	33	April
May	35		-							•		
June	43		-							1		
July	42			5						1		
August	51									1		
September	53		0	4	11					2	46	
9-Month Total 397 17 424 838 272 3 108 39 (s) 53	475			39								
2010 9-Month Total 447 17 424 888 307 3 108 40 (s) 60	518	60	(s)	40	108	3	307	888	424	17	447	2010 9-Month Total
2009 9-Month Total	506											

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

blended into motor gasoline.

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

Notes: • Data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption

Sources: See end of section.

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.

Table 3.8b Heat Content of Petroleum Consumption: Industrial Sector

(Trillion Btu)

					Industri	al Sector <sup>a</sup>				
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>b</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>c</sup>	Total
1973 Total	1,264	1,469	156	1,215	195	255	558	1,858	2,114	9,083
1975 Total	1.014	1,339	119	1.123	149	223	540	1,509	2.109	8,127
1980 Total	962	1,324	181	1,559	182	158	516	1,349	3,278	9.509
1985 Total	1.029	1,119	44	1,664	166	218	575	748	2,152	7,714
1990 Total	1,170	1,150	12	1,582	186	185	714	411	2,839	8,251
1995 Total	1,178	1,131	15	1,990	178	200	721	337	2,837	8,588
1996 Total	1,176	1,187	18	2,054	173	200	757	335	3,121	9,020
1997 Total	1,224	1,203	19	2,100	182	212	727	291	3,298	9,256
1998 Total	1,263	1,211	22	2,016	191	199	858	230	3,093	9,083
1999 Total	1,324	1,187	13	2,217	193	152	936	207	3,129	9,357
2000 Total	1,276	1,200	16	2,228	190	150	796	241	2,979	9,076
2001 Total	1,257	1,300	23	2,014	174	295	858	203	3,056	9,181
2002 Total	1,240	1,204	14	2,160	172	309	842	190	3,040	9,171
2003 Total	1,220	1,136	24	2,030	159	324	825	220	3,264	9,202
2004 Total	1,304	1,214	28	2,141	161	372	934	249	3,428	9,831
2005 Total	1,323	1,264	39	2,009	160	356	889	281	3,318	9,640
2006 Total	1,261	1,263	30	2,104	156	376	934	239	3,416	9,780
2007 Total	1,197	1,265	13	2,106	161	306	906	193	3,313	9,461
2008 Total	1,012	1,277	4	1,823	150	250	868	198	2,941	8,523
2009 January	40	153	1	173	12	20	67	13	247	725
February	51	110	1	158	8	18	60	8	214	629
March	62	107	(s)	166	11	21	64	11	208	649
April	59	69	(s)	146	12	20	78	12	209	606
May	76	79	(s)	140	10	21	81	9	206	623
June	102	77	(s)	133	12	20	84	10	208	646
July	102	57	(s)	144	12	21	56	5	236	634
August	111	56	(s)	157	13	21	63	7	220	650
September	92	79	(s)	150	12	20	72	6	234	665
October	78	102	(s)	178	12	21	54	8	218	670
November	57	106	(s)	200	11	20	57	8	192	651
December	42	112	1	204	11	21	62	11	219	682
Total	873	1,107	4	1,950	135	244	799	106	2,611	7,829
2010 January	42	83	(s)	216	11	20	<sup>R</sup> 38	<sup>R</sup> 10	215	635
February	46	82	1	188	12	18	_ 45	9	202	_ 602
March	54	122	(s)	181	13	20	<sup>R</sup> 67	10	252	<sup>R</sup> 718
April	66	108	(s)	145	12	20	58	10	251	672
May	78	84	(s)	151	12	21	51	R 9	240	648
June	103	74	(s)	150	14	21	60	R 7	237	R 667
July	97	60	(s)	158	14	21	57	R 9 R 7	242	R 658
August	110	98	(s)	160	12	21	69	•	259	R 738
September	92 89	122 <sup>R</sup> 98	(s)	160 170	13 12	20 21	67 52	9 9	227	<sup>R</sup> 710 666
October	89 59	114	(s)	166	12	20		9 10	215 227	669
November	42	122	1	219	12	20	61 57	R g	233	R 714
December Total	878	1,165	5	2,065	149	244	6 <b>82</b>	R 109	2,800	R 8,097
	40	,	(-)	,	40	40	50	R 4.4	•	744
<b>2011</b> January	46	143	(s)	216	13	19	53	R 11	239	741
February	46 50	103	1	177	11	18	36 50	10	202	603 <sup>R</sup> 737
March	58	144	•	183	14	20	50	10	259	<sup>R</sup> 737
April	63	103	(s)	147	12 12	20 20	55 68	11 9	234 199	
May	73 91	107 107	(s) (s)	157 149	12 11	20	68 59	9 8	199 236	646 <sup>R</sup> 681
June	91 95	55	(-)	152	11	20 21	59 53	8 R 5	236 260	653
July	95 112	103	(s)	152	13	21	53 72	**5 R 5	260 227	8711
August September	92	103	(s) (s)	157	12	20	72 54	5 8	208	659
9-Month Total	674	974	3	1,495	108	178	500	, 77	2,065	6,075
		-	_	,				24		
2010 9-Month Total 2009 9-Month Total	688 696	832 787	3 3	1,509 1,368	115 101	183 183	511 626	81 80	2,126 1,982	6,048 5,826

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

Notes: • Data are estimates. • For total heat content of petroleum consumption Notes. • Data are estimates. • Portocal near content to perfore minimal performance of the state Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973.

Sources: See end of section.

rindustrial sector fuel use, including that at industrial combined-real-and-power (CHP) and industrial electricity-only plants.

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

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

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

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

				Transporta	ion Secto	r			E	lectric Po	wer Sectora	
	Aviation Gasoline	Distillate Fuel Oil <sup>b</sup>	Jet Fuel <sup>c</sup>	Liquefied Petroleum Gases	Lubri- cants	Motor Gasoline	Residual Fuel Oil	Total	Distillate Fuel Oile	Petro- leum Coke	Residual Fuel Oil <sup>f</sup>	Total
1973 Total	83	2,222	2,131	49	163	12,455	727	17,832	273	15	3,226	3,515
1975 Total	71	2,121	2,029	43	155	12,485	711	17,615	226	2	2,937	3,166
1980 Total	64	2,795	2,179	18	172	12,383	1,398	19,009	169	5	2,459	2,634
1985 Total	50	3,170	2,497	30	156	12,784	786	19,472	85	7	998	1,090
1990 Total	45 40	3,661 4.195	3,129 3,132	23 18	176 168	13,575 14.607	1,016 911	21,626 23,070	97 108	30 81	1,163 566	1,289 755
1995 Total 1996 Total	40 37	4,195 4,469	3,132	16	163	14,837	851	23,648	109	80	628	817
1997 Total	40	4.672	3,308	14	172	14,999	712	23,918	111	102	715	927
1998 Total	35	4.812	3.357	18	180	15,463	674	24,538	136	124	1.047	1.306
1999 Total	39	5,001	3,462	14	182	15,855	665	25,219	140	112	959	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	837 906	27,645	115 74	243 214	876	1,235
2006 Total	33 32	6,414 6.457	3,379 3,358	27 22	147 152	17,197 17,321	906 994	28,105 28,335	89	171	361 397	648 657
2007 Total 2008 Total	28	6,020	3,193	40	141	16,872	920	27,214	73	154	240	468
2009 January	2	437	231	2	11	1,371	88	2,142	11	12	38	61
February	1	400	215	2	8	1,269	48	1,943	6	11	15	33
March	2	453	247	2	10	1,415	84	2,214	7	14	13	34
April	2	446	244	2	11	1,389	99	2,194	5	12	11	28
May	2	477	234	2	9	1,444	57	2,225	6	13	14	32
June	3	478 489	242	2	11	1,412	78 26	2,226	5 5	13	15	33
July	3 2	489 492	265 255	2 2	11 13	1,472 1,477	36 61	2,278 2,302	5	13 13	16 19	34 37
August September	3	463	241	2	11	1,477	41	2,302	4	13	12	29
October	2	485	239	3	11	1,428	70	2,239	5	8	13	26
November	1	451	230	3	10	1,370	63	2,129	5	8	8	20
December	2	457	241	3	10	1,420	86	2,219	6	10	8	24
Total	27	5,528	2,883	28	127	16,837	810	26,240	70	139	181	390
<b>2010</b> January	2	420	236	3	11	1,354	79	2,105	14	R 12	18	45
February	1	402	213	3	11	1,232	64	1,926	5	12	7	23
March	2	478	254	3	13	1,398	79	2,225	4	13	8	25
April May	3 2	483 499	240 254	2 2	12 12	1,401 1,456	88 <sup>R</sup> 74	2,228 2,299	6	11 12	8 13	23 31
June	3	499	263	2	14	1,430	R 61	R 2,299	7	14	20	41
July	3	511	263	2	13	1,478	R 78	R 2,348	8	15	R 23	46
August	2	532	261	2	12	1,471	R 62	R 2,342	6	12	19	37
September	3	502	248	2	12	1,402	72	2,241	5	11	12	28
October	2	503	251	2	12	1,433	R 73	2,276	R 4	10	7	22
November	2	472	238	2	11	1,356	81	R 2,162	5	9	7	21
December	2	479	243	3	10	1,416	_R 69	2,223	11	_ 12	_ 13	36
Total	27	5,776	2,963	30	141	16,830	R <b>880</b>	R 26,646	80	R <b>144</b>	R <b>154</b>	378
<b>2011</b> January	2	449	238	3	12	1,337	R 90	R 2,132	7	15	11	R 33
February	2	412 488	213 244	3 3	10 14	1,241 1,391	85 <sup>R</sup> 83	R 1,966 R 2,225	5 5	11 14	<sup>R</sup> 6	23 26
March	3 1	488 480	244 247	2	14	1,391	R 89	R 2,225	R 5	9	Rg	R 23
April May	3	510	247 251	2	11	1,346	73	2,179	5	9	9	22
June	3	R 510	263	2	10	1,390	R 68	R 2,249	R 6	11	8	R 25
July	3	508	258	2	10	1,424	42	R 2.248	7	14	10	31
August	3	534	273	2	12	1,416	42	2,283	5	12	9	R 25
September	2	496	241	2	11	1,346	70	2,169	4	11	6	22
9-Month Total	21	4,389	2,228	22	102	12,291	643	19,696	49	107	75	231
2010 9-Month Total	21	4,322	2,231	22	108	12,624	658	19,986	60	113	127	300
2009 9-Month Total	21	4,135	2,173	20	95	12,619	591	19,654	55	113	152	320

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

<sup>b</sup> 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 and naphtha-type jet fuel. Beginning in 2005 includes kerosene-type and naphtha-type jet fuel.

amount of fuel oil no. 4.

R=Revised.

R=Revised.

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

Through 2004, includes kerosene-type and napritira-type jet ruei. Deginining in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Industrial Sector Other" on Table 3.8b.

d Finished motor gasoline.

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

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

<sup>f</sup> Fuel oil nos. 5 and 6. 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

#### 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 3.6 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 "Other" petroleum products sources for Table 3.5). 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."

1981–2010: EIA, Petroleum Supply Annual.

2011: 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**

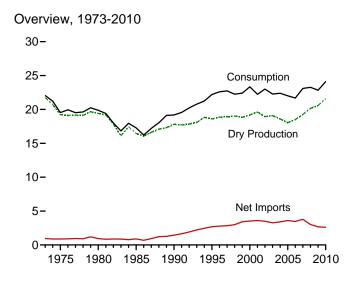
Transportation sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Transportation Sector" in Table 3.8c. Electric power sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Electric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

## **Natural Gas**

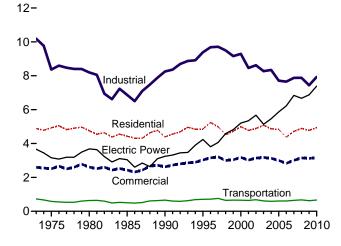


Natural gas pipeline, El Paso County, Texas. Source: U.S. Department of Energy.

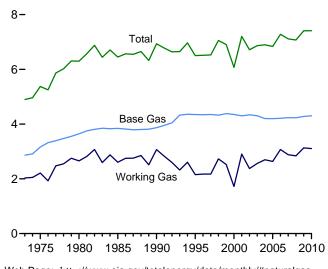
Figure 4.1 Natural Gas (Trillion Cubic Feet)



### Consumption by Sector, 1973-2010

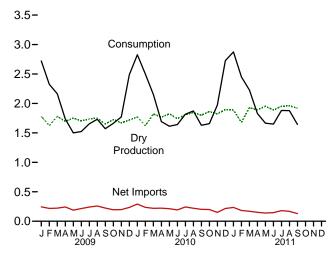


### Underground Storage, End of Year, 1973-2010



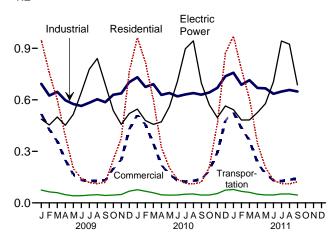
Web Page: http://www.eia.gov/totalenergy/data/monthly/#naturalgas. Sources: Tables 4.1, 4.3, and 4.4.

### Overview, Monthly



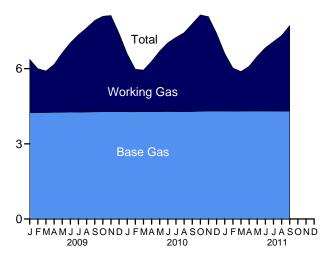
### Consumption by Sector, Monthly

1.2-



### Underground Storage, End of Month

9-



**Table 4.1 Natural Gas Overview** 

(Billion Cubic Feet)

	0	Manhatad			Supple-		Trade		Net		
	Gross With- drawals <sup>a</sup>	Marketed Production (Wet) <sup>b</sup>	Extraction Loss <sup>c</sup>	Dry Gas Production <sup>d</sup>	mental Gaseous Fuels <sup>e</sup>	Imports	Exports	Net Imports	Storage With- drawals <sup>f</sup>	Balancing Item <sup>g</sup>	Consump- tion <sup>h</sup>
1973 Total	24,067	<sup>j</sup> 22,648	917	<sup>j</sup> 21,731	NA	1,033	77	956	-442	-196	22,049
1975 Total	21,104	<sup>i</sup> 20,109	872	<sup>i</sup> 19,236	NA	953	73	880	-344	-235	19,538
1980 Total	21,870	20,180	777	19,403	155	985	49	936	23	-640	19,877
1985 Total	19,607	17,270	816	16,454	126	950	55	894	235	-428	17,281
1990 Total	21,523	18,594	784	17,810	123	1,532	86	1,447	-513	307	<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	3,586	163	3,422	172	-119	22,405
2000 Total	24,174	20,198	1,016	19,182	90	3,782	244	3,538	829	-306	23,333
2001 Total	24,501	20,570	954	19,616	86	3,977	373	3,604	-1,166	99	22,239
2002 Total	23,941	19,885	957	18,928	68	4,015	516	3,499	468	44	23,007
2003 Total	24,119	19,974	876	19,099	68	3,944	680	3,264	-197	44	22,277
2004 Total	23,970	19,517	927	18,591	60	4,259	854	3,404	-114	448	22,389
2005 Total	23,457	18,927	876	18,051	64	4,341	729	3,612	52	232	22,011
2006 Total	23,535	19,410	906	18,504	66	4,186	724	3,462	-436	89	21,685
2007 Total	24,664	20,196	930	19,266	63	4,608	822	3,785	192	-209	23,097
2008 Total	25,636	21,112	953	20,159	61	3,984	963	3,021	34	-7	23,268
2009 January	2,249	1,867	89	1,779	6	357	113	244	719	-27	2,721
February	2,071	1,701	81	1,621	5	322	103	218	380	101	2,325
March	2,257	1,869	89	1,781	6	325	104	221	98	58	2,164
April	2,143	1,779	84	1,694	5	322	80	242	-257	51	1,736
May	2,186	1,838	87	1,751	6	266	77	189	-475	29	1,499
June	2,137	1,788	85	1,703	5	282	66	216	-393	-8	1,523
July	2,166	1,823	86	1,737	5	317	76	240	-345	15	1,653
August	2,189	1,839	87	1,752	6	337	79	258	-280	-4	1,731
September	2,086	1,731	82	1,649	5	307	84	223	-301	-6	1,570
October	2,195	1,813	86	1,727	5	273	78	195	-172	-94	1,662
November	2,139	1,752	83	1,669	5	295	97	198	-36	-66	1,771
December	2,196	1,802	85	1,717	5	350	115	234	707	-180	2,484
Total	26,013	21,604	1,024	20,580	65	3,751	1,072	2,679	-355	-130	22,840
2010 January	2,225	E 1,850	80	E 1,770	6	385	94	291	812	R -52	R 2,827
February	2,051	E 1,697	75	E 1,622	6	324	88	236	620	R 14	R 2,498
March	2,304	E 1,906	84	E 1,821	6	319	100	219	36	R 70	R 2,152
April	2,208	E 1,847	81	E 1,766	5	298	76	223	-355	54	1,692
May	2,251	E 1,909	85	E 1,824	4	298	86	212	-409	<sup>R</sup> -18	R 1,613
June	2,142	E 1,820	80	E 1,740	6	282	90	192	-321	R 24	R 1,641
July	2,194	E 1,891	81	E 1,810	6	329	86	243	-227	<sup>R</sup> -16	R 1,816
August	2,231	E 1,928	84	E 1,844	6	305	84	221	-186	R -11	R 1,873
September	2,241	<sup>E</sup> 1,883	83	<sup>E</sup> 1,800	6	282	79	202	-353	26	1,629
October	2,333	E 1,948	86	E 1,861	6	295	96	199	-352	R -57	R 1,657
November	2,284	E 1,907	84	E 1,823	6	273	124	150	74	R -79	<sup>R</sup> 1,973
December	2,394	_ <sup>E</sup> 1,984	87	_ <sup>E</sup> 1,897	5	352	135	217	666	R -58	R 2,726
Total	26,858	E 22,569	992	E 21,577	67	3,741	1,137	2,604	5	<sup>R</sup> -155	R 24,099
2011 January	2,309	E 1,972	85	E 1,887	6	371	136	235	799	R -53	R 2,875
February	2,109	E 1,752	73	E 1,679	6	308	125	183	584	-2	2.450
March	2,423	E 2,020	91	E 1.928	6	314	145	170	145	R -22	R 2.227
April	2,363	E 1,979	88	E 1,891	5	278	127	152	-212	R -8	<sup>R</sup> 1.827
May	2,420	E 2,046	94	E 1.953	3	271	132	139	-398	R -33	R 1.664
June	2,330	E 1,977	89	E 1.888	5	265	120	146	-340	<sup>R</sup> -49	R 1 649
July	2,344	E 2,044	92	E 1.952	5	293	113	179	-244	<sup>R</sup> -11	<sup>R</sup> 1,881
August	R 2,371	RE 2,051	92	RE 1 959	5	279	111	R 168	-244	R -9	R 1,878
September	2,374	E 2,008	88	E 1,919	5	256	127	129	-398	-11	1,644
9-Month Total	21,043	E 17,848	793	E 17,056	46	2,635	1,135	1,500	-309	-197	18,096
2010 9-Month Total	19,847	E 16,730	734	E 15,997	50	2,821	782	2,039	-382	39	17,742
2009 9-Month Total	19,483	16,236	770	15,467	49	2,834	782	2,052	-854	210	16,923

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

b Gross withdrawals minus repressuring, nonhydrocarbon gases removed, and

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

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

Notes: • 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: 1973-2005—U.S. Energy Information Administration (EIA), Natural Gas Annual, annual reports.

2006 forward—EIA, Natural Gas Monthly, November 2011. Table 1. 2011, Table 1.

vented and flared. See Note 1, "Natural Gas Production," at end of section.

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

d Marketed production (wet) minus extraction loss.

See Note 3, "Supplemental Gaseous Fuels," at end of section.

Net withdrawals from underground storage. For 1980-2009, also includes net

withdrawals of liquefied natural gas in above-ground tanks. See Note 4, "Natural Gas Storage," at end of section.

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

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

May include unknown quantities of nonhydrocarbon gases.

Table 4.2 Natural Gas Trade by Country

(Billion Cubic Feet)

					Imports					Exports				
					Imports							Lxports		
	Algeriaa	Canada <sup>b</sup>	Egypta	<b>Mexico</b> b	Nigeriaa	Qatara	Trinidad and Tobago <sup>a</sup>	Othera,c	Total	Canada <sup>b</sup>	Japana	Mexico <sup>b</sup>	Othera,d	Total
1973 Total	3	1.028	0	2	0	0	0	0	1.033	15	48	14	0	77
1975 Total	5	948	ŏ	ō	ŏ	ŏ	Ŏ	ŏ	953	10	53	9	ŏ	73
1980 Total	86	797	0	102	0	0	0	0	985	0	45	4	0	49
1985 Total	24	926	0	0	0	0	0	0	950	0	53	2	0	55
1990 Total	84	1,448	0	0	0	0	0	0	1,532	17	53	16	0	86
1995 Total	18	2,816	0	7	0	0	0	0	2,841	28	65	61	0	154
1996 Total	35	2,883	0	14	0	0	0	5	2,937	52	68	34	0	153
1997 Total	66	2,899	0	17	0	0	0	12	2,994	56	62	38	0	157
1998 Total	69 76	3,052 3,368	0	15 55	0	20	0 51	17 17	3,152 3,586	40 39	66 64	53 61	0 0	159 163
1999 Total 2000 Total	47	3,544	0	12	13	46	99	21	3,782	73	66	106	0	244
2000 Total	65	3,729	ŏ	10	38	23	98	14	3,762	167	66	141	0	373
2002 Total	27	3,785	Ô	2	8	35	151	8	4,015	189	63	263	Ö	516
2003 Total	53	3,437	ŏ	ō	50	14	378	11	3.944	271	66	343	ŏ	680
2004 Total	120	3,607	ŏ	ŏ	12	12	462	46	4,259	395	62	397	ŏ	854
2005 Total	97	3,700	73	9	8	3	439	11	4,341	358	65	305	Ô	729
2006 Total	17	3,590	120	13	57	0	389	0	4,186	341	61	322	0	724
2007 Total	77	3,783	115	54	95	18	448	18	4,608	482	47	292	2	822
2008 Total	0	3,589	55	43	12	3	267	15	3,984	559	39	365	0	963
2009 January	0	324	5	6	0	0	19	3	357	84	2	28	0	113
February	0	293	6	(s)	0	0	16	6	322	75	3	25	0	103
March	0	293	12	1	0	0	17	3	325	77	3	24	0	104
April	0	259	22	7	8 0	0	20 31	6 3	322 266	55	2	23 29	0 0	80 77
May June	0	216 230	15 14	1 1	0	0	34	3	266 282	46 37	2	29 28	0	66
July	0	270	14	2	3	0	21	6	317	42	4	31	0	76
August	0	299	17	3	0	0	17	0	337	45	2	32	0	79
September	ő	274	14	1	2	Õ	15	Ö	307	47	4	33	Ö	84
October	Ö	244	15	2	0	Ö	13	Ö	273	47	2	29	Ö	78
November	0	258	12	(s)	0	8	17	0	295	66	2	29	0	97
December	0	311	14	3	0	4	17	0	350	81	4	28	3	115
Total	0	3,271	160	28	13	13	236	29	3,751	701	31	338	3	1,072
2010 January	0	327	17	1	0	12	22	6	385	68	2	23	0	94
February	0	277	12	1	0	6	16	12	324	60	2	22	3	88
March	0	276	9	5	3 9	1 9	16	9	319	77	2 4	21	0	100
April	0	252 257	6 9	5 4	9	0	15 16	3 3	298 298	50 55	2	22 29	0	76 86
May June	0	248	6	2	11	0	11	5 5	296 282	51	2	34	3	90
July	0	291	6	1	5	0	17	8	329	50	4	32	0	86
August	Õ	282	Ö	1	0	0	17	5	305	49	2	33	Ö	84
September	Ö	250	6	3	3	Ö	16	3	282	50	7	23	Ö	79
October	0	257	3	4	2	5	15	9	295	63	2	25	6	96
November	0	242	0	(s)	0	9	14	9	273	84	2	30	8	124
December	0	322	0	1	0	4	15	9	352	82	3	38	12	135
Total	0	3,280	73	30	42	46	190	81	3,741	739	33	333	32	1,137
2011 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	0	275	6	(s)	0	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	235 238	3	(s)	0	24	8	0	271	80	3	44 47	6 0	132 120
June	0	238 272	6 0	(s)	0	5	11	6	265 293	71	2 0	47 47	3	
July August	0	R 249	0	(s) (s)	2	5 8	13 11	3 9	293 279	64 67	2	47 42	0	113 111
September	0	235	0	(S) (S)	0	o 4	8	9	279 256	77	2	39	8	127
9-Month Total	0	2, <b>357</b>	29	1	2	76	98	71	2,635	702	16	376	41	1,135
2010 9-Month Total 2009 9-Month Total	0 0	2,459 2,458	70 120	25 22	39 13	28 0	146 191	54 29	2,821 2,834	510 507	26 23	240 252	6 0	782 782

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."
• 1988-2008: EIA, Natural Gas Annual, annual reports. • 2009 forward: EIA, Natural Gas Monthly, November 2011, Table 4; and U.S. Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

 <sup>&</sup>lt;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 1996-2009; Vermen in 2010 and 2011; and 2014; and

<sup>1996-2000;</sup> Yemen in 2010 and 2011; and Other (unassigned) in 2004.

d Brazil in 2010 and 2011; China in 2011; India in 2010 and 2011; Russia in 2007; South Korea in 2009-2011; Spain in 2010 and 2011; and United Kingdom in 2010 and 2011.

Table 4.3 Natural Gas Consumption by Sector

(Billion Cubic Feet)

	End-Use Sectors											
					Industrial			Tr	ansportatio	n	1	
		_		(	Other Industria	al		Pipelinesd		<u> </u>	Electric	
	Resi- dential	Com- mercial <sup>a</sup>	Lease and Plant Fuel	CHPb	Non-CHP <sup>c</sup>	Total	Total	and Dis- tribution <sup>e</sup>	Vehicle Fuel	Total	Power Sector <sup>f,g</sup>	Total
1973 Total	4,879 4,924	2,597 2,508	1,496 1,396	(h) (h)	8,689 6,968	8,689 6,968	10,185 8,365	728 583 635	NA NA	728 583	3,660 3,158	22,049 19,538
1980 Total 1985 Total 1990 Total	4,752 4,433 4,391	2,611 2,432 2,623	1,026 966 1,236	( h ) 1,055	7,172 5,901 5,963	7,172 5,901 7,018	8,198 6,867 8,255	504 660	NA NA (s)	635 504 660	3,682 3,044 3,245	19,877 17,281 19,174
1995 Total 1996 Total 1997 Total	4,850 5,241 4,984	3,031 3,158 3,215	1,220 1,250 1,203	1,258 1,289 1,282	6,906 7,146 7,229	8,164 8,435 8,511	9,384 9,685 9,714	700 711 751	5 6 8	705 718 760	4,237 3,807 4,065	22,207 22,609 22,737
1998 Total 1999 Total 2000 Total	4,520 4,726 4,996	2,999 3,045 3,182	1,173 1,079 1,151	1,355 1,401 1,386	6,965 6,678 6,757	8,320 8,079 8,142	9,493 9,158 9,293	635 645 642	9 12 13	645 657 655	4,588 4,820 5,206	22,246 22,405 23,333
2001 Total 2002 Total 2003 Total	4,771 4,889 5,079	3,023 3,144 3,179	1,119 1,113 1,122	1,310 1,240 1,144	6,035 6,267 6,007	7,344 7,507 7,150	8,463 8,620 8,273	625 667 591	15 15 18	640 682 610	5,342 5,672 5,135	22,239 23,007 22,277
2004 Total 2005 Total 2006 Total	4,869 4,827 4,368	3,129 2,999 2,832	1,098 1,112 1,142	1,191 1,084 1,115	6,052 5,514 5,398	7,243 6,597 6,512	8,341 7,709 7,654	566 584 584	21 23 24	587 607 608	5,464 5,869 6,222	22,389 22,011 21,685
2007 Total 2008 Total	4,722 4,892	3,013 3,153	1,226 1,220	1,050 955	5,598 5,706	6,648 6,661	7,874 7,881	621 648	25 26	646 674	6,841 6,668	23,097 23,268
2009 January	948 756 600	518 427 358	110 101 111	81 71 79	502 452 457	582 524 536	693 625 646	72 62 57	2 2 2	75 64 59	487 453 500	2,721 2,325 2,164
March April May	390 201	249 166	105 108	74 77	419 391	492 468	597 575	45 39	2 2	48 41	451 515	1,736 1,499
June July August	141 119 111	134 128 129	105 107 108	82 89 92	377 387 403	459 476 495	564 583 603	39 43 45	2 2 2	42 45 48	643 778 840	1,523 1,653 1,731
September October November	120 251 376	131 199 251	102 107 104	88 85 81	396 437 452	484 522 533	586 629 637	41 43 46	2 2 2	43 46 49	690 537 457	1,570 1,662 1,771
December Total	764 <b>4,778</b>	429 <b>3,119</b>	107 <b>1,275</b>	91 <b>990</b>	505 <b>5,177</b>	596 <b>6,167</b>	703 <b>7,442</b>	66 <b>598</b>	2 <b>29</b>	68 <b>627</b>	520 <b>6,873</b>	2,484 <b>22,840</b>
2010 January February March	961 820 600	512 456 346	E 109 E 100 E 112	90 R 80 84	532 R 495 R 495	622 575 578	731 675 691	E 74 E 65 E 56	E 3 E 3 E 3	E 77 E 68 E 59	<sup>R</sup> 546 <sup>R</sup> 480 <sup>R</sup> 457	R 2,827 R 2,498 R 2,152
April May	324 204	221 166	E 109 E 113 E 107	79 R 82 R 84	R 440 R 445 R 428	519 527	628 640	E 44 E 42 E 43	E 3 E 3 E 3	E 47 E 45 E 46	R 471 560 R 706	1,692 R 1,613
June July August	138 115 109	132 123 129	E 112 E 114	<sup>R</sup> 91 <sup>R</sup> 95	R 428 R 430	512 519 525	620 631 639	E 48 E 49	E3 E3	E 50 E 52	<sup>R</sup> 897 <sup>R</sup> 943	R 1,641 R 1,816 R 1,873
September October November	121 208 460	136 190 293	E 111 E 115 E 113	R 87 R 84 R 82	R 432 R 444 R 475	519 528 557	630 643 669	E 43 E 43 E 52	E 3 E 3	E 45 E 46 E 54	<sup>R</sup> 697 <sup>R</sup> 570 <sup>R</sup> 497	1,629 R 1,657 R 1,973
December Total	872 <b>4,931</b>	479 <b>3,183</b>	E 117 E <b>1,332</b>	R <b>1,029</b>	<sup>R</sup> 528 <sup>R</sup> <b>5,573</b>	620 <b>6,602</b>	737 <b>7,934</b>	E 71 E <b>631</b>	E 33	E 74 E <b>664</b>	<sup>R</sup> 564 <sup>R</sup> <b>7,387</b>	R 2,726 R <b>24,099</b>
2011 January February March	970 778 606	527 435 363	E 116 E 103 E 119	R 89 R 79 R 81	<sup>R</sup> 552 <sup>R</sup> 505 513	641 584 595	757 688 714	E 75 E 64 E 58	E 3 E 3	E 78 E 67 E 61	<sup>R</sup> 542 <sup>R</sup> 482 <sup>R</sup> 483	R 2,875 2,450 R 2,227
April May June	347 206 132	236 167 132	E 117 E 121 E 117	R 82 R 87 R 83	R 470 R 459 R 435	552 546 518	669 666 635	E 48 E 44 E 43	E 3 E 3 E 3	E 51 E 46 E 46	<sup>R</sup> 526 <sup>R</sup> 578 705	R 1,827 R 1,664 R 1,649
July August	112 110	127 135	E 121 E 121 E 118	R 88 R 89	R 439 R 447	527 536	648 657	E 49 E 49 E 43	E 3 E 3	E 52 E 52 E 46	R 942 R 923	R 1,881 R 1,878
September 9-Month Total	123 <b>3,384</b>	141 2,263	E 1,054	7 <b>63</b>	446 <b>4,265</b>	530 <b>5,029</b>	648 <b>6,082</b>	E 474	<sup>E</sup> 25	<sup>E</sup> 498	686 <b>5,868</b>	1,644 <b>18,096</b>
2010 9-Month Total 2009 9-Month Total	3,392 3,387	2,220 2,240	<sup>E</sup> 988 956	771 733	4,126 3,784	4,897 4,517	5,885 5,473	<sup>E</sup> 465 443	E 25 22	E 489 465	5,756 5,359	17,742 16,923

<sup>&</sup>lt;sup>a</sup> All commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Table 7.4c for CHP fuel use.
<sup>b</sup> Industrial combined-heat-and-power (CHP) and a small number of industrial

Notes: • Data are for natural gas, plus a small amount of supplemental gaseous fuels. • See Note 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 all available data beginning in 1973.

Sources: • Residential, Commercial, Lease and Plant Fuel, Other Industrial Total and Pipelines and Distribution: 1973-2005—U.S. Energy Information Administration (ElA), Natural Gas Annual (NGA), annual reports. 2006 forward—ElA, Natural Gas Monthly (NGM), November 2011, Table 2. • Industrial CHP: Table 7.4c. • Vehicle Fuel: 1990 and 1991—ElA, NGA 2000, (November 2001), Table 95. 1992-1998—ElA, "Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by multiplying by the motor gasoline conversion factor (see Table A3) and dividing by the natural gas end-use sectors conversion factor (see Table A4), 1999-2005—ElA, NGA, annual reports. 2006 forward—ElA, NGM, November 2011, Table 2. • Electric Power Sector: Table 7.4b.

electricity-only plants.

CAll industrial sector fuel use other than that in "Lease and Plant Fuel" and "CHP."

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

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

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

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

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

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

h Included in "Non-CHP."

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

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

Table 4.4 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	Natural Gas in Underground Storage, End of Period			ne Period us Year	Storage Activity			
	Base Gas	Working Gas	Totala	Volume	Percent	Withdrawals	Injections	Net <sup>b,0</sup>
973 Total	2.864	2,034	4,898	305	17.6	1,533	1.974	-442
975 Total	3,162	2,212	5,374	162	7.9	1,760	2,104	-344
	3,642	2,655	6,297	-99	-3.6	1,910	1,896	14
980 Total								
985 Total	3,842	2,607	6,448	-270	-9.4	2,359	2,128	231
990 Total	3,868	3,068	6,936	555	22.1	1,934	2,433	-499
995 Total	4,349	2,153	6,503	-453	-17.4	2,974	2,566	408
996 Total	4,341	2,173	6,513	19	.9	2,911	2,906	6
997 Total	4,350	2,175	6,525	2	.1	2,824	2,800	24
998 Total	4,326	2,730	7,056	554	25.5	2,379	2,905	-526
999 Total	4,383	2,523	6,906	-207	-7.6	2,772	2,598	174
000 Total	4,352	1,719	6,071	-806	-31.9	3,498	2,684	814
001 Total	4,301	2.904	7.204	1.185	68.9	2.309	3,464	-1.156
002 Total	4.340	2,375	6,715	-528	-18.2	3,138	2.670	468
003 Total	4,303	2,563	6,866	187	7.9	3,099	3,292	-193
	4,303 4,201	2,696		133	7.9 5.2			-113
004 Total			6,897			3,037	3,150	
005 Total	4,200	2,635	6,835	-61	-2.3	3,057	3,002	55
006 Total	4,211	3,070	7,281	435	16.5	2,493	2,924	-431
007 Total	4,234	2,879	7,113	-191	-6.2	3,325	3,133	192
008 Total	4,232	2,840	7,073	-39	-1.4	3,374	3,340	34
09 January	4,237	2,133	6,370	77	3.8	783	78	705
February	4,243	1,758	6,001	293	20.0	472	100	372
March	4,248	1,660	5,908	394	31.1	294	202	93
April	4,255	1,910	6,165	474	33.0	106	356	-251
May	4,257	2,375	6,632	535	29.1	45	512	-467
June	4,268	2,760	7,028	583	26.8	62	448	-386
July	4.263	3,090	7,354	573	22.8	83	421	-338
August	4,267	3,359	7,626	493	17.2	88	362	-274
September	4.276	3.646	7.922	485	15.3	57	352	-295
October	4.281	3.810	8.091	410	12.1	99	266	-167
November	4,288	3,837	8,125	492	14.7	140	173	-33
			7.407	290		738		-33 694
December	4,277	3,130			10.2		44	
Total	4,277	3,130	7,407	290	10.2	2,966	3,315	-349
010 January	4,278	2,319	6,597	185	8.7	877	65	812
February	4,281	1,696	5,978	-62	-3.5	660	40	620
March	4,282	1,662	5,944	3	2	240	204	36
April	4,281	2,012	6,293	102	5.4	70	425	-355
May	4,282	2,421	6,703	47	2.0	55	464	-409
June	4,289	2,741	7,030	-19	7	64	385	-321
July	4,283	2,967	7,249	-123	-4.0	114	340	-227
August	4,283	3,150	7,433	-209	-6.2	143	329	-186
September	4,287	3,500	7,787	-146	-4.0	56	409	-353
October	4,300	3,847	8,146	37	1.0	52	405	-352
November	4,304	3,773	8,077	-65	-1.7	238	163	74
December	4.305	3.107	7.412	-23	7	732	66	666
Total	4,305	3,107	7,412	-23	7	3,303	3,298	5
<b>11</b> January	4.306	2.308	6.614	-11	5	852	53	799
February	4.306	1,724	6.029	27	1.6	668	84	584
March	4,304	1,581	5,884	-82	-4.9	317	172	145
	4,304		6,096	-223	-4.9 -11.1	108	320	-212
April		1,789						
May	4,308	2,188	6,495	-234	-9.7	66	464	-398
June	4,305	2,530	6,835	-211	-7.7	90	430	-340
July	4,304	2,774	7,079	-193	-6.5	124	368	-244
August	4,304	3,020	7,323	-131	-4.1	138	382	-244
September	4,305	3,416	7,721	-84	-2.4	64	462	-398
9-Month Total						2,426	2,736	-309
10 9-Month Total						2,281	2,663	-382
09 9-Month Total						1,990	2,832	-842

For total underground storage capacity at the end of each calendar year, see
 Note 4, "Natural Gas Storage," at end of section.
 For 1980-2009, data differ from those shown on Table 4.1, which includes

available data beginning in 1973.

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

1976-1979—EIA, Natural Gas Production and Consumption 1979, Table 1.
1980-1995—EIA, Historical Natural Gas Annual 1930 Through 2000, Table 11.
1996-2005—EIA, Natural Gas Monthly (NGM), monthly issues. 2006
forward—EIA, NGM, November 2011, Table 6. • 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," and Federal Energy Regulatory Commission
(FERC), Form FERC-8, "Underground Gas Storage Report." 1979-1995—EIA,
Form EIA-191, "Underground Gas Storage Report." 1979-1995—EIA,
"Underground Gas Storage Report." 1996-2006—EIA, NGM, monthly issues. 2007
forward—EIA, NGM, November 2011, Table 6.

For 1980-2009, data differ from those shown on Table 4.1, which include liquefied natural gas storage for that period.

C Positive numbers indicate that withdrawals are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable ending stocks. See Note 4, "Natural Gas Storage," at end of section.

### **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 at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

<b>1975</b> 6,280	<b>1987</b> 8,124	1999	8,229
<b>1976</b> 6,544	<b>1988</b> 8,124	2000	8,241
<b>1977</b> 6,678	<b>1989</b> 8,120	2001	8,182
<b>1978</b> 6,890	<b>1990</b> 7,794	2002	8,207
<b>1979</b> 6,929	<b>1991</b> 7,993	2003	8,206
<b>1980</b> 7,434	<b>1992</b> 7,932	2004	8,255
<b>1981</b> 7,805	<b>1993</b> 7,989	2005	8,268
<b>1982</b> 7,915	<b>1994</b> 8,043	2006	8,330
<b>1983</b> 7,985	<b>1995</b> 7,953	2007	8,402
<b>1984</b> 8,043	<b>1996</b> 7,980	2008	8,499
<b>1985</b> 8,087	<b>1997</b> 8,332	2009	8,656
<b>1986</b> 8,145	<b>1998</b> 8,179	2010	P8,710

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 1980–2009 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 shown in EIA's Natural Gas Navigator 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-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, 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.

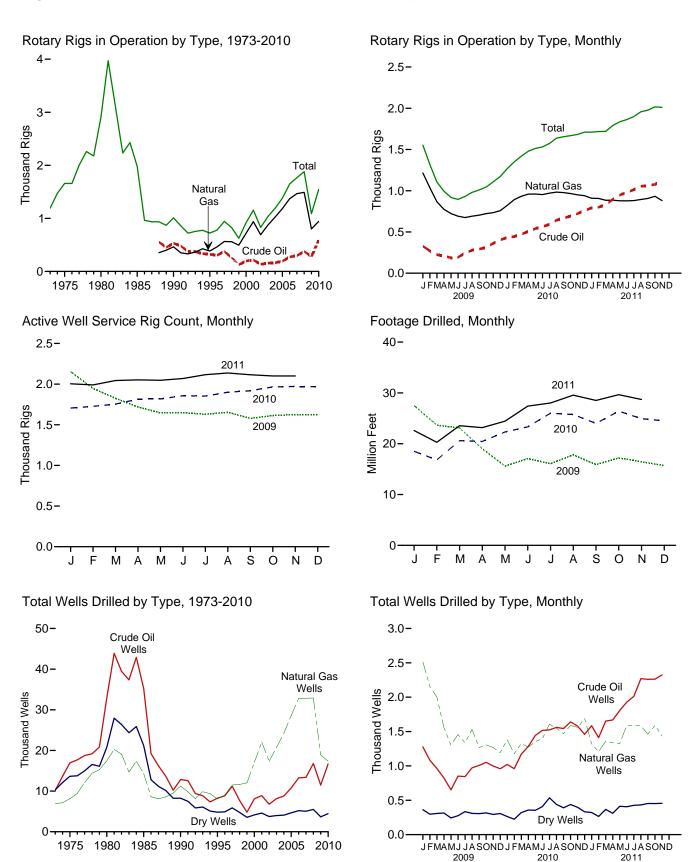
Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA NGM. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas.* 

# Crude Oil and Natural Gas Resource Development



New oil and gas drilling activity in Wyoming. Source: Dreamstime Stock Photos.

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators



Web Page: http://www.eia.gov/totalenergy/data/monthly/#crude. Sources: Tables 5.1 and 5.2.

Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements

(Number of Rigs)

		Site	By	Туре			
			_,	.,,,,		Active Well Service	
	Onshore	Offshore	Crude Oil	Natural Gas	Total <sup>b</sup>	Rig Count <sup>c</sup>	
973 Average	1,110	84	NA	NA	1,194	2,008	
975 Average	1,554	106	ŇA	NA NA	1,660	2,486	
980 Average	2,678	231	ŇA	NA NA	2,909	4,089	
985 Average	1,774	206	NA NA	NA	1,980	4,716	
990 Average	902	108	532	464	1,010	3,658	
	622	101	323	385	723	3,041	
995 Average	671	101	306	464	779	3,445	
996 Average							
997 Average	821	122	376	564	943	3,499	
998 Average	703	123	264	560	827	3,014	
999 Average	519	106	128	496	625	2,232	
000 Average	778	140	197	720	918	2,692	
001 Average	1,003	153	217	939	1,156	2,267	
002 Average	717	113	137	691	830	1,830	
003 Average	924	108	157	872	1,032	1,967	
004 Average	1,095	97	165	1,025	1,192	2,064	
005 Average	1,287	94	194	1,184	1,381	2,222	
006 Average	1,559	90	274	1,372	1,649	2,364	
007 Average	1,695	72	297	1,466	1,768	2,388	
008 Average	1,814	65	379	1,491	1,879	2,515	
<b>009</b> January	1.487	66	328	1,215	1,553	2,152	
February	1,467	57	326 271	1,037	1,320	2,152 1,947	
March	1,059	46	225	867	1,105	1,825	
	947	48	209	775	995		
April						1,718	
May	864	54	187	723	918	1,646	
June	848	47	194	691	895	1,648	
July	893	38	245	675	931	1,629	
August	949	31	279	691	980	1,653	
September	976	33	293	704	1,009	1,579	
October	1,011	33	312	722	1,044	1,613	
November	1,071	36	362	734	1,107	1,625	
December	1,136	37	404	758	1,172	1,625	
Average	1,046	44	278	801	1,089	1,722	
<b>010</b> January	1.225	42	433	822	1.267	1.706	
February	1,305	45	446	892	1,350	1,726	
March	1,368	51	471	933	1,419	1,754	
April	1.426	53	508	959	1.479	1.816	
May	1,464	49	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	
	1,619	20	644	983	1,638	1,900	
August							
September	1,635 1.647	19 21	668 693	977 966	1,655 1.668	1,918 1.965	
October							
November	1,662	22	723	950	1,683	1,971	
December Average	1,687 <b>1,514</b>	24 <b>31</b>	759 <b>591</b>	940 <b>943</b>	1,711 <b>1,546</b>	1,968 <b>1,854</b>	
_					1,0-10		
<b>011</b> 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	
April	1,762	28	896	885	1,790	2,052	
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	2,017	2,100	
11-Month Average	1,834	31	964	<b>894</b>	1,865	2,100 <b>2,070</b>	
-	,	•		644		,	
010 11-Month Average 009 11-Month Average	1,496 1,036	32 45	573 264	944 806	1,528 1,081	1,844 1,730	

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

b Sum of rigs drilling for crude oil, rigs drilling for natural gas, and other rigs (not

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: By Site—Baker Hughes, Inc., Houston, Texas, Rotary Rigs Running—by State. By Type—Baker Hughes, Inc., Houston, Texas, weekly phone recording. • Active Well Service Rig Count: Cameron International Corporation, Houston, Texas. See http://www.c-a-m.com/Forms/Product.aspx?prodID=cdc209c4-79a3-47e5-99c2-fdeda6d4aad6.

shown) drilling for miscellaneous purposes, such as service wells, injection wells, and stratigraphic tests.

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

Table 5.2 Crude Oil and Natural Gas Exploratory and Development Wells

						Wells	Drilled						
		Explo	ratory			Develo	pment			То	tal		
	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Total Footage Drilled
						Nun	nber						Thousand Feet
1973 Total 1975 Total 1980 Total 1980 Total 1980 Total 1998 Total 1995 Total 1995 Total 1996 Total 1997 Total 1998 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2007 Total 2007 Total	642 982 1,777 1,680 770 489 491 327 197 288 357 258 350 383 359 R 648 R 828	1,067 1,248 2,099 1,200 811 558 576 562 566 570 657 1,052 844 997 1,671 R 2,141 R 2,445 R 2,796 R 2,445	5,952 7,129 9,081 8,954 3,652 2,024 1,956 2,113 1,590 1,157 1,733 1,282 1,297 1,350 1,462 1,537 1,595 1,762	7,661 9,359 12,957 11,834 3,152 3,021 3,166 2,483 1,924 2,384 3,142 2,384 4,442 R 4,142 R 5,219 R 5,129	9,525 15,966 31,182 33,581 12,061 7,678 8,347 10,715 4,608 7,802 8,531 6,517 7,779 8,406 12,612 12,557 15,870	5,866 6,879 15,362 13,124 10,435 7,524 8,451 10,936 11,073 11,457 16,498 21,020 16,498 19,725 22,515 26,449 30,316 30,057	4,368 6,517 11,704 12,257 4,593 2,790 2,934 3,761 3,171 2,393 2,865 2,472 2,685 2,732 3,191 3,639 R 3,458 R 3,732	19,759 29,362 58,248 58,962 27,973 25,412 21,599 18,458 27,001 32,416 25,487 30,189 33,653 33,653 38,860 R 46,567 R 50,049	10,167 16,948 32,959 35,261 12,839 8,248 8,836 11,206 4,805 8,888 6,775 8,129 8,789 10,779 R 13,260 R 13,385 R 16,792	6,933 8,127 17,461 14,324 11,246 8,082 9,027 11,498 11,639 12,027 17,342 20,722 24,186 R 28,590 R 32,771 R 32,853 R 32,892	10,320 13,646 20,785 21,211 8,281 4,814 4,890 3,754 4,761 3,550 4,598 3,754 4,082 4,653 5,176 R 5,053 R 5,494	27,420 38,721 71,205 70,796 32,330 21,144 22,753 28,578 24,082 20,382 20,387 35,558 27,871 32,833 37,057 R 51,291 R 55,178	138,223 180,494 316,943 314,409 R 156,149 R 117,240 R 161,564 R 137,492 R 102,943 144,568 R 180,155 R 180,155 R 177,430 R 204,512 R 204,512 R 204,512 R 303,314 R 340,499
Page 1 Pa	82 59 39 50 47 44 49 62 55 40 35 <b>624</b>	R 173 R 128 R 151 77 R 97 95 103 89 R 75 87 90 101	103 92 90 97 83 75 105 88 98 80 85 89	R 358 R 282 R 300 213 R 230 217 252 226 R 235 222 215 225 R 2,975	1,196 1,021 904 786 601 804 801 924 945 R 997 R 958 R 924	2,340 2,030 1,851 1,481 1,206 1,361 R 1,234 1,441 1,192 1,219 1,178 1,093 R 17,626	260 206 R 218 218 160 200 230 221 R 208 236 209 218	3,796 3,257 R 2,973 2,485 1,967 2,365 R 2,265 2,586 R 2,345 R 2,452 R 2,452 R 2,235 R 31,071	1,278 1,083 963 825 651 851 845 973 1,007 R 1,052 R 998 R 959	R 2,513 R 2,158 R 2,002 1,558 R 1,303 1,456 R 1,337 1,530 R 1,267 1,306 1,268 1,194	363 298 R 308 315 243 275 335 309 R 306 316 294 307	R 4,154 R 3,539 R 3,273 2,698 R 2,197 2,582 R 2,517 2,812 R 2,580 R 2,674 R 2,560 R 2,460	R 27,493 R 23,640 R 23,136 F 19,021 R 15,599 R 17,077 R 16,058 R 17,819 R 15,897 R 17,196 R 17,196 R 15,685 R 15,685
Page 2010 January	59 47 62 54 55 61 49 59 73 77 69 57	96 71 82 84 112 110 103 114 83 87 122 92 <b>1,156</b>	86 69 95 81 91 199 116 97 93 130 109 74	241 187 239 219 258 270 268 270 249 294 300 223 <b>3,018</b>	963 R 913 1,109 1,231 1,389 1,457 1,476 R 1,501 R 1,471 R 1,564 R 1,510 R 1,402 R 15,986	R 1,284 R 1,105 R 1,245 R 1,189 1,241 R 1,287 1,504 1,434 1,387 R 1,503 1,439 1,597 R 16,215	R 178 155 226 277 264 309 R 420 342 297 308 288 258	R 2,425 R 2,173 R 2,580 R 2,697 2,894 R 3,053 R 3,400 R 3,277 R 3,155 R 3,237 R 3,257 R 3,257	1,022 R 960 1,171 1,285 1,444 1,518 1,525 R 1,560 R 1,544 R 1,641 R 1,579 R 1,459	R 1,380 R 1,176 R 1,327 R 1,273 1,353 R 1,397 1,607 1,548 1,470 R 1,590 1,561 1,689	R 264 224 321 358 355 408 R 536 439 390 438 397 332 R 4,462	R 2,666 R 2,360 R 2,819 R 2,916 3,152 3,323 R 3,668 R 3,547 R 3,404 R 3,537 R 3,480 R 3,537	R 18,499 R 16,826 R 20,598 20,434 R 22,312 R 23,318 R 25,993 R 25,744 R 24,000 R 26,403 R 24,930 R 24,480 R 273,537
Page 2011 January	70 64 71 76 87 89 94 111 101 103 109 <b>975</b>	83 64 75 83 84 86 78 87 91 96 81	87 64 70 62 R 90 R 82 R 97 R 98 R 110 R 110	240 192 216 R 221 R 261 R 257 R 269 R 296 R 302 R 309 308 <b>2,871</b>	R 1,514 R 1,347 R 1,581 R 1,593 R 1,720 R 1,839 R 1,918 2,158 2,159 R 2,160 2,215 <b>20,204</b>	1,239 1,143 1,285 R 1,253 R 1,244 1,503 1,509 1,497 1,371 1,493 1,354 14,891	235 201 297 248 323 324 330 334 342 338 <b>3,316</b>	R 2,988 R 2,691 R 3,163 R 3,094 R 3,287 R 3,666 R 3,757 3,989 3,874 R 3,995 3,907	R 1,584 R 1,411 R 1,652 R 1,669 R 1,807 R 1,928 R 2,012 2,269 2,260 R 2,263 2,324 <b>21,179</b>	1,322 1,207 1,360 R 1,336 R 1,328 1,589 1,587 1,584 1,462 1,589 1,435	322 265 367 310 R 413 R 406 R 427 R 432 R 454 R 452 456 <b>4,304</b>	R 3,228 R 2,883 R 3,379 R 3,315 R 3,548 R 3,923 R 4,026 R 4,285 R 4,176 R 4,304 4,215 41,282	R 22,604 R 20,290 R 23,548 R 23,161 R 24,444 R 27,406 R 28,015 R 29,554 R 28,519 R 29,643 28,703 285,887
2010 11-Month Total 2009 11-Month Total	665 589	1,064 1,165	1,066 996	2,795 2,750	14,584 9,937	14,618 16,533	3,064 2,366	32,266 28,836	15,249 10,526	15,682 17,698	4,130 3,362	35,061 31,586	249,057 209,399

R=Revised.

R=Revised.

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

<sup>&</sup>quot;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 available data beginning in 1973.

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

### 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

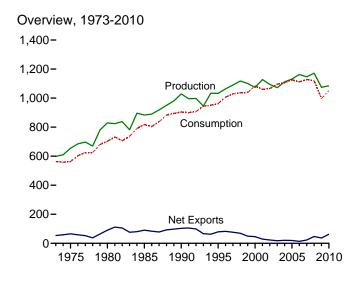
completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported well completions proved to be an inaccurate indicator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

## Coal

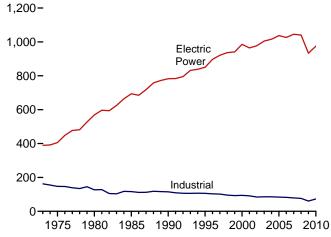


Coal yard, Curtis Bay, Maryland. Source: U.S. Department of Energy.

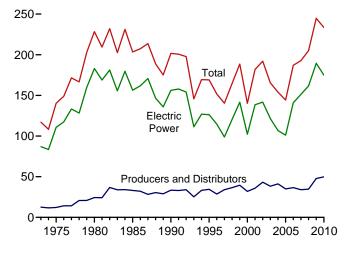
Figure 6.1 Coal (Million Short Tons)



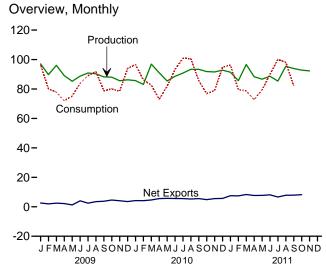




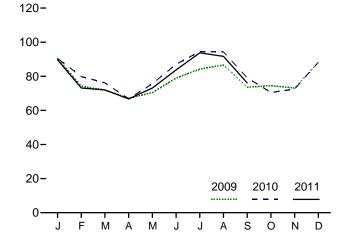
### Stocks, End of Year, 1973-2010



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



### Electric Power Sector Consumption, Monthly



## Electric Power Sector Stocks, End of Month 240-

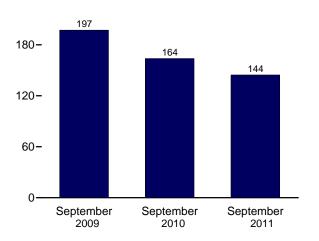


Table 6.1 Coal Overview

(Thousand Short Tons)

		Waste Coal		Trade		Stock	Losses and Unaccounted	
	Productiona	Suppliedb	Imports	Exports	Net Imports <sup>c</sup>	Changed	fore	Consumptio
1973 Total	598,568	NA	127	53,587	-53,460	(f)	f-17,476	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
000 Total	1,073,612	9,089	12,513	58,489	-45,976	-48,309	938	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
2003 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
2005 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 January	97,022	1,272	2,329	4,907	-2,578	-2,104	1,370	96,449
February	89,688	928	1,855	3,822	-1,968	7,901	626	80,121
March	96,062	1,121	2,141	4,605	-2,464	12,517	4,389	77,814
April	89,072	1,036	1,303	3,513	-2,210	13,303	2,577	72,019
May	85,236	1,065	2,283	3,552	-1,269	7,537	2,231	75,264
June	88,708	1,118	1,840	5,886	-4,045	2,746	-792	83,827
July	90,847	1,248	2,018	4,477	-2,459	-781	1,282	89,134
August	90,308	1,206	1,568	5,056	-3,488	-4,988 4.868	1,282 1.902	91,731
September	88,185	1,113	1,854	5,625	-3,771			78,757
October	88,002	1,142	1,762	6,364	-4,603	4,561	-54	80,035
November	85,564 86.229	1,164 1,252	1,506 2,179	5,586 5,703	-4,080 -3,524	2,724 -8.617	1,423 -1.252	78,502 93.826
December Total	1,074,923	13,666	22,639	59,09 <b>7</b>	-36,458	39,668	14,985	997,478
<b>010</b> January	85.711	1.187	1.665	5.866	-4.202	R -9,978	R -3.933	R 96,607
February	83,087	908	1,239	5,386	-4,146	R -6,588	R 323	R 86.115
March	96.904	1,192	1.899	6,554	-4.655	R 8.845	R 2.038	R 82.559
April	90.960	1.071	1.812	7,358	-5.545	R 11,519	R 1,858	R 73,108
May	85,401	1,138	1.475	7,220	-5,745	R 2,723	R -3.819	R 81,890
June	88.621	1,219	1,771	7,387	-5,616	R -9,407	R 331	R 93,301
July	90.795	1,273	1,390	6.928	-5.539	R -15,570	R 1.262	R 100,837
August	93.350	1,261	1.702	7.001	-5.299	R -8.837	R -2.502	R 100,651
September	93,360	1,102	1,588	7,145	-5,556	R 5,040	R -1,778	R 85,644
October	91,831	982	1,775	6,623	-4,849	R 11,425	R -292	R 76,831
November	91,558	1,121	1,473	7,015	-5,542	R 8,840	R -641	R 78,938
December	92,791	1,197	1,563	7,232	-5,669	R -9,225	R 2,718	R 94,826
Total	1,084,368	13,651	19,353	81,716	-62,363	R -11,215	R -4,435	R 1,051,307
<b>011</b> January	91,398	<sup>R</sup> 1,187	1,014	8,509	-7,496	R -11,881	R 722	R 96,248
February	85,618	R 1,030	843	8,275	-7,432	R -6,225	R 5,897	R 79,544
March	96,608	R 1,068	1,524	9,832	-8,308	R 3,605	R 7,155	R 78,607
April	88,335	R 910	1,136	8,843	-7,706	R 8,733	R-6	R 72,812
May	86,652	R 852	1,313	9,042	-7,730	R 2,033	R -1,626	R 79,367
June	88,647	R 1,109	970	9,102	-8,132	R -10,066	R 1,757	R 89,934
July	R 85,375	F 1,069	1,208	7,865	-6,657	R -18,023	R -2,200	R 100,011
August	R 95,362	F 1,069	1,545	9,387	-7,843	R -11,043	R 1,488	R 98,144
September	R 93,889	RF 1,043	835	8,723	-7,888	<sup>R</sup> 4,710	R 259	R 82,073
October	92,794	NA	R 917	R 9,159	R -8,242	NA	NA	NA
November	92,244	NA	NA	NA	NA	NA	NA	NA
11-Month Total	996,922	NA	NA	NA	NA	NA	NA	NA
010 11-Month Total 009 11-Month Total	991,577 988,694	12,454 12,414	17,789 20,460	74,484 53,394	-56,694 -32,934	-1,990 48,285	-7,153 16,237	956,481 903,651

<sup>&</sup>lt;sup>a</sup> Beginning in 2001, includes a small amount of refuse recovery (coal recaptured from a refuse mine and cleaned to reduce the concentration of

Sources: See end of section.

noncombustible materials).

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

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

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

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

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

f In 1973, stock change is included in "Losses and Unaccounted for."
R=Revised. NA=Not available. F=Forecast.

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

Notes: • For methodology used to calculate production, consumption, and stocks, see Note 1, "Coal Production," Note 2, "Coal Consumption," and Note 3, "Coal Stocks," at end of section. • Data 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-Use Sectors											
			Commerci	al			Industrial					
	Desi				Calsa	0	ther Industria	al		Tuana	Electric	
	Resi- dential	CHPa	Otherb	Total	Coke Plants	CHPC	Non-CHP <sup>d</sup>	Total	Total	Trans- portation	Power Sector <sup>e,f</sup>	Total
1973 Total	4,113 2,823	(g)	7,004 6,587	7,004 6,587	94,101 83,598	(h)	68,038 63,646	68,038 63,646	162,139 147,244	116 24	389,212 405,962	562,584 562,640
1975 Total 1980 Total	1,355	(9)	5,097	5,587 5,097	83,598 66,657	( ' ' )	60,347	60,347	147,244	(h) 24	405,962 569,274	702,730
1985 Total	1,711	(°)	6,068	6,068	41,056	(h)	75,372	75,372	116,429	(h)	693,841	818,049
1990 Total	1,345	1,191	4,189	5,379	38,877	27,781	48,549	76,330	115,207	(h)	782,567	904,498
1995 Total	755	1,419	3,633	5,052	33,011	29,363	43,693	73,055	106,067	(h)	850,230	962,104
1996 Total 1997 Total	721 711	1,660 1,738	3,625 4,015	5,285 5,752	31,706 30,203	29,434 29,853	42,254 41,661	71,689 71,515	103,395 101,718	\ h \	896,921 921,364	1,006,321 1,029,544
1998 Total	534	1,443	2,879	4,322	28,189	28,553	38,887	67,439	95,628		936,619	1,037,103
1999 Total	585	1,490	2,803	4,293	28,108	27,763	36,975	64,738	92,846	(h)	940,922	1,038,647
2000 Total	454	1,547	2,126	3,673	28,939	28,031	37,177	65,208	94,147	( h )	985,821	1,084,095
2001 Total	481 533	1,448 1.405	2,441 2,506	3,888 3,912	26,075 23,656	25,755 26,232	39,514 34,515	65,268 60.747	91,344 84.403	(h)	964,433 977.507	1,060,146 1,066,355
2002 Total 2003 Total	551	1,816	1,869	3,685	24,248	24,846	36,415	61,261	85,509	(h)	1,005,116	1,094,861
2004 Total	512	1,917	2,693	4,610	23,670	26,613	35,582	62,195	85,865	(h)	1,016,268	1,107,255
2005 Total	378	1,922	2,420	4,342	23,434	25,875	34,465	60,340	83,774	( h )	1,037,485	1,125,978
2006 Total	290	1,886	1,050	2,936	22,957	25,262	34,210	59,472	82,429	(h)	1,026,636	1,112,292
2007 Total 2008 Total	353 351	1,927 2,021	1,247 1,134	3,173 3,155	22,715 22,070	22,537 21,902	34,078 32,491	56,615 54,393	79,331 76,463	( '' ) ( <sup>h</sup> )	1,045,141 1,040,580	1,127,998 1,120,548
2009 January	44	208	148	356	1,390	1,793	2,225	4,018	5,409	( h )	90,640	96,449
February	38	178	126	305	1,449	1,605	2,470	4,075	5,524	( h ) ( h )	74,254	80,121
March April	36 25	170 128	120 71	290 199	1,559 1,150	1,692 1,487	2,289 2,036	3,981 3,522	5,540 4,673	( h )	71,948 67,123	77,814 72,019
May	22	117	65	181	1,118	1,550	1,967	3,517	4,635	\h \	70,425	75,264
June	26	135	75	211	1,134	1,600	1,903	3,503	4,637	(h)	78,954	83,827
July	23	137	49	186	1,032	1,659	1,991	3,650	4,682	( h )	84,243	89,134
August	24 21	143 127	51	194	1,168	1,694	2,017	3,710	4,878	(h)	86,635	91,731
September October	27	127	45 88	172 216	1,250 1,431	1,611 1,671	2,136 2,170	3,747 3,841	4,997 5,272	( h )	73,566 74,520	78,757 80,035
November	31	151	103	255	1,274	1,622	2,257	3,878	5,153	}h {	73,063	78,502
December	36	174	119	293	1,371	1,783	2,088	3,871	5,242	(h)	88,255	93,826
Total	353	1,798	1,059	2,857	15,326	19,766	25,549	45,314	60,641	(h)	933,627	997,478
2010 January February	43 37	R 193 R 167	<sup>R</sup> 156 <sup>R</sup> 136	349 303	1,472 1,584	R 2,094 R 1,978	<sup>R</sup> 2,197 <sup>R</sup> 2,329	4,291 R 4,306	5,763 5,891	( h ) ( h )	<sup>R</sup> 90,452 <sup>R</sup> 79,884	<sup>R</sup> 96,607 <sup>R</sup> 86,115
March	33	R 149	R 121	271	1,801	R 2,124	R 2,220	4,344	6,145	ìhί	R 76,110	R 82,559
April	21	R 117	R 54	171	1,786	R 2.220	R 2,067	4,287	6,073	ìhί	R 66,842	R 73,108
May	21	R 118	R 55	173	1,794	R 2,010	R 2,294	4,305	6,099	( h )	<sup>R</sup> 75,597	R 81,890
June	24 24	R 135 R 142	R 62 R 48	197	1,772	R 1,898 R 2,122	R 2,378 R 2,199	4,276	6,049 R 6,104	(h) (h)	R 87,030 R 94,519	R 93,301
July August	24 25	R 152	R 52	190 203	1,783 1,814	R 2,122	R 2,199	4,321 4,361	6,175	( h )	R 94,519	R 100,837 R 100,651
September	22	R 133	R 45	178	1,894	R 1,941	R 2,432	R 4,373	6,268	(h (	R 79,176	R 85,644
October	26	R 121	R 86	207	1,731	R 1,958	R 2,419	4,376	6,107	( h )	R 70,492	R 76,831
November	27	R 128	R 90	218	1,787	R 1,854	R 2,538	4,392	6,179	(h)	R 72,514	R 78,938
December Total	35 <b>339</b>	R 165 R <b>1,720</b>	R 116 R <b>1,022</b>	281 <b>2,742</b>	1,874 <b>21,092</b>	R 2,246 R <b>24,638</b>	R 2,202 R <b>27,443</b>	4,448 R <b>52,082</b>	6,321 R <b>73,174</b>	( h )	<sup>R</sup> 88,189 <sup>R</sup> <b>975,052</b>	R 94,826
<b>2011</b> January	40	R 178	R 144	R 322	1,746	R 2,320	R 2,139	4,458	6,204	( h )	R 89,682	R 96,248
February	37	R 165	R 133	R 298	1,623	R 2,044	R 2,386	4,430	6,053	(h)	R 73,156	R 79,544
March	R 35 23	158 <sup>R</sup> 124	<sup>R</sup> 127 <sup>R</sup> 63	<sup>R</sup> 285 <sup>R</sup> 187	1,819	R 2,088 R 1,767	R 2,371 R 2,425	4,459 4,192	6,278 5,860	( h ) ( h )	<sup>R</sup> 72,009 <sup>R</sup> 66,741	<sup>R</sup> 78,607 <sup>R</sup> 72,812
April May	23	R 128	R 65	R 193	1,668 1,878	R 2,126	R 2,425	4,192 4,173	5,860 6,051	( h )	R 73,100	R 72,812
June	23	R 124	R 63	<sup>R</sup> 187	1 846	R 2,056	R 2 122	4.178	6,024	λhí	R 83,700	R 89,934
July	F 21	R 134	RF 39	F 173	F 2.197	R 2,208	RF 1.675	F 3,883	F 6,080	( h )	R 93,736	R 100,011
August	F 23	R 124	RF 59	F 183	r 2.347	R 2,182	RF 1,741	F 3,924	F 6,270	(h) (h)	<sup>R</sup> 91,667	R 98,144
September 9-Month Total	F 20 E <b>246</b>	121 <b>1,255</b>	F 42 E <b>736</b>	F 163 E <b>1,992</b>	F 2,160 E <b>17,283</b>	2,100 <b>18,891</b>	F 1,500 E <b>18,406</b>	F 3,599 E <b>37,297</b>	F 5,760 E <b>54,580</b>	( '' ) ( h )	76,131 <b>719,921</b>	82,073 <b>776,739</b>
		,		,	,	,	,	,	,	` ,	,	,
2010 9-Month Total 2009 9-Month Total	252 259	1,306 1,344	730 749	2,036 2,093	15,701 11,250	18,581 14,690	20,285 19,034	38,866 33,724	54,567 44,974	( h ) ( h )	743,857 697,789	800,711 745,115

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

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

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

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

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

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

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

g Included in "Commercial Other."
h Included in "Industrial Non-CHP."
R=Revised. E=Estimate. F=Forecast.
Notes: • CHP monthly values are from Table 7.4c; electric power sector monthly values are from Table 7.4b; all other monthly values are estimates derived from collected quarterly and annual data. See Note 2, "Coal Consumption," at end of section. • Data 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.

Sources: See end of section.

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

			E	nd-Use Sectors					
	Producers	Residential and		Industrial			Electric Power		
	and Distributors	Commercial	Coke Plants	Othera	Total	Total	Sector <sup>b,c</sup>	Total	
1973 Year	12,530	290	6,998	10,370	17,368	17,658	86,967	117,155	
1975 Year	12,108	233	8,797	8,529	17,326	17,559	110,724	140,391	
1980 Year	24,379	NA	9,067	11,951	21,018	21,018	183,010	228,407	
1985 Year	33,133	NA	3,420	10,438	13,857	13,857	156,376	203,367	
1990 Year	33,418	NA	3,329	8,716	12,044	12,044	156,166	201,629	
1995 Year	34,444	NA	2,632	5,702	8,334	8,334	126,304	169,083	
1996 Year	28,648	NA	2,667	5,688	8,355	8,355	114,623	151,627	
1997 Year	33,973	NA	1,978	5,597	7,576	7,576	98,826	140,374	
1998 Year	36,530	NA	2,026	5,545	7,571	7,571	120,501	164,602	
1999 Year	39,475	NA	1,943	5,569	7,511	7,511	° 141,604	188,590	
2000 Year	31,905	NA	1,494	4,587	6,081	6,081	102,296	140,282	
2001 Year	35,900	NA	1,510	6,006	7,516	7,516	138,496	181,912	
2002 Year	43,257	NA	1,364	5,792	7,156	7,156	141,714	192,127	
2003 Year	38,277	NA	905	4,718	5,623	5,623	121,567	165,468	
2004 Year	41,151	NA	1,344	4,842	6,186	6,186	106,669	154,006	
2005 Year	34,971	NA	2,615	5,582	8,196	8,196	101,137	144,304	
2006 Year	36,548	NA	2,928	6,506	9,434	9,434	140,964	186,946	
2007 Year	33,977	NA	1,936	5,624	7,560	7,560	151,221	192,758	
2008 Year	34,688	498	2,331	6,007	8,338	8,836	161,589	205,112	
<b>2009</b> January	38,394	490	2,260	5,788	8,049	8,539	156,075	203,008	
February	42,066	483	2,190	5,570	7,760	8,243	160,601	210,909	
March	41,257	475	2,119	5,352	7,471	7,946	174,223	223,426	
April	43,195	477	2,000	5,266	7,266	7,744	185,790	236,729	
May	41,622	480	1,880	5,181	7,061	7,541	195,103	244,266	
June	44,018	482	1,760	5,096	6,856	7,338	195,656	247,012	
July	45,372	496	1,702	5,099	6,800	7,297	193,563	246,232	
August	42,457	510	1,644	5,101	6,745	7,255	191,532	241,244	
September	41,690	524	1,585	5,104	6,690	7,214	197,208	246,112	
October	43,882	526 527	1,683	5,106	6,789	7,314 7,415	199,477 203,765	250,673 253,397	
November	42,217		1,780	5,108	6,888				
December	47,718	529	1,957	5,109	7,066	7,595	189,467	244,780	
2010 January	48,854 49,069	510 490	1,832 1,708	<sup>R</sup> 5,515 <sup>R</sup> 5,921	<sup>R</sup> 7,347 <sup>R</sup> 7,629	<sup>R</sup> 7,857 <sup>R</sup> 8,119	<sup>R</sup> 178,091 <sup>R</sup> 171,026	R 234,802 R 228,214	
February	50,936	490 471	1,706	R 6,326	R 7,910	R 8.381	R 177,026	R 237.058	
March April	50,930	482	1,715	R 6.358	R 8.073	R 8.556	R 189.260	R 248.577	
May	50,900	494	1,846	<sup>R</sup> 6,391	R 8,237	R 8,730	R 191,669	R 251,299	
June	51,497	505	1,978	R 6,423	R 8,400	R 8,905	R 181,490	R 241,892	
July	47,935	509	1,948	R 6,425	R 8.373	R 8.882	R 169,504	R 226,322	
August	48.638	513	1,918	R 6.427	R 8.346	R 8.859	R 159,987	R 217,484	
September	49,913	513 517	1,889	R 6,430	R 8.319	R 8.836	R 163,776	R 222,524	
October	49,430	529	1.901	R 6,403	R 8.304	R 8.833	R 175.686	R 233.949	
November	50,571	541	1,913	R 6,376	R 8,289	R 8,830	R 183,389	R 242,790	
December	49,820	552	1,925	<sup>R</sup> 6,350	R 8,275	R <b>8,827</b>	R 174,917	R 233,564	
<b>2011</b> January	48,295	536	1,937	R 6,076	<sup>R</sup> 8,012	<sup>R</sup> 8,548	<sup>R</sup> 164,840	R 221,684	
February	45,750	520	1,948	R 5,802	<sup>R</sup> 7,750	R 8,269	R 161,439	R 215,458	
March	44,336	503	1,959	R 5,528	<sup>R</sup> 7,487	R 7,990	R 166,737	R 219,063	
April	45,585	500	1,958	<sup>R</sup> 5,755	<sup>R</sup> 7,713	R 8,213	R 173,999	R 227,796	
May	46,775	497	1,957	<sup>R</sup> 5,981	<sup>R</sup> 7,938	R 8,435	R 174,619	R 229,829	
June	45,398	494	1,956	R 6,208	<sup>R</sup> 8,164	R 8,658	R 165,707	R 219,763	
July	F 46,926	F 535	F 2,055	<sup>F</sup> 4,256	<sup>F</sup> 6,311	F 6,847	R 147,967	R 201,740	
August	F 44,445	<sup>F</sup> 535	F 2,040	<sup>F</sup> 4,451	<sup>F</sup> 6,492	F 7,027	R 139,225	R 190,696	
September	F 43,763	F 536	F 2,025	F 4,645	F 6,670	F 7,206	144,438	195,407	

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

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 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 sounding and coarse of the Forecast of Coarse of Coarse of Coarse of the Forecast of Coarse o

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.

plants only.

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

electricity, or electricity and heat, to the public.

<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.

### 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/emeu/steo/pub/contents.html.

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

### **Table 6.1 Sources**

### **Production**

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

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

### Waste Coal Supplied

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

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

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

Quality Report—Manufacturing Plants."

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

2008 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.

### 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.

### **Commercial CHP**

Table 7.4c.

### **Commercial Other**

Calculated as "Commercial Total" minus "Commercial CHP."

### **Industrial Coke Plants**

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

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

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

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

### **Other Industrial Total**

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

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

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

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

2008 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, Short-Term Integrated Forecasting System.

### **Other Industrial CHP**

Table 7.4c.

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

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

### **Transportation**

1973–1976: DOI, BOM, Minerals Yearbook.

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

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

### **Electric Power**

Table 7.4b.

### **Table 6.3 Sources**

### **Producers and Distributors**

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

1980–1997: U.S. Energy Information Administration (EIA), Form EIA-6, "Coal Distribution Report," quarterly. 1998–2007: EIA, Form EIA-6A, "Coal Distribution Report," annual.

2008 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.

### **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, Short-Term Integrated Forecasting System.

### **Industrial Coke Plants**

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

October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal

Chemicals—Monthly/Annual."

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

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

### **Industrial Other**

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

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

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

2008 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, Short-Term Integrated Forecasting System.

### **Electric Power**

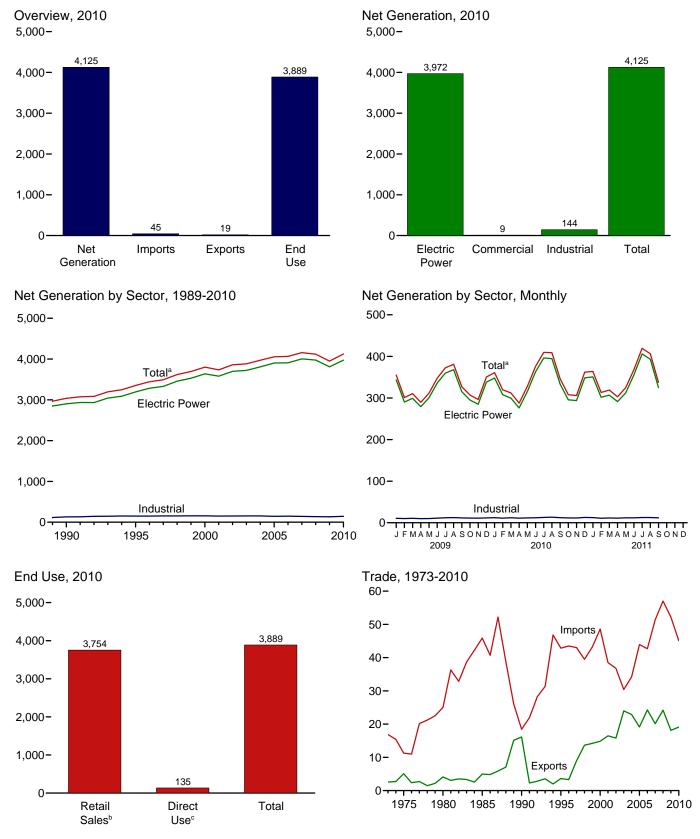
Table 7.5.

## **Electricity**



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

Figure 7.1 Electricity Overview (Billion Kilowatthours)



<sup>&</sup>lt;sup>a</sup> Includes commercial sector.

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

<sup>&</sup>lt;sup>c</sup> 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	Exportsd	Net Imports <sup>d</sup>	T&D Losses <sup>e</sup> and Unaccounted for <sup>f</sup>	Retail Sales <sup>9</sup>	Direct Use <sup>h</sup>	Total
1973 Total 1975 Total	1,861 1,918	NA NA	3	1,864 1,921	17 11	3 5	14 6	165 180	1,713 1,747	NA NA	1,713 1,747
1980 Total	2.286	NA	3	2,290	25	4	21	216	2.094	NA	2.094
1985 Total	2,470	NA	3	2,473	46	5	41	190	2,324	NA	2,324
1990 Total	2,901	6	131	3,038	18	16	2	203	2,713	125	2,837
1995 Total	3,194	8	151	3,353	43	4	39	229	3,013	151	3,164
1996 Total	3,284	9	151	3,444	43	3	40	231	3,101	153	3,254
1997 Total	3,329	9	154	3,492	43	9	34	224	3,146	156	3,302
1998 Total	3,457	9	154	3,620	40	14	26	221	3,264	161	3,425
1999 Total	3,530	9	156	3,695	43	14	29	240	3,312	172	3,484
2000 Total	3,638	8	157	3,802	49	15	34	244	3,421	171	3,592
2001 Total	3,580	7	149	3,737	39	16	22	202	3,394	163	3,557
2002 Total	3,698	7	153	3,858	37	16	21	248	3,465	166	3,632
2003 Total	3,721	7	155	3,883	30	24	6	228	3,494	168	3,662
2004 Total	3,808	8	154	3,971	34	23	11	266	3,547	168	3,716
2005 Total	3,902	8	145	4,055	44	19	25	269	3,661	150	3,811
2006 Total	3,908	8	148	4,065	43	24	18	266	3,670	147	3,817
2007 Total	4,005	8	143	4,157	51	20	31	298	3,765	126	3,890
2008 Total	3,974	8	137	4,119	57	24	33	287	3,733	132	3,865
2009 January	344	1	11	355	4	2	2	25	321	E 10	332
February	290	1	10	301	4	2	2	7	287	E 10	297
March	299	1	11	311	3	2	1	18	284	E 10	294
April	279	1	10	290	3	1	2	16	266	E 10	275
May	300	1	10	311	4	1	3	29	275	E 10	285
June	336	1	11	348	5	2	3	35	305	E 11	315
July	360	1	12	373	6	1	4	27	338	E 11	349
August	368	1	12	381	6	1	4	29	345	E 12	357
September	315	1	12	327	4	1	3	8	311	E 11 E 11	322
October	295	1	11	307	5	1	3	12	287	E 11	298
November	285 338	1	11 12	297 351	4 5	1 1	3 3	21 33	268 310	E 11	278
December Total	3,810	8	132	3,950	5 <b>2</b>	18	3 <b>4</b>	261	3,597	127	321 <b>3,724</b>
	0.40		40	P.004	_			P 00	,	E 11	,
2010 January	348 308	1 1	12 11	<sup>R</sup> 361 <sup>R</sup> 320	5 4	1 1	4 3	<sup>R</sup> 22 14	332 298	E 10	343 309
March	R 300	i	12	312	4	i	3	R 12	R 293	E 11	R 304
April	276	i	11	R 288	4	i	3	13	R 267	E 10	277
May	316	1	R 12	328	3	2	1	R 35	R 284	E 11	R 295
June	363	1	12	376	4	2	2	R 36	R 331	RE 11	R 342
July	R 396	1	13	410	4	R 1	3	32	369	E 12	381
August	395	1	13	409	4	2	2	R 26	R 372	RE 13	384
September	R 333	1	12	R 346	3	2	R 1	R 7	328	E 11	R 339
October	<sup>R</sup> 296	1	R 12	R 308	3	2	(s)	_ 10	R 288	E 11	R 299
November	_ 294	1	_ 11	R 306	3	2	1	R 21	R 275	E 11	R 286
December Total	R 349 R <b>3,972</b>	1 R <b>9</b>	R 13 R <b>144</b>	R 362 R <b>4,125</b>	4 <b>45</b>	1 <b>19</b>	3 <b>26</b>	<sup>R</sup> 34 <sup>R</sup> <b>262</b>	319 R <b>3,754</b>	E 12 R <b>135</b>	<sup>R</sup> 331 <sup>R</sup> <b>3,889</b>
1 Ulai	3,312	9	144		40				•		,
2011 January	351	1	12	R 364	4	2	3	R 22	R 333	RE 12	R 344
February	302	1	R 11	R 313	4	2	2	Ř g	R 296	E 10	R 306
March	R 307	1	11	R 319	4	2	2	R 21	R 290	E 11	301
April	291	1	11	R 303	4	2	2	R 21	R 274	E 10	R 284
May	312	1	R 12	R 325	5	1	4	R 31	R 286	E 11	R 297
June	R 356	1	12	368	4	1	3	R 33	R 327	E 11	R 338
July	406	1	R 13	419	6	1	5	R 44	369	E 12	R 380
August	393	1	R 13	406	6	1	5	R 29	R 370	E 12	R 382
September	325	1	12	338	4	1	3	5	324	E 11	335
9-Month Total	3,043	6	107	3,156	41	12	29	217	2,868	E 100	2,968
2010 9-Month Total 2009 9-Month Total	3,034 2,892	6 6	108 98	3,149 2,996	36 39	14 14	22 25	197 195	2,873 2,732	E 101 E 94	2,974 2,826

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

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

plants.

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

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

exports.

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

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

 <sup>&</sup>lt;sup>9</sup> Electricity retail sales to ultimate customers by electric utilities and, beginning in 1996, other energy service providers.
 <sup>h</sup> Use of electricity that is 1) self-generated, 2) produced by either the same

In 1996, otner energy service provioers.

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

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

kilowatthours

kilowatthours.

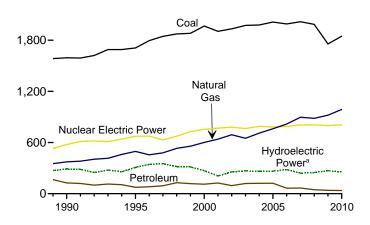
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

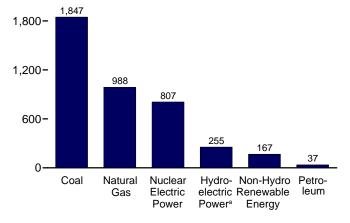
Sources: See end of section.

Figure 7.2 Electricity Net Generation (Billion Kilowatthours)

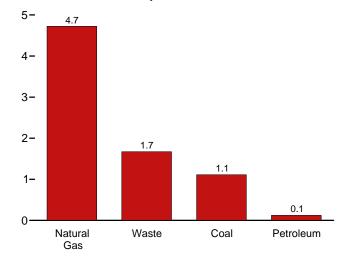
Total (All Sectors), Major Sources, 1989-2010 2,400-



Total (All Sectors), Major Sources, 2010 2,400-

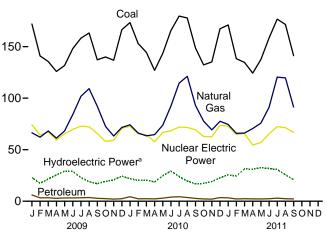


Commercial Sector, Major Sources, 2010



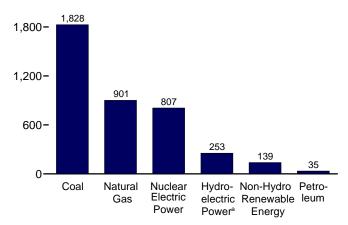
<sup>&</sup>lt;sup>a</sup> Conventional and pumped storage hydroelectric power.

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



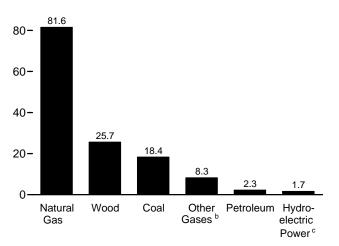
Electric Power Sector, Major Sources, 2010

2,400-



Industrial Sector, Major Sources, 2010

100-



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

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

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

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

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

		Fossil F	uels					Renewable Energy					
							Conven-	Bior	nass				
		D. 4		0.11	Nuclear	Hydro- electric	tional Hydro-				0.1/		
	Coala	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Electric Power	Pumped Storage <sup>e</sup>	electric Power <sup>f</sup>	Wood <sup>g</sup>	Wasteh	Geo- thermal	Solar/ PV <sup>i</sup>	Wind	Total <sup>j</sup>
1973 Total	847,651	314,343	340,858	NA	83,479	( <sup>f</sup> )	275,431	130	198	1,966	NA	NA	1,864,057
1975 Total 1980 Total	852,786 1.161.562	289,095 245,994	299,778 346,240	NA NA	172,505 251,116	{	303,153 279,182	18 275	174 158	3,246 5,073	NA NA	NA NA	1,920,755 2,289,600
1985 Total	1,402,128	100,202	291,946	NA 40.202	383,691	(f)	284,311	743	640	9,325	11	6	2,473,002
1990 Total <sup>k</sup> 1995 Total		126,460 74,554	372,765 496,058	10,383 13,870	576,862 673,402	-3,508 -2,725	292,866 310,833	32,522 36,521	13,260 20,405	15,434 13,378	367 497	2,789 3,164	3,037,827 3,353,487
1996 Total	1,795,196	81,411	455,056	14,356	674,729	-3,088	347,162	36,800	20,911	14,329	521	3,234	3,444,188
1997 Total 1998 Total	1,845,016 1.873.516	92,555 128.800	479,399 531,257	13,351 13,492	628,644 673,702	-4,040 -4,467	356,453 323,336	36,948 36,338	21,709 22,448	14,726 14,774	511 502	3,288 3,026	3,492,172 3,620,295
1999 Total	1,881,087	118,061	556,396	14,126	728,254	-6,097	319,536	37,041	22,572	14,827	495	4,488	3,694,810
2000 Total	1,966,265	111,221	601,038	13,955 9,039	753,893	-5,539	275,573	37,595 35,200	23,131	14,093	493 543	5,593	3,802,105
2001 Total 2002 Total	1,903,956 1,933,130	124,880 94,567	639,129 691,006	11,463	768,826 780,064	-8,823 -8,743	216,961 264,329	38,665	14,548 15,044	13,741 14,491	543 555	6,737 10,354	3,736,644 3,858,452
2003 Total	1,973,737	119,406	649,908	15,600	763,733	-8,535	275,806	37,529	15,812	14,424	534	11,187	3,883,185
2004 Total 2005 Total	1,978,301 2,012,873	121,145 122,225	710,100 760,960	15,252 13,464	788,528 781,986	-8,488 -6,558	268,417 270,321	38,117 38,856	15,421 15,420	14,811 14,692	575 550	14,144 17,811	3,970,555 4,055,423
2006 Total	1,990,511	64,166	816,441	14,177	787,219	-6,558	289,246	38,762	16,099	14,568	508	26,589	4,064,702
2007 Total	2,016,456 1,985,801	65,739 46,243	896,590 882,981	13,453 11,707	806,425 806,208	-6,896 -6,288	247,510 254,831	39,014 37,300	16,525 17,734	14,637 14,840	612 864	34,450 55,363	4,156,745 4,119,388
2008 Total	1,965,601	40,243	002,301	11,707	000,200	-0,200	234,031	37,300	17,734	14,040	004	33,303	4,119,300
2009 January	171,925	6,104	66,390	807	74,102	-501	23,490	3,030	1,462	1,289	7	5,951	354,993
February March	140,916 135,530	3,318 3,349	62,139 68,203	784 834	64,227 67,241	-413 -315	17,812 21,827	2,823 2,919	1,357 1,553	1,168 1,300	30 78	5,852 7,099	300,887 310,603
April	125,935	2,807	61,159	758	59,408	-272	25,770	2,664	1,542	1,222	99	7,458	289,537
May	131,673 148,087	3,209 3,243	68,146 84,205	773 876	65,395 69,735	-349 -226	29,560 29,233	2,735 2,997	1,522 1,558	1,235 1,209	110 103	6,262 5,599	311,306 347,658
June July	158,234	3,358	101,894	966	72,949	-491	23,385	3,227	1,628	1,209	121	4,955	372,542
August	163,260	3,642	109,240	1,012	72,245	-613	19,580	3,355	1,604	1,251	116	5,464	381,221
September October	137,145 139.956	2,853 2,560	92,127 72.603	1,022 960	65,752 58.021	-348 -385	17,359 19.691	3,061 3.032	1,501 1.533	1,217 1,221	95 68	4,651 6.814	327,401 307.040
November	136,810	2,072	63,285	910	59,069	-330	21,008	3,049	1,572	1,273	40	6,875	296,635
December Total	166,434 <b>1,755,904</b>	2,422 <b>38,937</b>	71,590 <b>920,979</b>	930 <b>10,632</b>	70,710 <b>798,855</b>	-383 <b>-4,627</b>	24,730 <b>273,445</b>	3,158 <b>36,050</b>	1,608 <b>18,443</b>	1,368 <b>15,009</b>	21 <b>891</b>	6,906 <b>73,886</b>	350,507 <b>3,950,331</b>
	R 173,320	R 4,348	R 74,173	909	72,569	R -565	R 22,383	R 3,126	R 1,503	R 1,312	10	R 6,854	R 360,957
2010 January February	R 153,044	R 2,373	R 66,198	R 825	65,245	R -351	R 20,590	R 2,895	R 1,382	R 1,159	R 33	R 5,432	R 319,735
March	R 144,406	R 2,470	R 63,431	R 1,010	64,635	R -325	R 20,886	R 3,090	R 1,592	R 1,307	R 76	R 8,589	R 312,168
April May	R 126,952 R 143,272	R 2,286 R 2,994	R 64,644 R 73,665	R 943 R 1,017	57,611 66,658	R -335 R -441	R 19,097 R 25,079	R 2,932 R 2,893	R 1,558 R 1,577	R 1,240 R 1,311	<sup>R</sup> 112 <sup>R</sup> 153	R 9,764 R 8,698	R 287,800 R 327,936
June	R 165,491	R 3,989	R 92,268	R 964	68,301	R -472	R 29,854	R 3,094	R 1,627	R 1,264	R 176	R 8,049	R 375,759
July	R 179,600 R 177,745	R 4,411 R 3,575	R 114,624 R 121,151	R 963 R 1,061	71,913 71,574	<sup>R</sup> -557 <sup>R</sup> -600	R 24,517 R 20.119	R 3,308	R 1,640 R 1,642	R 1,274 R 1,297	R 161 R 156	R 6,724 R 6,686	R 409,725 R 408.884
August September	R 148,746	R 2,783	R 93,004	R 954	69,371	R -421	R 17,265	R 3,157	R 1,575	R 1,253	R 138	R 7,106	R 346,045
October	R 132,270	R 2,228	R 77,738	R 808	62,751	R -438	R 17,683	R 3,003	R 1,547	R 1,222	75	R 7.944	R 307,921
November December	R 135,185 R 167,258	R 2,079 R 3,523	R 69,227 R 77,573	R 907 R 952	62,655 73,683	R -467 -530	R 19,562 R 23,169	R 3,080 R 3,275	R 1,625 R 1,650	R 1,252 R 1,330	R 77 R 44	R 9,748 R 9,059	R 306,010 R 362,119
Total	R 1,847,290	R 37,061	R 987,697	R 11,313	806,968	R -5,501	R 260,203	R 37,172	R 18,917	R 15,219	R 1,212	R 94,652	R 4,125,060
<b>2011</b> January	R 170,983	R 3,268	R 74,458	R 910	72,743	-426	R 26,148	R 3,258	R 1,503	R 1,478	R 31	R 8,659	R 363,855
February March	R 138,295 R 134,717	2,201 R 2,454	R 65,852 R 66,169	<sup>R</sup> 770 <sup>R</sup> 955	64,789 65,662	-247 -350	R 24,687 R 31,737	R 2,896 R 3,041	R 1,393 R 1,655	R 1,326 R 1,465	R 80	R 10,528 R 10.536	R 313,351 R 319.092
April	R 124,293	<sup>R</sup> 2,279	R 70,529	R 913	54,547	-467	R 31,629	R 2,788	R 1,619	R 1,337	R 161	R 12,447	R 302,993
May	R 137,493	R 2,198	R 75,769	R 848 R 980	57,017	-419	R 33,105	R 2,802	R 1,702	R 1,438	R 201 R 257	R 11,635 R 10,887	R 324,756
June July	R 158,308 R 176,709	R 2,439 R 3,011	R 91,096 R 120,377	R 1,059	65,270 72,345	-568 -709	R 32,253 R 31,570	R 3,243 R 3,348	R 1,685 R 1,767	R 1,363 R 1,372	R 226	R 7,381	R 368,183 R 419,479
August	R 171,472	R 2,407	R 119,646	R 999	71,339	-663	R 26,320	R 3,290	R 1,717	R 1,380	R 236	R 7,341	R 406,449
September 9-Month Total	141,220 <b>1,353,490</b>	2,247 <b>22,504</b>	91,377 <b>775,273</b>	958 <b>8,392</b>	66,849 <b>590,560</b>	-554 <b>-4,403</b>	21,500 <b>258,949</b>	3,113 <b>27,779</b>	1,621 <b>14,664</b>	1,334 <b>12,491</b>	183 <b>1,488</b>	6,882 <b>86,296</b>	337,605 <b>3,155,763</b>
2010 9-Month Total 2009 9-Month Total	1,412,577 1,312,705	29,231 31,882	763,159 713,501	8,646 7,832	607,879 611,054	-4,067 -3,529	199,789 208,017	27,814 26,811	14,095 13,729	11,415 11,146	1,016 761	67,902 53,291	3,149,010 2,996,149
	,= .=,. 50	,	,	.,	,	-,		,-,-	,0	,		,	,,

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

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

synfuel.

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

b Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.
c Natural gas, plus a small amount of supplemental gaseous fuels.
d Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
Pumped storage facility production minus energy used for pumping.
Through 1989, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."
Wood and wood-derived fuels.
Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

Solar thermal and photovoltaic (PV) energy.

i Solar thermal and photovoltaic (PV) energy. Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels). 
k Through 1988, all data except hydroelectric are for electric utilities only; hydroelectric data through 1988 include industrial plants as well as electric utilities. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants. 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.

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

(Subset of Table 7.2a; Million Kilowatthours)

1995 Total				e Energy	Renewabl						uels	Fossil I		
1975 Total	Total <sup>j</sup>	Wind					tional Hydro- electriç	electric Pumped	Electric				Coal <sup>a</sup>	
February	1,860,71 1,917,64 2,286,43 2,469,84 2,901,32 3,194,23 3,29,37 3,457,41 3,529,98 3,637,52 3,580,05 3,698,45 3,721,15 3,908,07 4,005,34 4,005,34 3,974,34	NA NA	NA NA 11 367 497 521 511 502 495 493 543 555 534 575 550 601	1,966 3,246 5,073 9,325 15,434 13,378 14,726 14,774 14,827 14,093 13,741 14,424 14,811 14,692 14,568 14,637	198 174 158 640 11,500 17,986 17,816 18,485 19,233 20,307 12,944 13,145 13,808 13,062 13,031 13,927 14,294	130 18 275 743 7,032 7,597 8,386 8,680 8,961 8,914 9,009 9,528 10,570 10,570 10,571	272,083 300,047 276,021 281,149 289,753 305,410 341,159 350,648 317,867 314,663 271,338 213,749 260,491 271,512 265,064 267,040 286,254 245,843	(f) (f) (f) (f) (f) (f) (f) (f) (f) (f)	83,479 172,505 251,116 383,691 576,862 673,402 674,729 628,644 673,702 728,254 780,064 763,733 768,826 780,064 763,733 81,986	NA NA NA NA 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	340,858 299,778 346,240 291,946 419,179 378,757 399,596 449,293 472,996 517,978 554,940 607,683 567,303 627,172 683,829 734,417 814,752	314,343 289,095 245,994 100,202 118,864 68,146 74,783 86,479 122,211 111,539 105,192 119,149 89,733 113,697 114,678 116,482 59,708	847,651 852,786 1,161,562 1,402,128 1,572,109 1,686,056 1,771,973 1,820,762 1,850,193 1,943,111 1,882,826 1,910,613 1,952,714 1,957,188 1,992,054 1,969,737 1,998,390	1975 Total 1980 Total 1985 Total 1990 Total 1995 Total 1996 Total 1997 Total 1997 Total 1998 Total 1998 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2006 Total
February R 151,461 R 2,166 R 59,556 R 247 65,245 R -351 R 20,421 R 926 R 1,207 R 1,159 R 33 R 5,431 March R142,665 R 2,299 R 56,492 R 275 64,635 R -325 R 20,691 R 939 R 1,391 R 1,307 R 76 R 8,588 April R 125,615 R 2,109 R 58,124 R 273 S 7,611 R -335 R 18,898 R 837 R 1,334 R 1,240 R 112 R 9,763 May R 141,669 R 2,801 R 66,862 R 279 66,658 R -441 R 24,903 R 830 R 1,359 R 1,311 R 153 R 8,696 June R 163,912 R 3,792 R 85,033 R 265 R 8301 R -472 R 29,711 R 955 R 1,409 R 1,264 R 175 R 8,048 July R 177,778 R 4,199 R 106,961 R 267 71,913 R -557 R 24,405 R 1,061 R 1,419 R 1,274 R 161 R 6,723 August R 175,848 R 3,375 R 112,961 R 249 71,574 R -600 R 20,019 R 1,074 R 1,413 R 1,297 R 156 R 6,685 September R 147,157 R 2,608 R 85,498 R 240 R 9,371 R -421 R 17,188 R 974 R 1,364 R 1,253 R 137 R 7,104 Cotober R 130,663 R 2,037 R 70,876 R 170 R 2,751 R -438 R 17,561 R 887 R 1,330 R 1,222 T 5 R 7,942 November R 185,494 R 3,302 R 69,875 R 208 7 3,683 -530 R 23,024 R 1,018 R 1,443 R 1,330 R 43 R 9,058 T 1041 R 1,827,738 R 34,679 R 901,389 R 2,967 806,968 R -5,501 R 258,455 R 11,046 R 16,376 R 15,219 R 1,006 R 94,636 March R 133,163 R 2,282 R 99,350 R 250 64,862 R -467 R 13,422 R 674 R 1,439 R 1,337 R 160 R 12,444 May R 133,667 R 2,282 R 99,350 R 250 64,862 R -467 R 13,422 R 674 R 1,439 R 1,337 R 160 R 12,444 May R 13,307 R 2,282 R 99,350 R 250 54,547 R -467 R 31,422 R 674 R 1,439 R 1,337 R 160 R 12,444 May R 13,579 R 2,282 R 99,350 R 250 54,547 R -467 R 31,422 R 674 R 1,439 R 1,337 R 160 R 12,444 May R 13,666 R 13,666 R 2,667 R 2,007 R 2,112 R 63,709 R 250 54,547 R -467 R 31,422 R 674 R 1,439 R 1,337 R 160 R 12,444 May R 13,566 R 2,282 R 99,350 R 250 54,547 R -467 R 31,422 R 674 R 1,439 R 1,337 R 160 R 12,444 May R 13,566 R 2,282 R 99,350 R 250 65,662 S 050 R 31,537 R 838 R 1,457 R 1,465 R 112 R 1,552 R 137 R 1,465 R 112 R 1,552 R 137 R 1,465 R 113 R 1,465	343,51 290,22 299,25 278,99 300,49 336,01 359,84 368,13 315,16 295,09 285,01 338,09	5,852 7,099 7,458 6,262 5,599 4,955 5,464	30 78 99 110 103 121 116 95 68 40 21	1,168 1,300 1,222 1,235 1,209 1,255 1,251 1,217 1,221 1,273 1,368	1,178 1,343 1,334 1,323 1,358 1,417 1,395 1,301 1,315 1,345 1,388	903 862 721 749 928 976 1,021 891 825 866 1,004	17,662 21,624 25,570 29,364 29,055 23,243 19,444 17,263 19,552 20,865 24,548	-413 -315 -272 -349 -226 -491 -613 -348 -385 -330 -383	64,227 67,241 59,408 65,395 69,735 72,949 72,245 65,752 58,021 59,069 70,710	213 240 231 234 253 288 278 298 280 256 269	56,164 61,837 55,301 62,125 77,591 94,487 101,636 84,942 65,852 56,735 64,367	2,999 3,077 2,557 2,965 2,994 3,111 3,391 2,607 2,340 1,846 2,190	139,743 134,314 124,803 130,527 146,845 156,943 161,917 135,950 138,667 135,644 165,146	February March April May June July August September October November December
February R136,752 R2,042 R59,187 R206 64,789 -247 R24,517 R873 R1,204 R1,326 R79 R10,525 March R133,163 R2,282 R59,350 R250 65,662 -350 R31,537 R883 R1,457 R1,465 R112 R10,534 April R123,067 R2,112 R63,709 R250 54,547 -467 R31,422 R674 R1,439 R1,337 R160 R12,444 May R135,794 R2,053 R68,567 R250 57,017 -419 R32,888 R753 R1,467 R1,438 R199 R11,632 June R156,677 R2,276 R84,032 R282 65,270 -568 R32,097 R921 R1,470 R1,363 R254 R10,884	R 348,12 R 307,99 R 299,57 R 276,12 R 315,65 R 396,19 R 394,65 R 333,05 R 394,65 R 393,83 R 348,54 R 3,972,38	R 8,588 R 9,763 R 8,696 R 8,048 R 6,723 R 6,685 R 7,104 R 7,942 R 9,746 R 9,058	R 33 R 76 R 112 R 153 R 175 R 161 R 156 R 137 75 R 76 R 43	R 1,159 R 1,307 R 1,240 R 1,311 R 1,264 R 1,274 R 1,297 R 1,253 R 1,252 R 1,330	R 1,207 R 1,391 R 1,334 R 1,359 R 1,409 R 1,419 R 1,413 R 1,330 R 1,412 R 1,443	R 926 R 939 R 837 R 830 R 955 R 1,061 R 1,074 R 974 R 887 R 934 R 1,018	R 20,421 R 20,691 R 18,898 R 24,903 R 29,711 R 24,405 R 20,019 R 17,188 R 17,561 R 19,426 R 23,024	R -351 R -325 R -335 R -441 R -472 R -557 R -600 R -421 R -438 R -4467 -530	65,245 64,635 57,611 66,658 68,301 71,913 71,574 69,371 62,751 62,655 73,683	R 247 R 275 R 273 R 265 R 267 R 249 R 240 R 170 R 270 R 208	R 59,556 R 56,492 R 58,124 R 66,862 R 85,033 R 106,961 R 112,961 R 85,498 R 70,876 R 62,305 R 69,875	R 2,166 R 2,299 R 2,109 R 2,801 R 3,792 R 4,199 R 3,375 R 2,608 R 2,037 R 1,879 R 3,302	R 151,461 R 142,665 R 125,615 R 141,669 R 163,912 R 177,778 R 175,848 R 147,157 R 130,663 R 133,815	February March April May June July August September October November
August       R 169,572       R 2,243       R 111,991       R 293       71,339       -663       R 26,217       R 1,020       R 1,481       R 1,380       R 233       R 7,339         September       139,458       2,075       84,392       287       66,849       -554       21,375       896       1,395       1,334       181       6,880         9-Month Total       1,338,491       20,979       711,030       2,361       590,560       -4,403       257,494       8,049       12,744       12,491       1,472       86,274	R 350,77 R 301,73 R 306,93 R 291,28 R 312,22 R 355,56 R 406,01 R 393,05 325,12 3,042,71	R 12,444 R 11,632	R 79 R 112 R 160 R 199 R 254 R 223 R 233 181 <b>1,472</b>	R 1,326 R 1,465 R 1,337 R 1,438 R 1,363 R 1,372 R 1,380 1,334 12,491	R 1,204 R 1,457 R 1,439 R 1,467 R 1,470 R 1,537 R 1,481 1,395 <b>12,744</b>	R 873 R 883 R 674 R 753 R 921 R 1,042 R 1,020 896 8,049	R 24,517 R 31,537 R 31,422 R 32,888 R 32,097 R 31,442 R 26,217 21,375 257,494	-247 -350 -467 -419 -568 -709 -663 -554 <b>-4,403</b>	64,789 65,662 54,547 57,017 65,270 72,345 71,339 66,849 <b>590,560</b>	R 206 R 250 R 250 R 250 R 282 R 296 R 293 287 <b>2,361</b>	R 59,187 R 59,350 R 63,709 R 68,567 R 84,032 R 112,765 R 111,991 84,392 <b>711,030</b>	R 2,042 R 2,282 R 2,112 R 2,053 R 2,276 R 2,840 R 2,243 2,075 <b>20,979</b>	R 136,752 R 133,163 R 123,067 R 135,794 R 156,677 R 174,850 R 169,572 139,458 <b>1,338,491</b>	February March April May June July August September 9-Month Total

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

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

b Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.
c Natural gas, plus a small amount of supplemental gaseous fuels.
d Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
Pumped storage facility production minus energy used for pumping.
f Through 1989, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."
Wood and wood-derived fuels.
h Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

i Solar thermal and photovoltaic (PV) energy.
i Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
k Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.
R=Revised. NA=Not available.
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.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

(Subset of Table 7.2a; Million Kilowatthours)

1975 Total NA			Com	mercial Se	ectora		Industrial Sector <sup>b</sup>							
1973 Total			Datas	Network	Biomass			Datas	Natural	041		Bion	nass	
1975 Total NA		Coalc			Waste <sup>f</sup>	Totalg	Coalc					Wood <sup>j</sup>	Waste <sup>f</sup>	Total <sup>k</sup>
1886 Total NA														3,347
1985 Total														3,106
1999 Total 998 379 5.629 3.272 812 5.877 9.708 60.007 9,641 2,275 25,379 949 130,381 1999 Total 998 379 5.622 1.718 9 8.232 2.272 6.030 71,717 1,443 5.04 2.8868 900 151,022 1995 Total 1,051 369 5.248 2.178 9.030 22,172 6.260 71,040 13,015 5.247 28,354 919 151,011 1995 Total 995 383 4.484 4,607 2.393 8.748 2.2337 6,006 77,085 11,007 5.549 27,693 880 154,131 1999 Total 995 434 4,607 2.393 8.748 2.2337 6,006 77,085 11,007 5.549 27,693 880 154,131 1999 Total 995 434 4,607 2.393 8.748 2.2066 5.577 78,798 11,1227 4,135 2.8652 839 156,677 2001 Total 995 438 4,434 1,007 7,416 20,135 5.293 78,758 11,227 4,135 2.8652 839 156,677 2001 Total 995 438 4,434 1,007 7,416 20,135 5.293 78,758 8,454 31,452 2.8685 896 149,772 2001 Total 995 438 4,434 1,007 7,416 20,135 5.293 79,758 8,454 31,452 2.8685 896 149,772 2001 Total 995 43 8,499 1,552 8,709 19,773 5.965 78,789 11,827 4,135 2.8685 896 149,772 2001 Total 1,340 499 3,969 1,552 8,709 19,773 5.965 78,789 11,884 2.8652 839 156,673 2001 Total 1,331 2.35 4,429 1,657 8,492 19,773 5.965 78,789 11,884 2.8687 8,789 11,884 2.2005 Total 1,331 2.35 4,355 1,599 8,273 19,466 5,368 72,882 9,887 3,195 2.877 11,443 2.006 Total 1,371 189 4.577 1,599 8,273 19,466 5,368 72,882 9,923 2.2627 631 143,122 2.2007 Total 1,251 142 4,188 1,534 7,328 15,703 3,213 76,42 5,504 11,351 2.2008 7010 11,261 1,361 2.25 4,365 1,599 8,273 15,703 3,213 76,42 5,504 11,351 2.2008 7010 11,261 1,361 2.25 4,365 1,599 8,273 15,703 3,213 76,42 5,504 11,351 2.2008 7010 11,261 11,2														
1995 Total 998 379 5,162 1,519 8,030 71,717 11,943 5,304 28,868 900 151,021 1995 Total 1,051 369 5,249 2,176 9,030 22,172 6,030 71,717 11,943 5,304 28,868 900 151,021 1997 Total 1,040 15 5,000 151,021 1997 Total 995 434 4,725 2,342 8,000 170 170 11,000 170 170 170 170 170 170 170 170 170														
1996 Total 1,061 369 5,249 2,176 9,030 22,172 6,260 71,049 13,015 5,678 23,354 919 151,011 1997 Total 1,040 427 4,725 2,342 8,701 2,3214 5,649 75,078 11,814 5,685 28,225 82,25 82 154,092 1998 Total 985 434 4,677 2,385 8,562 2,316 6,08 77,083 11,170 5,344 27,693 880 154,312 1998 Total 985 434 4,677 2,385 8,562 2,316 6,08 77,083 11,170 1,314 4,755 2,349 27,693 880 154,312 1998 Total 995 434 4,677 2,385 8,562 2,316 6,08 77,083 11,170 1,314 4,755 2,082 880 154,312 1998 Total 995 438 4,344 1,007 7,416 20,135 5,223 79,755 14,211 4,755 2,082 8,082 86 154,312 1907 101 101 101 101 101 101 101 101 101 1	1990 Total													
1997 Total 965 383 4,879 2,335 8,748 22,337 6,694 75,078 11,814 5,685 22,525 882 154,097 1998 Total 985 383 4,879 2,333 8,748 2,337 6,066 77,085 11,170 5,349 27,693 880 154,173 1999 Total 995 434 4,607 2,393 8,563 21,474 6,088 78,783 12,519 4,788 22,060 686 156,266 2000 Total 995 438 4,484 1,007 7,7415 20,135 5,289 78,789 11,527 4,135 22,852 883 156,726 2001 Total 985 438 4,484 1,007 7,7416 20,135 5,289 78,789 8,484 3,142 22,858 5,389 156,78 149,520 2001 Total 985 438 4,484 1,007 7,7416 20,135 5,289 78,789 8,484 3,142 22,858 5,389 156,780 149,520 2001 Total 1,206 423 3,889 1,562 8,270 19,773 5,967 78,999 11,684 3,248 22,798 8,484 3,248 22,798 3,248 22,7	1995 Total													
1998 Total 995 383 4,679 2,335 8,748 22,337 6,266 77,085 11,170 5,349 27,693 880 154,132 1999 Total 995 434 4,607 2,393 8,663 21,474 6,088 78,793 11,579 4,786 28,060 686 156,672 2000 Total 9,995 432 4,264 1,985 7,903 22,056 5,597 78,798 11,927 4,135 28,682 839 156,677 2001 Total 992 438 4,264 1,985 7,903 22,056 5,597 78,798 11,927 4,135 28,682 839 156,677 2001 Total 992 438 4,264 1,985 7,903 22,056 5,597 78,798 11,927 4,135 28,682 839 156,677 2001 Total 993 438 4,3310 1,289 7,496 19,817 5,285 78,705 12,953 4,222 27,988 715 154,531 2001 Total 1,340 499 3,869 1,269 8,749 19,745 5,585 78,705 12,953 4,222 27,988 715 154,531 2001 Total 1,340 499 3,869 1,567 8,492 19,466 5,368 72,882 9,687 3,195 28,271 733 144,733 2005 Total 1,351 225 4,355 1,599 8,371 19,464 4,243 77,560 9,411 1,590 28,287 631 143,722 2005 Total 1,371 189 4,257 1,599 8,371 16,684 4,243 77,580 9,411 1,590 28,287 631 143,722 2005 Total 1,371 189 4,257 1,599 8,371 16,684 4,243 77,580 9,411 1,590 28,287 631 143,722 2005 Total 1,371 189 4,257 1,599 8,371 16,684 4,243 77,580 9,411 1,590 28,287 631 143,722 2005 Total 1,261 142 362 132 120 527 1,081 2,99 5,642 571 144 1,919 59 10,766 1,081 2,091 2,														
1999 Total														
2000 Total	1998 Total													
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2007 Total         1371         189         4,257         1,599         8,273         16,694         4,243         77,580         9,411         1,590         228,287         631         143,712           2008 Total         1,261         142         4,188         1,534         7,926         15,703         3,219         76,221         8,507         1,676         26,641         821         137,113           2009 January         105         44         362         131         717         1,194         324         6,059         587         165         2,039         75         10,716           Harch         86         11         344         145         668         1,130         261         6,022         595         193         2,054         65         10,678           April         74         11         324         145         633         1,058         239         5,534         527         191         1,941         63         9,911           July         96         8         344         155         675         1,160         2244         6,269         623         169         2,068         46         10,977           July         96         <														
2009 January	2006 Total													
2009 January	2007 Total													
February   92   19   333   120   627   1,081   299   5,642   571   144   1,919   59   1,0044   March   March   86   11   344   145   668   1,300   261   6,022   595   193   2,054   65   10,677   April   74   11   324   145   668   1,057   235   5,710   539   187   1,984   44   10,177   June   82   5   345   155   675   1,160   244   6,269   623   169   2,068   46   10,977   June   82   5   345   155   675   1,160   244   6,269   623   169   2,068   46   10,977   June   32   5   345   155   675   1,160   244   6,269   623   169   2,068   46   10,977   June   38   34   14   154   769   1,235   239   7,013   678   140   2,249   55   13,964   August   109   13   414   154   769   1,235   239   7,013   678   140   2,249   55   13,964   August   109   13   414   154   769   1,235   239   7,169   744   136   2,332   55   12,314   Cotober   85   8   346   146   659   1,204   212   6,405   680   136   2,206   72   11,286   August   109   13   367   143   703   1,181   219   6,555   662   175   2,152   78   11,797   December   107   13   367   143   703   1,181   219   6,555   662   175   2,152   78   11,797   Total   1,096   163   4,225   1,748   8,165   13,686   2,963   75,748   7,574   1,868   25,292   740   132,322   2010 January   R 102   R 11   R 339   R 111   R 623   1,481   R 197   R 6,303   R 578   R 162   R 1,967   R 64   R 1,114   August   R 80   9   R 326   R 144   R 645   R 1,258   R 169   R 6,194   R 669   R 187   R 2,004   R 68   R 1,104   R 1,044   R 645   R 1,258   R 1,258   R 1,258   R 1,258   R 1,254   R 1,258		1,261	142	4,188	1,534	7,926	15,703	3,219	76,421	8,507	1,676	26,641	821	137,113
March														10,760
April 74 11 324 145 633 1,058 229 5,534 527 191 1,941 63 9,911 May 76 9 310 155 640 1,070 235 5,710 539 187 1,984 44 10,177 June 82 5 345 155 676 1,160 244 6,269 623 169 2,068 46 10,975 1,000														
May														
Jurie 82 5 345 155 675 1,160 244 6,269 623 169 2,068 46 10,972 July 96 8 8 394 155 673 1,180 239 7,013 678 140 2,249 55 11,966 August 109 13 414 154 769 1,235 239 7,013 678 140 2,249 55 11,966 August 109 13 414 154 769 1,235 239 7,013 678 140 2,249 55 11,546 August 109 13 414 154 769 1,235 239 7,013 678 140 2,249 55 11,546 August 109 13 414 154 769 1,235 239 7,013 678 140 2,249 55 11,546 August 109 13 414 154 769 1,235 239 7,013 678 140 2,224 55 11,546 August 109 13 414 154 769 1,242 12 6,405 680 136 2,206 72 11,248 November 94 11 311 151 648 1,072 215 6,239 655 137 2,181 76 10,975 Total 1,096 163 4,225 1,748 8,165 13,686 2,963 75,748 7,574 1,868 25,292 740 132,325 2010 January R116 R13 R367 R137 R709 R1,544 R225 R6,559 R6,559 R6,562 175 2,152 78 11,709 R6,030 R6,578 R169 R6,049 R6,														9,910
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August 109 13 414 154 769 1,235 239 7,189 734 136 2,332 55 12,314 September 89 8 374 148 693 1,105 238 6,810 725 95 2,188 52 11,545 October 85 8 346 146 659 1,204 212 6,405 680 136 2,206 72 11,285 November 94 11 311 151 648 10,72 215 6,239 655 137 2,181 76 10,975 December 107 13 367 143 703 1,181 219 6,855 662 175 2,152 78 11,705 Total 1,096 163 4,225 1,748 8,165 13,686 2,963 75,748 7,574 1,868 25,292 740 132,325 2010 January 8116 813 8367 8137 8709 1,181 219 6,855 662 175 2,152 78 11,705 Total 8,1096 163 4,225 1,748 8,165 13,686 2,963 75,748 7,574 1,868 25,292 740 132,325 2010 January 8106 81 8 8 8351 134 8621 1,844 822 82,582 86,959 8634 8169 82,114 870 82,114 870 82,114 870 82,114 870 82,114 810 82,114														10,973
September 89 8 374 148 693 1,105 238 6,810 725 95 2,168 52 11,545 Cotober 85 8 346 146 659 1,204 212 6,405 680 136 2,206 72 11,285 November 94 11 311 151 648 1,072 215 6,239 655 137 2,181 76 10,975 December 107 13 367 143 703 1,181 219 6,855 662 175 2,152 78 11,705 December 10,096 163 4,225 1,748 8,165 13,686 2,963 75,748 7,574 1,868 25,292 740 132,325 2010 January 8116 813 8367 8137 8709 81,544 8225 86,959 8634 8169 82,114 872 812,122 810 810 810 810 810 810 810 810 810 810														
October         85         8         346         146         659         1,204         212         6,405         680         136         2,206         72         11,285           November         94         11         311         151         648         1,072         215         6,239         655         137         2,181         76         10,975           Total         1,096         163         4,225         1,748         8,165         13,686         2,963         75,748         7,574         1,868         25,292         740         132,325           2010 January         R 116         R 13         R 367         R 137         R 709         R 1,544         R 225         R 6,959         R 634         R 169         R 2,114         R 72         R 12,122           February         R 101         R 8         R 351         134         R 661         R 1,649         163         R 6,303         R 78         R 162         R 1,967         R 64         R 11,938           April         R 8         R 326         R 144         R 645         R 1,519         R 81         R 669         R 187         R 2,044         R 60         R 11,034           May         8         <	August													
November   94   11   311   151   648   1,072   215   6,239   655   137   2,181   76   10,975   70   71   71   73   367   71   73   73   73   73   73   73   7														
December														
Total         1,096         163         4,225         1,748         8,165         13,686         2,963         75,748         7,574         1,868         25,292         740         132,325           2010 January         R 116         R 13         R 367         R 137         R 709         R 1,544         R 225         R 6,959         R 634         R 169         R 2,114         R 72         R 12,120           February         R 102         R 11         R 339         R 111         R 623         1,481         R 197         R 6,303         R 578         R 162         R 1,967         R 64         R 11,134           March         R 91         R 8         R 351         134         R 661         R 1,649         163         R 6,588         735         R 188         R 2,119         R 664         R 11,134           April         R 80         9         R 326         R 144         R 665         R 1,258         R 169         R 6,194         R 669         R 187         R 2,094         R 80         R 11,034           July         R 110         R 8         R 459         R 146         R 812         R 1,258         R 187         R 6,885         R 700         R 132         R 2,193         A 8														
2010 January R116 R13 R367 R137 R709 R1,544 R225 R6,959 R634 R169 R2,114 R72 R12,127 February R102 R11 R339 R111 R623 1,481 R197 R6,303 R578 R162 R1,967 R64 R11,118 March R81 R8 R351 134 R661 R1,649 163 R6,588 735 R188 R2,149 R67 R11,938 May R80 9 R326 R144 R645 R1,258 R169 R6,194 R69 R187 R2,094 R80 R11,033 May R44 R12 R326 R149 R666 R1,519 R181 R6,477 R738 R164 R2,061 R69 R11,614 June R97 R10 R350 R150 R699 R1,812 R6,885 R700 R132 R2,137 68 R12,077 July R110 18 R459 R146 R812 R1,713 R194 R7,205 696 R107 R2,246 R75 R12,718 August R105 R11 R490 R152 R838 R1,729 R189 R7,701 R812 R99 R2,243 R78 R13,398 September R89 R9 R421 R188 R750 R1,499 R165 R7,085 R713 R76 R2,182 R62 R12,272 R189 R7,701 R812 R99 R2,243 R78 R13,398 December R89 R89 R9 R421 R188 R750 R1,499 R165 R7,085 R713 R76 R2,182 R62 R12,273 October R80 R4 R401 R134 R683 R793 R1,677 R2,09 R7,223 R744 R146 R4,205 R146 R79 R1,527 R184 R6,443 R637 R117 R2,114 R84 R11,562 R149 R130 R2,145 R79 R14,499 R165 R7,085 R713 R76 R2,182 R69 R1,1562 R134 R648 R130 R2,145 R79 R1,145 R150 R14 R148 R130 R2,145 R79 R1,145 R150 R14 R148 R130 R2,145 R79 R1,145 R150 R149 R130 R2,145 R79 R1,145 R150 R149 R130 R2,145 R79 R1,145 R150 R149 R165 R7,085 R713 R76 R2,182 R69 R1,1562 R149 R189 R7,701 R181 R6,201 R68 R130 R2,145 R79 R1,149 R150 R149 R149 R130 R2,145 R79 R1,149 R150 R149 R149 R150 R2,145 R79 R1,149 R150 R149 R149 R149 R150 R149 R149 R150 R149 R149 R149 R149 R149 R149 R149 R149														
February R102 R11 R339 R111 R623 1,481 R197 R6,303 R578 R162 R1,967 R64 R11,118 March R91 R8 R351 134 R661 R1,649 163 R6,588 735 R188 R2,149 R67 R11,936 April R80 9 R326 R144 R645 R1,258 R169 R6,194 R669 R187 R2,094 R80 R11,034 May R44 R12 R326 R149 R666 R1,519 R181 R6,477 R738 R164 R2,061 R69 R11,034 May R97 R10 R350 R150 R699 R1,482 R187 R6,885 R700 R132 R2,137 68 R12,075 July R110 R8 R459 R146 R812 R1,713 R194 R7,205 696 R107 R2,246 R75 R12,715 August R105 R11 R490 R152 R838 R1,792 R189 R7,701 R812 R99 R2,243 R78 R13,395 September R89 R9 R421 R148 R750 R1,499 R165 R7,085 R713 R76 R2,182 R62 R12,235 October R80 R7 R419 R133 R712 R1,527 R184 R6,443 R637 R117 R2,114 R84 R11,562 November R69 R4 R401 R134 R683 R1,301 R196 R6,520 R688 R130 R2,145 R79 R11,493 December R88 R12 R476 R136 R793 R1,677 R209 R7,223 R744 134 R2,255 R71 R12,777 Total R1,111 R124 R4,725 R1,672 R8,592 R18,441 R2,258 R8,583 R8,343 R1,668 R25,706 R869 R14,082 R1,096 March R97 7 R341 R134 R666 R1,457 R165 R6,478 R95 R97 7 R341 R134 R666 R1,457 R165 R6,478 R95 R97 7 R341 R134 R622 R1,457 R165 R6,478 R95 R2,271 R71 R12,341 R614 R99 R71 R5 R341 R18 R622 R1,557 R162 R6,473 R662 R196 R2,112 R62 R1,086 May R77 R6 R373 R160 R714 R165 R6,478 R95 R96 R13 R441 R25 R85 R791 R1,763 R165 R668 R2,112 R62 R1,086 R77 R40 R36 R79 R7 R341 R18 R622 R1,155 R162 R6,473 R662 R196 R2,112 R62 R1,086 May R71 R5 R341 R18 R622 R1,155 R162 R6,473 R662 R196 R2,112 R62 R1,086 R77 R6 R373 R160 R714 R1,622 R140 R6,829 R597 R208 R2,145 R65 R1,086 R75 R1,086 R75 R1,086 R75 R1,677 R6 R373 R160 R714 R1,622 R140 R6,829 R597 R208 R2,145 R65 R1,636 R791 July R96 R13 R431 R155 R791 R1,763 R158 R7,181 R762 R18 R2,204 R76 R18,204 R18 R2,204 R76 R18,204 R18 R2,204 R76 R18,204 R18 R2,204 R76 R	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
March R91 R8 R351 134 R661 R1,649 163 R6,588 735 R188 R2,149 R67 R11,934 April R80 9 R326 R144 R645 R1,559 R169 R6,194 R669 R187 R2,094 R80 R11,034 R10,034 R1			<sup>R</sup> 13	R 367					R 6,959		R 169			R 12,120
April R80 9 R326 R144 R645 R1,258 R169 R6,194 R669 R1,87 R2,094 R80 R11,034 May R97 R10 R350 R150 R699 R1,482 R187 R6,885 R700 R132 R2,137 68 R12,075 July R110 18 R459 R146 R812 R1,713 R194 R7,205 696 R107 R2,246 R75 R12,718 August R105 R11 R490 R152 R38 R1,792 R189 R7,701 R812 R99 R2,243 R78 R13,398 September R89 R9 R421 R148 R750 R1,499 R165 R7,085 R713 R76 R2,182 R62 R12,238 October R80 R7 R419 R133 R712 R1,527 R184 R6,443 R637 R117 R2,114 R84 R11,565 November R80 R7 R419 R134 R683 R1,301 R196 R6,520 R688 R130 R2,145 R79 R11,495 December R88 R12 R476 R136 R793 R1,677 R209 R7,223 R744 134 R2,255 R71 R12,777 Total R1,111 R124 R4,725 R1,672 R8,592 R18,441 R2,258 R81,583 R8,343 R1,668 R25,706 R869 R144,082 R191 R191 R191 R191 R191 R191 R191 R19	February		R 11	R 339		R 623	_ 1,481		<sup>R</sup> 6,303		R 162	R 1,967		R 11,118
Máy         84         R12         R326         R149         R666         R1,519         R181         R6,477         R738         R164         R2,061         R69         R11,612           June         R97         R10         R350         R150         R699         R1,482         R187         R6,885         R700         R132         R2,137         68         R12,075           July         R110         18         R459         R146         R812         R1,713         R194         R7,205         696         R107         R2,246         R75         R12,717         R812         R78         R107         R2,246         R75         R1,713         R194         R7,205         696         R107         R2,246         R75         R1,331         R712         R1,499         R165         R7,015         R812         R99         R2,243         R78         R13,339         R712         R1,527         R184         R6,443         R637         R117         R2,114         R84         R1,562         R688         R130         R1,479         R165         R688         R130         R2,145         R99         R2,223         R744         134         R4         R11,562         R688         R130         R117				<sup>R</sup> 351			R 1,649				<sup>R</sup> 188			
June   R97						<sup>R</sup> 645		<sup>R</sup> 169		<sup>R</sup> 669	<sup>R</sup> 187			
July         R 110         18         R 459         R 146         R 812         R 1,713         R 194         R 7,205         696         R 107         R 2,246         R 75         R 12,718           August         R 105         R 11         R 490         R 152         R 838         R 1,792         R 189         R 7,701         R 812         R 99         R 2,243         R 78         R 13,395           September         R 89         R 9         R 421         R 148         R 750         R 1,499         R 165         R 7,015         R 713         R 76         R 2,182         R 2         R 2,182         R 2         R 2,182         R 2,283         R 1,111         R 133         R 127         R 1,527         R 184         R 6,443         R 637         R 1,17         R 2,114         R 84         R 1,156           November         R 88         R 12         R 476         R 136 <td></td> <td>84</td> <td>r 12</td> <td>r 326</td> <td></td> <td>r 666</td> <td><sup>K</sup> 1,519</td> <td>r 181</td> <td><sup>K</sup> 6,477</td> <td>r 738</td> <td></td> <td><sup>K</sup> 2,061</td> <td></td> <td><sup>K</sup> 11,614</td>		84	r 12	r 326		r 666	<sup>K</sup> 1,519	r 181	<sup>K</sup> 6,477	r 738		<sup>K</sup> 2,061		<sup>K</sup> 11,614
August R105 R11 R490 R152 R838 R1,792 R189 R7,701 R812 R99 R2,243 R78 R13,395 September R89 R9 R421 R148 R750 R1,499 R165 R7,085 R713 R76 R2,182 R62 R12,236 October R80 R7 R419 R133 R712 R1,527 R184 R6,443 R637 R117 R2,114 R4 R4 R11,566 R1,677 R209 R7,223 R744 R134 R2,255 R71 R12,777 Total R111 R124 R4,725 R1,677 R5,992 R18,441 R2,258 R81,583 R8,343 R1,668 R25,706 R869 R144,082 R1,111 R124 R4,725 R1,677 R5,666 R1,447 R151 R6,314 R664 R160 R2,021 R64 R10,966 March R97 R95 R8 R350 R125 R656 R1,447 R151 R6,314 R664 R160 R2,021 R64 R1,993 R1,493 R165 R6,478 R97 R18,884 R2,156 R65 R11,493 R160 R1,457 R165 R6,478 R662 R1,677 R683 R2,112 R62 R11,083 R2,114 R64 R1,995 R18,841 R1,55 R162 R6,473 R662 R1,677 R2,114 R64 R1,995 R18,841 R1,155 R162 R6,473 R662 R1,47 R2,114 R18 R2,114 R18 R2 R1,155 R162 R6,473 R662 R1,167 R2,114 R1,165 R1,167 R18 R2,114 R18 R2,114 R18 R2,114 R18 R2 R1,155 R162 R6,473 R662 R1,167 R2,114 R1,168 R1,169 R		K 97		K 350					K 6,885			K 2,137	68	
September         R 89         R 9         R 421         R 148         R 750         R 1,499         R 165         R 7,085         R 713         R 76         R 2,182         R 62         R 62         R 12,236           October         R 80         R 7         R 419         R 133         R 712         R 1,527         R 184         R 637         R 117         R 2,114         R 84         R 11,562           November         R 69         R 4         R 401         R 134         R 683         R 1,301         R 196         R 6,520         R 688         R 130         R 2,145         R 79         R 1,499         R 1,697         R 209         R 7,223         R 744         134         R 2,225         R 71         R 1,457         R 1,499         R 1,677         R 209         R 7,223         R 744         134         R 2,255         R 71         R 1,477         R 1,499         R 1,491         <		r 110	18	r 459	^ 146	™ 812	1,/13	r 194	^ /,205	696	r 107		r /5	
October         R 80         R 7         R 419         R 133         R 712         R 1,527         R 184         R 6,443         R 637         R 117         R 2,114         R 84         R 11,562           November         R 69         R 4         R 401         R 134         R 683         R 1,301         R 196         R 6,520         R 688         R 130         R 2,145         R 79         R 11,493           December         R 88         R 12         R 476         R 136         R 793         R 1,677         R 209         R 7,223         R 744         134         R 2,255         R 71         R 12,777           Total         R 1,111         R 124         R 4,725         R 1,672         R 8,592         R 18,441         R 2,258         R 81,583         R 8,343         R 1,668         R 25,706         R 869         R 144,082           2011 January         103         R 13         R 402         R 139         R 739         R 1,723         R 198         R 7,017         R 663         R 137         R 2,271         R 71         R 2,241           February         R 95         8         R 350         R 125         R 656         R 1,447         R 151         R 663         R 137         R 2,271         R 7			^11	^ 490	^ 152	° 838	1,792	` 189	^ /,/U1	^ 812	` 99	^ 2,243	^ /8	
November         R 69         R 4         R 401         R 134         R 683         R 1,301         R 196         R 6,620         R 688         R 130         R 2,145         R 79         R 11,492           December         R 88         R 12         R 476         R 136         R 793         R 1,677         R 209         R 7,223         R 744         134         R 2,255         R 71         R 12,777           Total         R 1,111         R 124         R 4,725         R 1,672         R 8,592         R 18,441         R 2,258         R 81,583         R 8,343         R 1,668         R 25,706         R 869         R 14,408           2011 January         103         R 13         R 402         R 139         R 739         R 1,723         R 198         R 7,017         R 663         R 137         R 2,271         R 71         R 12,341           February         R 95         8         R 350         R 125         R 656         R 1,447         R 151         R 6,314         R 664         R 160         R 2,271         R 71         R 1,433           April         R 77         R 341         R 134         R 666         R 1,457         R 165         R 6,478         705         R 188         R 2,156         R 65						^ /50		^ 165		^ /13		N 2,182	^ 62	
December         R 88         R 12         R 476         R 136         R 793         R 1,677         R 209         R 7,223         R 744         1 34         R 2,255         R 71         R 12,777           Total         R 1,111         R 124         R 4,725         R 1,672         R 8,592         R 18,441         R 2,258         R 81,583         R 8,343         R 1,668         R 25,706         R 869         R 144,082           2011         January         1 03         R 13         R 4,022         R 1,394         R 7,986         R 1,743         R 1,677         R 209         R 7,223         R 7,44         1 34         R 668         R 1,447         R 1,677         R 208         R 3,433         R 1,668         R 25,706         R 869         R 1,440         R 2,258         R 81,583         R 8,343         R 1,668         R 2,5706         R 869         R 1,440,082           Pebruary         R 95         8         R 350         R 125         R 656         R 1,447         R 1,51         R 6,314         R 564         R 160         R 2,021         R 64         R 10,966           March         R 97         7         R 341         R 134         R 660         R 1,457         R 165         R 6,473         R 7662		K 80		R 419	R 133	R 000	R 4 204	R 100	R 0,500	R 600	R 117	R 2,114	R 70	
Total         R1,111         R 124         R 4,725         R 1,672         R 8,592         R 18,441         R 2,258         R 81,583         R 8,343         R 1,668         R 25,706         R 869         R 144,082           2011 January         103         R 13         R 402         R 139         R 739         R 1,723         R 198         R 7,017         R 663         R 137         R 2,271         R 71         R 12,341           February         R 95         8         R 350         R 125         R 656         R 1,447         R 151         R 663         R 137         R 2,201         R 64         R 10,961           March         R 97         7         R 341         R 134         R 666         R 1,447         R 165         R 6,314         R 160         R 2,021         R 64         R 10,961           April         R 71         R 5         R 347         R 118         R 622         R 1,155         R 162         R 6,473         R 662         R 196         R 2,112         R 62         R 11,085           May         R 77         R 6         R 373         R 160         R 714         R 1,622         R 140         R 6,629         R 597         R 208         R 2,112         R 62         R 11,822		., 69 B 00		* 401 R 476	134 R 136	., pgg	R 1,301		" 6,520 R 7,000	. 688 8 744		° 2,145		
2011 January		00 R 4 4 4 4				R 9 F03								
February         R 95         8         R 350         R 125         R 656         R 1,447         R 151         R 6,314         R 564         R 160         R 2,021         R 64         R 10,961           March         R 97         7         R 341         R 134         R 666         R 1,457         R 165         R 6,478         705         R 188         R 2,156         R 65         R 11,493           April         R 71         R 5         R 347         R 118         R 622         R 1,155         R 162         R 6473         R 662         R 196         R 2,112         R 2         R 11,493           May         R 77         R 6         R 373         R 160         R 714         R 1,622         R 140         R 6,829         R 597         R 208         R 2,047         R 74         R 11,822           June         R 82         8         R 368         R 144         R 693         R 1,549         R 155         R 6,696         R 698         R 147         R 2,321         R 71         R 72         R 80					•					•		•		
February	<b>2011</b> January													
April       R71       R5       R347       R118       R622       R1,155       R162       R6473       R662       R196       R2,112       R62       R11,088         May       R77       R6       R373       R160       R714       R1,622       R140       R6,829       R597       R208       R2,047       R74       R1,182         Jule       R82       R8       R368       R144       R693       R1,549       R155       R6,960       R698       R147       R2,321       R71       R1,11,22         July       R96       R13       R431       R155       R791       R1,763       R158       R7,181       R762       R18       R2,304       R76       R12,668         August       R86       R7       R408       R160       R752       R1,814       R157       R7,248       R706       R100       R2,268       R76       R12,638         September       76       6       356       150       674       1,686       166       6,629       670       123       2,215       76       11,814         9-Month Total       785       73       3,376       1,284       6,306       14,214       1,453       60,866       6,02	February			K 350		K 656		K 151	K 6,314		K 160			K 10,961
May         R77         R6         R373         R160         R714         R1,622         R140         R6,829         R597         R208         R2,047         R74         R11,822           June         R82         8         R368         R144         R693         R1,549         R155         R6,969         R698         R147         R2,321         R71         R11,822           July         R96         R13         R431         R155         R791         R1,763         R158         R7,181         R762         R118         R2,304         R76         R12,669           August         R86         R7         R408         R160         R752         R1,814         R157         R7,248         R706         R100         R2,268         R76         R12,669           September         76         6         356         150         674         1,686         166         6,629         670         123         2,215         76         11,810           9-Month Total         785         73         3,376         1,284         6,306         14,214         1,453         60,866         6,028         1,377         19,715         636         106,743           2010 9-Month Total						K 666		K 165			K 188	<sup>K</sup> 2,156		<sup>K</sup> 11,493
June     R82     8     R368     R144     R693     R1,549     R155     R6,696     R698     R147     R2,321     R71     R11,921       July     R96     R13     R431     R155     R791     R1,763     R158     R7,181     R762     R118     R2,304     R76     R12,668       August     R86     R7     R408     R160     R752     R1,814     R157     R7,248     R706     R100     R2,268     R76     R12,638       September     76     6     356     150     674     1,686     166     6,629     670     123     2,215     76     11,810       9-Month Total     785     73     3,376     1,284     6,306     14,214     1,453     60,866     6,028     1,377     19,715     636     106,743       2010 9-Month Total     875     101     3,429     1,269     6,403     13,937     1,669     61,397     6,273     1,286     19,191     635     108,250			<u>۲</u> 5	K 347	K 118	K 622	K 1,155	K 162	K 6,473	<sup>K</sup> 662	K 196			
July         R 96         R 13         R 431         R 155         R 791         R 1,763         R 158         R 7,181         R 762         R 118         R 2,304         R 76         R 12,665           August         R 86         R 7         R 408         R 160         R 752         R 1,814         R 157         R 7,248         R 706         R 100         R 2,268         R 76         R 12,638           September         76         6         356         150         674         1,686         166         6,629         670         123         2,215         76         11,814           9-Month Total         785         73         3,376         1,284         6,306         14,214         1,453         60,866         6,028         1,377         19,715         636         106,743           2010 9-Month Total         875         101         3,429         1,269         6,403         13,937         1,669         61,397         6,273         1,286         19,191         635         108,250				r 373	^ 160	<sup>r</sup> 714	1,622	^ 140		° 597	° 208			
August														
September				r 431	r 155		1,763	r 158	^ /,181	r /62	r 118	^ 2,304		12,669
9-Month Total 785 73 3,376 1,284 6,306 14,214 1,453 60,866 6,028 1,377 19,715 636 106,745 2010 9-Month Total 875 101 3,429 1,269 6,403 13,937 1,669 61,397 6,273 1,286 19,191 635 108,250	August							^ 157						
2010 9-Month Total 875 101 3,429 1,269 6,403 13,937 1,669 61,397 6,273 1,286 19,191 635 108,250														
2009 9-Month Total 810 130 3.201 1.308 6.154   10.229 2.317 56.248 5.578 1.420 18.754 515 98.357	2010 9-Month Total 2009 9-Month Total	875 810	101 130	3,429 3,201	1,269 1,308	6,403 6,154	13,937 10,229	1,669 2,317	61,397 56,248	6,273 5,578	1,286 1,420	19,191 18,754	635 515	108,250 98,357

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

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.

plants.

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

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

synfuel.

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

Distillate fuel oil, restoual fuel oil, petroleum coke, jet fuel, kerosene, otner petroleum, and waste oil.

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

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

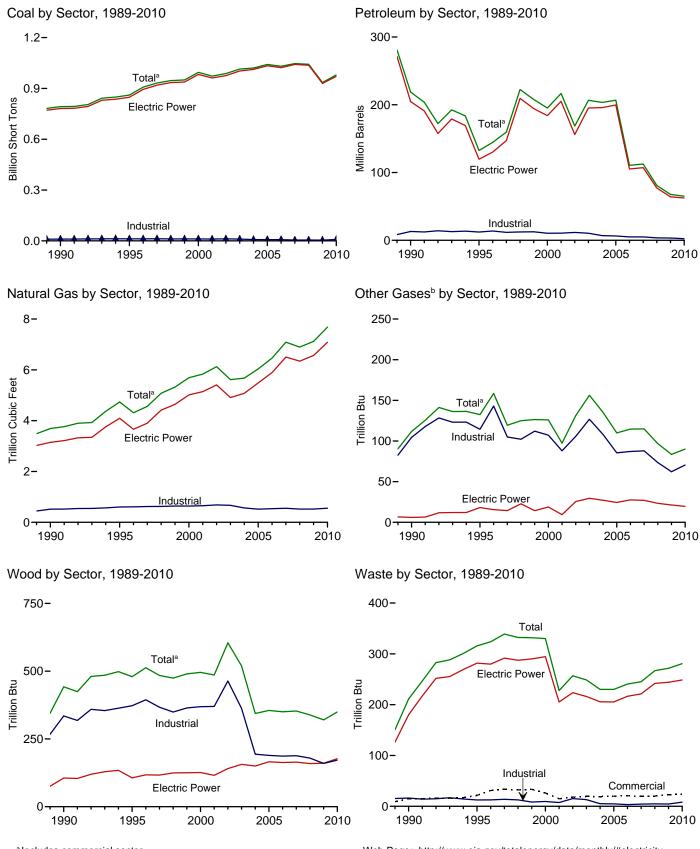
tire-derived fuels).

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

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

i Conventional hydroelectric power.
j Wood and wood-derived fuels.
k Includes photovoltaic (PV) energy, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels)

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation



<sup>&</sup>lt;sup>a</sup> Includes commercial sector.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity. Sources: Tables 7.3a–7.3c.

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

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

				Petroleum					Bion	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	Th	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	(s)	2	NA
1980 Total	569,274	29,051	391,163	NA	179	421,110	3,682	NA	` 3	2	NA
1985 Total	693,841	14,635	158,779	NA_	231	174,571	3,044	NA_	8	7	NA_
1990 Total <sup>k</sup>	792,457 860,594	18,143 19,615	190,652 95,507	437 680	1,914 3,355	218,800	3,692 4,738	112	442 480	211 316	36
1995 Total 1996 Total	907.209	20.252	106.055	1,712	3,322	132,578 144.626	4,736 4.312	133 159	513	324	42 37
1997 Total	931.949	20,232	118,741	237	4.086	159,715	4,565	119	484	339	36
1998 Total	946.295	25.062	172,728	549	4.860	222.640	5.081	125	475	332	36
1999 Total	949,802	25,951	158,187	974	4,552	207,871	5,322	126	490	332	41
2000 Total	994,933	31,675	143,381	1.450	3,744	195,228	5,691	126	496	330	46
2001 Total	972,691	31,150	165,312	855	3,871	216,672	5,832	97	486	228	160
2002 Total	987,583	23,286	109,235	1,894	6,836	168,597	6,126	131	605	257	191
2003 Total	1,014,058	29,672	142,518	2,947	6,303	206,653	5,616	156	519	249	193
2004 Total	1,020,523	20,163	142,088	2,856	7,677	203,494	5,675	135	344	230	183
2005 Total	1,041,448	20,651	141,518	2,968	8,330	206,785	6,036	110	355	230	173
2006 Total	1,030,556	13,174	58,473	2,174	7,363	110,634	6,462	115	350	241	172
2007 Total	1,046,795	15,683	63,833	2,917	6,036	112,615	7,089	115	353	245	168
2008 Total	1,042,335	12,832	38,191	2,822	5,417	80,932	6,896	97	339	267	172
2009 January	90,639	1,882	6,033	424	426	10,467	505	6	28	21	13
February	74,256	1,203	2,414	256	390	5,823	470	6	25	20	12
March	71,990	1,252	2,045	246	480	5,943	519	7	26	23	14
April	67,209	825	1,691	178	427	4,828	468	6	23	23	14
May	70,508	1,071	2,216	185	432	5,632	533	6	24	23	15
June	79,071	1,001	2,313	150	433	5,628	665	7	26	23	15
July	84,360	934	2,517	134	455	5,859	802	8	29	24	15
August	86,789 73,705	1,002 765	2,976 1.846	166 135	439 438	6,338 4.936	865 713	8 8	30 27	24 22	15 14
September October	74,686	847	2,062	139	276	4,427	559	7	27	22	14
November	73,150	827	1,217	143	273	3,551	479	7	27	23	14
December	88,320	1,050	1,246	172	353	4,234	544	8	29	23	14
Total	934,683	12,658	28,576	2,328	4,821	67,668	7,121	84	320	272	170
2010 January	R 90,767	R 2,485	R 2,860	R 241	R 433	<sup>R</sup> 7,751	R 570	7	R 30	R 22	<sup>R</sup> 15
February	R 80,209	R 869	R 1,075	R 212	R 404	R 4,174	R 502	6	R 28	R 20	R 13
March	R 76,544	R 785	R 1.245	<sup>R</sup> 147	R 438	R 4,370	R 479	8	R 29	R 24	<sup>R</sup> 15
April	<sup>R</sup> 67,037	<sup>R</sup> 726	R 1,160	R 126	R 382	R 3,923	R 494	8	R 27	_ 23	<sup>R</sup> 15
May	R 76,061	R 1,050	R 1,997	R 121	R 415	R 5,244	R 582	8	R 27	R 24	<sup>R</sup> 15
June	R 87,395	R 1,244	R 3,087	R 154	R 493	R 6,950	R 731	. 8	R 29	R 24	R 16
July	R 94,993	R 1,347	R 3,681	R 200	R 524	R 7,849	R 923	R 8	R 31	R 24	R 16
August	R 94,786	R 1,093	R 2,987	R 164	R 423	R 6,358	R 972	8	R 32	R 24	R 16 R 16
September	<sup>R</sup> 79,573 <sup>R</sup> 70,918	<sup>R</sup> 905 <sup>R</sup> 787	R 1,789 R 1,113	<sup>R</sup> 151 <sup>R</sup> 129	R 394 R 362	R 4,813 R 3,840	<sup>R</sup> 723 <sup>R</sup> 594	8 6	R 30 R 28	<sup>R</sup> 23 <sup>R</sup> 23	<sup>R</sup> 15
October November	R 72,756	R 876	R 982	R 143	R 317	R 3,588	R 519	7	R 29	R 24	R 15
December	R 88,645	1.883	R 2,021	R 266	R 408	R 6,210	R 591	R 8	R 31	R 24	R 16
Total	R 979,684	R 14,050	R 23,997	R <b>2,056</b>	R <b>4,994</b>	R 65,071	R 7,680	R 90	R 350	R 281	R 184
2011 January	R 90,106	R 1.238	R 1,700	R 231	R 526	R 5,802	R 564	7	R 30	R 22	12
February	R 73,505	R 854	R 1,007	R 124	387	R 3,919	503	6	R 27	R 21	11
March	R 72,340	R 839	R 1.122	R 133	R 465	R 4,421	R 504	7	R 28	R 24	R 14
April	R 66,870	R 957	R 1,328	R 121	R 304	R 3,924	R 548	7	R 24	R 23	R 13
May	R 73,511	R 909	R 1,222	R 110	R 316	R 3,820	R 603	7	R 25	R 24	14
June	R 84,072	R 969	R 1,261	<sup>R</sup> 145	R 388	R 4,316	R 729	8	R 29	R 25	14
July	R 94,214	<sup>R</sup> 1,161	R 1,542	R 167	R 479	R 5,265	R 966	<sup>R</sup> 8	R 30	R 26	15
August	R 92,177	R 809	R 1,333	R 122	R 415	R 4,341	R 948	8	R 30	R 25	14
September 9-Month Total	76,612 <b>723,408</b>	778 <b>8,514</b>	958 <b>11,474</b>	162 <b>1,315</b>	392 <b>3,673</b>	3,861 <b>39,669</b>	710 <b>6,074</b>	8 <b>68</b>	28 <b>251</b>	24 <b>214</b>	13 <b>121</b>
		,	,	,	,	,	,				
2010 9-Month Total 2009 9-Month Total	747,365 698,527	10,504 9,934	19,881 24,051	1,517 1,874	3,906 3,919	51,433 55,455	5,976 5,539	69 61	261 238	210 203	138 128

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

b Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal

combustion plant use of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.

<sup>c</sup> Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of

petroleum. For 1980-2000, electric utility data also include a small amount of fuel oil no. 4.

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

on no. 4.

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

<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, propane gas, and other manufactured and waste gases derived from fossil fuels.

b Wood and wood-derived fuels.

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

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

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

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

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

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

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

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

				Petroleum					Bion	nass	
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	TI	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>	781,301	16,394	183,285	25	1,008	204,745	3,147	6	106	180	(s)
1995 Total 1996 Total	847,854 894,400	18,066 18.472	88,895 98,795	441 567	2,452 2,467	119,663 130,168	4,094 3,660	18 16	106 117	282 280	2
1997 Total	919,009	18,646	112,423	130	3,201	147,202	3,903	14	117	292	1
1998 Total	934,126	23,166	165,875	411	3,999	209,447	4,416	23	125	287	2
1999 Total 2000 Total	937,888 982,713	23,875 29,722	151,921 138,047	514 403	3,607 3,155	194,345 183,946	4,644 5,014	14 19	125 126	290 294	1 1
2001 Total	961,523	29,056	159,150	374	3,308	205,119	5,142	9	116	205	109
2002 Total	975,251	21,810	104,577	1,243	5,705	156,154	5,408	25	141	224	137
2003 Total 2004 Total	1,003,036 1,012,459	27,441 18,793	137,361 138,831	1,937 2,511	5,719 7,135	195,336 195,809	4,909 5,075	30 27	156 150	216 206	136 131
2005 Total	1,033,567	19,450	138,337	2,591	7,877	199,760	5,485	24	166	205	116
2006 Total	1,022,802 1.041,346	12,578 15.135	56,347 62.072	1,783 2,496	6,905 5,523	105,235 107,316	5,891 6,502	28 27	163 165	216 221	117 117
2008 Total	1,036,891	12,318	37,222	2,608	5,000	77,149	6,342	23	159	242	122
2009 January	90,224	1,778	5,871	400	398	10,039	460	1	15	19	9
February March	73,894 71,583	1,084 1,198	2,313 1,958	234 201	363 455	5,445 5,632	429 475	1 2	13 13	18 20	8 10
April	66,830	769	1,623	149	403	4,557	428	2	11	20	9
May	70,105	981 932	2,154 2,264	172 130	407 406	5,340	491 619	2 2	11	21 21	10 10
June July	78,636 83.917	932 865	2,264	126	423	5,357 5.577	751	2	14 15	21	10
August	86,322	927	2,935	150	409	6,056	812	2	15	21	10
September	73,288 74,232	707 809	1,801 2,022	122 129	407 247	4,663 4,195	664 512	2 2	13 13	20 20	10 9
October November	72,767	787	1,173	136	243	3,309	434	2	13	20	9
December	87,894	1,012	1,180	161	326	3,982	494	2	15	21	10
Total	929,692	11,848	27,768	2,110	4,485	64,151	6,567	21	160	244	115
2010 January	R 90,080 R 79,537	<sup>R</sup> 2,441 <sup>R</sup> 833	<sup>R</sup> 2,804 <sup>R</sup> 1,023	<sup>R</sup> 219 <sup>R</sup> 196	<sup>R</sup> 404 <sup>R</sup> 379	<sup>R</sup> 7,482 <sup>R</sup> 3,946	<sup>R</sup> 519 <sup>R</sup> 456	2 2	<sup>R</sup> 16 <sup>R</sup> 15	<sup>R</sup> 20 <sup>R</sup> 18	9
February March	R 75,772	<sup>R</sup> 756	R 1,214	<sup>R</sup> 130	415	R 4,176	R 432	2	R 15	<sup>R</sup> 21	9
April	R 66,559	<sup>R</sup> 695	R 1,132	R 112	R 360	R 3,741	R 449	2	R 14	R 20	R g
May June	R 75,311 R 86,725	R 1,021 R 1,220	R 1,964 R 3,059	<sup>R</sup> 104 <sup>R</sup> 137	R 390 R 463	<sup>R</sup> 5,040 <sup>R</sup> 6,733	<sup>R</sup> 536 <sup>R</sup> 681	2 2	<sup>R</sup> 13 <sup>R</sup> 15	R 21 R 21	10 10
July	R 94,194	R 1,306	R 3,643	<sup>R</sup> 185	R 495	<sup>R</sup> 7,610	R 869	2	R 16	R 22	10
August	R 93,922	R 1,066	R 2,962	R 149	R 392	R 6,136	<sup>R</sup> 915 <sup>R</sup> 671	R 2	16	R 22	10
September October	R 78,881 R 70,205	R 880 R 762	R 1,760 R 1,076	R 136 R 112	<sup>R</sup> 371 <sup>R</sup> 337	R 4,628 R 3,634	<sup>R</sup> 547	1 1	R 15 R 13	<sup>R</sup> 21 20	10 10
November	R 72,206	R 849	R 949	<sup>R</sup> 125	R 290	R 3,373	R 473	i	R 15	R 21	10
December Total	R 87,854 R <b>971,245</b>	R 1,847 R <b>13,677</b>	R 1,973 R <b>23,560</b>	244 R <b>1,848</b>	R 383 R <b>4,679</b>	R 5,978 R <b>62,477</b>	R 538 R <b>7,085</b>	1 <b>20</b>	R 16 R <b>177</b>	R 22 R <b>249</b>	10 R <b>116</b>
2011 January	R 89,305	R 1,215	R 1,653	R 223	495	R 5,564	512	R 1	<sup>R</sup> 15	R 20	9
February	R 72,814	R 832	R 973	R 117	365	R 3,750	457	1	R 14	R 18	8
March April	R 71,671 R 66,411	822 <sup>R</sup> 936	<sup>R</sup> 1,093 <sup>R</sup> 1,296	<sup>R</sup> 121 <sup>R</sup> 104	R 440 R 282	<sup>R</sup> 4,234 <sup>R</sup> 3,747	R 457 R 500	<sup>R</sup> 1 2	13 <sup>R</sup> 11	R 22 R 21	10 10
May	R 72,742	<sup>R</sup> 891	R 1,199	R 103	R 295	R 3,670	R 551	2	R 12	R 22	10
June	R 83,360 R 93,388	<sup>R</sup> 946 <sup>R</sup> 1,135	R 1,236 R 1,518	R 129	R 364 R 452	<sup>R</sup> 4,134 <sup>R</sup> 5,069	679 R 912	2 2	<sup>R</sup> 14 <sup>R</sup> 15	R 22 R 23	10
July August	R 91,388	R 788	R 1,311	158 <sup>R</sup> 107	R 389	R 4,152	R 894	2	R 15	R 23	11 10
September	75,820	756	940	126	369	3,670	661	2	13	21	10
9-Month Total	716,851	8,323	11,220	1,188	3,452	37,990	5,623	15	122	191	87
2010 9-Month Total 2009 9-Month Total	740,980 694,800	10,218 9,241	19,562 23,393	1,367 1,683	3,669 3,669	49,492 52,665	5,528 5,127	16 16	133 120	186 183	86 87

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

b Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal

combustion plant use of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.

<sup>c</sup> Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of

petroleum. For 1980-2000, electric utility data also include a small amount of fuel oil no. 4.

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

oil no. 4.

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

<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, propane gas, and other manufactured and waste gases derived from fossil fuels.

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Nood and wood-derived fuels.

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

tire-derived fuels).

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

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

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

Notes: Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants.

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

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

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

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

Sources: See end of section.

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

		Commercial Sector <sup>a</sup>				Industrial Sector <sup>b</sup>						
			National	Biomass			Network	045	Bion	nass		
	Coalc	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>	Woodh	Waste <sup>f</sup>	Other <sup>i</sup>	
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillion	n Btu		
1989 Total	414	1,165	18	9	9.707	8,482	444	83	267	15	37	
1990 Total	417	953	28	15	10,740	13,103	517	104	335	16	36	
1995 Total	569	649	43	21	12,171	12,265	601	114	373	13	40	
1996 Total	656	645	42	31	12,153	13,813	610	143	394	13	35	
1997 Total 1998 Total	630 440	790 802	39 41	34 32	12,311 11,728	11,723 12,392	623 625	105 102	367 349	14 13	36 35	
1999 Total		931	39	33	11,432	12,595	639	112	364	8	39	
2000 Total	514	823	37	26	11,706	10,459	640	107	369	10	45	
2001 Total	532	1.023	36	15	10,636	10,530	654	88	370	7	44	
2002 Total	477	834	33	18	11,855	11,608	685	106	464	15	43	
2003 Total	582	894	38	19	10,440	10,424	668	127	362	13	46	
2004 Total	377	766	33	19	7,687	6,919	566	108	194	5	41	
2005 Total	377	585	34	20	7,504	6,440	518	85	189	5	46	
2006 Total		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 January	32	54	3	2	384	374	42	5	13	(s)	3	
February	28	22	3	2	334	356	38	5	12	(s)	3	
March	25 22	12	3	2 2	382	299	41	5	13	(s)	3	
April	22 22	12 11	3	2	356 381	259 282	38 39	4 4	12 13	(s) (s)	4	
May June	24	7	3	2	412	265	43	5	13	(s)	4	
July	28	9	3	2	415	273	48	6	14	(s)	4	
August	30	15	3	2	437	267	50	6	15	(s)	4	
September	26	10	3	2	391	263	47	6	14	(s)	3	
October	24	10	3	2	430	223	44	6	14	(s)	3	
November	26	11	3	2	357	232	43	5	14	(s)	4	
December Total	30 <b>317</b>	16 <b>190</b>	3 <b>34</b>	2 <b>23</b>	396 <b>4,674</b>	236 <b>3,328</b>	47 <b>520</b>	6 <b>62</b>	14 <b>160</b>	(s)	4 <b>42</b>	
										R 1		
2010 January February	R 32 R 28	<sup>R</sup> 18 <sup>R</sup> 16	3	2 2	<sup>R</sup> 654 <sup>R</sup> 643	<sup>R</sup> 252 <sup>R</sup> 212	R 48 R 43	5 5	14 13	N 1 R 1	R 4 R 4	
March	26	R 12	3	2	R 746	R 182	44	6	14	R 1	R 4	
April	R 23	R 11	3	2	R 456	R 171	42	6	14	R 1	R 4	
May	R 23	14	3	2	R 727	R 190	R 44	6	14	R 1	R 4	
June		R 13	3	2	R 643	R 204	R 47	6	14	R 1	<sup>R</sup> 5	
July	30	R 26	R 4	2	R 769	<sup>R</sup> 213	<sup>R</sup> 50	6	15	<sup>R</sup> 1	<sup>R</sup> 5	
August	R 29	R 15	R 4	2	R 835	R 207	R 53	7	15	R 1	R 5	
September	26 R 23	R 13	3	2	R 666 R 690	R 171 R 195	R 48 R 44	6	R 15	R 1 R 1	R 5 R 5	
October	21	11 R <b>7</b>	3 3	2 2	R 529	R 208	43	5 6	14 14	N 1 R 1	<sup>^</sup> 5	
November December	R 26	R 15	8 4	2	R 765	R 217	43 48	6	15	R 1	R 5	
Total		R 172	R 39	R <b>24</b>	R 8,125	R 2,422	R <b>555</b>	R 70	R 172	R 8	R 55	
2011 January	30	R 14	3	2	R 771	R 223	R 49	6	<sup>R</sup> 15	R 1	2	
February	R 28	9	3	2	R 663	R 160	R 44	5	13	R 1	2	
March	R 28	8	3	2	R 641	R 179	R 44	6	14	Ŗ į	3	
April	22	<sup>R</sup> 6	3	2	437	171	R 45	6	R 14	R 1	3	
May	R 23	7	3	2	R 746	R 143	R 48	5	13	R 1 R 1	3	
June	<sup>R</sup> 24 <sup>R</sup> 28	<sup>R</sup> 9 <sup>R</sup> 15	3 R 4	2	R 688 R 798	<sup>R</sup> 173 <sup>R</sup> 181	<sup>R</sup> 47 <sup>R</sup> 50	6	15	<sup>K</sup> 1	3	
July	* 28 26	^ 15 9	* 4 3	2 2	R 811	<sup>R</sup> 181	* 50 50	7 6	15 <sup>R</sup> 15	^1 R1	R 3	
August September	23	8	3	2	769	183	46	6	14	1	2	
9-Month Total	233	86	28	17	6,324	1,593	422	53	129	6	24	
2010 9-Month Total 2009 9-Month Total	244 236	139 153	28 26	18 17	6,140 3,491	1,802 2,638	420 386	53 46	128 118	6 3	41 31	

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

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

technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels). R=Revised. (s)=Less than 0.5 trillion Btu.

Notes: 

Data are for fuels consumed to produce electricity. Through 1988, data are not available.

See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section.

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

Geographic coverage is the 50 States

and the District of Columbia.

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

plants.

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

synfuel.

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

petroleum, and waste oil.

Patroleum, and waste oil.

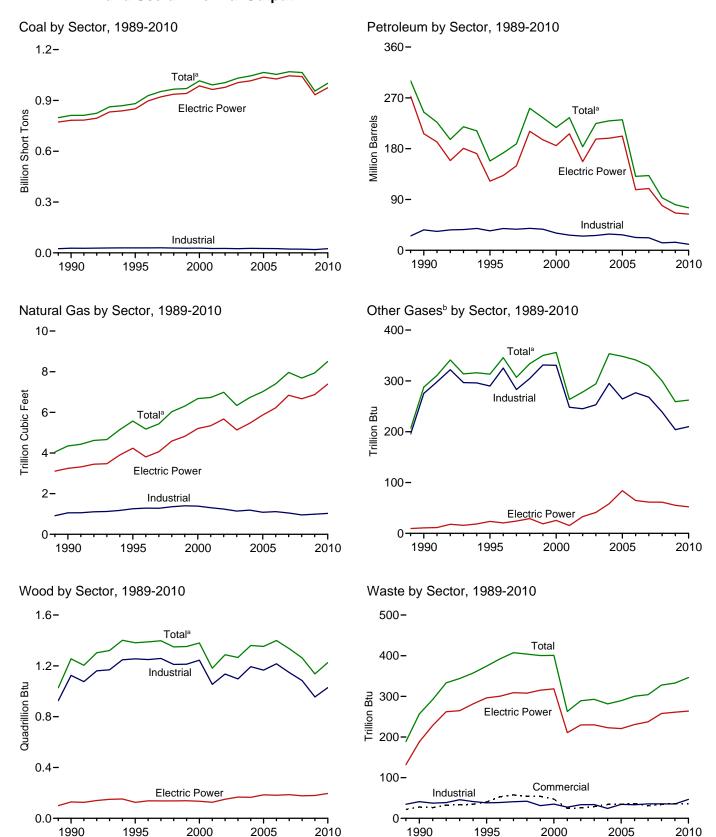
Natural gas, plus a small amount of supplemental gaseous fuels.

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

Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
 Wood and wood-derived fuels.

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

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



<sup>&</sup>lt;sup>a</sup> Includes commercial sector.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity. Sources: Tables 7.4a–7.4c.

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

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

				Petroleum					Bion	nass	
	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>9</sup>	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Ti	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total	389,212	47,058	513,190	NA	507	562,781	3,660	NA	1	2	NA
1975 Total	405,962	38,907	467,221	NA	70	506,479	3,158	NA	0	2	NA
1980 Total 1985 Total	569,274 693,841	29,051 14,635	391,163 158,779	NA NA	179 231	421,110 174,571	3,682 3,044	NA NA	3 8	2 7	NA NA
1990 Total k	811,538	20,194	209,081	1,332	2,832	244,765	4,346	288	1,256	257	86
1995 Total	881,012	21,697	112,168	1,322	4,590	158,140	5,572	313	1,382	374	97
1996 Total 1997 Total	928,015 952,955	22,444 22,893	124,607 134,623	2,468 526	4,596 6,095	172,499 188,517	5,178 5,433	346 307	1,389 1,397	392 407	91 103
1998 Total	966,615	30,006	189,267	1,230	6,196	251,486	6,030	334	1,349	404	95
1999 Total	970,175	30,616	172,319	1,812	5,989	234,694	6,305	350	1,352	400	101
2000 Total	1,015,398	34,572	156,673	2,904	4,669	217,494	6,677	356	1,380	401	109
2001 Total 2002 Total	991,635 1,005,144	33,724 24,749	177,137 118,637	1,418 3,257	4,532 7,353	234,940 183,409	6,731 6,986	263 278	1,182 1,287	263 289	229 252
2003 Total	1,031,778	31,825	152,859	4,576	7,067	224,593	6,337	294	1,266	293	262
2004 Total	1,044,798	23,520	157,478	4,764	8,721	229,364	6,727	353	1,360	282	254
2005 Total	1,065,281	24,446	156,915	4,270 3,396	9,113	231,193	7,021 7,404	348 341	1,353	289 300	237 247
2006 Total 2007 Total	1,053,783 1,069,606	14,655 17,042	69,846 74,616	3,396 4,237	8,622 7,299	131,005 132,389	7,404 7.962	341	1,399 1,336	300 304	247
2008 Total	1,064,503	14,137	43,477	3,765	6,314	92,948	7,689	300	1,263	328	212
<b>2009</b> January	92,641	2,157	6,799	536	509	12,037	575	21	95	27	18
February	76,038 73,810	1,432 1,449	2,913 2,473	354 350	474 559	7,069 7,068	531 584	20 21	89 92	25 30	17 18
March April	68,738	994	2,473 2,054	275	494	5,794	531	19	92 86	27	19
May	72,092	1,238	2,817	270	501	6,827	597	20	89	27	20
June	80,689	1,174	2,706	205	514	6,652	731	21	93	27	20
July	86,039	1,118	2,850	181	545	6,876	874 940	23 24	100	28 28	20 20
August September	88,471 75,305	1,158 923	3,297 2,168	215 199	530 531	7,322 5,946	940 785	24 24	103 96	28 26	19
October	76,319	980	2,380	195	364	5,377	628	22	98	28	19
November	74,836	972	1,546	194	366	4,541	544	22	97	29	19
December Total	90,212 <b>955,190</b>	1,204 <b>14,800</b>	1,671 <b>33,672</b>	242 <b>3,218</b>	441 <b>5,828</b>	5,320 <b>80,830</b>	618 <b>7,938</b>	22 <b>259</b>	101 <b>1,137</b>	29 <b>333</b>	19 <b>228</b>
<b>2010</b> January	R 92,738	R 2,643	R 3,212	R 338	R 525	R 8,819	R 643	R 21	R <sub>103</sub>	R 29	R 18
February	R 82,029 R 78,383	R 978 R 866	R 1,397 R 1,439	<sup>R</sup> 286 <sup>R</sup> 207	<sup>R</sup> 497 <sup>R</sup> 522	<sup>R</sup> 5,143 <sup>R</sup> 5,124	<sup>R</sup> 566 <sup>R</sup> 547	<sup>R</sup> 19 <sup>R</sup> 23	<sup>R</sup> 96 <sup>R</sup> 103	<sup>R</sup> 26 <sup>R</sup> 30	<sup>R</sup> 17 <sup>R</sup> 19
March April	R 69,179	R 837	R 1,439	R 176	R 458	R 4,656	556	R 22	R 98	R 29	R 19
May	R 77,725	R 1.111	R 2.221	R 176	R 500	R 6,005	647	23	R 98	R 29	R 20
June	R 89,063	R 1,295	R 3,291	R 204	R 586	R 7,721	R 796	R 23	R 101	R 29	R 21
July August	R 96,783 R 96,593	<sup>R</sup> 1,455 <sup>R</sup> 1,185	R 3,921 R 3,190	R 244 R 206	<sup>R</sup> 613 <sup>R</sup> 510	R 8,684 R 7,132	R 997 R 1.047	R 22 23	R 105 R 106	R 29 R 29	R 21 R 21
September	R 81,250	R 961	R 2,006	R 191	R 475	R 5,534	R 791	R 22	103	R 27	R 20
October	R 72,571	R 871	<sup>R</sup> 1,370	R 186	R 453	R 4,693	R 662	R 20	R 101	R 29	R 20
November	R 74,496	R 1,017	R 1,212	R 204	R 414	R 4,503	R 586	21	R 102	R 30	R 20
December Total	R 90,600 R <b>1,001,411</b>	R 2,029 R <b>15,247</b>	R 2,332 R <b>26,944</b>	<sup>R</sup> 361 <sup>R</sup> <b>2,777</b>	<sup>R</sup> 499 <sup>R</sup> <b>6,053</b>	<sup>R</sup> 7,218 <sup>R</sup> <b>75,231</b>	<sup>R</sup> 665 <sup>R</sup> <b>8,502</b>	R 23 R <b>262</b>	R 109 R <b>1,226</b>	R 30 R <b>346</b>	R 21 R <b>237</b>
2011 January	R 92,180	R 1,302	R 2,014	R 286	R 602	R 6,611	R 639	22	R <sub>108</sub>	R 29	15
February	R 75,364	R 934	R 1,197	R 161	R 490	R 4,742	R 568	20	R 96	R 26	14
March	<sup>R</sup> 74,254 <sup>R</sup> 68,631	<sup>R</sup> 890 <sup>R</sup> 1,020	R 1,327 R 1,541	<sup>R</sup> 175 <sup>R</sup> 170	<sup>R</sup> 573 <sup>R</sup> 409	<sup>R</sup> 5,256 <sup>R</sup> 4,774	<sup>R</sup> 570 <sup>R</sup> 615	R 24 R 23	R 100 R 95	R 29 R 27	16 15
April May	R 75,353	R 962	R 1.405	R 147	R 434	R 4,683	R 671	R 23	R 94	R 29	16
June	R 85,880	R 1.013	R 1.452	<sup>R</sup> 188	R 475	R 5.030	<sup>R</sup> 794	R 24	R 104	R 29	<sup>R</sup> 17
July	R 96,079	<sup>R</sup> 1,208	<sup>R</sup> 1,739	R 206	<sup>R</sup> 566	R 5,982	R 1,037	R 24	R 105	R 30	17
August	R 93,974	R 851	R 1,523	<sup>R</sup> 165 225	<sup>R</sup> 498 465	<sup>R</sup> 5,029 4,497	R 1,020	R 24	R 103	<sup>R</sup> 30 29	16
September 9-Month Total	78,352 <b>740,068</b>	816 <b>8,997</b>	1,129 <b>13,326</b>	1, <b>725</b>	465 <b>4,511</b>	4,497 <b>46,604</b>	777 <b>6,692</b>	23 <b>208</b>	101 <b>907</b>	<b>259</b>	15 <b>141</b>
2010 9-Month Total 2009 9-Month Total	763,744 713,823	11,330 11,643	22,031 28,076	2,027 2,586	4,686 4,657	58,817 65,593	6,590 6,148	198 193	913 842	257 247	177 171

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

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

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

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 7.4b and 7.4c.

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.

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

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

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

Blast furnace gas, propane gas, and other manufactured and waste gases</sup> 

derived from fossil fuels.

h Wood and wood-derived fuels.

Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes

non-renewable waste (municipal soilid waste morii non-biogenic sources, and tire-derived fuels).

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

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

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

							]				
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Th	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	(s)	2	NA
1980 Total	569,274	29,051	391,163	NA	179	421,110	3,682	NA	` 3	2	NA
1985 Total 1990 Total k	693,841 782,567	14,635 16,567	158,779 184,915	NA 26	231 1,008	174,571 206,550	3,044 3,245	<u>NA</u> 11	<u>8</u> 129	<u>7</u> 188	NA (s)
1995 Total	850,230	18,553	90,023	499	2,674	122,447	4,237	24	125	296	(3)
1996 Total	896,921	18,780	99,951	653	2,642	132,593	3,807	20	138	300	2
1997 Total	921,364	18,989	113,669	152	3,372	149,668	4,065	24	137	309	1
1998 Total	936,619	23,300	166,528	431	4,102	210,769	4,588	29	137	308	2
1999 Total	940,922 985,821	24,058 30,016	152,493 138,513	544 454	3,735 3,275	195,769 185,358	4,820 5,206	19 25	138 134	315 318	1
2000 Total 2001 Total	964,433	29.274	159,504	377	3,273	206,291	5,342	15	126	211	113
2002 Total	977,507	21,876	104,773	1.267	5,816	156,996	5,672	33	150	230	143
2003 Total	1,005,116	27,632	138,279	2,026	5,799	196,932	5,135	41	167	230	140
2004 Total	1,016,268	19,107	139,816	2,713	7,372	198,498	5,464	58	165	223	138
2005 Total	1,037,485	19,675	139,409	2,685	8,083	202,184	5,869	84	185	221	123
2006 Total 2007 Total	1,026,636 1,045,141	12,646 15,327	57,345 63,086	1,870 2,594	7,101 5,685	107,365 109,431	6,222 6,841	65 61	182 186	231 237	125 124
2008 Total	1,040,580	12,547	38,241	2,670	5,119	79,056	6,668	61	177	258	131
2009 January	90,640	1,865	5,974	424	410	10,311	487	4	17	21	10
February	74,254	1,106	2,385	256	374	5,614	453	4	15	19	9
March	71,948	1,227	2,023	214	464	5,785	500	4	14	24	10
April	67,123	776	1,709	159	414	4,712	451	4	12	21	10
May	70,425	987	2,230	192	418	5,497	515	5	13	22	11
June	78,954	935 868	2,345	132 127	418 434	5,501	643 778	5 5	15 16	22	11 11
July August	84,243 86,635	930	2,558 3,021	151	434 419	5,721 6,199	840	5	17	23 23	11
September	73,566	709	1,885	123	416	4,799	690	5	14	21	10
October	74,520	813	2,123	132	256	4,349	537	5	14	21	10
November	73,063	797	1,260	138	252	3,457	457	4	15	22	10
December	88,255	1,023	1,270	162	336	4,137	520	5	17	22	10
Total	933,627	12,035	28,782	2,210	4,611	66,081	6,873	55	180	261	124
2010 January	R 90,452	R 2,459	R 2,887	R 222	R 413	7,636	R 546	5	17	R 21	10
February	R 79,884 R 76,110	<sup>R</sup> 851 <sup>R</sup> 759	R 1,061 R 1,256	<sup>R</sup> 219 <sup>R</sup> 131	<sup>R</sup> 389 <sup>R</sup> 427	<sup>R</sup> 4,076 <sup>R</sup> 4,281	<sup>R</sup> 480 <sup>R</sup> 457	4 5	16	R 20 22	9 10
March April	R 66,842	R 699	R 1,214	R 112	369	R 3,871	R 471	5 5	16 <sup>R</sup> 15	22	10
May	R 75,597	R 1,023	R 2,055	R 104	400	R 5,181	560	5	14	R 22	R 10
June	R 87,030	R 1,222	R 3,147	R 137	R 471	<sup>R</sup> 6,860	R 706	R 5	16	R 23	11
July	<sup>R</sup> 94,519	R 1,309	R 3,730	<sup>R</sup> 185	<sup>R</sup> 503	R 7,742	R 897	<sup>R</sup> 5	17	R 23	11
August	R 94,247	R 1,068	R 3,051	R 149	R 394	R 6,236	R 943	4	18	R 23	11
September October	<sup>R</sup> 79,176 <sup>R</sup> 70,492	<sup>R</sup> 883 <sup>R</sup> 772	<sup>R</sup> 1,845 <sup>R</sup> 1,161	R 136 R 112	<sup>R</sup> 372 <sup>R</sup> 346	R 4,726 R 3,773	<sup>R</sup> 697 <sup>R</sup> 570	4 3	R 16 R 15	R 22 R 22	10 10
November	R 72.514	R 890	R 1,035	126	R 301	R 3,557	R 497	4	16	R 23	10
December	R 88,189	R 1.854	R 2,062	R 245	R 391	R 6.118	R 564	4	17	R 23	R 11
Total	R 975,052	R 13,790	R 24,503	R 1,877	R <b>4,777</b>	R 64,055	R 7,387	52	R 196	R 264	124
<b>2011</b> January	R 89,682	R 1,225	R 1,759	R 224	R 500	R 5,707	R 542	4	16	21	10
February	R 73,156	<sup>R</sup> 858	R 1.020	R 117	R 374	R 3,866	R 482	4	15	R 20	9
March	R 72,009	827	R 1,164	R 121	R 451	R 4,364	R 483	5	R 15	R 23	11
April	<sup>R</sup> 66,741 <sup>R</sup> 73,100	R 940 R 894	<sup>R</sup> 1,378 <sup>R</sup> 1,279	R 104 R 103	291 R 306	R 3,879 R 3,807	<sup>R</sup> 526 <sup>R</sup> 578	4 R 4	<sup>R</sup> 12 <sup>R</sup> 13	R 22 R 22	10 11
May June	R 83,700	R 950	R 1,279	R 129	R 374	R 4,265	1 578 705	5	15	R 23	11
July	R 93,736	1.139	R 1.603	158	R 462	R 5.211	R 942	5	16	R 24	11
August	R 91,667	<sup>R</sup> 793	R 1,400	R 107	R 400	R 4,299	R 923	5	16	R 23	11
September	76,131	760	1,027	127	380	3,812	_ 686	5	15	22	10
9-Month Total	719,921	8,385	11,946	1,190	3,538	39,211	5,868	42	133	200	94
2010 9-Month Total 2009 9-Month Total	743,857 697,789	10,274 9,402	20,245 24,129	1,395 1,777	3,739 3,766	50,607 54.138	5,756 5.359	41 41	147 134	196 195	92 93

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

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

tire-derived fuels).

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

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

for electric utilities and independent power producers.

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

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.

amounts of kerosene and jet fuel.

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

amount of fuel oil no. 4.

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

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

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

Natural gas, plus a small amount of supplemental gaseous ruels.
 Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
 Mood and wood-derived fuels.
 Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

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

		Commerci	ial Sector <sup>a</sup>				Indu	strial Sector	b		
			Matural	Biomass			Network	041	Biom	nass	
	Coalc	Petroleumd	Natural Gas <sup>e</sup>	Wastef	Coalc	Petroleumd	Natural Gas <sup>e</sup>	Other Gases	Woodh	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	78	40	29,363	34,448	1,258	290	1,255	38	95
1996 Total	1,660	1,246	82	53	29,434	38,661	1,289	325	1,249	39	89
1997 Total 1998 Total	1,738 1,443	1,584 1.807	87 87	58 54	29,853 28,553	37,265 38,910	1,282 1,355	283 305	1,259 1,211	41 42	102 93
1999 Total	1,443	1,613	84	54	27,763	37,312	1,401	331	1,213	31	99
2000 Total	1,547	1,615	85	47	28,031	30,520	1,386	331	1,244	35	108
2001 Total	1,448	1,832	79	25	25,755	26,817	1,310	248	1,054	27	101
2002 Total	1,405	1,250	74	26	26,232	25,163	1,240	245	1,136	34	92
2003 Total	1,816	1,449 2,009	58 72	29 34	24,846 26,613	26,212 28,857	1,144 1,191	253 295	1,097 1,193	34 24	103 94
2004 Total 2005 Total	1,917 1,922	1.630	68	34	25,875	27,380	1,191	264	1,166	34	94
2006 Total	1.886	935	68	36	25,262	22,706	1,115	277	1,216	33	102
2007 Total	1,927	752	70	31	22,537	22,207	1,050	268	1,148	36	98
2008 Total	2,021	671	66	34	21,902	13,222	955	239	1,084	35	60
2009 January	208	176	7	3	1,793	1,550	81	17	78	4	6
February	178	70	6	3	1,605	1,385	71	16	74	3	6
March	170 128	35 26	6	3	1,692 1,487	1,248 1,056	79 74	17	77 73	4 3	6
April May	128	26 19	5 5	3	1,487	1,056	74 77	15 15	73 76	2	6 7
June	135	14	6	3	1,600	1.138	82	16	77	2	7
July	137	19	7	3	1,659	1,136	89	18	83	2	7 7
August	143	38	7	3	1,694	1,086	92	19	86	2	7
September	127	20	7	3	1,611	1,128	88	19	81	2	7
October	129 151	17 35	6 6	3	1,671 1,622	1,010 1.049	85 81	17 17	84 82	4 4	7
November December	174	53	7	3	1,022	1,049	91	17	84	4	7
Total	1,798	521	76	36	19,766	14,228	990	204	955	35	82
2010 January	<sup>R</sup> 193	<sup>R</sup> 55	_ 7	3	R 2,094	R 1,128	_ 90	17	R 86	R 4	<sup>R</sup> 6
February	R 167	R 47	R 7	3	R 1,978	R 1,021	R 80	15	79	R 4 R 4	R 7
March	<sup>R</sup> 149 <sup>R</sup> 117	R 26 R 24	R 7 6	3	R 2,124 R 2,220	<sup>R</sup> 817 <sup>R</sup> 761	84 79	R 18 18	<sup>R</sup> 86 <sup>R</sup> 83	R 5	R7
April May	R 118	R 28	6	R 4	R 2,010	R 796	R 82	18	R 83	3	R <b>7</b>
June	R 135	R 26	6	3	R 1,898	R 835	R 84	18	R 85	3	R 8
July	R 142	R 59	Rg	3	R 2,122	R 883	<sup>R</sup> 91	17	R 88	3	R 8
August	R 152	R 46	Rg	3	R 2,194	R 849	R 95	ຼ 19	R 88	3	R 8
September	R 133	R 27 R 21	R7 R7	3	R 1,941	R 780	<sup>R</sup> 87 <sup>R</sup> 84	R 18 R 17	R 87	3 R 5	R 8 R 8
October November	R 121 R 128	R 22	7	3	R 1,958 R 1,854	<sup>R</sup> 899 <sup>R</sup> 924	R 82	17	86 R 86	* 5 R 5	R 8
December	R 165	R 55	R 8	3	R 2,246	R 1,045	R 92	R 19	R 91	R 4	R 8
Total	R 1,720	R 437	R 86	R 36	R 24,638	R 10,740	R 1,029	R 210	R 1,029	R <b>47</b>	R 91
2011 January	R 178	R 45	R 8	3	R 2,320	R 858	R 89	18	R 91	R 4	3
February	<sup>R</sup> 165	R 24	R 7	3	R 2,044	R 852	R 79	_ 16	R 81	R 4	3
March	158	R 29	6	3	R 2,088	R 862	R 81	R 20	R 86	3	3
April	R 124	R 15 R 17	6 R <b>7</b>	R 3	R 1,767	R 880	R 82	R 19	R 83	R 3 R 4	3
May June	R 128 R 124	<sup>R</sup> 17	6	3	R 2,126 R 2,056	<sup>R</sup> 859 <sup>R</sup> 743	<sup>R</sup> 87 <sup>R</sup> 83	<sup>R</sup> 18 <sup>R</sup> 19	<sup>R</sup> 81 <sup>R</sup> 89	R 4	4
July	R 134	R 35	R 7	3	R 2,036	R 737	R 88	R 19	R 89	R 4	4
August	R 124	R 20	R <b>7</b>	3	R 2,182	<sup>R</sup> 710	R 89	R 19	R 86	R 4	3
September	121	15	6	3	2,100	670	84	18	87	4	3
9-Month Total	1,255	222	60	26	18,891	7,170	763	166	773	32	30
2010 9-Month Total 2009 9-Month Total	1,306 1,344	339 416	63 57	28 27	18,581 14,690	7,872 11,039	771 733	157 152	765 706	33 24	67 61

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

<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-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."

plants.

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

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

synfuel.

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

petroleum, and waste oil.

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

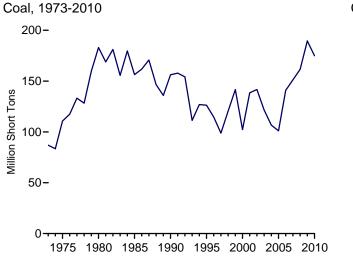
petroleum, and waste oil.

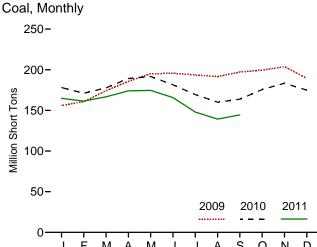
<sup>e</sup> Natural gas, plus a small amount of supplemental gaseous fuels.

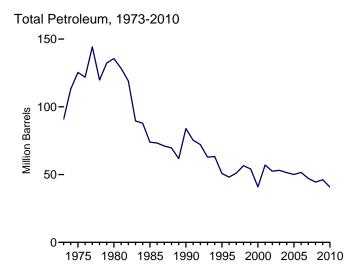
<sup>f</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

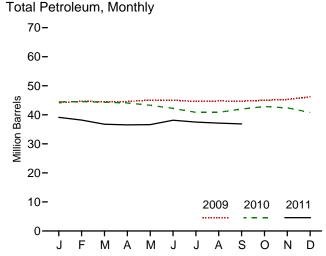
<sup>9</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
h Wood and wood-derived fuels.

Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector

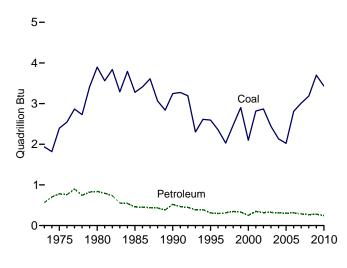




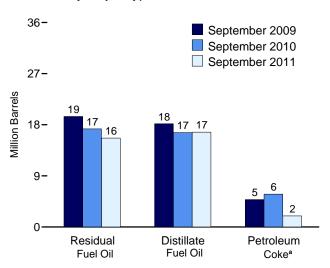




Coal and Petroleum Stocks, 1973-2010



### Petroleum by Major Type, End of Month



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

Table 7.5 Stocks of Coal and Petroleum: Electric Power Sector

				Petroleum		
	Coal <sup>a</sup>	Distillate Fuel Oilb	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale
	Thousand Short Tons		Thousand Barrels		Thousand Short Tons	Thousand Barrels
973 Year	86,967	10,095	79,121	NA	312	90,776
975 Year		16,432	108.825	NA	31	125,413
980 Year		30,023	105,351	NA	52	135,635
985 Year		16,386	57.304	NA	49	73,933
990 Year		16,471	67,030	NA	94	83,970
995 Year		15,392	35,102	NA NA	65	50,821
996 Year		15,216	32,473	NA NA	91	48.146
997 Year		15,456	33,336	NA NA	469	51,138
998 Year		16,343	37,451	NA NA	559	56.591
999 Year <sup>f</sup>		17,995	34,256	NA NA	372	54,109
000 Year	102,296	15,127	24,748	NA NA	211	40.932
	. ,		,	NA NA	390	-,
001 Year		20,486	34,594			57,031
002 Year		17,413	25,723	800	1,711	52,490
003 Year		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
007 Year		18,395	24,136	1,902	554	47,203
008 Year	161,589	17,761	21,088	1,955	739	44,498
009 January		17,882	20,501	2,061	746	44,175
February	160,601	17,737	21,141	2,102	738	44,668
March	174,223	17,691	21,160	2,118	715	44,544
April	185,790	18,055	20,890	2,129	705	44,598
May	195,103	17,958	21,022	2,195	779	45,072
June	195,656	17,866	21,131	2,234	763	45,048
July		17,971	20,734	2,252	729	44,604
August		18,040	20.093	2,265	876	44,777
September		18,162	19,454	2,292	963	44,726
October		18.009	18.931	2,307	1.152	45,007
November		17,880	18,806	2,316	1,258	45,294
December		17,886	19,068	2,257	1,394	46,181
010 January	R 178.091	R 17,193	R 18,035	<sup>R</sup> 2,198	R 1,406	R 44.454
February	.,	R 17,409	R 18,532	R 2,222	R 1,280	R 44.562
March		R 17,353	R 18,679	R 2,105	R 1.240	R 44.337
April		R 17,295	R 18.353	R 2.228	R 1.243	R 44.090
May		R 17,185	R 17,935	R 2,235	R 1,188	R 43,294
June		R 17,163	R 17,411	R 2,172	R 1,117	R 42,209
July		R 16,917	R 16,441	R 2.268	R 1.046	R 40.856
August		R 16,737	R 16,288	R 2,292	R 1,112	R 40,878
		R 16,608	R 17.269	R 2,330	R 1,158	R 41,996
September						R 42.840
October		R 16,698	R 17,781	2,377	R 1,197	
November December		<sup>R</sup> 17,024 <sup>R</sup> <b>16,758</b>	<sup>R</sup> 17,492 <sup>R</sup> <b>16,629</b>	<sup>R</sup> 2,410 <sup>R</sup> <b>2,319</b>	<sup>R</sup> 1,098 <sup>R</sup> <b>1,019</b>	<sup>R</sup> 42,414 <sup>R</sup> <b>40,800</b>
011 January	R 164.840	R 16.673	R 16.061	R 2.383	R 801	R 39,123
011 January	_ ' ' ' '	R 16,673	R 15.575		R 707	R 38,123
February				R 2,435		
March		R 16,498	R 15,393	R 2,437	R 489	R 36,776
April		R 16,301	R 15,180	R 2,460	R 522	R 36,551
May		R 16,195	R 15,235	R 2,447	R 548	R 36,617
June		R 16,779	R 16,356	R 2,564	R 491	R 38,152
July		R 16,550	R 16,090	<sup>R</sup> 2,561	R 462	<sup>R</sup> 37,510
August		R 16,583	<sup>R</sup> 15,804	<sup>R</sup> 2,581	R 435	<sup>R</sup> 37,144
September	144,438	16,691	15,654	2,593	389	36,884

R=Revised. NA=Not available.

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

are at end of period.

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

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

Web Page: See http://www.eia.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 "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." EIA-923, "Power Plant Operations Report."

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

<sup>c</sup> Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant stocks of

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

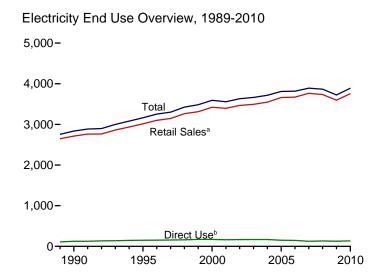
oil no. 4.

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

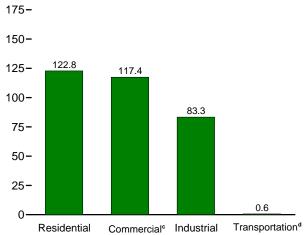
waste oil. Petroleum coke is converted from short tons to barrels by multiplying by 5.

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

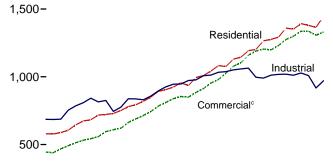
Figure 7.6 Electricity End Use (Billion Kilowatthours)



### Retail Sales<sup>a</sup> by Sector, September 2011



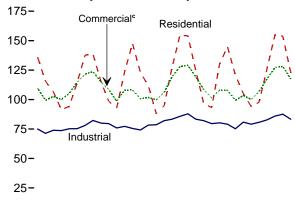


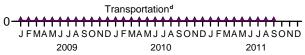




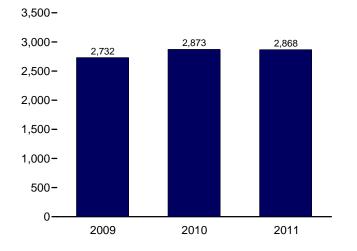
1975 1980 1985 1990 1995 2000 2005 2010

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



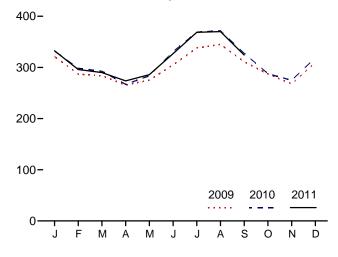


#### Retail Sales<sup>a</sup> Total, January-September



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

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



<sup>&</sup>lt;sup>d</sup> Transportation sector, including sales to railroads and railways. Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity. Source: Tables 7.6.

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

<sup>&</sup>lt;sup>c</sup> Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorites.

Table 7.6 Electricity End Use

(Million Kilowatthours)

			Retail Sales <sup>a</sup>					Discont Retail Sale	
	Residential	Commercialb	Industrial <sup>c</sup>	Transpor- tation <sup>d</sup>	Total Retail Sales <sup>e</sup>	Direct Use <sup>f</sup>	Total End Use	Commercial (Old) <sup>h</sup>	Other (Old)
1973 Total	579,231	E 444,505	686,085	E 3,087	1,712,909	NA NA	1,712,909	388,266	59,326
1975 Total	588,140	E 468,296	687,680	E 2,974	1,747,091	NA	1,747,091	403,049	68,222
1980 Total	717,495	558,643	815,067	3,244	2,094,449	NA	2,094,449	488,155	73,732
1985 Total	793,934	689,121	836,772	4,147	2,323,974	NA	2,323,974	605,989	87,279
1990 Total	924,019	838,263	945,522	4,751	2,712,555	124,529	2,837,084	751,027	91,988
1995 Total	1,042,501	953,117	1,012,693	4,975	3,013,287	150,677	3,163,963	862,685	95,407
1996 Total	1,082,512	980,061	1,033,631	4,923	3,101,127	152,638	3,253,765	887,445	97,539
1997 Total	1,075,880	1,026,626	1,038,197	4,907	3,145,610	156,239	3,301,849	928,633	102,901
1998 Total	1,130,109	1,077,957	1,051,203	4,962	3,264,231	160,866	3,425,097	979,401	103,518
1999 Total	1,144,923	1,103,821	1,058,217	5,126	3,312,087	171,629 170,943	3,483,716	1,001,996	106,952 109,496
2000 Total	1,192,446	1,159,347	1,064,239 996,609	5,382	3,421,414	162,649	3,592,357	1,055,232 1,083,069	
2001 Total	1,201,607 1,265,180	1,190,518 1,204,531	990,238	5,724 5,517	3,394,458 3,465,466	166,184	3,557,107 3,631,650	1,104,497	113,174 105,552
2002 Total	1,275,824	1,198,728	1,012,373	6,810	3,493,734	168,295	3,662,029	1,104,497	105,552
2003 Total 2004 Total	1,275,624	1,190,720	1,012,373	7,224	3,493,734 3,547,479	168,470	3,715,949		
2005 Total	1,359,227	1,275,079	1,019,156	7,506	3,660,969	150,016	3,810,984		
2006 Total	1,351,520	1,299,744	1,011,298	7,358	3,669,919	146,927	3,816,845		
2007 Total	1,392,241	1,336,315	1,027,832	8,173	3,764,561	125,670	3,890,231		
2008 Total	1,379,981	1,335,981	1,009,300	7,700	3,732,962	132,197	3,865,159		
2009 January	136,080	109,523	75,003	774	321,379	E_10,369	331,749		
February	115,536	99,358	71,304	672	286,869	E 9,637	296,507		
March	106,544	102,646	73,913	671	283,773	E 10,251	294,025		
April	91,473	100,020	73,662	611	265,766	E 9,526	275,292		
May	94,180	105,215	75,198	599	275,193	E 9,767	284,960		
June	114,347	114,752	75,246	611 674	304,956	E 10,524	315,480		
July	137,681 138.447	121,608 123,662	78,045 82,298	644	338,009 345,051	E 11,475 E 11,820	349,484 356,871		
August	115,372	115,027	80,022	638	311,059	E 11,020	322,116		
September October	98,522	108,635	79,584	607	287,348	E 10,795	298,143		
November	92,722	98,646	75,917	592	267,877	E 10,501	278,378		
December	123,570	108,076	77,251	688	309,585	E 11,214	320,800		
Total	1,364,474	1,307,168	917,442	7,781	3,596,865	126,938	3,723,803		
2010 January	R 147,500	R 108,120	R 75,506	<sup>R</sup> 715	R 331,841	RE 11,306	R 343,148		
February	R 122,840	R 100,747	R 74,164	R 689	R 298,440	RE 10,348	R 308,788		
March	R 111,790	R 101,756	R 78,303	<sup>R</sup> 656	R 292,505	RE 11,102	R 303,607		
April	R 88,046	R 99,791	R 78,597	R 600	R 267,034	RE 10,293	R 277,327		
May	R 94,843	R 106,176	R 82,088	R 606	R 283,712	RE 10,823	R 294,536		
June	R 127,496	R 119,388	R 83,347	R 658	R 330,889	RE 11,258	R 342,148		
July	R 154,688 R 154.053	R 127,925 R 129.143	R 85,725	<sup>R</sup> 667 <sup>R</sup> 628	R 369,006	RE 11,924 RE 12,544	R 380,930 R 384,272		
August September	R 124,582	R 119,137	<sup>R</sup> 87,904 <sup>R</sup> 83,353	R 639	<sup>R</sup> 371,728 <sup>R</sup> 327,711	RE 11,446	R 339.157		
October	R 96.688	R 108.461	R 82.046	R 615	R 287,811	RE 10,818	R 298,629		
November	R 93,166	R 101,524	R 79,575	R 607	R 274,871	RE 10,731	R 285,602		
December	R 130,015	R 108,031	R 80,264	R 633	R 318,943	RE 11.960	R 330,903		
Total	R 1,445,708	R 1,330,199	R 970,873	R 7,712	R 3,754,493	R 134,554	R 3,889,047		
<b>2011</b> January	R 144,911	R_107,884	R 79,055	R 710	R 332,561	RE 11,527	R 344,088		
February	R 120,685	R 99,368	R 75,223	<sup>R</sup> 633	R 295,909	RE 10,237	R 306,146		
March	R 105,065	R 103,507	<sup>R</sup> 80,817	<sup>R</sup> 655	R 290,044	RE 10,716	R 300,760		
April	R 94,069	R 100,019	R 79,099	<sup>R</sup> 618	R 273,805	RE 10,321	R 284,126		
May	R 97,755	R 106,841	R 80,741	R 615	R 285,951	RE 11,048	R 296,999		
June	R 126,008	R 117,460	R 82,775	R 637	R 326,881	RE 11,117	R 337,997		
July	R 154,888	R 127,139	R 85,907	645	R 368,580	RE 11,863	R 380,442		
August	R 153,688	R 128,200	R 87,565	620	R 370,073	RE 11,801	R 381,874		
September 9-Month Total	122,842 <b>1,119,911</b>	117,403 <b>1,007,821</b>	83,311 <b>734,494</b>	630 <b>5,764</b>	324,186 <b>2,867,989</b>	E 11,002 E <b>99,632</b>	335,188 <b>2,967,621</b>		
2010 9-Month Total	1,125,839	1,012,183	728,988	5,857	2,872,868	E 101,045	2,973,913		
2009 9-Month Total	1,049,660	991,811	684,690	5,894	2,732,055	E 94,427	2,826,482		

Sources: See end of section

 <sup>&</sup>lt;sup>a</sup> Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
 <sup>b</sup> Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorities.
 <sup>c</sup> Industrial sector. Through 2002, excludes agriculture and irrigation; beginning in 2003, includes agriculture and irrigation.
 <sup>d</sup> Transportation sector, including sales to railroads and railways.
 <sup>e</sup> The sum of "Residential," "Commercial," "Industrial," and "Transportation."
 <sup>f</sup> Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use.
 <sup>g</sup> The sum of "Total Retail Sales" and "Direct Use."

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

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

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

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

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

Sources: See end of section.

# **Electricity**

Note. Classification of Power Plants Into Energy-

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

http://www.eia.gov/cneaf/electricity/forms/eia860/eia860.doc.

#### **Table 7.1 Sources**

# **Net Generation, Electric Power Sector**

Table 7.2b.

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

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

1973–September 1977: Unpublished Federal Power Commission data.

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

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

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

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

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

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

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

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

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

DOE, 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

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." 1984–1996: EIA, Form EIA-861, "Annual Electric Utility Report."

1997 forward: EIA, *Electric Power Monthly*, December 2011, 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/states/sep\_use/notes/use\_elec.pdf.

2003 forward: EIA, *Electric Power Monthly*, December 2011, 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*, December 2011, 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.

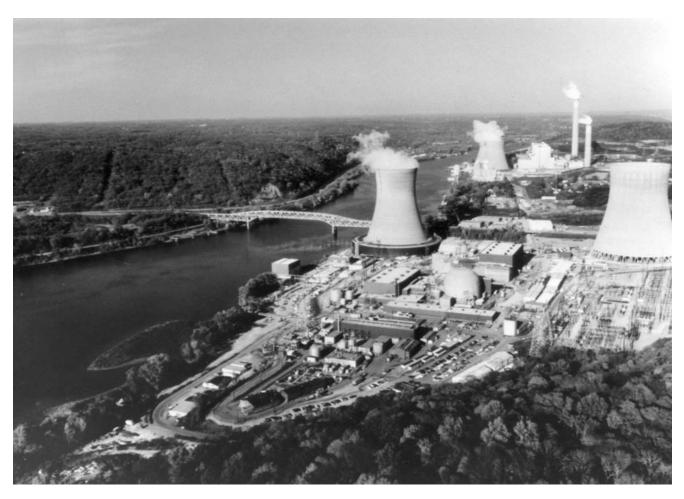
#### **Direct Use, Monthly**

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 2011, the 2010 annual share is used.

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

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

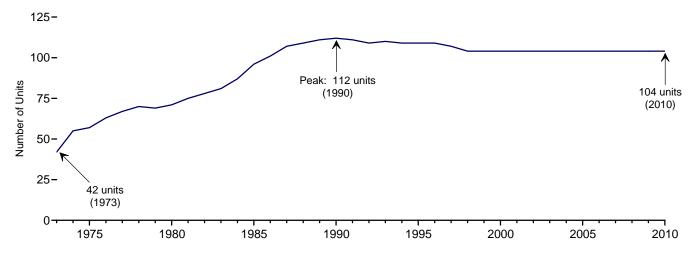
# **Nuclear Energy**



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

Figure 8.1 Nuclear Energy Overview

Operable Units, End of Year, 1973-2010



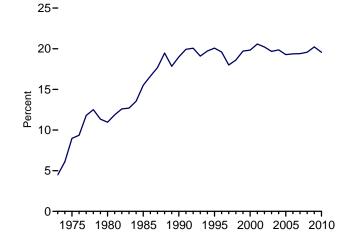
Electricity Net Generation, 1973-2010

5
4Total

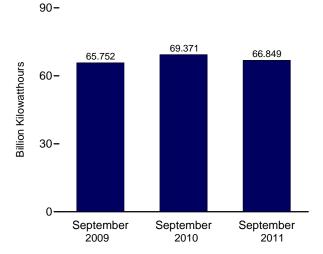
3
Nuclear Electric
Power

1975 1980 1985 1990 1995 2000 2005 2010

Nuclear Share of Electricity Net Generation, 1973-2010

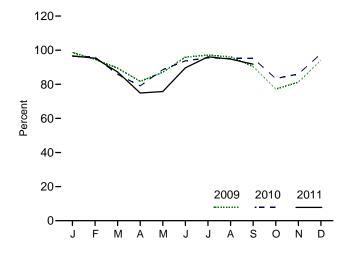


**Nuclear Electricity Net Generation** 



Web Page: http://www.eia.gov/totalenergy/data/monthly/#nuclear. Sources: Tables 7.2a and 8.1.

#### Capacity Factor, Monthly



**Table 8.1 Nuclear Energy Overview** 

	Total Operable Units <sup>a,b</sup>	Net Summer Capacity of Operable Units <sup>b,c</sup>	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Capacity Factord
	Number	Million Kilowatts	Million Kilowatthours	Pe	rcent
973 Total	42	22.683	83.479	4.5	53.5
975 Total	57	37.267	172,505	9.0	55.9
	57 71				
980 Total		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
96 Total	109	100.784	674,729	19.6	76.2
997 Total	107	99.716	628,644	18.0	71.1
998 Total	104	97.070	673,702	18.6	78.2
999 Total	104	97.411	728,254	19.7	85.3
000 Total	104	97.860	753,893	19.8	88.1
001 Total	104	98.159	768.826	20.6	89.4
002 Total			780,064	20.2	90.3
			763,733	19.7	87.9
003 Total					
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	787,219	19.4	89.6
007 Total	104	100.266	806,425	19.4	91.8
008 Total	104	100.755	806,208	19.6	91.1
009 January	104	101.004	74,102	20.9	98.6
February	104	101.004	64,227	21.3	94.6
March	104	101.004	67,241	21.6	89.5
April	104	101.004	59.408	20.5	81.7
May	104	101.004	65,395	21.0	87.0
June	104	101.004	69,735	20.1	95.9
	104				
July		101.004	72,949	19.6	97.1
August	104	101.004	72,245	19.0	96.1
September	104	101.004	65,752	20.1	90.4
October	104	101.004	58,021	18.9	77.2
November	104	101.004	59,069	19.9	81.2
December	104	101.004	70,710	20.2	94.1
Total	104	101.004	798,855	20.2	90.3
010 January	104	R 101.167	72,569	20.1	R 96.4
February	104	<sup>R</sup> 101.167	65,245	R 20.4	R 96.0
March	104	R 101.167	64,635	20.7	R 85.9
April	104	R 101.167	57,611	R 20.0	<sup>R</sup> 79.1
May	104	R 101.167	66,658	20.3	R 88.6
	104	R 101.167	68,301	18.2	R 93.8
June		101.107 R 404.407			R 95.5
July	104	<sup>R</sup> 101.167 <sup>R</sup> 101.167	71,913	R 17.6	'` 95.5
August	104		71,574	17.5	R 95.1
September	104	R 101.167	69,371	R 20.0	R 95.2
October	104	R 101.167	62,751	20.4	R 83.4
November	104	<sup>R</sup> 101.167	62,655	_ 20.5	R 86.0
December	104	<sup>R</sup> 101.167	73,683	R 20.3	<sup>R</sup> 97.9
Total	104	R 101.167	806,968	19.6	<sup>R</sup> 91.1
011 January	104	R 101.167	72,743	20.0	<sup>R</sup> 96.6
February	104	R 101.167	64,789	20.7	R 95.3
March	104	R 101.167	65,662	R 20.6	R 87.2
		R 101.167	54,547	R 18.0	R 74.9
			54,547 57,017	17.6	R 75.8
May					* 75.8 R 89.6
June	104	R 101.167	65,270	17.7	
July	104	R 101.167	72,345	R 17.2	R 96.1
August	104	<sup>R</sup> 101.167	71,339	17.6	<sup>R</sup> 94.8
September	104	101.167	66,849	19.8	91.8
9-Month Total	104	101.167	590,560	18.7	89.1
010 9-Month Total	104	101.167	607,879	19.3	91.7

<sup>&</sup>lt;sup>a</sup> Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at end of period. See Note 1, "Operable Nuclear Reactors," at end of section. For additional information on nuclear generating units, see Annual Energy Review 2010, Octobe http://www.eia.gov/totalenergy/data/annual/#nuclear. October 2011,

Sources: See end of section.

At end of period.
 For the definition of "Net Summer Capacity," see Note 2, "Nuclear Capacity," at end of section.

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

<sup>2, &</sup>quot;Nuclear Capacity," at end of section.

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

# **Nuclear Energy**

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

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

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

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

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

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

#### **Table 8.1 Sources**

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

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

1983 forward: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report," and monthly updates as appropriate. For a list of currently operable units, see http://www.eia.gov/nuclear/reactors/stats\_table1.html.

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

See Table 7.2a.

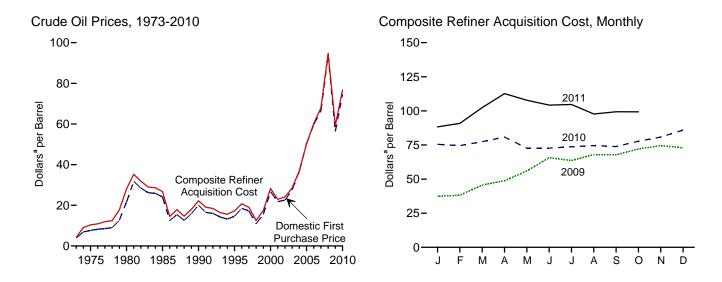
#### **Capacity Factor**

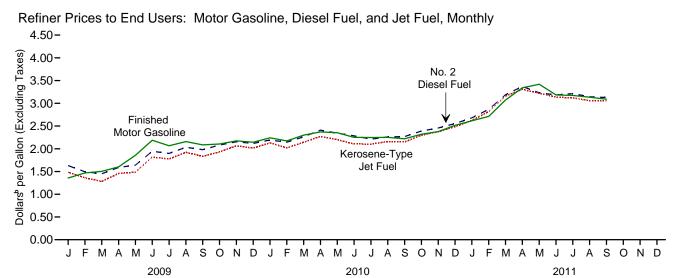
Calculated by EIA using the method described above in Note 2.

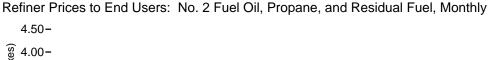
# **Energy Prices**

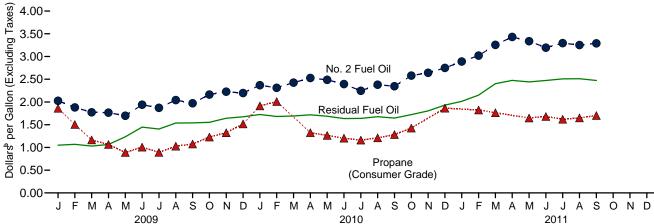


Figure 9.1 Petroleum Prices









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

**Table 9.1 Crude Oil Price Summary** 

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

				R	efiner Acquisition Co	<b>st</b> <sup>b</sup>
	Domestic First Purchase Price <sup>c</sup>	F.O.B. Cost of Imports <sup>d</sup>	Landed Cost of Imports <sup>e</sup>	Domestic	Imported	Composite
1973 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
1975 Average	7.67	11.18	12.70	8.39	13.93	10.38
1980 Average	21.59	32.37	33.67	24.23	33.89	28.07
•	24.09	25.84	26.67	26.66	26.99	26.75
1985 Average		20.37	21.13	22.59	20.99	20.75
1990 Average	20.03					
1995 Average	14.62	15.69	16.78	17.33	17.14	17.23
1996 Average	18.46	19.32	20.31	20.77	20.64	20.71
1997 Average	17.23	16.94	18.11	19.61	18.53	19.04
1998 Average	10.87	10.76	11.84	13.18	12.04	12.52
1999 Average	15.56	16.47	17.23	17.90	17.26	17.51
2000 Average	26.72	26.27	27.53	29.11	27.70	28.26
2001 Average	21.84	20.46	21.82	24.33	22.00	22.95
2002 Average	22.51	22.63	23.91	24.65	23.71	24.10
2003 Average	27.56	25.86	27.69	29.82	27.71	28.53
2004 Average	36.77	33.75	36.07	38.97	35.90	36.98
2005 Average	50.28	47.60	49.29	52.94	48.86	50.24
2006 Average	59.69	57.03	59.11	62.62	59.02	60.24
2007 Average	66.52	66.36	67.97	69.65	67.04	67.94
2008 Average	94.04	90.32	93.33	98.47	92.77	94.74
	04.04	00.02	00.00	30.41	02.11	04.14
2009 January	35.00	36.87	38.74	38.67	36.84	37.45
February	34.14	38.08	40.27	37.51	38.56	38.15
March	42.45	44.34	46.74	44.92	45.96	45.57
April	45.19	47.67	51.43	47.52	49.58	48.78
May	52.67	55.61	58.27	54.58	56.77	55.96
June	63.09	64.82	65.89	64.65	66.37	65.72
July	60.44	62.32	64.78	63.79	63.46	63.58
	65.28	67.47	68.53	67.81	68.09	67.99
August						
September	65.28	65.41	68.50	67.87	67.65	67.74
October	69.82	70.45	72.58	72.09	72.06	72.08
November	71.99	73.16	74.41	74.60	74.40	74.48
December	70.42	71.24	73.50	73.35	72.67	72.95
Average	56.35	57.78	60.23	59.49	59.17	59.29
2010 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	<b>74.20</b>	76.49	77.96	75.88	76.69
Average	74.71	74.20	70.49	77.90	75.00	70.09
2011 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	R 105.60	R 106.19	102.67	105.94	104.68
August	89.00	R 98.08	R 99.11	R 95.89	99.01	97.70
September	R 90.34	R 100.54	R 99.00	R 96.89	R 101.05	R 99.39
October	NA	NA	NA	E 96.89	E 101.71	E 99.33

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.

Sources: See end of section.

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

d See Note 3, "Crude Oil F.O.B. Costs," at end of section.
e See Note 4, "Crude Oil Landed Costs," at end of section.
f Based on October, November, and December data only.
R=Revised. NA=Not available. E=Estimate.

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.

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

(Dollarsa per Barrel)

			s	elected Count	ries			Danaian.		
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>b</sup>	Total OPEC <sup>c</sup>	Total Non-OPEC <sup>c</sup>
1973 Average <sup>d</sup>	w	w	_	7.81	3.25	_	5.39	3.68	5.43	4.80
1975 Average	10.97	_	11.44	11.82	10.87	_	11.04	10.88	11.34	10.62
1980 Average	33.45	W	31.06	35.93	28.17	34.36	24.81	28.92	32.21	32.85
1985 Average	26.30	_	25.33	28.04	22.04	27.64	23.64	23.31	25.67	25.96
1990 Average	20.23	20.75	19.26	22.46	20.36	23.43	19.55	18.54	20.40	20.32
1995 Average	16.58	16.73	15.64	17.40	W	16.94	13.86	W	15.36	16.02
1996 Average	20.71	21.33	19.14	21.27	19.28	19.43	17.73	19.22	18.94	19.65
1997 Average	18.81	18.85	16.72	19.43	15.16	18.59	15.33	15.24	16.26	17.51
1998 Average	12.11	12.56	10.49	12.97	8.87	12.52	9.31	9.09	10.20	11.21
1999 Average	17.46	17.20	15.89	17.32	17.65	19.14	14.33	17.15	15.90	16.84
2000 Average	27.90	29.04	25.39	28.70	24.62	27.21	24.45	24.72	25.56	26.77
2001 Average	23.25	24.25	18.89	24.85	18.98	23.30	18.01	18.89	19.73	21.04
2002 Average	24.09	24.64	21.60	25.38	23.92	24.50	20.13	23.38	22.18	22.93
2003 Average	28.22	28.89	24.83	29.40	25.03	28.76	23.81	25.17	25.36	26.21
2004 Average	37.26	37.73	31.55	38.71	34.08	37.30	31.78	33.08	33.95	33.58
2005 Average	52.48	51.89	43.00	55.95	47.96	54.48	46.39	47.21	49.60	45.79
2006 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 January	39.50	26.24	36.96	46.26	W	W	36.68	35.24	37.61	36.15
February	40.60	32.55	37.59	45.02	W	_	38.03	36.38	39.71	36.81
March	44.56	46.69	40.94	50.34	48.31	W	41.78	47.66	45.75	42.96
April	50.59	W	46.71	54.00	W	_	45.98	51.05	48.82	46.87
May	55.23	54.17	55.49	59.02	W	_	54.91	58.05	56.30	55.12
June	66.96	62.94	63.83	69.00	W	_	63.16	64.26	65.37	64.34
July	63.34	58.58	60.42	69.73	W	_	60.16	63.42	63.25	61.39
August	72.25	64.41	67.20	72.37	66.37	W	65.42	66.14	67.65	67.31
September	67.49	63.68	64.51	69.65	W	-	64.18	67.25	65.91	65.04
October	71.19	69.59	68.71	76.01	W	W	66.95	73.45	70.54	70.38
November	76.89	70.96	72.71	77.58	W	W	69.43	72.99	73.60	72.81
December	74.56	66.72	69.75	76.06	_W_		68.32	72.85	72.48	70.01
Average	57.07	57.90	56.47	64.61	57.87	65.63	55.58	59.53	58.53	57.16
2010 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		73.90	72.76	81.27	W	<del>-</del>	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	80.93	74.06	-	67.59	73.34	73.24	70.24
October	W	76.06	73.93	84.59	W	_	72.10	78.28	77.55	73.80
November	85.99	78.92	77.14	86.61	W	_	75.03	80.99	80.95	78.49
December Average	W <b>78.18</b>	81.62 <b>72.56</b>	81.75 <b>72.46</b>	93.68 <b>80.83</b>	W <b>76.44</b>	w	77.78 <b>70.30</b>	₩ <b>75.65</b>	85.72 <b>75.23</b>	82.40 <b>73.24</b>
2011 January	95.97	83.36	84.36	99.86	W	-	81.25	W	89.74	83.92
February		87.23	88.77	109.07	W	_	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 R 100.00
July August	114.80 W	100.30 <sup>R</sup> 95.01	104.84 <sup>R</sup> 98.21	119.68 <sup>R</sup> 115.61	W	_	100.62 <sup>R</sup> 97.17	109.06 R 106.98	110.09 R 104.19	R 100.90 R 94.02

a Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

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

b 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, On this table, "Total OPEC" for all years includes Algeria, Iran, Iraq, Kuwari, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; for 1973-2008, also includes Indonesia; for 1973-1992 and again beginning in 2008, also includes Ecuador (although Ecuador rejoined OPEC in November 2007, on this table Ecuador is included in "Total Non-OPEC" for 2007); for 1974-1995, also includes Gabon (although Gabon was a member of OPEC for only 1975-1994); and beginning in 2007, also includes Angola. Data for all countries not included in "Total OPEC" are included in "Total Non-OPEC."

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

R-Revised — -No data reported. W-Value withheld to avoid disclosure of

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

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Dollarsa 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 Averaged	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	98.18	90.00	93.43	85.97	104.83	94.75	96.95	90.76	93.59	95.49	90.59
2009 January	43.58	34.17	32.08	38.08	48.98	39.78	W	39.12	39.41	40.26	36.96
February	42.83	35.83	34.49	38.16	47.00	44.46	W	39.58	43.17	42.75	38.08
March	47.58	44.22	46.70	41.76	53.02	52.14	47.76	43.87	50.54	48.55	45.09
April	53.45	47.60	46.43	47.26	59.03	57.32	52.41	48.40	57.10	54.22	48.78
May	56.44	54.42	54.90	56.22	63.48	62.40	60.43	56.78	62.11	60.06	56.79
June	68.46	63.97	65.65	64.39	69.29	66.27	68.54	64.52	66.28	66.63	65.19
July	67.21	62.18	63.24	60.99	71.46	66.14	W	62.11	66.20	66.27	63.23
August	72.52	64.23	66.71	67.71	73.94	69.37	73.66	67.23	69.23	70.00	66.96
September	72.63	66.59	66.27	65.00	71.98	72.77	W	65.85	72.05	70.02	66.84
October	74.94	70.28	71.24	69.40	77.72	74.20	W	68.85	74.18	73.71	71.46
November	78.25	71.95	72.70	73.29	79.00	73.92	W	71.41	73.99	75.18	73.67
December	77.11	70.01	70.18	70.20	78.63	73.08	78.33	70.46	74.54	75.01	71.88
Average	61.32	57.60	58.50	57.35	68.01	62.14	63.87	57.78	62.15	61.90	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 Average	91.77 <b>80.63</b>	80.76 <b>72.80</b>	82.76 <b>74.25</b>	82.37 <b>72.86</b>	95.44 <b>83.15</b>	90.45 <b>79.25</b>	92.50 <b>80.12</b>	80.79 <b>72.43</b>	89.99 <b>78.58</b>	89.25 <b>78.27</b>	83.97 <b>74.67</b>
_											
<b>2011</b> January	99.58	81.43 80.65	85.88	85.00	101.24	96.59	W	84.70	96.57	94.03	85.02
February		89.32	90.14 105.74	89.08 103.03	108.94 117.17	103.20 110.12		89.88 101.22	101.81 109.56	99.96 109.23	89.03 101.20
March							118.42				
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 72	98.29	109.70	105.62	119.95	112.19	W	104.04	111.48	111.90	105.06
June		92.36 <sup>R</sup> 91.76	104.31	103.71	120.81	110.00 R 111.06	W	102.32	108.97 R 110.10	109.87 <sup>R</sup> 111.58	100.83 R 100.38
July	R 117.98	** 91.76 R 84.13	101.35 R 05.06	105.38 R 00.70	121.80 R 115.92	R 111.06	W	103.04 <sup>R</sup> 99.54	R 110.19 R 108.38	<sup>N</sup> 111.58 <sup>R</sup> 106.10	* 100.38 R 93.93
August			R 95.06	R 98.78	R 115.83	R 109.57	VV				
September	116.62	84.80	99.30	100.28	119.02	109.27	_	99.03	108.15	106.32	94.50

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 into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.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 and 2011: EIA, Petroleum Marketing Monthly, December 2011, Table 22.

<sup>&</sup>lt;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 1974-1995, also includes Gabon (although Edabon was a member of OPEC for only 1975-1994); and 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.

d Based on October, November, and December data only.
R=Revised. — =No data reported. W=Value withheld to avoid disclosure of individual company data.
Notes: • See "Landed Costs" in Glossary, and Note 4, "Crude Oil Landed

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

	Leaded Regular	Unleaded Regular	Unleaded Premium <sup>b</sup>	All Types <sup>c</sup>
973 Average	0.388	NA	NA	NA
975 Average	0.567	NA NA	NA NA	NA NA
	1.191	1.245	NA NA	1.221
080 Average				
85 Average	1.115	1.202	1.340	1.196
990 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
998 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
	NA NA	1.461	1.657	1.531
001 Average				
002 Average	NA	1.358	1.556	1.441
003 Average	NA	1.591	1.777	1.638
004 Average	NA	1.880	2.068	1.923
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
<b>009</b> January	NA	1.787	2.036	1.838
February	NA	1.928	2.182	1.979
March	NA	1.949	2.197	2.000
April	NA	2.056	2.309	2.107
	NA NA			2.314
May		2.265	2.511	
June	NA	2.631	2.883	2.681
July	NA	2.543	2.806	2.594
August	NA	2.627	2.887	2.677
September	NA	2.574	2.845	2.626
October	NA	2.561	2.826	2.613
November	NA	2.660	2.917	2.709
	NA NA	2.621	2.882	2.671
December				
Average	NA	2.350	2.607	2.401
010 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 NA	2.704	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
011 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
	NA NA	3.702		
June			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 NA	3.423	3.700	3.475
14010111001	INC	J. <del>4</del> ZJ	3.700	3.413

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

NA=Not available.

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

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

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

Table 9.5 Refiner Prices of Residual Fuel Oil

	Sulfur Co	al Fuel Oil ontent Less al to 1 Percent	Residual Sulfur ( Greater Tha		Average		
	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	
80 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	
90 Average	0.472	0.505	0.372	0.400	0.413	0.444	
95 Average	0.383	0.436	0.338	0.377	0.363	0.392	
96 Average	0.456	0.526	0.389	0.433	0.420	0.455	
97 Average	0.415	0.488	0.366	0.403	0.387	0.423	
98 Average	0.299	0.354	0.269	0.287	0.280	0.305	
99 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	
01 Average	0.523	0.642	0.428	0.492	0.476	0.531	
02 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 January	1.035	1.164	0.861	0.953	0.926	1.049	
February	1.011	1.200	0.918	0.974	0.954	1.068	
March	1.019	1.183	0.917	0.952	0.952	1.030	
April	1.077	1.174	0.992	1.027	1.017	1.066	
May	1.205	1.213	1.191	1.245	1.195	1.234	
June	1.401	1.440	1.373	1.451	1.381	1.447	
July	1.417	1.488	1.400	1.369	1.405	1.404	
August	1.584	1.641	1.567	1.488	1.572	1.536	
September	1.531	1.689	1.556	1.491	1.549	1.540	
October	1.619	1.717	1.549	1.501	1.560	1.552	
November	1.743	1.739	1.700	1.602	1.711	1.642	
December	1.723	1.813	1.673	1.614	1.685	1.674	
	1.723 1.337	1.613 1.413	1.344	1.306	1.342	1.341	
Average	1.337	1.413	1.344	1.306	1.342	1.341	
10 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	
September	1.716	1.883	1.612	1.558	1.632	1.645	
October	1.793	1.913	1.688	1.637	1.712	1.721	
November	1.865	2.025	1.741	1.701	1.768	1.804	
December Average	2.036 <b>1.756</b>	2.215 <b>1.920</b>	1.814 <b>1.679</b>	1.784 <b>1.619</b>	1.865 <b>1.697</b>	1.931 <b>1.713</b>	
_							
11 January	NA	2.302	1.896	1.870	1.918	2.013	
February	2.100	2.451	2.079	2.019	2.086	2.150	
March	2.344	2.654	2.307	2.245	2.321	2.403	
April	2.555	2.741	2.427	2.370	2.448	2.475	
May	2.463	2.786	2.374	2.325	2.392	2.440	
June	2.467	2.905	2.377	2.312	2.402	2.473	
July	2.547	2.877	2.430	2.362	2.474	2.508	
August	2.394	2.896	2.392	2.342	2.392	2.512	
September	2.368	2.882	2.370	2.318	2.369	2.473	

 $<sup>^{\</sup>rm a}\,$  Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary. NA=Not available.

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

<sup>6, &</sup>quot;Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

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

available data beginning in 1978.

Sources: • 1978-2009: EIA, Petroleum Marketing Annual 2009, Table 16.
• 2010 and 2011: EIA, Petroleum Marketing Monthly, December 2011, Table 16.

Table 9.6 Refiner Prices of Petroleum Products for Resale

	Finished Motor Gasoline <sup>b</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	0.434	0.537	0.386	0.404	0.369	0.365	0.237
980 Average	0.941	1.128	0.868	0.864	0.803	0.801	0.415
985 Average	0.835	1.130	0.794	0.874	0.776	0.772	0.398
990 Average	0.786	1.063	0.773	0.839	0.697	0.694	0.386
995 Average	0.626	0.975	0.539	0.580	0.511	0.538	0.344
996 Average	0.713	1.055	0.646	0.714	0.639	0.659	0.461
997 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
000 Average	0.886	1.256	0.763	0.821	0.756	0.784	0.540
ū			0.703		0.694	0.784	0.431
002 Average	0.828	1.146		0.752			
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
006 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
<b>009</b> January	1.246	1.851	1.472	1.810	1.548	1.480	0.974
February	1.333	2.040	1.352	1.607	1.427	1.326	0.890
March	1.397	2.031	1.266	1.456	1.358	1.315	0.805
April	1.482	2.225	1.425	1.480	1.397	1.456	0.719
May	1.763	2.478	1.460	1.540	1.468	1.531	0.728
June	2.022	2.743	1.780	1.849	1.744	1.828	0.838
July	1.867	2.548	1.759	1.773	1.658	1.745	0.760
August	2.026	2.759	1.894	1.951	1.804	1.937	0.837
September	1.915	2.592	1.822	1.857	1.774	1.848	0.923
October	1.975	2.611	1.917	2.053	1.918	1.978	1.004
November	2.039	2.701	2.060	2.067	2.004	2.037	1.088
December	1.999	2.655	2.012	2.148	1.989	1.997	1.178
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
May	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	1.277
December	2.383	3.024	2.459	2.744	2.435	2.486	1.322
Average	2.165	2.874	2.185	2.299	2.147	2.214	1.212
<b>011</b> 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	2.737	3.134	1.401
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
September	2.896	3.878	3.025	3.073	2.927	3.035	1.557

 $<sup>^{\</sup>rm a}\,$  Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.  $^{\rm b}\,$  See Note 5, "Motor Gasoline Prices," at end of section.

NA=Not available.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are shown in Table 9.7; they are sales made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. • Values for the current month are preliminary. • Prices prior to 1983 are 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 and 2011: EIA, Petroleum Marketing Monthly, December 2011, Table 4.

Table 9.7 Refiner Prices of Petroleum Products to End Users

	Finished Motor Gasoline <sup>b</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	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
000 Average	1.032	1.323	0.775	1.045	0.829	0.842	0.506
ŭ							
002 Average	0.947	1.288	0.721	0.990	0.737	0.762	0.419
003 Average	1.156	1.493	0.872	1.224	0.933	0.944	0.577
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 January	1.358	1.857	1.483	2.626	2.026	1.630	1.861
February	1.468	1.974	1.360	2.627	1.879	1.495	1.505
March	1.503	1.977	1.281	2.565	1.772	1.450	1.166
April	1.601	2.150	1.458	2.540	1.765	1.589	1.065
May	1.856	2.423	1.486	2.497	1.697	1.640	0.889
June	2.187	2.707	1.818	2.490	1.939	1.945	1.008
July	2.067	2.607	1.774	2.462	1.871	1.897	0.891
August	2.157	2.764	1.922	2.545	2.041	2.032	1.029
September	2.086	2.684	1.834	NA	1.972	1.980	1.075
October	2.104	2.693	1.930	2.738	2.163	2.082	1.229
November	2.173	2.845	2.064	2.875	2.227	2.155	1.323
December	2.144	2.799	2.016	2.894	2.197	2.117	1.517
Average	1.888	2.799 2.442	1.704	2.67 <b>5</b>	1.962	1.834	1.220
-							
010 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
July	2.247	3.028	2.103	NA	2.246	2.212	1.162
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 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 4 C40
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
August	3.134	R 3.920	3.057	3.851	<sup>R</sup> 3.251	3.143	1.650
September	3.090	3.915	3.057	3.873	3.288	3.127	1.702

 $<sup>^{\</sup>rm a}\,$  Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.  $^{\rm b}\,$  See Note 5, "Motor Gasoline Prices," at end of section.

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

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

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

Sources: • 1978-2009: EIA, Petroleum Marketing Annual 2009, Table 2. • 2010 and 2011: EIA, Petroleum Marketing Monthly, December 2011, Table 2.

R=Revised. NA=Not available.

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

	Maine	New Hampshire	Vermont	Massachusetts	Rhode Island	Connecticut	New York	New Jersey	Pennsylvani
978 Average	0.486	0.503	0.508	0.488	0.507	0.501	0.501	0.496	0.488
980 Average	0.963	1.004	1.015	0.978	1.011	0.983	0.982	0.979	0.964
985 Average	0.997	1.024	1.077	1.070	1.067	1.080	1.113	1.059	1.023
990 Average	0.989	1.028	1.070	1.084	1.086	1.098	1.125	1.087	1.026
995 Average	0.787	0.779	0.853	0.844	0.874	0.864	0.955	0.888	0.826
996 Average	0.972	0.940	0.969	0.976	0.986	0.986	1.063	1.024	0.953
997 Average	0.942	0.942	0.987	0.960	0.989	0.963	1.065	1.033	0.950
998 Average	0.788	0.788	0.873	0.818	0.868	0.831	0.948	0.892	0.814
999 Average	0.813	0.770	0.854	0.836	0.858	0.852	0.969	0.913	0.815
000 Average	1.297	1.281	1.255	1.273	1.259	1.291	1.442	1.404	1.224
001 Average	1.217	1.256	1.261	1.221	1.236	1.239	1.363	1.314	1.159
002 Average	1.129	1.119	1.172	1.141	1.124	1.118	1.218	1.220	1.064
003 Average	1,314	1.312	1.309	1.386	1.344	1.355	1.436	1.489	1,304
2004 Average	1.511	1.497	1.505	1.559	1.511	1.518	1.627	1.662	1.489
	1.986	1.972	1.987	2.064	2.000	2.012	2.105	2.166	1.974
005 Average	2.294	2.283	2.408	2.355	2.360	2.357	2.458	2.467	2.286
2006 Average	2.294	2.203	2.408 2.679	2.576	2.602	2.357	2.436	2.467	2.508
007 Average									
008 Average	3.199	3.207	3.323	3.197	3.210	3.195	3.293	3.267	3.157
009 January	2.506	2.537	2.774	2.356	2.346	2.576	2.543	2.389	2.427
February	2.404	2.426	2.693	2.226	2.209	2.429	2.447	2.288	2.268
March	2.237	2.283	2.545	2.166	2.127	2.362	2.334	2.166	2.202
April	2.250	2.246	2.437	2.192	2.143	2.314	2.338	2.187	2.177
May	2.175	2.151	2.370	2.142	2.169	2.225	2.300	2.187	2.190
June	2.295	2.201	2.376	2.371	2.385	2.413	2.428	2.381	2.211
July	2.268	2.077	2.324	2.312	2.285	2.354	2.291	2.322	2.137
August	2.350	2.243	2.378	2.432	2.454	2.490	2.523	2.454	2.257
September	2.333	2.272	2.403	2.386	2.357	2.349	2.455	2.437	2.196
October	2.391	2.373	2.484	2.470	2.537	2.516	2.574	2.541	2.315
November	2.461	2.484	2.604	2.619	2.685	2.645	2.747	2.710	2.520
December	2.486	2.523	2.640	2.634	2.718	2.665	2.733	2.731	2.536
	2.480	2.377	2.593	2.358	2.716	2.487	2.733 2.504	2.731 2.404	2.330 2.330
Average	2.302	2.377	2.593	2.330	2.376	2.407	2.504	2.404	2.330
010 January	2.583	2.611	2.753	2.762	2.856	2.764	2.893	2.928	2.692
February	2.536	2.600	2.705	2.729	2.777	2.730	2.845	2.871	2.697
March	2.560	2.632	2.747	2.795	2.800	2.758	2.801	2.929	2.755
April	2.565	2.651	2.771	2.868	2.959	2.815	2.845	2.946	2.752
May	2.511	2.636	2.710	2.811	2.921	2.736	2.781	2.873	2.680
June	2.479	2.574	2.649	2.716	2.829	2.705	2.691	2.747	2.561
July	2.478	2.532	2.614	2.656	2.728	2.653	2.651	2.715	2.519
August	2.469	2.513	2.619	2.651	2.735	2.634	2.668	2.701	2.543
September	2.539	2.543	2.657	2.686	2.745	2.647	2.721	2.754	2.583
October	2.677	2.642	2.784	2.860	2.942	2.822	2.848	2.912	2.759
November	2.774	2.772	2.924	2.969	3.044	2.946	2.969	3.077	2.892
December	2.910	2.904	3.032	3.126	3.197	3.106	3.147	3.278	3.061
Average	2.639	2.680	2.795	2.850	2.927	2.835	2.894	2.973	2.780
044 January	2.074	2.400	2.400	2 242	2 200	2.000	2 204	2.450	0.007
011 January	3.071	3.102	3.186	3.313	3.368	3.268	3.281	3.458	3.237
February	3.188	3.269	3.330	3.493	3.536	3.477	3.428	3.624	3.369
March	NA	NA	NA	NA	NA	NA	NA	NA	NA
April	NA	NA	NA	NA	NA	NA	NA	NA	NA
May	NA	NA	NA	NA	NA	NA	NA	NA	NA
June	NA	NA	NA	NA	NA	NA	NA	NA	NA
July	NA	NA	NA	NA	NA	NA	NA	NA	NA
August	NA	NA	NA	NA	NA	NA	NA	NA	NA
September	NA	NA	NA	NA	NA	NA	NA	NA	NA

 $<sup>^{\</sup>rm a}\,$  Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary. NA=Not available.

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

Due to recent budget cuts, EIA is adjusting its data programs. Beginning with the June 2011 Monthly Energy Review, No. 2 distillate fuel oil prices to residences (Tables 9.8a-9.8c) will not be available for March 2011 forward.

Petroleum Prices," at end of section.

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 15. • 2010 and 2011: EIA, Petroleum Marketing Monthly, December 2011, Table 15.

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

				(= 0	por cane			-,			
		District									
		of			West						
	Delaware	Columbia	Maryland	Virginia	Virginia	Ohio	Michigan	Indiana	Illinois	Wisconsin	Minnesota
1978 Average	0.478	0.507	0.492	0.491	0.462	0.474	0.479	0.485	0.465	0.447	0.478
1980 Average	0.954	1.026	0.979	0.985	0.922	0.919	0.978	0.996	0.958	0.915	0.999
1985 Average	1.046	1.143	1.088	1.063	0.980	0.997	1.021	0.991	0.975	0.983	1.019
1990 Average	1.058	1.078	1.119	1.106	0.991	0.981	1.009	0.993	0.961	0.942	1.014
1995 Average	0.870	1.010	0.936	0.844	0.815	0.808	0.860	0.816	0.785	0.812	0.801
1996 Average	0.984	1.178	1.063	0.952	0.960	0.921	0.977	0.912	0.893	0.899	0.909
1997 Average	0.984	1.174	1.057	0.948	0.962	0.913	0.942	0.865	0.870	0.933	0.899
1998 Average	0.858	1.022	0.902	0.856	0.818	0.767	0.804	0.748	0.735	0.801	0.738
1999 Average	0.884	1.011	0.907	0.870	0.789	0.820	0.883	0.793	0.716	0.847	0.774
2000 Average	1.270	W	1.351	1.269	1.251	1.220	NA	1.207	1.095	1.171	1.156
2001 Average	1.234	1.431	1.342	1.202	1.139	1.160	NA	1.133	1.121	1.180	1.122
2002 Average	1.164	W	1.201	1.057	1.054	1.058	1.109	1.025	0.975	1.073	1.051
2003 Average	1.433	w	1.455	1.311	1.304	1.284	1.321	1.202	1.198	1.269	1.218
2004 Average	1.570	W W	1.632	1.462	1.493	1.475	1.539	1.537	1.405	1.465	1.433
2005 Average	2.075 2.381	W	2.127 2.398	2.044	2.043 2.261	2.009 2.244	2.053	2.017 2.317	2.021 2.312	1.993 2.297	1.987 2.268
2006 Average 2007 Average	2.584	W	2.396	2.268 2.407	2.478	2.494	2.329 2.588	2.557	2.528	2.297	2.266
2008 Average	3.187	w	3.273	3.124	3.221	3.147	3.067	3.105	3.152	3.088	3.065
<b>2009</b> January	2.428	W	2.470	2.225	2.329	2.041	1.991	2.062	2.069	2.004	1.974
February	2.310	W	2.407	2.145	2.188	1.888	1.866	1.912	1.869	1.854	1.813
March	2.253	W	2.275	1.999	2.042	1.826	1.806	1.822	1.836	1.781	1.735
April	2.267	W	2.263	NA 1 00 1	2.035	1.917	1.810	1.922	1.983	1.870	1.890
May	2.253	W	2.224	1.824	2.008	1.941	1.807	1.972	NA	1.975	1.872
June	2.289 2.253	W W	2.320	2.037	2.119 2.122	2.180 2.103	2.095 1.964	2.176 2.181	2.060	2.200 2.166	2.156 2.092
July August	2.253	W	2.307 2.397	2.055 2.140	2.122	2.103	2.153	2.101	NA 2.147	2.100	2.092
September	2.340	W	2.396	2.140	2.253	2.279	2.179	2.318	NA	2.262	2.232
October	2.505	W	2.561	2.322	2.397	2.364	2.336	2.391	2.386	2.331	2.301
November	2.683	W	2.707	2.408	2.504	2.479	2.485	2.520	2.483	2.421	2.388
December	2.724	W	2.763	2.495	2.496	2.493	2.447	2.507	2.427	2.395	2.394
Average	2.421	W	2.473	2.193	2.265	2.130	2.096	2.189	2.155	2.105	2.124
<b>2010</b> January	2.878	W	2.861	2.594	2.681	2.572	2.526	2.565	2.526	2.466	2.505
February	2.857	W	2.833	2.561	2.714	2.533	2.501	2.510	2.516	2.421	W
March	2.988	W	2.894	2.587	2.712	2.585	2.640	2.614	2.660	2.537	2.580
April	NA	W	2.858	NA	2.676	2.566	2.731	2.679	2.777	2.640	2.668
May	2.853	W	2.808	2.435	2.583	2.574	2.669	NA	2.783	2.567	2.581
June	2.695	W	2.705	2.356	2.501	2.436	2.505	2.482	NA	2.478	2.557
July	2.655	W	2.636	2.345	2.499	2.436	2.481	2.510	2.582	2.508	2.466
August	2.617	W	2.669	2.351	2.547	2.511	2.508	2.550	W	2.514	2.559
September	2.678	W	2.692	2.397	2.577	2.554	2.596	2.607	2.732	2.562	2.596
October	2.847	W	2.822	2.567	2.720	2.695	2.734	2.701	NA 2.045	2.702	2.719
November	NA	W	2.985	2.754	2.834	2.802	2.830	2.864	2.915	2.788	2.866
December Average	3.223 <b>2.951</b>	W W	3.195 <b>2.925</b>	2.920 <b>2.621</b>	3.024 <b>2.724</b>	2.923 <b>2.653</b>	2.933 <b>2.657</b>	2.979 <b>2.670</b>	3.030 <b>2.749</b>	2.894 <b>2.610</b>	2.965 <b>2.470</b>
Average	2.331	••	2.323	2.021	2.127	2.000	2.001	2.070	2.173	2.010	2.770
<b>2011</b> January	3.431	W	3.377	3.093	3.204	3.039	3.041	3.109	3.098	3.008	3.031
February	3.560	W	3.508	3.222	3.365	3.189	3.196	3.246	3.286	3.169	3.184
March	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
April	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
May	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
June		NA	NA	NA	NA	NA	NA NA	NA	NA	NA	NA
July	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
August September		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
September	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA

<sup>&</sup>lt;sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary. NA=Not available. W=Value withheld to avoid disclosure of individual company

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

Petroleum Prices," at end of section.

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

Sources: • 1978-2009: EIA, Petroleum Marketing Annual 2009, Table 15.
• 2010 and 2011: EIA, Petroleum Marketing Monthly, December 2011, Table 15.

Due to recent budget cuts, EIA is adjusting its data programs. Beginning with the June 2011 Monthly Energy Review, No. 2 distillate fuel oil prices to residences (Tables 9.8a-9.8c) will not be available for March 2011 forward.

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

	Idaho	Washington	Oregon	Alaska	U.S. Average
978 Average	0.436	0.486	0.458	0.532	0.490
980 Average	0.916	1.008	0.973	0.978	0.974
985 Average	0.972	1.011	0.971	1.083	1.053
990 Average	0.974	1.029	0.970	1.101	1.063
995 Average	0.839	0.962	0.894	0.834	0.867
996 Average	0.933	1.080	0.989	0.909	0.989
997 Average	0.953	1.139	1.031	0.973	0.984
998 Average	0.784	0.978	0.861	0.852	0.852
999 Average	0.762	1.065	0.938	0.966	0.876
000 Average	1.170	1.445	1.368	1.337	1.311
001 Average	1.038	1.336	1.211	1.377	1.250
002 Average	0.919	1.204	1.060	1.087	1.129
003 Average	1.188	1.487	1.303	1.243	1.355
004 Average	1.495	1.749	1.594	1.524	1.548
005 Average	2.123	2.385	2.146	2.061	2.052
006 Average	2.391	2.681	2.411	2.395	2.365
	2.598	2.909	2.500	2.518	2.592
007 Average 008 Average	2.598 3.078	2.909 3.401	2.500 3.060	2.518 3.485	2.592 3.219
700 Average	5.070	J.+U1	3.000	3.403	3.213
009 January	1.879	2.388	1.939	2.160	2.426
February	1.762	2.253	1.819	NA	2.309
March	1.674	2.124	1.727	1.946	2.210
April	1.863	2.414	1.986	2.140	2.211
May	1.878	2.473	2.050	2.256	2.167
June	2.148	2.544	2.278	2.506	2.307
July	2.123	2.335	2.149	2.362	2.219
August	2.158	2.489	2.326	2.554	2.369
September	2.273	2.658	2.357	NA	2.334
October	2.333	2.737	2.469	NA	2.458
November	2.459	2.871	2.551	NA	2.608
December	2.354	2.830	2.475	NA	2.628
Average	2.048	2.491	2.132	2.503	2.386
Average	2.040	2.491	2.132	2.303	2.300
<b>010</b> January	2.392	2.918	2.583	NA	2.763
February	2.412	2.817	2.536	2.790	2.658
March	2.569	2.924	2.664	2.884	2.757
April	2.747	3.105	2.817	2.965	2.787
May	2.675	3.053	2.685	2.958	2.723
June	2.075 NA	2.892	2.653	2.891	2.623
	2.540	2.092 NA			2.584
July			NA 0.605	2.878	
August	2.598	2.757	2.625	2.901	2.597
September	2.676	NA	2.760	2.944	2.641
October	2.853	3.174	2.871	3.041	2.795
November	2.937	3.195	2.935	3.070	2.926
December	2.980	3.242	2.991	3.134	3.089
Average	2.716	3.039	2.776	2.951	2.798
_					
011 January	3.005	3.350	3.079	3.210	3.251
February	3.173	3.537	3.295	3.366	3.409
March	NA	NA	NA	NA	NA
April	NA	NA	NA	NA	NA
May	NA	NA	NA	NA	NA
June	NA	NA NA	NA NA	NA	NA NA
	NA NA	NA NA	NA NA	NA NA	NA NA
July					
August	NA	NA	NA	NA	NA
September	NA	NA	NA	NA	NA
October	NA	NA	NA	NA	NA

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

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

Petroleum Prices," at end of section.

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

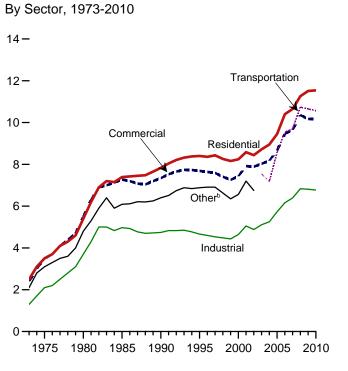
Due to recent budget cuts, EIA is adjusting its data programs. Beginning with the June 2011 Monthly Energy Review, No. 2 distillate fuel oil prices to residences (Tables 9.8a-9.8c) will not be available for March 2011 forward.

available data beginning in 1978.

Sources: • 1978-2009: EIA, Petroleum Marketing Annual 2009, Table 15.

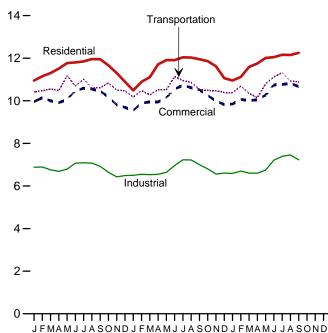
• 2010 and 2011: EIA, Petroleum Marketing Monthly, December 2011, Table 15.

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



<sup>&</sup>lt;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 rail-roads and railways.

By Sector, Monthly



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

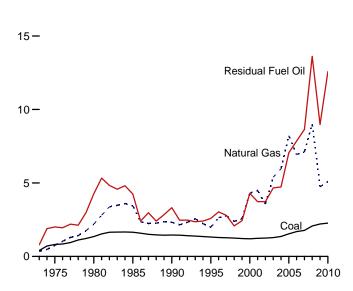
2010

2011

2009

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

Costs, 1973-2010 Costs, Monthly 20 – 25 –



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

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

Table 9.9 Average Retail Prices of Electricity

(Centsa per Kilowatthour, Including Taxes)

1973 Average   2.50     1975 Average   3.50     1986 Average   5.40     1985 Average   7.39     1990 Average   7.83     1995 Average   8.46     1996 Average   8.46     1997 Average   8.43     1998 Average   8.26     1999 Average   8.16     2000 Average   8.24     2001 Average   8.58     2002 Average   8.72     2004 Average   8.72     2005 Average   9.45     2006 Average   10.40     2007 Average   10.65     2008 Average   11.26     2009 January   10.95     February   11.15     March   11.30     April   11.51     May   11.77     June   11.80     July   11.85     August   11.96     September   11.96     September   11.30     December   10.89     Average   11.51     2010 January   R 10.49     February   R 10.89     Average   11.51     2010 January   R 10.49     February   R 10.89     March   R 11.11     April   R 11.71     June   R 11.91     July   R 12.04     August   R 12.03     September   R 11.95     Cotober   R 11.86     November   R 11.62     December   R 11.95     Cotober   R 11.86     November   R 11.96     September   R 11.91     June   R 11.91     Average   R 11.54     2011 January   R 10.95     February   R 10.89     February   R 10.95     February					Total
375 Average       3.50         380 Average       5.40         385 Average       7.39         395 Average       7.83         395 Average       8.40         395 Average       8.26         397 Average       8.26         398 Average       8.26         399 Average       8.24         390 Average       8.24         390 Average       8.44         390 Average       8.72         390 Average       9.45         390 Average       10.40         390 Average       10.40         390 Average       10.40         390 Average       10.45         390 Average       10.45         390 Average       10.45         390 Average       11.26         390 Average       11.26         390 Average       11.26         390 Average       11.51         390 Average       11.51         390 Average       11.51         390 Average       11.80         390 Average       11.51         390 Average       11.51         390 Average       11.51         390 Average       11.51         390 Average	2.40	1.30	NA	2.10	2.00
180 Average       5.40         185 Average       7.39         190 Average       7.83         195 Average       8.40         196 Average       8.36         197 Average       8.43         198 Average       8.26         199 Average       8.16         100 Average       8.24         101 Average       8.58         102 Average       8.95         103 Average       9.45         104 Average       10.40         107 Average       10.65         108 Average       11.26         109 January       10.95         February       11.15         March       11.30         April       11.51         May       11.77         July       11.85         August       11.95         October       11.66         November       11.30         December       10.89         Average       11.51         110 January       R 10.49         February       R 10.89         March       R 11.11         April       R 11.71         May       R 11.11         July	3.50	2.10	NA NA	3.10	2.90
85 Average         7.39           90 Average         7.83           95 Average         8.40           96 Average         8.36           97 Average         8.26           99 Average         8.26           99 Average         8.24           01 Average         8.58           8.02 Average         8.44           03 Average         8.95           05 Average         9.45           06 Average         10.65           08 Average         11.26           09 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.85           August         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           May         81.71           March         81.11           April         81.56           November         11.30           December         10.89           Average         11.51	5.50	3.70	NA NA	4.80	4.70
90 Average 7.83 995 Average 8.40 996 Average 8.36 97 Average 8.43 998 Average 8.26 99 Average 8.26 99 Average 8.26 99 Average 8.24 01 Average 8.58 02 Average 8.44 03 Average 8.72 04 Average 9.45 05 Average 9.45 06 Average 10.40 07 Average 10.65 08 Average 11.26 09 January 10.95 February 11.15 March 11.30 April 11.51 May 11.77 June 11.80 August 11.96 September 11.95 October 11.66 November 11.30 December 10.89 Average 11.51 10 January R 10.49 February R 10.89 Average 11.51 11 January R 10.49 February R 10.89 Average 11.51 11 January R 10.49 February R 10.89 Average 11.51 11 January R 10.49 February R 10.89 Average 11.51 11 June R 11.11 April R 11.71 May R 11.91 June R 11.91 June R 11.91 June R 11.95 October R 11.86 November R 11.86 November R 11.95 October R 11.86 November R 11.91 June R 11.54 11 January R 10.95 February R 10.89 Average R 11.54	7.27		NA NA	6.09	6.44
95 Average 8.40 96 Average 8.36 97 Average 8.43 98 Average 8.26 99 Average 8.26 99 Average 8.26 90 Average 8.24 01 Average 8.24 01 Average 8.58 02 Average 8.72 04 Average 9.45 06 Average 9.45 06 Average 10.40 07 Average 10.65 08 Average 11.26 09 January 10.95 February 11.15 March 11.30 April 11.51 May 11.77 June 11.80 July 11.85 August 11.96 September 11.95 October 11.66 November 11.30 December 10.89 Average 11.51  10 January R 10.49 February R 10.89 Average 11.51  11 January R 10.89 Average 11.51  May R 11.71 May R 11.91 June R 11.91 June R 11.95 October R 11.86 November 11.95 October R 11.86 November 11.95 October R 11.81 April R 11.71 May R 11.91 June R 11.91 June R 11.95 October R 11.86 November R 11.95		4.97			
96 Average	7.34	4.74	NA	6.40	6.57
97 Average 8.43 998 Average 8.26 999 Average 8.26 99 Average 8.26 00 Average 8.24 01 Average 8.58 01 Average 8.58 02 Average 8.72 04 Average 9.45 05 Average 9.45 06 Average 9.45 07 Average 10.65 08 Average 10.65 08 Average 11.26 09 January 10.95 February 11.15 March 11.30 April 11.51 May 11.77 June 11.80 August 11.96 September 11.95 Cotober 11.66 November 11.30 December 10.89 Average 11.51 10 January R 10.49 February R 10.89 March R 11.11 April R 11.71 May R 11.91 June R 11.95 September R 11.95 Sept	7.69	4.66	NA	6.88	6.89
98 Average         8.26           90 Average         8.16           90 Average         8.16           90 Average         8.24           91 Average         8.58           92 Average         8.72           94 Average         8.95           95 Average         10.40           97 Average         10.65           98 Average         11.26           99 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.80           July         11.85           August         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           10 January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.71           May         R 11.91           July         R 12.03           September         R 11.54	7.64	4.60	NA	6.91	6.86
199 Average         8.16           100 Average         8.24           101 Average         8.58           102 Average         8.44           103 Average         8.72           104 Average         8.95           105 Average         10.40           106 Average         10.65           108 Average         11.26           109 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.85           August         11.96           September         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           10 January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           June         R 11.81           10 January         R 10.49           February         R 10.89           March         R 11.11	7.59	4.53	NA	6.91	6.85
199 Average         8.16           100 Average         8.24           101 Average         8.58           102 Average         8.44           103 Average         8.72           104 Average         8.95           105 Average         10.40           106 Average         10.65           108 Average         11.26           109 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.85           August         11.96           September         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           10 January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           June         R 11.81           10 January         R 10.49           February         R 10.89           March         R 11.11	7.41	4.48	NA	6.63	6.74
100 Average         8.24           101 Average         8.58           102 Average         8.44           103 Average         8.72           104 Average         9.45           105 Average         10.40           107 Average         10.65           108 Average         11.26           109 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.80           July         11.85           August         11.96           September         11.30           December         10.89           Average         11.51           10 January         R 10.49           February         R 10.89           Average         11.51           10 January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.91           July         R 12.03           September         R 11.91           July         R 12.03           September         R 11.62	7.26	4.43	NA	6.35	6.64
01 Average       8.58         02 Average       8.44         03 Average       8.72         04 Average       8.95         05 Average       10.40         07 Average       10.65         08 Average       11.26         09 January       10.95         February       11.15         March       11.30         April       11.51         May       11.77         June       11.85         August       11.95         October       11.66         November       11.30         December       10.89         Average       11.51         10 January       R 10.49         February       R 10.89         March       R 11.11         April       R 11.71         May       R 11.91         July       R 12.04         August       R 12.03         September       R 11.86         November       R	7.43	4.64	NA	6.56	6.81
02 Average         8.44           03 Average         8.72           04 Average         8.95           05 Average         9.45           06 Average         10.65           08 Average         11.26           09 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.80           July         11.85           August         11.96           September         11.30           December         10.89           Average         11.51           10 January         R 10.49           February         R 10.89           Average         11.51           11 January         R 10.49           February         R 10.89           March         R 11.11           May         R 11.91           July         R 12.04           August         R 12.03           September         R 11.54           11 January         R 11.62           December         R 11.62           December         R 11.62	7.92	5.05	NA	7.20	7.29
103 Average       8.72         104 Average       8.95         105 Average       9.45         106 Average       10.40         107 Average       10.65         108 Average       11.26         109 January       10.95         February       11.15         March       11.30         April       11.51         May       11.77         June       11.80         July       11.85         August       11.96         September       11.95         October       11.66         November       11.30         December       10.89         Average       11.51         110 January       R 10.49         February       R 10.49         February       R 10.89         Average       11.51         May       R 11.71         May       R 11.91         July       R 12.04         August       R 11.91         July       R 12.04         August       R 11.91         July       R 12.04         August       R 11.91         July       R 12.05 </td <td>7.89</td> <td>4.88</td> <td>NA</td> <td>6.75</td> <td>7.20</td>	7.89	4.88	NA	6.75	7.20
104 Average         8.95           106 Average         9.45           106 Average         10.40           107 Average         10.65           108 Average         11.26           109 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.85           August         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           10 January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           July         R 12.04           August         R 12.03           September         R 11.91           July         R 12.04           August         R 12.03           September         R 11.86           November         R 11.86           November         R 11.86           November         R 11.86 <td>8.03</td> <td>5.11</td> <td>7.54</td> <td>0.75</td> <td>7.44</td>	8.03	5.11	7.54	0.75	7.44
05 Average         9.45           06 Average         10.40           07 Average         10.65           08 Average         11.26           09 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.80           August         11.96           September         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           10 January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           July         R 12.03           September         R 11.91           July         R 12.04           August         R 12.03           September         R 11.62           December         R 11.62           December         R 11.62           December         R 11.62           December         R 11.62					
10.40   10.4	8.17	5.25	7.18		7.61
107 Average         10.65           108 Average         11.26           109 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.80           July         11.85           August         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           10 January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           July         R 12.04           August         R 12.03           September         R 11.91           July         R 12.04           August         R 12.03           September         R 11.86           November         R 11.86           November         R 11.86           November         R 11.54           11 January         R 10.95           February         R 11.54	8.67	5.73	8.57		8.14
11.26   10.95   10.9	9.46	6.16	9.54		8.90
108 Average         11.26           109 January         10.95           February         11.15           March         11.30           April         11.51           May         11.77           June         11.80           July         11.85           August         11.96           September         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           V10 January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           June         R 11.91           July         R 12.04           August         R 12.03           September         R 11.86           November         R 11.86           November         R 11.62           December         R 11.62           December         R 11.62           December         R 11.54           V11 January         R 10.95           February         R 11.12	9.65	6.39	9.70		9.13
February 11.15 March 11.30 April 11.51 May 11.77 June 11.85 August 11.96 September 11.95 October 11.66 November 11.30 December 10.89 Average 11.51  10 January R 10.49 February R 10.89 March R 11.11 April R 11.71 May R 11.91 June R 11.95 September R 11.95 October R 11.62 December R 11.62 December R 11.64 November R 11.65 November R 11.65 November R 11.65 Average R 11.54  M1 January R 10.95 February R 11.54 March R 11.75 May R 12.01 June R 12.05 July R 12.05 July R 12.05 July R 12.05	10.36	6.83	10.74		9.74
March         11.30           April         11.51           May         11.77           June         11.80           July         11.85           August         11.96           September         11.95           October         11.60           November         11.30           December         10.89           Average         11.51           110 January         R 10.49           February         R 10.49           February         R 11.91           March         R 11.11           April         R 11.71           May         R 11.91           July         R 12.03           September         R 11.91           July         R 12.03           September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.62           Average         R 11.54           M1 January         R 10.95           February         R 11.12           March         R 11.54           M1 January         R 10.95           February         R 11.175	9.96	6.88	10.42		9.66
March 11.30 April 11.51 May 11.77 June 11.80 July 11.85 August 11.96 September 11.95 October 11.60 November 11.30 December 10.89 Average 11.51  10 January R10.49 February R10.89 March R11.71 May R11.71 May R11.91 July R2.04 August R11.91 July R12.04 August R11.95 October R11.86 November R11.95 October R11.86 November R11.95 February R10.95 February R11.95 February R11.95 Average R11.54  11 January R10.95 February R11.12 March R11.75 May R11.175 May R12.01 June R12.01 June R12.01	10.14	6.89	10.47		9.74
April 11.51 May 11.77 June 11.80 July 11.85 August 11.96 September 11.95 October 11.66 November 10.89 Average 11.51  O10 January R 10.49 February R 10.89 March R 11.17 May R 11.91 June R 11.91 July R 12.04 August R 11.51 October R 11.86 November R 11.62 December R 11.54  O11 January R 10.95 February R 10.95 February R 11.54  O11 January R 10.95 February R 11.54  O12 March R 11.75 May R 12.01 June R 11.75 May R 12.01 June R 12.01 June R 11.54  O13 March R 11.55 May R 12.01 June R 12.05 July R 12.05 July R 12.05	10.00	6.76	10.55		9.65
May 11.77 June 11.80 July 11.85 August 11.96 September 11.95 October 11.66 November 11.30 December 10.89 Average 11.51 D10 January R 10.49 February R 10.89 March R11.11 April R 11.71 May R 11.91 June R 11.95 September R 11.62 December R 11.62 December R 11.64 November R 11.65 Average R 11.54 D11 January R 10.95 February R 11.12 March R 11.59 April R 11.75 May R 12.01 June R 12.05 July R 12.05 July R 12.05	9.91	6.69	10.48		9.57
June 11.80 July 11.85 August 11.96 September 11.95 October 11.66 November 11.30 December 10.89 Average 11.51  10 January R 10.89 March R11.11 April R11.71 May R11.91 July R2.04 August R12.03 September R11.95 October R11.86 November R11.96 Average R11.54	10.07	6.79	11.18		9.76
July         11.85           August         11.96           September         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           MIO January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           Jule         R 11.91           July         R 12.04           August         R 12.03           September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.62           December         R 11.54           M1 January         R 10.95           February         R 11.54           March         R 11.12           March         R 11.57           May         R 12.01           July         R 12.05           July         R 12.05					
August 11.96 September 11.95 October 11.66 November 11.30 December 10.89 Average 11.51  10 January R 10.49 February R 10.89 March R 11.11 April R 11.71 May R 11.91 June R 11.91 July R 12.04 August R 12.04 August R 12.04 August R 11.95 October R 11.86 November R 11	10.47	7.07	10.69		10.13
September         11.95           October         11.66           November         11.30           December         10.89           Average         11.51           100 January         R 10.49           February         R 10.89           March         R 11.91           March         R 11.91           June         R 11.91           July         R 12.04           August         R 12.03           September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.62           December         R 11.54           M1 January         R 10.95           February         R 11.54           March         R 11.59           April         R 11.75           May         R 12.01           July         R 12.05           July         R 12.06	10.59	7.09	11.02		10.30
October         11.66           November         11.30           December         10.89           Average         11.51           MO January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           June         R 11.91           July         R 12.04           August         R 12.03           September         R 11.86           November         R 11.62           December         R 11.62           December         R 11.54           M1 January         R 10.95           February         R 11.12           March         R 11.52           March         R 11.59           April         R 11.75           May         R 12.01           July         R 12.05           July         R 12.05	10.55	7.07	10.61		10.28
November	10.46	6.92	10.61		10.10
November	10.17	6.64	10.84		9.70
December   10.89   Average   11.51	9.81	6.43	10.50		9.37
Average         11.51           M0 January         R 10.49           February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           June         R 11.91           July         R 12.04           August         R 12.03           September         R 11.86           November         R 11.62           December         R 11.62           December         R 11.54           M1 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.57           May         R 12.01           June         R 12.05           July         R 12.05	9.69	6.49	10.47		9.38
February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           June         R 11.91           July         R 12.04           August         R 12.03           September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.66           Average         R 11.54           M1 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.59           May         R 12.01           June         R 12.05           July         R 12.16	10.17	6.81	10.65		9.82
February         R 10.89           March         R 11.11           April         R 11.71           May         R 11.91           June         R 11.91           July         R 12.04           August         R 12.03           September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.66           Average         R 11.54           M1 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.59           May         R 12.01           June         R 12.05           July         R 12.16	R 9.55	R 6.50	R 10.17		R 9.28
March         R 11.11           April         R 11.71           May         R 11.91           June         R 11.91           July         R 12.04           August         R 12.03           September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.06           Average         R 11.54           M1 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	R 9.89	6.55	R 10.48		R 9.47
April R11.71 May R11.91 June R11.91 July R2.04 August R12.03 September R11.95 October R11.86 November R11.62 December R11.54 M1 January R10.95 February R11.12 March R11.75 May R12.01 June R12.06 July R2.06	R 9.95	R 6.53	R 10.28		R 9.48
May         R 11.91           June         R 11.91           July         R 12.03           September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.06           Average         R 11.54           V11 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	R 9.95	R 6.55	R 10.52		R 9.53
June         R 11.91           July         R 12.04           August         R 12.03           September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.06           Average         R 11.54           VII January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	9.93 R40.45				
July         R 12.04           August         R 12.03           September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.06           Average         R 11.54           M1 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	R 10.15	R 6.64	R 10.52		R 9.73
August         R 12.03           September         R 11.95           October         R 11.62           December         R 11.62           December         R 11.06           Average         R 11.54           V11 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	R 10.56	R 6.96	R 11.14		R 10.18
September         R 11.95           October         R 11.86           November         R 11.62           December         R 11.06           Average         R 11.54           III January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	<sup>R</sup> 10.72	R 7.23	R 10.95		R 10.46
October         R 11.86           November         R 11.62           December         R 11.06           Average         R 11.54           V1 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	<sup>R</sup> 10.62	R 7.22	<sup>R</sup> 10.86		R 10.40
October         R11.86           November         R11.62           December         R11.06           Average         R11.54           V11 January         R10.95           February         R11.12           March         R11.59           April         R11.75           May         R12.01           June         R12.05           July         R12.16	<sup>R</sup> 10.52	R 7.00	<sup>R</sup> 10.53		R 10.17
November         R 11.62           December         R 11.06           Average         R 11.54           11 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	R 10.25	R 6.80	<sup>R</sup> 10.49		<sup>R</sup> 9.81
December	R 9.99	R 6.56	R 10.47		R 9.55
Average         R 11.54           V11 January         R 10.95           February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	R 9.82	R 6.60	R 10.39		R 9.52
February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	R 10.19	R 6.77	R 10.57		R 9.83
February         R 11.12           March         R 11.59           April         R 11.75           May         R 12.01           June         R 12.05           July         R 12.16	<sup>R</sup> 9.85	<sup>R</sup> 6.59	R 10.39		<sup>R</sup> 9.55
March     R 11.59       April     R 11.75       May     R 12.01       June     R 12.05       July     R 12.16	R 10.07	R 6.70	R 10.69		R 9.64
April R11.75 May R12.01 June R2.05 July R12.16	R 10.01	R 6.60	R 10.35		R 9.64
May       R 12.01         June       R 12.05         July       R 12.16	R 10.05				R 9.64
June R 12.05 July R 12.16		R 6.60	R 10.14		
July R 12.16	R 10.27	R 6.75	10.80		9.87
	<sup>R</sup> 10.75	7.21	<sup>R</sup> 11.12		R 10.35
	<sup>R</sup> 10.77	7.39	11.32		<sup>R</sup> 10.57
	<sup>R</sup> 10.82	<sup>R</sup> 7.46	10.93		<sup>R</sup> 10.58
September 12.25	10.67	7.23	10.88		10.39
9-Month Average 11.79	10.39	6.96	10.73		10.06
010 9-Month Average 11.56	10.24	6.81	10.60		9.89

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 "Iransportation," 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." • 1984-1996: EIA, Form EIA-861, "Annual
Electric Utility Report." • 1997 forward: EIA, Electric Power Monthly, December
2011, Table 5.3.

 <sup>&</sup>lt;sup>a</sup> Prices are not adjusted for inflation. See "Nominal Price" in Glossary.
 <sup>b</sup> Commercial sector. For 1973-2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.
 <sup>c</sup> Industrial sector. For 1973-2002, prices exclude agriculture and irrigation.
 <sup>d</sup> Transportation sector, including railroads and railways.

d Transportation sector, including railroads and railways.

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

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

(Dollarsa per Million Btu, Including Taxes)

			Petrole	um			
	Coal	Residual Fuel Oilb	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total <sup>d</sup>	Natural Gas <sup>e</sup>	All Fossil Fuels
1973 Average	0.41	0.79	NA	NA	0.80	0.34	0.48
1975 Average	.81	2.01	NA NA	NA NA	2.02	.75	1.04
	1.35	4.27	NA NA	NA NA	4.35	2.20	1.93
1980 Average							
985 Average	1.65	4.24	NA 5.00	NA	4.32	3.44	2.09
1990 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
2001 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
2003 Average	1.28	4.66	6.82	.72	4.33	5.39	2.28
2004 Average	1.36	4.73	8.02	.83	4.29	5.96	2.48
	1.54	4.73 7.06	0.02 11.72	.03 1.11	4.29 6.44	5.96 8.21	2.46 3.25
005 Average							
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 January	2.23	6.90	11.67	2.06	6.76	6.38	3.42
February	2.27	6.84	11.36	1.82	6.28	5.38	3.14
March	2.29	7.02	10.75	1.63	5.83	4.73	2.98
April	2.22	7.90	11.54	1.20	5.82	4.48	2.85
Mav	2.23	8.29	12.00	1.68	6.30	4.48	2.93
	2.22	9.46	13.66	1.58	7.43	4.44	3.01
June							
July	2.19	10.23	14.00	1.63	7.59	4.32	3.02
August	2.21	11.02	14.94	1.81	7.83	4.15	2.99
September	2.18	12.04	15.22	1.36	6.81	3.84	2.80
October	2.17	11.54	15.79	1.55	7.50	4.82	3.04
November	2.13	11.56	15.50	1.30	8.01	4.87	2.96
December	2.14	11.77	15.88	1.61	8.37	5.96	3.40
Average	2.21	8.98	13.22	1.61	7.02	4.74	3.04
010 January	R 2.23	<sup>R</sup> 11.85	R 15.73	R 1.72	<sup>R</sup> 9.72	<sup>R</sup> 6.71	R 3.74
February	2.27	R 12.11	R 15.69	R 1.80	R 9.51	R 6.07	R 3.45
March	2.31	R 12.44	R 16.42	R 2.09	R 8.95	R 5.29	R 3.16
April	2.29	13.17	R 17.10	R 2.18	R 7.95	R 4.71	R 3.01
	2.26	R 12.36		R 2.22	R 9.47	R 4.79	
May		" 12.30 R 44.00	16.54	R 2.22		``4./9 R = 40	3.12
June	2.25	R 11.96	R 16.12		R 9.26	R 5.12	R 3.34
July	2.27	R 12.28	15.89	R 2.42	R 9.63	5.18	3.51
August	R 2.30	R 12.28	<sup>R</sup> 16.24	R 2.65	<sup>R</sup> 9.18	4.92	R 3.39
September	R 2.28	R 12.34	16.53	R 2.67	<sup>R</sup> 9.35	R 4.45	<sup>R</sup> 3.10
October	R 2.27	<sup>R</sup> 13.53	R 17.14	R 2.43	<sup>R</sup> 9.13	R 4.30	2.94
November	R 2.26	<sup>R</sup> 14.06	<sup>R</sup> 17.43	R 2.22	<sup>R</sup> 10.86	R 4.35	2.94
December	2.23	R 14.61	<sup>R</sup> 18.56	R 2.57	<sup>R</sup> 11.29	R 5.43	R 3.32
Average	R 2.27	R 12.57	R 16.60	R 2.28	R 9.54	R 5.09	R 3.26
<b>011</b> January	R 2.33	R 14.65	19.48	R 2.92	R 11.71	<sup>R</sup> 5.35	R 3.36
February	2.36	R 15.98	R 20.93	R 2.67	R 12.08	<sup>R</sup> 5.06	R 3.26
March	2.34	R 17.65	R 22.60	R 2.94	R 13.71	R 4.61	R 3.12
April	2.39	R 18.30	R 24.06	R 2.99	R 13.73	R 4.85	3.29
	2.39	R 17.73	R 23.17	R 3.22	R 13.70	R 4.85	3.29
May	R 2.42	" 17.73 R 40.04			R 40.00		
June	·· 2.42	R 18.81	R 22.89	R 2.57	R 13.82	R 5.03	3.49
July	R 2.45	R 20.17	R 22.96	R 3.14	R 12.22	R 4.96	R 3.61
August	<sup>R</sup> 2.48	<sup>R</sup> 19.51	R 22.48	<sup>R</sup> 2.95	<sup>R</sup> 11.68	4.72	3.44
September	2.44	20.81	22.67	2.79	12.17	4.54	3.26
9-Month Average	2.41	17.99	22.24	2.92	12.76	4.88	3.36
010 9-Month Average	2.27	12.24	16.16	2.24	9.29	5.20	3.32
009 9-Month Average	2.23	8.38	12.57	1.65	6.75	4.60	3.02

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>&</sup>lt;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).

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

petroleum coke.

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

derived from fossil fuels.

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

Gas."

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

R=Revised. NA=Not available.

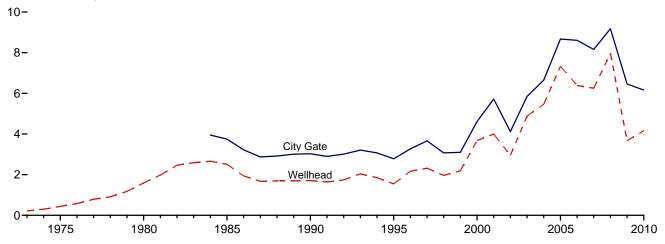
Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • Geographic coverage is the 50 States and the District of Columbia.

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

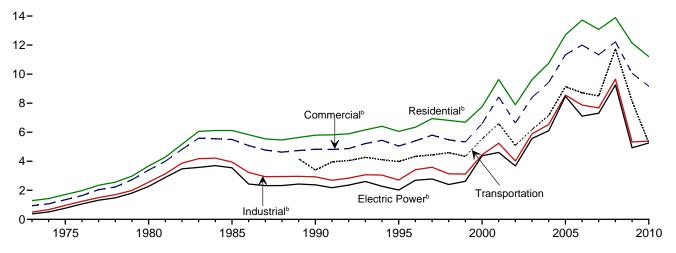
Figure 9.4 Natural Gas Prices

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

Selected Prices, 1973-2010

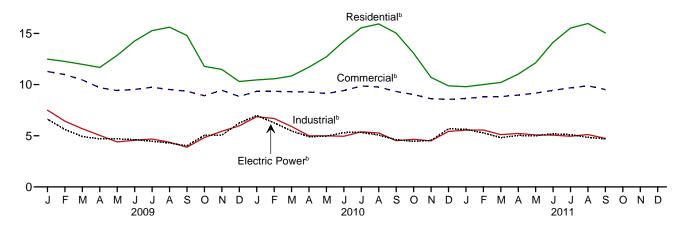


### Consuming Sectors, 1973-2010



### Consuming Sectors, Monthly

20-



 $^{\rm a}\textsc{Prices}$  are not adjusted for inflation. See "Nominal Dollars" in Glossary.  $^{\rm b}\textsc{Includes}$  taxes.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices. Source: Table 9.11.

**Table 9.11 Natural Gas Prices** 

(Dollarsa per Thousand Cubic Feet)

						Co	onsuming	Sectorsb			
		0.4	Res	sidential	Com	mercial <sup>c</sup>	Ind	ustrial <sup>d</sup>	Transportation	Electr	ric Power <sup>e</sup>
	Wellhead Price	City 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 1980 Average 1980 Average 1990 Average 1995 Average 1997 Average 1997 Average 1998 Average 1999 Average 2000 Average 2001 Average 2002 Average 2003 Average 2004 Average 2004 Average 2005 Average 2006 Average 2006 Average 2007 Average 2007 Average 2007 Average 2007 Average 2008 Average		NA NA 3.75 3.03 2.78 3.66 3.07 3.10 5.72 4.12 5.65 8.67 8.16 9.18	1.29 1.71 3.68 6.12 5.80 6.06 6.34 6.94 6.69 7.76 7.89 9.63 7.89 9.63 10.75 12.70 13.73 13.08	NA NA NA 99.2 99.0 98.8 97.7 95.2 92.6 92.4 97.9 97.5 97.7 98.2 98.1 98.0 97.5	0.94 1.35 3.39 5.50 4.83 5.05 5.40 5.80 5.48 6.53 8.43 6.63 8.43 11.34 12.03	NA NA NA 86.6 76.7 77.6 67.0 66.1 63.9 66.0 77.4 78.2 78.0 82.1 80.8 80.4 79.9	0.50 .96 2.56 3.95 2.71 3.42 3.59 3.14 3.12 5.24 4.02 5.89 6.53 8.56 7.68 9.65	NA NA NA 68.8 35.2 24.5 19.4 18.1 16.1 18.8 20.8 22.7 22.1 23.7 24.1 23.7 24.1 23.4 22.2 20.5	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 11.75	0.38 .77 2.27 2.38 2.02 2.69 2.78 2.40 4.38 6.11 8.47 7.11 7.31 9.26	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 89.8 91.3 93.4 92.2
2009 January February March April May June July August September October November December Average	3.70 3.38 3.18 3.23 3.38 3.45 3.37 2.98 3.83 4.20 4.66	7.98 7.25 6.83 5.68 5.47 5.53 5.67 5.58 5.32 5.62 6.31 6.23 <b>6.46</b>	12.49 12.26 11.98 11.68 12.86 14.26 15.27 15.61 14.80 11.78 11.48 10.30 <b>12.14</b>	97.6 97.7 97.4 97.2 97.2 96.8 96.9 96.9 96.6 96.8 97.2 97.4	11.28 10.98 10.46 9.70 9.42 9.53 9.74 9.52 9.35 8.92 9.45 8.84 <b>10.06</b>	82.4 81.1 80.7 77.7 74.4 73.3 70.5 68.5 69.3 73.3 75.8 80.1	7.50 6.43 5.69 5.04 4.40 4.56 4.68 4.37 3.88 4.82 5.97 <b>5.33</b>	20.1 19.9 19.4 18.6 19.0 18.7 18.6 18.3 18.0 17.8 17.8 18.9	NA NA NA NA NA NA NA NA NA NA NA	6.62 5.62 4.92 4.70 4.70 4.62 4.47 4.30 4.02 5.04 5.06 6.24 <b>4.93</b>	100.9 101.1 101.8 101.6 101.5 101.0 100.8 100.7 100.6 102.4 101.0 100.7 <b>101.1</b>
2010 January February March April May June July August September October November December Average	E 4.89 E 4.36 E 3.92 E 4.04 E 4.25 E 4.36 E 4.22 E 3.76 E 3.69 E 3.34 E 3.96	6.83 6.62 6.42 5.87 5.80 6.06 6.30 6.21 5.70 5.73 5.48 5.74 <b>6.16</b>	10.46 10.57 10.84 11.71 12.72 14.25 15.55 15.93 15.03 13.07 10.71 9.88 11.21	97.0 97.4 97.3 95.8 96.8 96.6 96.4 96.0 96.3 97.0 97.4	9.35 9.34 9.31 9.27 9.13 9.42 9.86 9.76 9.32 9.03 8.62 8.56 <b>9.17</b>	76.3 77.0 74.2 69.1 65.7 64.0 62.1 60.9 59.9 63.8 71.2 74.3	6.86 6.69 5.91 4.99 4.99 5.38 5.27 4.52 4.65 4.51 5.42 <b>5.39</b>	17.6 17.2 17.0 16.8 17.0 16.8 17.6 17.2 16.6 15.8 16.6 16.7	NA NA NA NA NA NA NA NA NA NA	R 6.98 R 6.27 5.47 R 4.91 R 5.31 R 5.34 R 5.06 R 4.61 R 4.455 R 5.68 R 5.27	R 101.0 100.5 101.0 R 100.9 100.9 100.6 R 100.6 R 100.7 101.3 R 101.0 R 101.3
2011 January February March April May June July August September 9-Month Average	E 4.23 E 3.90 E 3.98 E 4.12 E 4.19 E 4.27 E 4.20 E 3.82	5.69 5.69 5.61 5.79 6.07 6.14 6.19 5.91	9.79 10.00 10.21 11.02 12.13 14.13 15.52 15.97 15.05 <b>10.94</b>	96.1 96.1 96.1 95.5 95.7 95.9 95.9 95.2 95.1 <b>95.9</b>	8.64 8.81 8.97 9.17 9.44 9.68 9.88 9.52 <b>8.97</b>	70.0 69.3 66.6 61.3 57.9 55.8 53.9 51.6 51.3 <b>63.4</b>	5.55 5.56 5.11 5.23 5.08 5.06 4.95 5.12 4.74 <b>5.17</b>	16.4 16.3 16.1 15.7 16.0 15.4 16.3 15.7 15.8	NA NA NA NA NA NA NA NA	5.63 R 5.28 R 4.82 R 5.03 5.01 R 5.19 R 5.11 R 4.84 4.69 <b>5.05</b>	R 101.5 R 102.1 R 101.2 R 101.8 R 101.1 R 101.2 R 100.2 100.9 101.5 <b>101.2</b>
2010 9-Month Average 2009 9-Month Average		6.38 6.62	11.48 12.63	96.9 97.4	9.36 10.41	71.3 78.0	5.56 5.29	17.1 19.0	NA NA	5.37 4.78	100.7 101.1

a Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
b See Note 9, "Natural Gas Prices," at end of section.
c Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.
d Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.
e The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 2001, data are for electric utilities only; beginning in 2002, data also include independent power producers. See Note 8, "Costs of Fossil-Fuel Receipts at Electric Generating Plants," at end of section for plant coverage.

Includes taxes.

Includes taxes.

The percentage of the sector's consumption in Table 4.3 for which price data are available. For details on how the percentages are derived, see Table 9.11 Sources at end of section.

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.

Percentages exceed 100 percent when reported natural gas receipts are greater than reported natural gas consumption—this can occur when combined-heat-and-power plants report fuel receipts related to non-electric

combined-heat-and-power plants report fuel receipts related to non-electric generating activities.

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

Notes: • Prices are for natural gas, plus a small amount of supplemental gaseous fuels. • Prices are intended to include all taxes. See Note 9, "Natural Gas Prices," at end of section. • Wellhead annual and year-to-date prices are simple averages of the monthly prices; all other annual and year-to-date prices are volume-weighted averages of the monthly prices. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

## **Energy Prices**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Note 9. Natural Gas Prices. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all Federal, State, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on more than 3,000 consumers' bills are sometimes excluded by the reporting utilities. 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 and 2011: EIA, *Petroleum Marketing Monthly*, December 2011, 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 and 2011: EIA, *Petroleum Marketing Monthly*, December 2011, 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 and 2011: EIA, Petroleum Marketing Monthly, December 2011, 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

2010: EIA, *Petroleum Marketing Monthly*, December 2011, Table 21.

#### **Table 9.10 Sources**

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

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

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

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

Table 26.

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

2008 forward: EIA, *Electric Power Monthly*, December 2011, Table 4.1; and Form EIA-923, "Power Plant Operations Report."

# **Table 9.11 Sources**

# All Prices Except Vehicle Fuel and Electric Power

1973–2005: U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports.

2006 forward: EIA, *Natural Gas Monthly (NGM)*, November 2011, 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 and 2011: Estimated by EIA as the average of the three previous annual values.

# **Percentage of Commercial Sector**

1987–2005: 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.

2006 forward: EIA, NGM, November 2011, Table 3.

# **Percentage of Industrial Sector**

1982–2005: 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.

2006 forward: EIA, NGM, November 2011, Table 3.

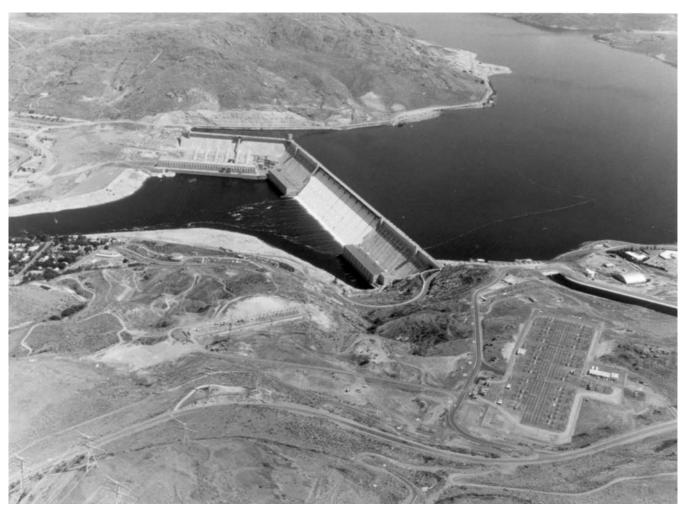
## **Percentage of Electric Power Sector**

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).

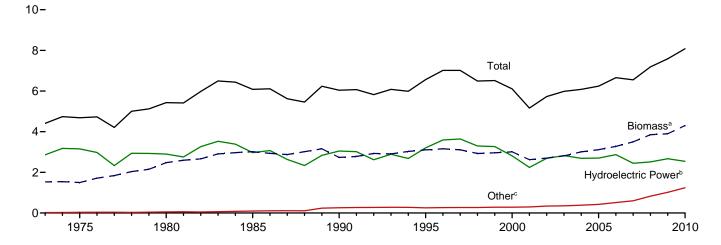
# Renewable Energy



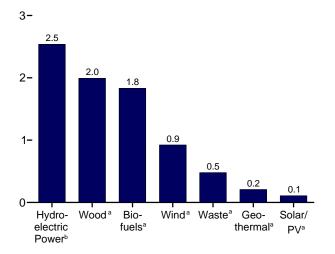
Grand Coulee Dam, Washington State. Source: U.S. Bureau of Reclamation.

Figure 10.1 Renewable Energy Consumption (Quadrillion Btu)

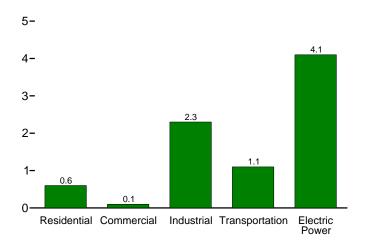
Total and Major Sources, 1973-2010



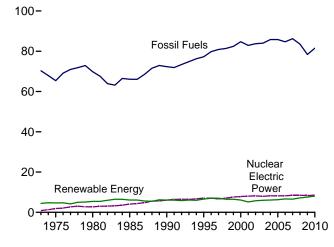
By Source, 2010



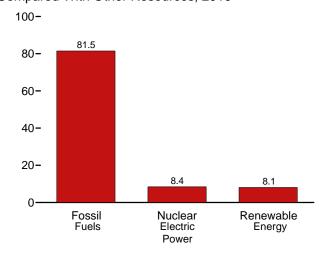
By Sector, 2010



Compared With Other Resources, 1973-2010



# Compared With Other Resources, 2010



Web Page: http://www.eia.gov/totalenergy/data/monthly/#renewable. Sources: Tables 1.3 and 10.1–10.2c.

<sup>&</sup>lt;sup>a</sup> See Table 10.1 for definition.

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

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

Table 10.1 Renewable Energy Production and Consumption by Source

	Bio	mass	Consumption									
			Total						Bion	nass		Total
	Bio- fuels <sup>b</sup>	Total <sup>c</sup>	Renew- able Energy <sup>d</sup>	Hydro- electric Power <sup>e</sup>	Geo- thermal <sup>f</sup>	Solar/ PV <sup>9</sup>	Wind <sup>h</sup>	Wood <sup>i</sup>	Waste <sup>j</sup>	Bio- fuels <sup>k</sup>	Total	Renew- able Energy
1973 Total	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	93 111	3,016 2,735	6,084 6.041	2,970 3.046	97 171	(s) 59	(s) 29	2,687 2.216	236 408	93 111	3,016 2,735	6,084 6.041
1990 Total 1995 Total	198	3,099	6,558	3,046	152	69	33	2,370	531	200	3,101	6,560
1996 Total	141	3,155	7,012	3,590	163	70	33	2,437	577	143	3,157	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	65	57	2,262	511	236	3,008	6,106
2001 Total	254 308	2,624 2,705	5,164 5,734	2,242 2,689	164 171	64 63	70 105	2,006 1,995	364 402	253 303	2,622 2,701	5,163 5,729
2002 Total 2003 Total	402	2,705	5,982	2,825	175	62	115	2,002	401	404	2,701	5,729
2004 Total	487	2,998	6,070	2,623	178	63	142	2,121	389	499	3,010	6,082
2005 Total	564	3,104	6,229	2,703	181	63	178	2,136	403	577	3,116	6,242
2006 Total	720	3,226	6,608	2,869	181	68	264	2,109	397	771	3,276	6,659
2007 Total	978	3,489	6,537	2,446	186	76	341	2,098	413	991	3,502	6,551
2008 Total	1,387	3,867	7,205	2,511	192	89	546	2,044	436	1,372	3,852	7,190
2009 January	120	315	627	229	17	8	58	158	37	115	310	622
February	111	291	545	174	16	7	57	146	34	102	283	537
March	120	316	624	213	17	8	69	155	40	118	314	621
April	116	300	649	252	16	8	73	147	37	120	304	653
May	126	315	690	289	17	9	61	152	37	131	319	694
June	127 139	318 340	683 643	285 228	16 17	8 9	55 48	154 163	37 39	129 139	320 340	685 643
July August	141	345	615	191	17	9	53	166	38	141	346	615
September	136	329	568	169	16	8	45	157	36	134	327	567
October	144	343	627	192	16	8	67	161	38	145	344	627
November	149	345	642	205	17	8	67	158	39	144	340	637
December	154	357	692	241	18	8	67	164	39	148	352	686
Total	1,583	3,915	7,603	2,669	200	98	721	1,881	452	1,567	3,899	7,587
2010 January	152	359	670	R 218	18	8	R 67	R 167	R 40	142	349	R 661
February	142	R 332	R 609	R 201	16	8	R 53	R 154	R 36	136	R 326	R 603
March	158	<sup>R</sup> 366 <sup>R</sup> 352	<sup>R</sup> 680 <sup>R</sup> 659	<sup>R</sup> 204 <sup>R</sup> 186	18 17	9 9	<sup>R</sup> 84 <sup>R</sup> 95	<sup>R</sup> 167 <sup>R</sup> 160	<sup>R</sup> 41 <sup>R</sup> 40	149 149	<sup>R</sup> 357 348	<sup>R</sup> 671 <sup>R</sup> 656
April May	152 157	R 358	R 715	R 245	17	10	85	R 162	R 40	155	R 356	714
June	152	355	R 751	R 291	R 17	10	R 79	R 163	R 40	154	R 357	R 754
July	158	368	R 700	R 239	R 17	10	R 66	<sup>R</sup> 169	R 41	159	368	R 700
August	160	371	R 660	R 196	18	10	65	R 170	R 41	158	369	R 658
September	155	R 359	R 623	R 168	17	9	_ 69	_ 165	R 38	152	R 356	R 620
October	162	R 368	R 644	R 173	17	9	R 77	R 165	R 40	159	R 365	R 641
November	163 167	<sup>R</sup> 369 <sup>R</sup> 382	<sup>R</sup> 680 <sup>R</sup> 723	R 191 226	<sup>R</sup> 17 <sup>R</sup> 18	9 9	<sup>R</sup> 95 <sup>R</sup> 88	<sup>R</sup> 164 <sup>R</sup> 173	R 41 R 42	157 162	R 362 R 377	<sup>R</sup> 674 <sup>R</sup> 718
December Total	1,879	R <b>4,337</b>	R <b>8,116</b>	R <b>2,539</b>	R <b>208</b>	<b>109</b>	R <b>923</b>	R <b>1,979</b>	R <b>479</b>	1,832	R <b>4,291</b>	R <b>8,069</b>
	,				40	•	P 0 4		P 40	,		
2011 January	169 151	<sup>R</sup> 381 <sup>R</sup> 341	<sup>R</sup> 748 <sup>R</sup> 711	<sup>R</sup> 255 <sup>R</sup> 241	19 <sup>R</sup> 18	9 8	<sup>R</sup> 84 <sup>R</sup> 103	<sup>R</sup> 172 <sup>R</sup> 154	<sup>R</sup> 40 <sup>R</sup> 37	154 144	<sup>R</sup> 365 <sup>R</sup> 335	<sup>R</sup> 733 <sup>R</sup> 704
February March	170	R 374	R 815	R 310	19	9	R 103	R 164	R 40	159	R 364	R 805
April	162	R 357	R 814	R 309	18	10	R 121	<sup>R</sup> 157	R 38	153	R 348	R 805
May	168	R 367	R 833	R 323	19	10	R 114	R 158	R 40	163	R 361	R 827
June	165	R 371	R 821	R 315	18	10	106	<sup>R</sup> 166	R 40	164	R 370	R 820
July	170	R 381	R 790	R 308	18	10	72	R 169	R 42	160	R 371	R 780
August	R 174	R 382	R 739	R 257	R 19	11	72 67	R 167	R 41	R 172	R 380	R 737
September 9-Month Total	165 <b>1,494</b>	368 <b>3,323</b>	673 <b>6,944</b>	210 <b>2,526</b>	18 <b>166</b>	10 <b>87</b>	67 <b>842</b>	163 <b>1,471</b>	40 <b>358</b>	159 <b>1,428</b>	362 <b>3,256</b>	666 <b>6,878</b>
3-WOHAH 10141	1,434	3,323	0,344	2,320	100	01	042	1,4/1	330	1,420	3,230	0,070
2010 9-Month Total 2009 9-Month Total	1,386 1.136	3,219 2,870	6,068 5,643	1,949 2,030	156 149	82 74	662 520	1,477 1,398	356 336	1,354 1,130	3,187 2,864	6,037 5,637

<sup>&</sup>lt;sup>a</sup> Production equals consumption for all renewable energy sources except

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

Wood and wood-derived fuels, biomass waste, and total biomass inputs to the

production of fuel ethanol and biodiesel.

d Hydroelectric power, geothermal, solar thermal/photovoltaic, wind, and

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.

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

Key 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

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/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

		Reside	ntial Sector					Co	mmercial	Sectora			
			Biomass		Hydro-					Bio	mass		
	Geo- thermal <sup>b</sup>	Solar/ PV <sup>c</sup>	Wood <sup>d</sup>	Total	electric Power <sup>e</sup>	Geo- thermal <sup>b</sup>	Solar/ PV <sup>f</sup>	Wind <sup>g</sup>	Woodd	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	NA	NA	850	850	NA	NA	NA	NA	21	NA	NA	21	21
1985 Total	NA	NA	1,010	1,010	NA	NA	NA	NA	24	NA	(s)	24	24
1990 Total	6	56	580	641	1	3	_	_	66	28	(s)	94	98
1995 Total	7 7	64 65	520 540	591 612	1 1	5 5	Ξ	_	72 76	40 53	(s)	113 129	118 135
1997 Total	8	64	430	502		6	_		73	58	(s) (s)	131	138
1998 Total	8	64	380	452	i	7	_	_	64	54	(s)	118	127
1999 Total	9	63	390	461	1	7	_	_	67	54	(s)	121	129
2000 Total	9	60	420	489	1	8	_	-	71	47	(s)	119	128
2001 Total	9	59	370	438	1	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 1	11	-	-	71	29	1	101	113
2004 Total	14	57	410	481	1	12	-	-	70	34	1	105	118
2005 Total	16 18	58 63	430 390	504 472	1 1	14 14	_	_	70 65	34 36	1 1	105 102	119 117
2006 Total 2007 Total	22	70	430	522		14	_	_	69	36 31	2	102	117
2008 Total	26	80	450 450	556	i	15	(s)	_	73	34	2	102	125
		•		000			(0)			•	_		
2009 January	3	8	37	47	(s)	1	(s)	(s)	6	3	(s)	9	11
February	3	7	33	42	(s)	1	(s)	(s)	6	3	(s)	8	10
March	3	8	37	47	(s)	1	(s)	(s)	6	3	(s)	9	11
April	3 3	7	35	45 47	(s)	1	(s)	(s)	6	3	(s)	9	11 11
May	3	8 7	37 35	47 45	(s) (s)	1	(s)	(s) (s)	6 6	3 3	(s) (s)	10 9	11
June July	3	8	37	43 47	(s)	1	(s) (s)	(s)	6	3	(s)	10	11
August	3	8	37	47	(s)	i	(s)	(s)	6	3	(s)	10	11
September	3	7	35	45	(s)	1	(s)	(s)	6	3	(s)	9	10
October	3	8	37	47	(s)	1	(s)	(s)	6	3	(s)	9	11
November	3	7	35	45	(s)	1	(s)	(s)	6	3	(s)	9	11
December	3	8	37	47	(s)	1	(s)	(s)	6	3	(s)	9	11
Total	33	89	430	552	1	17	(s)	(s)	72	36	3	112	129
2010 January	3	8	36	47	(s)	2	(s)	(s)	6	3	(s)	9	11
February	3	7	32	42	(s)	1	(s)	(s)	5	3	(s)	8	10
March	3	8	36	47	(s)	2	(s)	(s)	6	3	(s)	9	11
April	3	8	35	45	(s)	2	(s)	(s)	6	3	(s)	9	_ 11
May	3	8	36	47	(s)	2	(s)	(s)	6	R 4	(s)	10	R 12
June	3	8	35	45	(s)	2	(s)	(s)	6	3	(s)	9	11
July	3 3	8 8	36 36	47 47	(s) (s)	2 2	(s) (s)	(s) (s)	6 6	3 3	(s) (s)	9 9	11 11
August September	3	8	36 35	47 45	(s)	2	(s) (s)	(s)	6	3	(S) (S)	9	R 11
October	3	8	36	43	(s)	2	(s)	(s)	6	3	(s)	9	11
November	3	8	35	45	(s)	2	(s)	R (s)	6	3	(s)	9	10
December	3	8	36	47	(s)	2	(s)	R (s)	6	3	(s)	9	11
Total	37	97	420	554	`1	19	(s)	(s)	70	R 36	`3	R 109	R 129
2011 January	3	8	36	47	(s)	2	(s)	R(s)	6	3	(s)	9	11
February	3	7	32	42	(s)	1	(s)	R (s)	5	3	(s)	R g	10
March	3	8	36	47	(s)	2	(s)	(s)	6	3	(s)	9	11
April	3	8	35	45	(s)	2	(s)	(s)	6	R 3	(s)	9	10
May	3	8	36	47	(s)	2	(s)	(s)	6	3	(s)	9	11
June	3	8	35	45	(s)	2	(s)	(s)	6	3	(s)	9	11
July	3	8	36	47	(s)	2	(s)	(s)	6	3	(s)	9	11
August	3	8	36	47	(s)	2	(s)	(s)	6	3	(s)	9	11
September 9-Month Total	3 <b>28</b>	8 <b>72</b>	35 <b>314</b>	45 <b>414</b>	(s)	2 <b>14</b>	(s) <b>(s)</b>	(s) <b>(s)</b>	6 <b>53</b>	3 <b>26</b>	(s) <b>2</b>	9 <b>81</b>	11 <b>96</b>
5-WOILLI TOLAL	20	12	314	414	'	14	(5)	(5)	33	20	4	01	30
2010 9-Month Total 2009 9-Month Total	28 25	72 67	314 322	414 413	1 1	14 12	(s) (s)	(s) (s)	53 54	28 27	2 2	83 84	97 97

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

b Geothermal heat pump and direct use energy.
c Solar thermal direct use energy, and photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6). Includes small amounts of distributed solar thermal and PV energy used in the commercial, industrial, and electric power sectors.

d Wood and wood-derived fields

Wood and wood-derived fuels.
 Conventional hydroelectricity net generation (converted to Btu using the fossii-fuels heat rate—see Table A6).
 Photovoltaic (PV) electricity net generation (converted to Btu using the fossii-fuels heat rate—see Table A6) at commercial plants with capacity of 1

megawatt or greater.

<sup>9</sup> Wind\_electricity net generation (converted to Btu using the fossil-fuels heat

rate-see Table A6)

<sup>&</sup>lt;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

<sup>&</sup>lt;sup>1</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

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

				I	ndustrial S	ectora				Trans	sportation S	ector
						Biomass					Biomass	
	Hydro- electric Power <sup>b</sup>	Geo- thermal <sup>c</sup>	Solar/ PV <sup>d</sup>	Woode	Waste <sup>f</sup>	Fuel Ethanol	Losses and Co- products <sup>h</sup>	Total	Total	Fuel Ethanol <sup>i</sup>	Bio- diesel	Total
1973 Total	35	NA	NA	1,165	NA	NA	NA	1,165	1,200	NA	NA	NA
1975 Total	32	NA	NA	1,063	NA	NA	NA	1,063	1,096	NA	NA	NA
1980 Total	33	NA	NA	1,600	NA	NA	NA	1,600	1,633	NA	NA	NA
1985 Total1990 Total	33	NA	NA	1,645	230	1	42	1,918	1,951	50	NA	50
	31	2	-	1,442	192	1	49	1,684	1,717	60	NA	60
1995 Total	55	3	Ξ	1,652	195	2	86	1,934	1,992	112	NA	112
1996 Total	61	3		1,683	224	1	61	1,969	2,033	81	NA	81
1997 Total	58	3		1,731	184	1	80	1,996	2,057	102	NA	102
1998 Total1999 Total	55 49	3 4 4	Ξ	1,603 1,620	180 171	i 1 1	86 90	1,872 1,882	1,929 1,934	113 118	NA NA	113 118
2000 Total 2001 Total 2002 Total	42 33 39	5 5	=	1,636 1,443 1,396	145 129 146	3 3	99 108 130	1,881 1,681 1,676	1,928 1,719 1,720	135 141 168	NA 1 2	135 142 170
2003 Total	43	3	=	1,363	142	4	169	1,679	1,726	228	2	230
2004 Total	33	4		1,476	132	6	203	1,817	1,853	286	3	290
2005 Total	32	4		1,452	148	7	230	1,837	1,873	327	12	339
2006 Total	29	4	=	1,472	130	10	285	1,897	1,930	442	33	475
2007 Total	16	5		1,413	144	10	377	1,944	1,964	557	46	602
2008 Total	17	5		1,344	144	12	532	2,031	2,053	786	40	826
<b>2009</b> January	2	(s)	_	98	14	1	46	159	161	67	(s)	67
February	1	(s)	-	93	12	1	43	149	151	58	(s)	58
March	2	(s)		98	14	1	48	160	162	67	3	70
April	2	(s)		93	12	1	46	153	155	70	3	73
May	2	(s)	-	96	12	1	50	160	162	77	2	79
June	2	(s)	-	97	12	1	50	160	162	75	3	78
July	1	(s)	-	104	12	1	54	172	173	80	3	83
August	1	(s)	_	107	12	i	55	175	177	81	4	85
September	1	(s)		101	12	1	53	167	168	75	6	80
October November December	1 1 2 <b>18</b>	(s) (s) (s) <b>4</b>	- - -	104 101 104 <b>1,198</b>	14 14 14 <b>154</b>	1 1 1 13	56 57 60 <b>617</b>	175 174 179	177 175 181	82 81 82 <b>894</b>	6 4 5 <b>40</b>	88 85 87 <b>934</b>
Total 2010 January	2	(s)	(s)	R 108	R 16	1	60	1,982 R 185	<b>2,005</b> R 187	81	(s) 3	81
February	2	(s)	(s)	100	R 14	1	56	<sup>R</sup> 170	R 172	76	3	79
March	2	(s)	(s)	R 109	R 15	1	62	188	R 190	83	2	86
April	2	(s)	(s)	R 104	R 15	1	60	181	183	84	4	88
May June	2 1 1	(s) (s) (s)	(s) (s) (s)	R 106 R 106 R 110	<sup>R</sup> 15 14 <sup>R</sup> 15	1 1 1	62 60 62	R 183 R 182 R 188	R 185 R 183 R 190	89 91 91	3 2 3	92 93 95
July August September	1 1	(s) (s)	(s) (s)	<sup>R</sup> 111 109	<sup>R</sup> 15 <sup>R</sup> 14	i 1	63 61	<sup>R</sup> 190 <sup>R</sup> 185	<sup>R</sup> 191 187	91 86	2	93 89
October	1	(s)	(s)	R 109	R 16	1	64	<sup>R</sup> 190	R 192	91	2	94
November	1	(s)	(s)	R 108	R 16	1	65	<sup>R</sup> 190	191	88	2	90
December	1	(s)	(s)	R 114	R 16	1	67	<sup>R</sup> 198	R 199	92	2	94
Total	16	4	(s)	R <b>1,293</b>	R <b>179</b>	<b>15</b>	742	R <b>2,230</b>	R <b>2,251</b>	1,043	29	1,072
February March	1 2 2	(s) (s) (s)	(s) (s) (s)	<sup>R</sup> 101 <sup>R</sup> 108	R 14 R 15	i 1	66 59 65	R 175 R 189	R 177 R 192	83 81 87	3 3 5	86 84 92
April	2	(s)	(s)	R 105	R 14	1	62	R 182	R 184	83	7	90
May	2	(s)	(s)	R 104	R 15	1	64	R 184	R 187	90	6	96
June	1	(s)	(s)	R 111	14	1	63	R 189	R 191	92	7	100
July	1	(s)	(s)	<sup>R</sup> 111	<sup>R</sup> 15	i	64	R 191	<sup>R</sup> 193	85	9	95
August		(s)	(s)	<sup>R</sup> 109	<sup>R</sup> 15	1	65	R 190	<sup>R</sup> 192	96	9	R 105
September	1	(s)	(s)	108	15	1	62	186	188	83	12	95
9-Month Total	<b>13</b>	<b>3</b>	(s)	<b>971</b>	<b>132</b>	11	<b>571</b>	<b>1,685</b>	<b>1,701</b>	<b>781</b>	<b>62</b>	<b>843</b>
2010 9-Month Total	13	3	(s)	963	132	11	546	1,652	1,668	771	23	795
2009 9-Month Total	14	3	-	888	113	9	445	1,455	1,472	649	25	674

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

b Conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

Geothermal heat pump and direct use energy.

d Photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6) at industrial plants with capacity of 1

megawatt or greater.

e Wood and wood-derived fuels.

Wood and wood-derived fuels.
 Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
 The fuel ethanol (minus denaturant) portion of motor fuels, such as E10,

consumed by the industrial sector.

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

i The fuel ethanol (minus denaturant) portion of motor fuels, such as E10 and 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, and solar/PV. • 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

	Hydro- electric	Geo-				Biomass		
	Powera	thermalb	Solar/PV <sup>c</sup>	Wind <sup>d</sup>	Woode	Wastef	Total	Total
973 Total	2.827	20	NA	NA	1	2	3	2,851
975 Total	3,122	34	NA NA	NA NA	(s)	2	2	3,158
980 Total	2,867	53	NA NA	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
		138	5	33	125		422	
95 Total	3,149					296		3,747
96 Total	3,528	148	5 5	33	138	300	438	4,153
97 Total	3,581	150		34	137	309	446	4,216
98 Total	3,241	151	5	31	137	308	444	3,872
99 Total	3,218	152	5	46	138	315	453	3,874
00 Total	2,768	144	5	57	134	318	453	3,427
01 Total	2,209	142	6	70	126	211	337	2,763
02 Total	2,650	147	6	105	150	230	380	3,288
03 Total	2,781	148	5	115	167	230	397	3,445
04 Total	2,656	148	6	142	165	223	388	3,340
05 Total	2,670	147	6	178	185	221	406	3,406
06 Total	2,839	145	5	264	182	231	412	3,665
07 Total	2,430	145	6	341	186	237	423	3,345
08 Total	2,494	146	9	546	177	258	435	3,630
<b>09</b> January	228	13	(s)	58	17	21	37	336
February	172	11	(s)	57	15	19	34	276
March	211	13	1	69	14	24	38	332
April	250	12	i	73	12	21	33	369
	287	12	1	73 61	13	22	34	395
May	284	12	1	55	15 15	22	3 <del>4</del> 37	388
June			1					
July	227	12	•	48	16	23	39	328
August	190	12	1	53	17	23	39	296
September	168	12	1	45	14	21	36	262
October	191	12	1	67	14	21	35	305
November	204	12	(s)	67	15	22	37	320
December	240	13	(s)	67	17	22	40	360
Total	2,650	146	9	721	180	261	441	3,967
10 January	<sup>R</sup> 217	13	(s)	<sup>R</sup> 67	17	<sup>R</sup> 21	R 39	R 335
February	<sup>R</sup> 199	<sup>R</sup> 11	(s)	R 53	16	R 20	<sup>R</sup> 36	R 300
March	R 202	13	1	R 84	16	22	R 39	R 338
April	<sup>R</sup> 184	12	1	<sup>R</sup> 95	<sup>R</sup> 15	21	36	R 329
May	R 243	13	R1	85	14	R 22	R 36	R 378
June	R 290	R 12	2	R 79	16	R 23	R 39	R 421
July	R 238	R 12	2	R 66	17	R 23	R 40	R 358
August	R 195	13	2	65	18	R 23	R 41	R 315
September	R 168	12	1	69	R 16	R 22	R 38	R 288
October	R 171	12	1	R 77	R 15	R 22	R 37	R 298
November	R 190	R 12	1	R 95	16	R 23	R 39	R 337
December	R 225	R 13	(s)	R 88	17	R 23	R 41	R 367
Total	R <b>2,521</b>	R 148	R <b>12</b>	R <b>923</b>	R 196	R <b>264</b>	R <b>459</b>	R 4,064
<b>11</b> January	R 254	14	(s)	R 84	16	21	R 38	R 391
	R 239	13	(5)	R 103	15	R 20	R 35	R 390
February	R 308	13	1	R 103	R 15	R 23	R 38	R 463
March	R 308			1U3 R 404	<sup>N</sup> 15 R 12	R 22	**38 R 33	
April		13	2	R 121				R 476
May	R 321	14	2	113	R 13	R 22	R 35	R 486
June	R 313	13	2	106	15	R 23	R 38	R 473
July	R 307	13	2	72	16	R 24	R 40	R 434
August	R 256	13	R 2	72	16	R 23	R 39	R 383
September	209	13	2	67	15	22	37	327
9-Month Total	2,512	122	14	842	133	200	334	3,824
10 9-Month Total	1,936	111	10	662	147	196	343	3.063

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

tire-derived fuels).

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.

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

<sup>&</sup>lt;sup>g</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are

<sup>9</sup> Ihrough 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.

**Table 10.3 Fuel Ethanol Overview** 

		Losses	_				Traded	-					Consump- tion
	Feed- stock <sup>a</sup>	and Co- products <sup>b</sup>	Dena- turant <sup>c</sup>	P	roductiond		Net Imports <sup>e</sup>	Stocks <sup>d,f</sup>	Stock Change <sup>d,g</sup>	Соі	sumption	d	Minus Denaturant <sup>t</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	294	14,693	617	52	NA	NA	NA	14,693	617	52	51
1990 Total	111	49	356	17,802	748	63	NA 207	NA	NA 207	17,802	748	63	62
1995 Total	198 141	86 61	647 464	32,325	1,358 973	115	387 313	2,186	-207 -121	32,919	1,383 992	117	114 82
1996 Total 1997 Total	186	80	613	23,178 30,674	1,288	83 109	85	2,065 2,925	860	23,612 29,899	1.256	84 107	104
1998 Total	202	86	669	33,453	1,405	119	66	3,406	481	33,038	1,388	118	115
1999 Total	211	90	698	34,881	1,465	124	87	4,024	618	34,350	1,443	122	119
2000 Total	233	99	773	38.627	1,622	138	116	3,400	-624	39.367	1.653	140	137
2001 Total	253	108	841	42,028	1,765	150	315	4,298	898	41,445	1,741	148	144
2002 Total	307	130	1.019	50.956	2,140	182	306	6,200	1.902	49,360	2.073	176	171
2003 Total	400	169	1,335	66,772	2.804	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	552	230	1,859	92,961	3,904	331	3,234	5,563	-439	96,634	4,059	344	335
2006 Total	688	285	2,326	116,294	4,884	414	17,408	8,760	3,197	130,505	5,481	465	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	1,300	531	4,433	221,637	9,309	790	12,610	14,226	3,691	230,556	9,683	821	800
2009 January	114	46	403	19,561	822	70	388	14,514	288	19,661	826	70	68
February	106	43 48	409	18,255	767	65	56 79	15,834	1,320	16,991	714	61 70	59 68
March	117 113	46 46	452 427	20,121 19,374	845 814	72 69	166	16,411 15.322	577 -1.089	19,623 20.629	824 866	70 74	71
April	123	50	459	21,024	883	75	507	14,173	-1,149	22,680	953	81	79
May	123	50 50	455	21,024	887	75 75	705	13,974	-1,149	22,000	925	78	76
June July	133	54	503	22,887	961	82	960	14,223	249	23,598	923	84	82
August	135	55	494	23,136	972	82	983	14,671	448	23,671	994	84	82
September	129	53	479	22,218	933	79	310	15,283	612	21,916	920	78	76
October	137	55	515	23.467	986	84	269	14.933	-350	24.086	1.012	86	83
November	141	57	523	24,122	1,013	86	285	15,578	645	23,762	998	85	82
December	146	59	569	25.134	1.056	90	12	16,594	1.016	24.130	1.013	86	83
Total	1,517	616	5,688	260,424	10,938	928	4,720	16,594	2,368	262,776	11,037	936	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	154	62	537	26,486	1,112	94	-1,104	20,222	925	24,457	1,027	87	85
April	147	59	522	25,384	1,066	90	-927	20,042	-180	24,637	1,035	88	85
May	152	61	534	26,244	1,102	93	-368	19,851	-191	26,067	1,095	93	90
June	149	60	522	25,632	1,077	91	-341	18,565	-1,286	26,577	1,116	95	92
July	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
August September	152	61	533	26,964	1,132	93	-924	17,360	-429 57	25,096	1,121	90	88
October	160	64	563	27,471	1,154	98	-830	17,437	-159	26,800	1,126	95	93
November	161	65	585	27,747	1,165	99	-923	18,150	872	25,952	1,090	92	90
December	165	67	592	28.457	1,105	101	-1.711	17,941	-209	26,955	1,132	96	93
Total	1,839	741	6,506	316,617	13,298	1,127	-9,115	17,941	1,347	306,155	12,858	1,090	1,061
2011 January	165	66	581	28,524	1,198	102	-1,359	20,672	i 2,732	24,433	1,026	87	85
February	147	59	535	25,400	1,067	90	-1,425	20,809	137	23,838	1,001	85	83
March	163	65	548	28,194	1,184	100	-2,003	21,440	631	25,560	1,074	91	89
April	154	62	507	26,591	1,117	95	-2,865	20,807	-633	24,359	1,023	87	85
May	161	64	545	27,756	1,166	99	-1,743	20,387	-420	26,433	1,110	94	92
June	157	63	535	27,064	1,137	96	-1,533	18,833	-1,554	27,085	1,138	96	94
July	160	64	555	27,624	1,160	98	-2,731	18,700	-133	25,026	1,051	89	87
August	163	65	575	28,110	1,181	100	-790	17,900	-800	28,120	1,181	100	97
September 9-Month Total	154 <b>1,423</b>	62 <b>570</b>	525 <b>4,906</b>	26,645 <b>245,908</b>	1,119 <b>10,328</b>	95 <b>876</b>	-1,820 <b>-16,268</b>	18,437 <b>18,437</b>	537 <b>497</b>	24,288 <b>229,143</b>	1,020 <b>9,624</b>	86 <b>816</b>	84 <b>795</b>
2010 9-Month Total	1.353	546	4.766	232.942	9.784	830	-5.651	17,437	843	226.448	9.511	806	785
2009 9-Month Total	1,094	444	4,081	187,701	7,883	669	4,154	15,283	1,057	190,798	8,014	680	661

<sup>&</sup>lt;sup>a</sup> Total corn and other biomass inputs to the production of undenatured ethanol

barrels), not the final December 2010 value (17,941 thousand barrels) that is shown under "Stocks."

NA=Not available.

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," "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.

used for fuel ethanol.

b Losses and co-products from the production of fuel ethanol. Does not include natural gas, electricity, and other non-biomass energy used in the production of fuel ethanol—these are included in the industrial sector consumption statistics for the appropriate energy source.

<sup>c</sup> The amount of denaturant in fuel ethanol produced.

Includes denaturant.
 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.

Stocks are at end of period

Stocks are at end of period.
 A negative value indicates a decrease in stocks and a positive value indicates.

A regarive value indicates a decrease in stocks and a positive value indicates an increase.

h 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.

i Derived from the preliminary December 2010 stocks value (17,940 thousand

Derived from the preliminary December 2010 stocks value (17,940 thousand

Table 10.4 Biodiesel Overview

							Trade							
	Feed- stock <sup>a</sup>	Losses and Co- products <sup>b</sup>	P	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 1 2 4 12 32 63 88	(s) (s) (s) (s) (s) (s)	204 250 338 666 2,162 5,963 11,662 16,145	9 10 14 28 91 250 490 678	1 1 2 4 12 32 62 87	78 191 94 97 207 1,069 3,342 7,502	39 56 110 124 206 828 6,477 16,128	39 135 -16 -26 1 242 -3,135 -8,626	NA NA NA NA NA NA	NA NA NA NA NA NA	NA NA NA NA NA NA	243 385 322 640 2,163 6,204 8,528 7,519	10 16 14 27 91 261 358 316	1 2 2 3 12 33 46 40
Pebruary September October November Total	5 4 3 3 4 4 6 6 6 7 8 8 <b>65</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	1,011 780 599 624 689 761 1,030 1,070 1,158 1,364 1,511 1,455 <b>12,054</b>	42 33 25 26 29 32 43 45 49 57 63 61 <b>506</b>	5 4 3 3 4 4 6 6 6 7 8 8 <b>65</b>	261 158 383 52 117 138 58 126 123 159 105 165 1,844	1,150 1,166 203 154 417 366 581 397 224 424 819 431 <b>6,332</b>	-889 -1,009 180 -102 -300 -228 -523 -271 -101 -265 -714 -265 -4,489	664 424 665 632 600 581 511 511 527 553 531 711 <b>711</b>	664 -240 241 -33 -32 -19 -70 0 16 26 -22 180 <b>711</b>	621 61 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	79 73 538 554 421 552 576 799 1,041 1,074 819 1,010 <b>7,537</b>	3 3 23 23 18 24 34 44 45 34 45 34	(s) (s) 3 2 3 3 4 6 6 4 5 <b>40</b>
Pebruary February March April May June July August September October November December Total	3 4 4 5 4 3 3 3 3 2 2 <b>40</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	623 653 806 854 753 606 673 543 564 497 385 409 <b>7,366</b>	26 27 34 36 32 25 28 23 24 21 16 17 <b>309</b>	3 4 4 5 4 3 3 3 2 2 <b>39</b>	41 31 60 45 80 54 32 52 69 18 30 34	296 139 433 227 251 304 199 225 131 132 57 109 <b>2,503</b>	-256 -108 -374 -182 -171 -249 -167 -173 -62 -114 -27 -75	1,049 1,039 1,057 1,009 1,016 968 830 771 682 650 676 672 <b>672</b>	338 -10 18 -48 7 -48 -138 -59 -89 -32 26 -4	0 0 0 0 0 0 0 0 0	30 556 414 720 575 404 644 429 590 415 332 338 5,447	1 23 17 30 24 17 27 18 25 17 14 14 229	(s) 3 2 4 3 2 3 2 3 2 2 2 2 2 9
2011 January	4 4 7 8 8 8 10 RE 12 E 11 E 71	(s) (s) (s) (s) (s) (s) E(s) E(s)	740 718 1,220 1,442 1,424 1,562 1,866 RF 2,119 F 1,969 E 13,062	31 30 51 61 60 66 78 RF 89 F 83 E <b>549</b>	4 7 8 8 8 10 F 11 F 11 E 70	49 37 53 52 48 48 62 65 65	217 88 197 222 192 117 142 71 193 1,439	-169 -51 -144 -169 -144 -69 -80 -7 -127 <b>-959</b>	738 869 984 1,012 1,102 1,216 1,267 1,663 1,201 <b>1,201</b>	9 76 131 115 28 90 114 51 396 -462 <b>539</b>	0 0 0 0 0 0 0	496 536 961 1,245 1,190 1,379 1,736 RE 1,716 E 2,304 E 11,563	21 23 40 52 50 58 73 RE 72 E 97	3 5 7 6 7 9 E 9 E 12 E <b>62</b>
2010 9-Month Total 2009 9-Month Total	33 42	(s) 1	6,074 7,723	255 324	33 41	463 1,414	2,205 4,658	-1,742 -3,244	682 527	-29 527	0 682	4,361 4,634	183 195	23 25

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

R=Revised. E=Estimate. F=Forecast. 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. • Data values preceded by "F" are derived from EIA's Short-Term Integrated Forecasting System. • 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 2001.

Sources: See end of section.

Beginning with August 2011, biodiesel production data are not available from the Bureau of the Census; in their place, forecast data from EIA's Short-Term Integrated Forecasting System will be used until survey data from EIA's *Monthly Biodiesel Production Report* are available.

b Losses and co-products from the production of biodiesel. Does not include natural gas, electricity, and other non-biomass energy used in the production of biodiesel—these are included in the industrial sector consumption statistics for the appropriate energy source.

C Net imports equal imports minus exports.

d Stocks are at end of period.

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

<sup>&</sup>lt;sup>f</sup> Beginning in 2009, because of incomplete data coverage and different data sources, "Balancing Item" is used to balance biodiesel supply and disposition.

<sup>&</sup>lt;sup>9</sup> Derived from the preliminary December 2010 stocks value (662 thousand barrels), not the final December 2010 value (672 thousand barrels) that is shown under "Stocks."

# **Renewable Energy**

Note. Renewable Energy Production and Consump-

tion. 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

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. (The annual estimate for the current year is set equal to that of the previous year.)

# Residential Sector, Wood

1973–1979: EIA, Estimates of U.S. Wood Energy Consumption from 1949 to 1981, Table A2.

1980 forward: EIA, Form EIA-457, "Residential Energy Consumption Survey"; and EIA 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-heat-and-power (CHP) plants are calculated as total wood consumption at electricity-only and CHP plants (MER, Table 7.4a) minus wood consumption in the electric power sector (MER, Table 7.4b) and at industrial CHP plants (MER, Table 7.4c). Annual estimates for wood consumption at other commercial plants are based on Form EIA-871 (the annual estimate for the current year is set equal to that of the previous year); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

# **Commercial Sector, Biomass Waste**

EIA, MER, Table 7.4c.

# **Commercial Sector, Fuel Ethanol (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, 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 and 2010: U.S. Energy Information Administration (EIA), *Petroleum Supply Annual (PSA)*, 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.

2011: 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 and 2010: EIA, PSA, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.

2011: EIA, PSM, monthly reports, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.

# Trade, Stocks, and Stock Change

1992–2010: EIA, PSA, annual reports, Table 1.

2011: 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 and 2010: EIA, PSA, Table 1. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

2011: 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-toproduction 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).

January 2008–December 2009: 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.

January 2010–July 2011: 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).

August 2011 forward: EIA, Short-Term Integrated Forecasting System.

#### Trade

U.S. Department of Agriculture, imports data for Harmonized Tariff Schedule codes 3824.90.40.20, "Fatty Esters Animal/Vegetable/Mixture" (for data through June 2010), and 3824.90.40.30, "Biodiesel/Mixes" (for data beginning in July 2010); and exports data for Schedule B code 3824.90.40.00, "Fatty Substances Animal/Vegetable/Mixture" (for data through December 2010), and 3824.90.40.30, "Biodiesel <70%" (for data beginning in January 2011). 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 and 2010: EIA, *Petroleum Supply Annual (PSA)*, Table 1, data for renewable fuels except fuel ethanol.

2011: EIA, *Petroleum Supply Monthly*, 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.

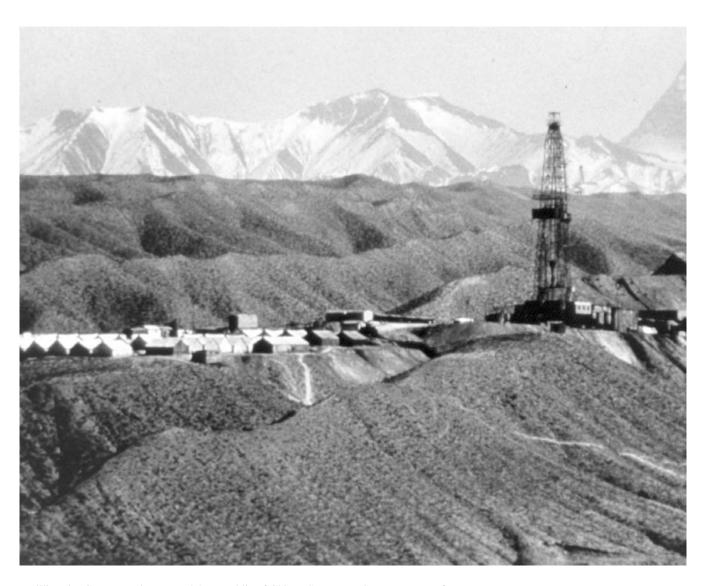
# Consumption

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.

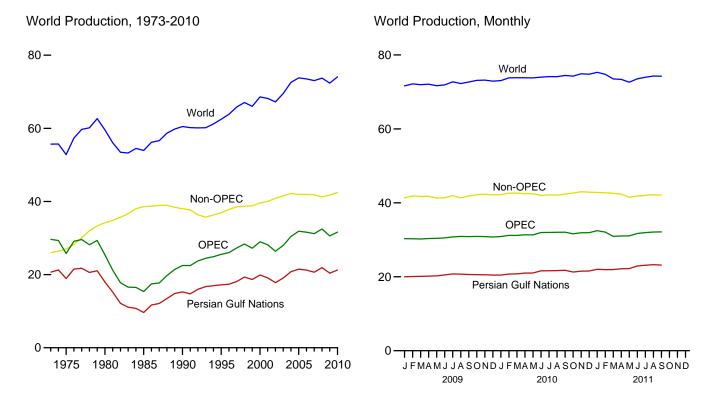
# International Petroleum

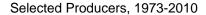


Drilling rig, Gansu Province, People's Republic of China. Source: U.S. Department of Energy.

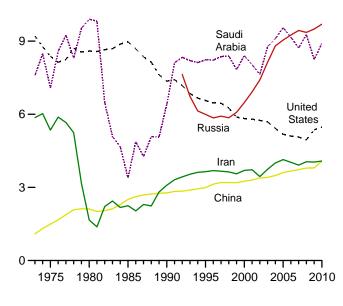
Figure 11.1a World Crude Oil Production Overview

(Million Barrels per Day)





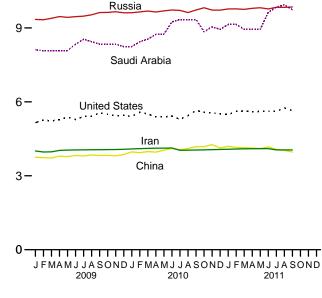
12-



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

# Selected Producers, Monthly

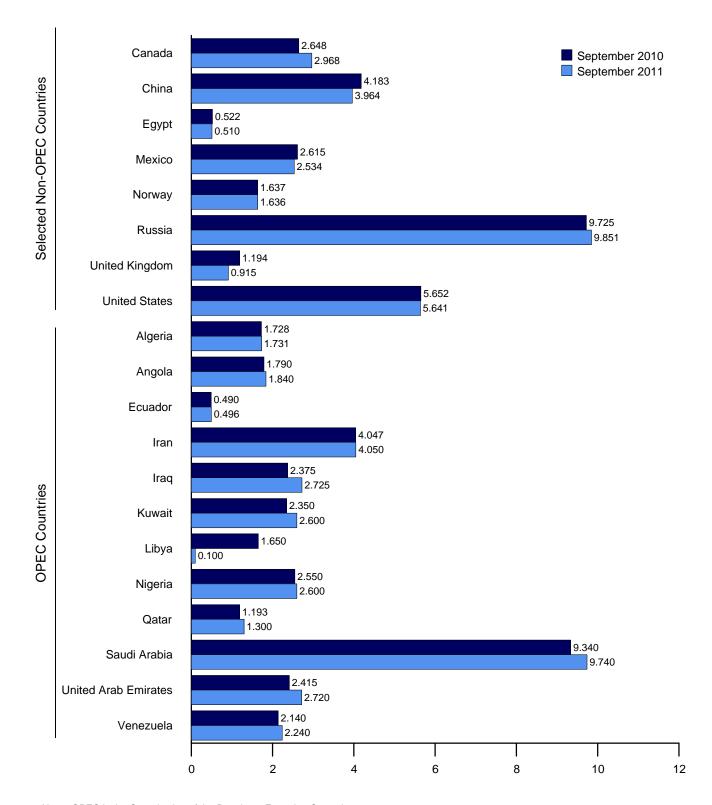
12-



sian Gulf Nations."

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)

	Algeria	Angola	Ecuador	Iran	Iraq	Kuwait <sup>a</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>a</sup>	United Arab Emirates	Vene- zuela	Total OPEC <sup>b</sup>
1973 Average	1,097	162	209	5,861	2,018	3,020	2,175	2,054	570	7,596	1,533	3,366	29,661
1975 Average	983	165	161	5,350	2,262	2,084	1,480	1,783	438	7,075	1,664	2,346	25,790
1980 Average	1,106	150	204	1,662	2,514	1,656	1,787	2,055	472	9,900	1,709	2,168	25,383
1985 Average	1,037	231	281	2,250	1,433	1,023	1,059	1,495	301	3,388	1,193	1,677	15,368
1990 Average	1,175	475	285	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	22,493
1995 Average	1,202	646 709	392	3,643	560 570	2,057	1,390	1,993	442 510	8,231	2,233 2,278	2,750 2,938	25,540 26,018
1996 Average	1,242 1,277	709	396 388	3,686 3,664	579 1,155	2,062 2,007	1,401 1,446	2,001 2,132	550	8,218 8,362	2,276	3,280	27,292
1997 Average 1998 Average	1,246	735	375	3,634	2,150	2,007	1,390	2,152	696	8,389	2,345	3,167	28,366
1999 Average	1,202	745	373	3,557	2,508	1,898	1,319	2,130	665	7,833	2,169	2,826	27,224
2000 Average	1,254	746	395	3,696	2,571	2.079	1,410	2,165	737	8,404	2,368	3,155	28,980
2001 Average	1,310	742	412	3,724	2,390	1,998	1,367	2,256	714	8,031	2,205	3,010	28,159
2002 Average	1,306	896	393	3,444	2,023	1,894	1,319	2,118	679	7,634	2,082	2,604	26,392
2003 Average	1,611	903	411	3,743	1,308	2,136	1,421	2,275	715	8,775	2,348	2,335	27,980
2004 Average	1,677	1,052	528	4,001	2,011	2,376	1,515	2,329	783	9,101	2,478	2,557	30,408
2005 Average	1,797	1,250	532	4,139	1,878	2,529	1,633	2,627	835	9,550	2,535	2,565	31,871
2006 Average	1,814	1,413	536	4,028	1,996	2,535	1,681	2,440	850	9,152	2,636	2,511	31,591
2007 Average	1,834	1,744	511	3,912	2,086	2,464	1,702	2,350	851	8,722	2,603	2,433	31,210
2008 Average	1,825	1,981	505	4,050	2,375	2,586	1,736	2,165	924	9,261	2,681	2,394	32,483
2009 January	1,758	1,915	504	4,007	2,212	2,350	1,650	2,192	860	8,113	2,411	2,340	30,312
February	1,757	1,840	498	3,963	2,313	2,350	1,650	2,162	935	8,068	2,412	2,340	30,288
March	1,757	1,840	497	3,970	2,365	2,350	1,650	2,060	910	8,072	2,412	2,340	30,223
April	1,757	1,840	495	4,030	2,366	2,350	1,650	2,217	910	8,077	2,412	2,240	30,344
May	1,757	1,840	486	4,044	2,418	2,350	1,650	2,212	910	8,081	2,412	2,240	30,399
June	1,756	1,840	491	4,050	2,419	2,350	1,650	2,059	910	8,335	2,412	2,240	30,514
July	1,726	1,890	483	4,053	2,470	2,350	1,650	2,051	910	8,540	2,413	2,240	30,777
August	1,726	1,950	477	4,056	2,472	2,350	1,650	2,193	945	8,440	2,413	2,240	30,912
September	1,726	1,950	475	4,060	2,473	2,350	1,650	2,240	945	8,340	2,413	2,240	30,862
October	1,726	1,990	475	4,063	2,425	2,350	1,650	2,290	951	8,340	2,413	2,240	30,913
November	1,726 1,726	1,990 1,990	477 470	4,067 4,076	2,375 2,375	2,350 2,350	1,650 1,650	2,370 2,450	962 974	8,340 8,240	2,413 2,414	2,140 2,040	30,860 30,754
December  Average	1,741	1,907	486	4,076	2,375 2,391	2,350 2,350	1,650	2,430 2,208	927	8,250	2,413	2,239	30,754
2010 January	1,730	2,040	464	4,088	2,475	2,250	1,650	2,480	969	8,240	2,414	2,090	30,889
February	1,729	2,040	470	4,100	2,475	2,250	1,650	2,420	1,036	8,440	2,414	2,140	31,184
March	1,729	2,070	478	4,112	2,375	2,250	1,650	2,430	1,055	8.540	2.414	2.090	31,193
April	1,729	2,070	480	4,120	2,375	2,250	1,650	2,360	1,072	8,740	2,414	2,110	31,371
May	1,729	2,030	478	4,120	2,375	2,250	1,650	2,310	1,091	8,740	2,415	2,140	31,327
June	1,728	1,980	491	4,127	2,425	2,250	1,650	2,410	1,113	9,240	2,415	2,140	31,968
July	1,728	1,970	492	4,033	2,325	2,350	1,650	2,410	1,136	9,340	2,415	2,140	31,989
August	1,728	1,890	485	4,040	2,325	2,350	1,650	2,510	1,164	9,340	2,415	2,140	32,037
September	1,728	1,790	490	4,047	2,375	2,350	1,650	2,550	1,193	9,340	2,415	2,140	32,068
October	1,728	1,790	497	4,053	2,375	2,350	1,650	2,580	1,216	8,840	2,415	2,140	31,634
November	1,728	1,790	508	4,060	2,375	2,350	1,650	2,510	1,235	9,040	2,415	2,240	31,901
December  Average	1,728 <b>1,729</b>	1,790 <b>1,939</b>	499 <b>486</b>	4,068 <b>4,080</b>	2,525 <b>2,399</b>	2,350 <b>2,300</b>	1,650 <b>1,650</b>	2,490 <b>2,455</b>	1,235 <b>1,127</b>	8,940 <b>8,900</b>	2,415 <b>2,415</b>	2,240 <b>2,146</b>	31,930 <b>31,626</b>
<b>2011</b> January	1,728	1,790	500	4,076	2,625	2,350	1,650	R 2,580	1,280	9,140	2,520	2,240	R 32,479
February	1,731	1,790	509	4,084	2,525	2,350	1,340	R 2,570	1,280	9,140	2,520	2,240	R 32,079
March	1,731	1,790	501	4,092	2,525	2,450	300	R 2,450	1,290	8,940	2,620	2,240	R 30,929
April	1,731	1,740	504	4,100	2,525	2,550	200	R 2,500	1,300	8,940	2,720	2,240	R 31,050
May	1,731	1,640	497	4,100	2,575	2,550	200	R 2,570	1,300	8,940	2,720	2,240	R 31,063
June	1,731	1,690	495	4,100	2,575	2,550	100	R 2,570	1,300	9,640	2,720	2,240	R 31,711
July	1,731	1,740	492	4,050	2,625	2,550	100	R 2,570	1,300	9,840	2,720	2,240	R 31,958
August	1,731	1,790	495	4,050	2,625	2,600	0	R 2,600	1,300	9,940	2,720	2,240	R 32,091
September	1,731	1,840	496	4,050	2,725	2,600	100	2,600	1,300	9,740	2,720	2,240	32,142
9-Month Average	1,731	1,756	499	4,078	2,592	2,507	437	2,557	1,295	9,364	2,665	2,240	31,719
2010 9-Month Average 2009 9-Month Average	1,729 1,747	1,989 1,879	481 490	4,087 4,026	2,390 2,390	2,284 2,350	1,650 1,650	2,431 2,154	1,092 914	8,887 8,231	2,415 2,412	2,125 2,273	31,560 30,516

<sup>&</sup>lt;sup>a</sup> Except for the period from August 1990 through May 1991, includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. In August 2011, 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.

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

example, Ecuador rejoined OPEC in 2007, and is thus included in "Total OPEC"

Sources: See end of section.

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, Eduator rejoined OPEC in 2007, and is thus included in Total Years; and Indonesia left OPEC at the end of 2008, and is thus included in "Total Non-OPEC" for all years.

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

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

for all available data beginning in 1973.

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

					Selected	l 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		1,430	1,490	235	705	189	9,523	NA	12	8,375	27,039	52,828
1980 Average		1,435	2,114	595	1,936	486	11,706	NA	1,622	8,597	34,175	59,558
1985 Average	9,630	1,471	2,505	887	2,745	773	11,585	NA	2,530	8,971	38,598	53,966
1990 Average	15,278	1,553	2,774	873	2,553	1,630	10,975	NA	1,820	7,355	37,999	60,492
1995 Average	17,208	1,805	2,990	920	2,711	2,766		5,995	2,489	6,560	36,939	62,479
1996 Average		1,837	3,131	922	2,944	3,091		5,850	2,568	6,465	37,822	63,841
1997 Average	18,095	1,922	3,200	856	3,104	3,142		5,920	2,518	6,452	38,533	65,825
1998 Average		1,981	3,198	834	3,160	3,011		5,854	2,616	6,252	38,688	67,055
1999 Average		1,907	3,195	852	2,998	3,019		6,079	2,684	5,881	38,791	66,015
2000 Average		1,977	3,249	768	3,104	3,222		6,479	2,275	5,822	39,605	68,584
2001 Average		2,029	3,300	720	3,218	3,226		6,917	2,282	5,801	40,027	68,186
2002 Average		2,171	3,390	715	3,263	3,131		7,408	2,292	5,746	40,850	67,242
2003 Average	19,063	2,306	3,409	713	3,459	3,042		8,132	2,093	5,681	41,538	69,519
2004 Average		2,398	3,485	673	3,476	2,954		8,805	1,845	5,419	42,156	72,565
2005 Average		2,369	3,609	658	3,423	2,698		9,043	1,649	5,178	41,932	73,803
2006 Average		2,525	3,673	633	3,345	2,491		9,247	1,490	5,102	41,928 R 41,851	73,519
2007 Average		2,628	3,729	637 581	3,143	2,270		9,437	1,498	5,064	R 41,851	<sup>R</sup> 73,061 <sup>R</sup> 73,733
2008 Average	21,913	2,579	3,790	301	2,839	2,182		9,357	1,391	4,950	41,230	13,133
<b>2009</b> January		2,592	3,755	553	2,729	2,195		9,343	1,425	5,154	R 41,334	R 71,647
February		2,684	3,733	550	2,707	2,260		9,331	1,449	5,260	R 41,880	R 72,168
March		2,579	3,726	547	2,697	2,238		9,388	1,451	5,227	R 41,741	R 71,964
April		2,459	3,795	547	2,688	2,072		9,459	1,468	5,273	R 41,749	R 72,093
May		2,436	3,775	544	2,655	1,890		9,429	1,390	5,379	<sup>R</sup> 41,291 <sup>R</sup> 41.387	R 71,690
June	20,511	2,559	3,824	541	2,563	1,850		9,457	1,359	5,281	R 41,387	R 71,901
July		2,667	3,801	538	2,605	2,147		9,476	1,342	5,402	R 41,355	R 72,733
August	- ,	2,575 2,528	3,844 3,826	535 532	2,587 2,643	1,970 1,923		9,532 9,623	993 1,119	5,418 5,547	R 41,821	<sup>R</sup> 72,267 <sup>R</sup> 72,683
September October		2,526	3,828	529	2,645	2,077		9,629	1,119	5,501	R 42.221	R 73,133
November	- , -	2,725	3,813	526	2,597	2,123		9,654	1,372	5,427	R 42,325	R 73,185
December	20,342	2,723	3,863	523	2,639	2,123		9.614	1,312	5,451	R 42,323	R 72,921
Average	-, -	2,579	3,799	539	2,646	2,067		9,495	1,328	5,361	R 41,767	R 72,366
<b>2010</b> January	20.471	2,497	3,968	523	2,660	2,060		9,615	1,379	5,406	42,177	73,066
February	- ,	2,712	3,938	523	2.655	2.038		9,648	1,274	5,578	R 42,622	R 73,806
March	-,	2,621	3,981	523	2,641	1,983		9,683	1,429	5,505	R 42.642	R 73,835
April		2,695	3,961	523	2,639	1,967		9,646	1,378	5,390	R 42.450	R 73,821
May		2.745	4.040	523	2,639	1,921		9,691	1,297	5,390	R 42,468	R 73,795
June		2,772	4,108	523	2,592	1,611		9,727	1,076	5,425	R 42,021	R 73,990
July		2,765	4,056	522	2,618	1,864		9,710	1,055	5,288	R 42,149	R 74,138
August		2,783	4,104	522	2,604	1,648		9,623	1,070	5,440	R 42,080	<sup>R</sup> 74,117
September		2,648	4,183	522	2,615	1,637		9,725	1,194	5,652	R 42,381	<sup>R</sup> 74,449
October		2,690	4,181	522	2,615	1,952		9,816	1,195	5,571	R 42,649	R 74,284
November		2,942	4,263	525	2,556	1,868		9,723	1,248	5,553	R 43,001	R 74,902
December		2,933	4,126	525	2,620	1,886		9,719	1,207	5,507	R 42,874	R 74,805
Average	21,257	2,734	4,076	523	2,621	1,869		9,694	1,233	5,474	R 42,458	<sup>R</sup> <b>74,084</b>
2011 January	22,026	2,770	4,195	522	2,632	1,905		9,769	1,316	E 5,483	R 42,806	R 75,285
February		2,906	4,147	521	2,602	1,861		9,773	1,085	E 5,612	R 42,701	R 74,780
March		2,854	4,139	517	2,620	1,808		9,753	R 1,073	E 5,633	R 42,580	R 73,509
April		2,843	4,127	515	2,621	1,874		9,795	<sup>R</sup> 1,164	E 5,594	R 42,347	R 73,396
May		2,547	4,104	515	2,603	1,607		9,818	<sup>R</sup> 1,017	E 5,612	<sup>R</sup> 41,558	R 72,622
June		2,652	4,172	515	2,592	1,660		9,770	1,020	E 5,624	R 41,836	R 73,547
July		R 2,891	4,073	510	2,580	1,737		9,837	R 942	E 5,610	R 42,018	R 73,975
August	23,270	R 3,029	4,030	510	2,598	1,714		9,832	R 757	E 5,754	R 42,215	R 74,306
September	23,170	2,968	3,964	510	2,534	1,636		9,851	915	E 5,641	42,106	74,248
9-Month Average	22,535	2,828	4,105	515	2,598	1,755		9,800	1,032	E 5,618	42,237	73,957
2010 9-Month Average	21,190	2,693	4,038	523	2,629	1,858		9,674	1,239	5,451	42,330	73,889
2009 9-Month Average	20,360	2,564	3,787	543	2,652	2,060		9,449	1,332	5,327	41,609	72,126

<sup>&</sup>lt;sup>a</sup> See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. On Tables 11.1a and 11.1b, countries are classified as "OPEC" or "Non-OPEC" in all years based on their status in the most current year. For example, Ecuador rejoined OPEC in 2007, and is thus included in "Total OPEC" 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, Iran, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and

Notes: • Data are for crude oil and lease condensate; they exclude natural gas plant liquids. • Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available. • Data for countries may not sum to World totals due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

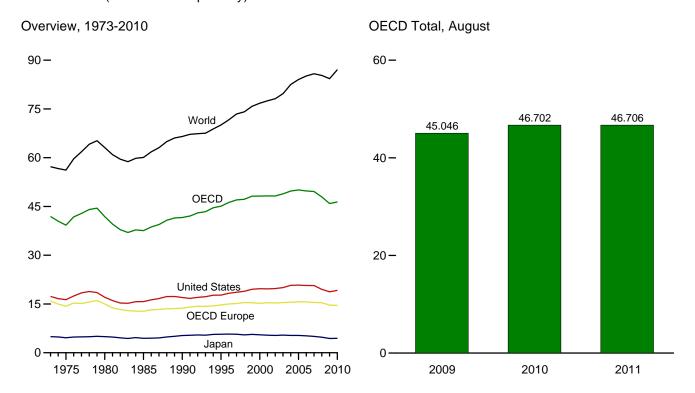
Sources: See end of section.

<sup>&</sup>lt;sup>b</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

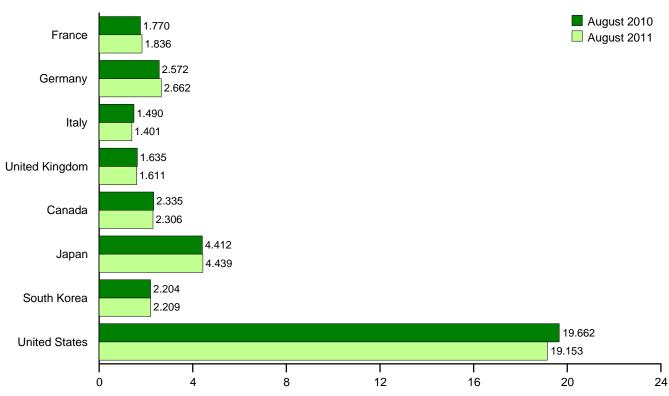
R=Revised. NA=Not available. --=Not applicable. E=Estimate.

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

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 Development. 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)

	_			United	OECD			South	United	Other		l
	France	Germanya	Italy	Kingdom	Europeb	Canada	Japan	Korea	States	OECDc	<b>OECD</b> d	World
1973 Average	2,601	3,324	2,068	2,341	15,879	1,729	4,949	281	17,308	1,768	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	12,770	1,526	4,436	552	15,726	2,564	37,575	60,083
1990 Average	1,826	2,682	1,868	1,776	13,729	1,737	5,315	1,048	16,988	2,784	41,601	66,533
1995 Average	1,920	2,882	1,942	1,816	14,714	1,817	5,693	2,008	17,725	3,135	45,092	70,067
1996 Average	1,949	2,922	1,920	1,852	14,998	1,871	5,739	2,101	18,309	3,206	46,224	71,665
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	15,215	2,014 2,043	5,515	2,135 2,132	19,701	3,624	48,205	76,781
2001 Average	2,054	2,807	1,832	1,747	15,384		5,412		19,649	3,633	48,253	77,508
2002 Average	1,985	2,710	1,870	1,739	15,329	2,065	5,319	2,149	19,761	3,595	48,218	78,161
2003 Average	2,001 2,009	2,662 2,649	1,860 1,829	1,759 1,785	15,445 15,547	2,191 2,282	5,428 5,319	2,175 2,155	20,034 20,731	3,628 3,719	48,901 49,753	79,708 82,530
2004 Average												
2005 Average	1,991 1,991	2,621 2,639	1,781 1,777	1,823 1,803	15,666 15,666	2,315 2,229	5,328 5,197	2,191 2,180	20,802 20,687	3,800 3,826	50,102 49,785	84,064 85,133
2006 Average												
2007 Average 2008 Average	1,979 1,945	2,420 2,545	1,729 1,667	1,734 1,725	15,474 15,389	2,283 2,232	5,037 4,788	2,241 2,142	20,680 19,498	3,876 3,870	49,591 47,920	85,823 85,318
2006 Average	1,943	2,545	1,007	1,725	15,369	2,232	4,700	2,142	19,490	3,070	47,920	03,310
2009 January	2,032	2,416	1,507	1,723	14,882	2,239	4,850	2,301	19,040	3,569	46,881	NA
February	2,044	2,644	1,585	1,675	15,234	2,230	4,721	2,459	18,822	3,712	47,178	NA
March	1,962	2,785	1,521	1,719	15,179	2,160	4,615	2,190	18,719	3,686	46,548	NA
April	1,842	2,506	1,526	1,686	14,674	2,060	4,267	2,212	18,672	3,645	45,529	NA
May	1,711	2,335	1,480	1,594	13,969	2,065	3,857	2,131	18,211	3,662	43,895	NA
June	1,860	2,373	1,541	1,670	14,681	2,155	4,104	2,080	18,828	3,775	45,623	NA
July	1,881	2,412	1,692	1,639	14,806	2,181	4,035	2,009	18,626	3,793	45,449	NA
August	1,618	2,263	1,415	1,636	13,892	2,168	4,211	2,069	18,949	3,757	45,046	NA
September	1,927	2,550	1,596	1,652	15,105	2,148	4,182	2,037	18,594	3,696	45,762	NA
October	1,887	2,506	1,598	1,633	14,893	2,115	4,337	2,192	18,803	3,819	46,158	NA
November	1,757	2,353	1,500	1,616	14,289	2,161	4,436	2,231	18,753	3,849	45,717	NA
December	1,936	2,299	1,563	1,512	14,415	2,210	5,124	2,370	19,237	3,967	47,323	NA
Average	1,870	2,452	1,543	1,646	14,663	2,157	4,394	2,188	18,771	3,744	45,918	84,336
2010 January	1,785	2,186	1,353	1,578	13,483	2,104	4,766	2,344	18,652	R 3,482	R 44,830	NA
February	1,988	2,481	1,518	1,679	14,691	2,229	4,988	2,365	18,850	R 3,804	R 46,927	NA
March	1,942	2,530	1,547	1,675	14,802	2,137	4,725	2,237	19,099	R 3,705	R 46,704	NA
April	1,875	2,286	1,504	1,638	14,225	2,108	4,352	2,232	19,044	R 3,752	R 45,712	NA
May	1,723	2,379	1,435	1,607	13,885	2,155	3,865	2,153	18,866	R 3,723	R 44,647	NA
June	1,866	2,535	1,561	1,590	14,659	2,241	3,992	2,160	19,537	R 3,823	R 46,411	NA
July	1,858	2,596	1,643	1,623	14,918	2,184	4,194	2,094	19,319	R 3,748	R 46,457	NA
August	1,770	2,572	1,490	1,635	14,494	2,335	4,412	2,204	19,662	R 3,595	R 46,702	NA
September	1,975	2,773	1,608	1,632	15,372	2,264	4,466	2,175	19,438	R 3,686	R 47,401	NA
October	1,782	2,647	1,516	1,659	14,894	2,208	4,059	2,209	18,974	R 3,640	R 45,983	NA
November	1,818	2,611	1,551	1,639	14,975	2,260	4,620	2,374	18,977	R 3,802	R 47,010	NA
December Average	1,968 <b>1,861</b>	2,349 <b>2,495</b>	1,615 <b>1,528</b>	1,518 <b>1,622</b>	14,606 <b>14,580</b>	2,274 <b>2,208</b>	5,029 <b>4,452</b>	2,479 <b>2,251</b>	19,722 <b>19,180</b>	<sup>R</sup> 3,824 <sup>R</sup> <b>3,714</b>	<sup>R</sup> 47,934 <sup>R</sup> <b>46,386</b>	NA R <b>87,057</b>
_												
2011 January	1,805	2,246	1,354	1,595	13,634	2,256	4,923	2,427	19,121	3,462	45,823	NA
February	1,951	2,409	1,504	1,646	R 14,664	2,253	5,093	2,346	18,869	3,821	R 47,047	NA
March	1,821	2,404	1,446	1,630	R 14,292	2,242	4,575	2,292	19,248	3,859	R 46,510	NA
April	1,780	2,283	1,463	1,615	R 13,939	2,115	4,008	2,008	18,613	3,753	R 44,436	NA
May	1,766	2,427	1,426	1,549	R 13,999	2,136	3,801	2,016	18,363	3,719	R 44,034	NA
June	1,819	2,292	1,511	1,682	R 14,390	R 2,206	R 3,957	2,109	19,277	3,874	R 45,813	NA
July	1,831	2,425	1,479	1,556	R 14,378	R 2,215	R 4,240	2,186	18,555	3,807	R 45,381	NA
August 8-Month Average	1,836 <b>1,825</b>	2,662 <b>2,394</b>	1,401 <b>1,447</b>	1,611 <b>1,610</b>	14,694 <b>14,244</b>	2,306 <b>2,216</b>	4,439 <b>4,374</b>	2,209 <b>2,199</b>	19,153 <b>18,900</b>	3,903 <b>3,774</b>	46,706 <b>45,707</b>	NA <b>NA</b>
_												
2010 8-Month Average 2009 8-Month Average	1,849 1,867	2,446 2,465	1,506 1,533	1,628 1,668	14,391 14,657	2,186 2,157	4,407 4,329	2,222 2,178	19,131 18,732	3,702 3,700	46,038 45,753	NA NA

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

R=Revised. NA=Not available.

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

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

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 and 2010—EIA, Short Term Energy Outlook, December 06, 2011, Table 3a. • All Other Data:—International Energy Agency (IEA), Quarterly Oil Statistics and Energy Balances in OECD Countries, various issues.

Germany.

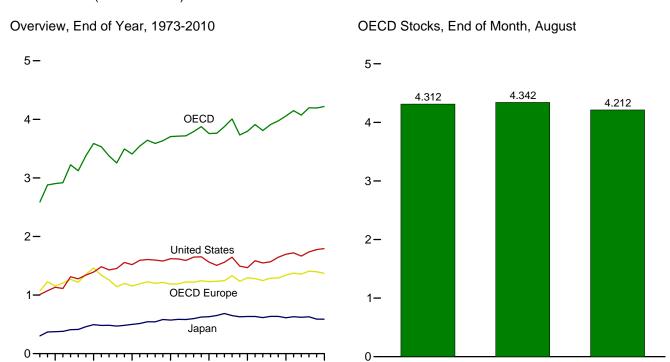
b "OECD Europe" consists of Austria, Belgium, Czech Republic, Denmark,
Locate Hungary Iceland, Ireland, Italy, Luxembourg, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, and the United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

c "Other OECD" consists of Australia, Chile, Mexico, New Zealand, and the

U.S. Territories.

<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."

Figure 11.3 Petroleum Stocks in OECD Countries (Billion Barrels)



2010

2011

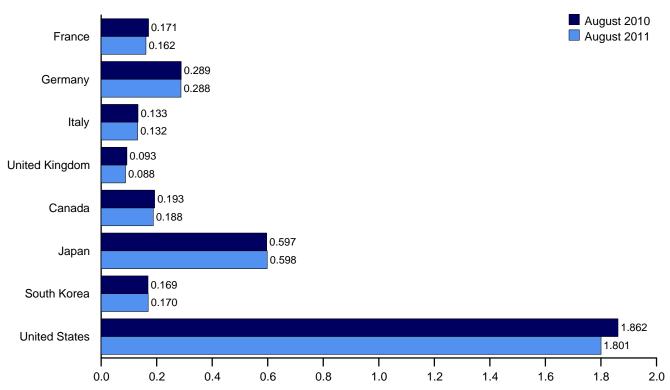
2009

By Selected OECD Country, End of Month

1985

1990 1995 2000 2005 2010

1975 1980



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	Germanya	Italy	Kingdom	Europeb	Canada	Japan	Korea	States	OECDc	OECDd
973 Year	201	181	152	156	1.070	140	303	NA	1.008	67	2.588
975 Year	225	187	143	165	1,154	174	375	NA	1,133	67	2,903
980 Year	243	319	170	168	1,464	164	495	NA	1,392	72	3,587
985 Year	139	277	156	131	1,154	112	500	13	1,519	110	3,408
990 Year	143	280	143	103	1,188	143	572	64	1,621	117	3,706
995 Year	155	302	141	101	1,228	132	631	92	1,563	113	3.758
996 Year	154	303	135	103	1,235	127	651	123	1,507	118	3,762
997 Year	161	299	129	100	1,246	144	685	124	1,560	115	3,875
998 Year	169	323	135	104	1.331	139	649	129	1,647	111	4.006
999 Year	160	290	130	101	1,233	142	629	132	1,493	105	3,733
000 Year	170	272	140	100	1,294	144	634	140	1,468	117	3,796
001 Year	165	273	134	113	1,281	154	634	143	1,586	112	3,910
002 Year	170	253	138	104	1.247	155	615	140	1,548	103	3,808
003 Year	179	273	135	100	1,290	165	636	155	1,568	96	3,910
004 Year	177	267	136	101	1,292	154	635	149	1,645	99	3.974
005 Year	185	283	132	95	1,342	168	612	135	1,698	103	4,058
2006 Year	182	283	133	103	1,374	169	631	152	1,720	103	4,148
2007 Year	180	275	133	90	1,358	175	621	143	1,665	108	4,072
008 Year	179	279	128	99	1,407	174	630	135	1,737	114	4,196
009 January	179	282	136	100	1,413	177	618	149	1,766	115	4,237
February	178	281	128	98	1,412	177	619	157	1,777	107	4,249
March	178	280	131	100	1,415	175	611	155	1,803	109	4,268
April	173	281	132	98	1,405	178	606	152	1,816	114	4,271
May	176	286	133	92	1,403	178	609	149	1,831	112	4,281
June	173	285	129	92	1,403	177	611	149	1,844	110	4,295
July	174	283	127	97	1,398	181	607	157	1,850	108	4,300
August	178	287	130	96	1,415	182	610	160	1,834	111	4,312
September	174	280	129	94	1,400	177	607	167	1,848	117	4,317
October	173	281	130	96	1,382	179	604	167	1,825	109	4,266
November	179	286	130	96	1.408	177	606	162	1.814	109	4,275
December	175	284	126	94	1,398	169	589	155	1,776	105	4,193
<b>010</b> January	182	295	127	95	1,439	172	593	162	1,786	111	4,263
February	175	290	134	99	1,424	174	587	163	1,785	117	4,249
March	172	289	129	93	1,404	180	581	164	1,787	114	4,230
April	172	284	135	95	1,414	181	590	166	1,810	111	R 4,272
May	173	286	131	99	1,422	177	599	166	1,830	108	4,302
June	170	280	133	96	1,405	178	597	167	1,842	120	R 4,308
July	168	282	127	96	1,389	187	598	170	1,855	116	4,316
August	171	289	133	93	1,406	193	597	169	1,862	115	4,342
September	163	286	127	95	1,365	194	582	174	1,861	111	4,288
October	161	285	129	94	1,375	194	599	170	1,847	112	4,297
November	170	287	126	92	1,367	195	604	171	1,827	108	4,273
December	168	287	133	89	R 1,371	195	588	165	1,794	105	<sup>R</sup> 4,219
<b>011</b> January	173	293	140	96	1,413	186	596	168	1,803	105	4,272
February	170	291	131	95	_ 1,386	182	591	162	1,773	108	4,202
March	167	289	_ 132	93	R 1,374	_ 185	575	170	1,770	105	R 4,179
April	163	295	<sup>R</sup> 132	93	<sup>R</sup> 1,360	<sup>R</sup> 191	601	173	1,776	108	4,209
May	168	292	R 130	90	R 1,364	190	599	170	1,805	110	R 4,237
June	167	291	<sup>R</sup> 130	85	R 1,356	<sup>R</sup> 189	593	175	1,808	107	R 4,228
July	164	295	<sup>R</sup> 130	86	1,345	<sup>R</sup> 188	599	173	1,820	107	R 4,232
August	162	288	132	88	1,348	188	598	170	1,801	107	4,212

<sup>&</sup>lt;sup>a</sup> Through December 1983, the data for Germany are for the former West Germany only. Beginning with January 1984, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany. <sup>b</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France,

R=Revised. NA=Not available.

Notes: • Stocks are at end of period. • Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined

products. • In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, thereby affecting subsequent stocks reported. New-basis end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.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, November 10, 2011

b "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom, and, for 1984 forward Czech Republic, Hungary, Poland, and Slovakia

<sup>1984</sup> forward, Czech Republic, Hungary, Poland, and Slovakia.

<sup>c</sup> "Other OECD" consists of Australia, New Zealand, and the U.S. Territories, and, for 1984 forward, Mexico.

and, for 1984 forward, Mexico.

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

# **International Petroleum**

# Tables 11.1a and 11.1b Sources

# **United States**

December 2011.

Table 3.1.

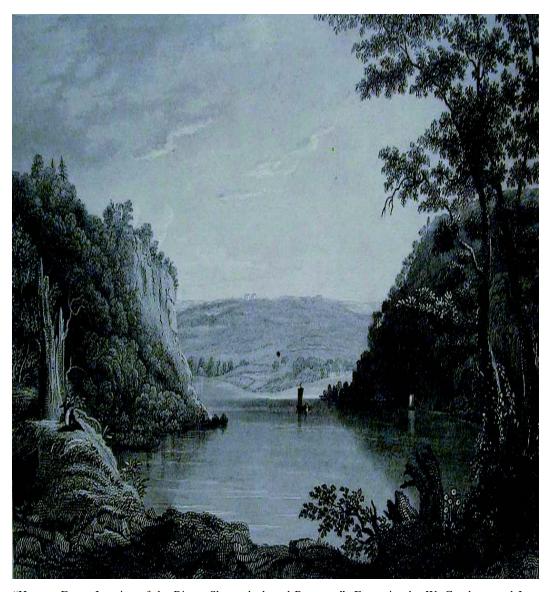
# All Other Countries and World, Annual Data

1973–1979: U.S. Energy Information Administration (EIA), *International Energy Annual 1981*, Table 8.
1980 forward: EIA, International Energy Database, December 2011.

# All Other Countries and World, Monthly Data

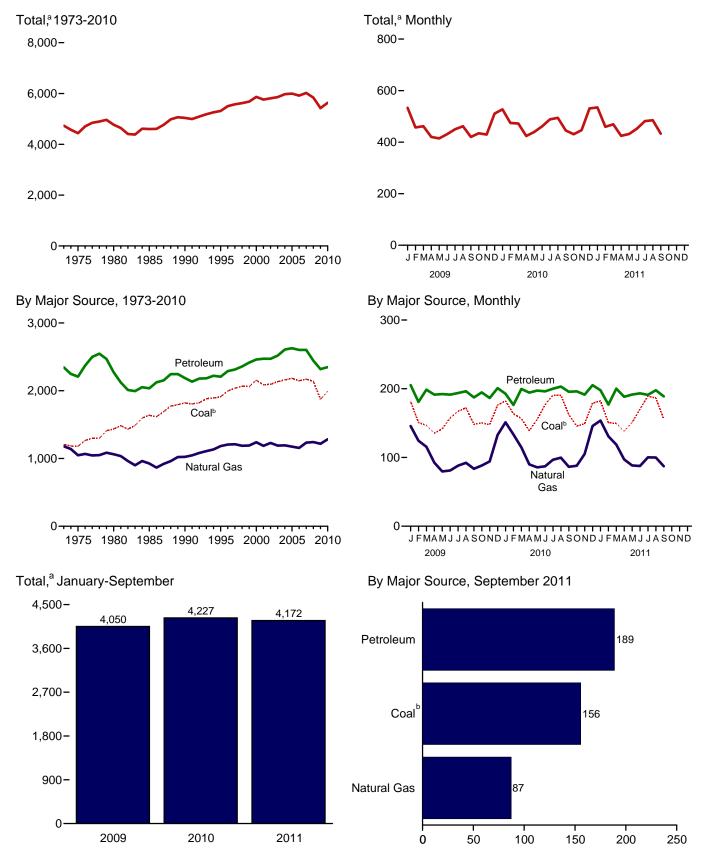
1973–1980: *Petroleum Intelligence Weekly (PIW)*, *Oil & Gas Journal (OGJ)*, and EIA adjustments. 1981–1993: *PIW*, *OGJ*, and other industry sources. 1994 forward: EIA, International Energy Database,

# **Environment**



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

Figure 12.1 Carbon Dioxide Emissions From Energy Consumption by Source (Million Metric Tons of Carbon Dioxide)



<sup>&</sup>lt;sup>a</sup> Excludes emissions from biomass energy consumption.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#environment. Source: Table 12.1.

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

Carbon Dioxide Emissions From Energy Consumption by Source **Table 12.1** 

						,								
								Petrole	um			1		
	Coalb	Natural Gas <sup>c</sup>	Aviation Gasoline	Distillate Fuel Oil <sup>d</sup>	Jet Fuel	Kero- sene	LPGe	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 1990 Total 1995 Total 1995 Total 1996 Total 1997 Total 1997 Total 1998 Total 1998 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2007 Total	1,207 1,181 1,436 1,638 1,821 1,913 1,995 2,040 2,064 2,065 2,185 2,136 2,160 2,182 2,147 2,172 2,139	1,181 1,047 1,063 9,065 1,025 1,184 1,201 1,189 1,192 1,194 1,191 1,194 1,175 1,157 1,235 1,243	65 4 3 3 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2	480 443 446 445 470 498 524 538 555 580 598 587 610 632 640 648 652 615	155 146 156 178 223 222 232 234 238 245 254 243 237 231 240 246 240 238 226	32 24 24 17 6 8 9 10 11 10 11 6 8 10 10 8 5 2	91 82 87 86 69 78 84 485 75 91 102 92 98 98 94 93 94	13 11 13 12 13 13 14 14 14 13 11 12 11 12 11	911 911 900 930 988 1,044 1,063 1,075 1,107 1,127 1,135 1,151 1,183 1,188 1,214 1,214 1,224 1,227 1,166	51 48 46 55 67 75 78 79 89 93 84 88 94 105 105 104 98	508 443 453 216 220 152 152 142 158 145 125 138 155 164 122 129 111	100 97 142 93 127 114 132 125 130 117 132 127 140 142 141 150 148 130	2,346 2,209 2,272 2,035 2,187 2,207 2,313 2,358 2,417 2,461 2,473 2,473 2,475 2,609 2,603 2,603 2,603 2,444	4,733 4,437 4,700 4,600 5,039 5,314 5,501 5,575 5,622 5,867 5,759 5,807 5,807 5,897 5,975 5,975 5,918 6,022 5,838
Pebruary	181 151 147 135 142 158 167 172 148 150 148 176 <b>1,876</b>	146 124 116 92 80 81 88 92 84 133 1,218	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	54 46 49 44 45 45 45 45 45 45 45 46 51	16 15 18 17 17 17 19 18 17 17 16 17	1 (s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	9 8 8 7 6 6 7 7 7 8 10 10 <b>91</b>	1 1 1 1 1 1 1 1 1 1 1 1	95 88 98 96 99 97 101 101 94 98 94 97	7 7 7 8 9 9 6 7 8 6 7 8	12 6 9 10 7 8 5 7 5 8 7 9	11 10 9 8 9 8 10 9 10 9 111	205 181 199 191 192 191 194 196 187 195 187 201 <b>2,320</b>	533 457 462 420 415 431 450 462 420 434 430 511 <b>5,425</b>
Pebruary	182 R 164 157 139 R 155 177 191 191 162 146 149 179	151 R 134 R 115 90 86 87 97 100 86 88 105 146 R 1,284	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	49 46 51 48 48 47 50 50 50 49 55 <b>590</b>	17 15 18 17 18 19 19 19 18 18 17 17	(s) (s) (s) (s) (s) (s) (s) (s) (s) 1	10 9 8 7 7 7 7 7 7 8 8 11 <b>94</b>	1 1 1 1 1 1 1 1 1 1	92 84 95 96 99 97 101 100 96 97 92 96	5 5 7 6 7 7 8 7 6 7	9 7 8 9 8 7 8 7 8 8 8 <b>9</b>	9 9 11 11 10 10 10 11 11 10 9 9 10	193 176 200 194 197 196 200 203 196 196 191 205 <b>2,349</b>	527 474 472 424 440 461 R 488 R 494 445 431 R 447 531 <b>5,635</b>
Pebruary	182 151 149 138 151 170 R 189 R 186 156 <b>1,473</b>	154 131 119 97 88 88 100 100 87 <b>964</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s)	52 46 53 47 48 50 45 52 50 <b>443</b>	17 15 17 17 18 19 18 19 17	(s) 1 (s) (s) (s) (s) (s) (s) (s) (s)	10 8 8 6 7 6 7 7 7 <b>67</b>	1 1 1 1 1 1 1 1 8	91 84 95 92 95 94 97 96 92 <b>836</b>	6 4 6 6 7 7 6 8 6 57	9 8 9 7 7 5 5 7 <b>66</b>	10 9 12 10 9 10 11 10 9 <b>89</b>	198 177 200 188 192 193 191 198 189 <b>1,726</b>	535 R 459 469 R 425 432 452 482 483 4,172
2010 9-Month Total 2009 9-Month Total	1,517 1,401	945 903	1	435 419	158 154	2 2	69 63	8 7	861 869	58 69	72 68	91 85	1,756 1,737	4,227 4,050

a Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.

b Includes coal coke net imports.

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.

<sup>&</sup>lt;sup>c</sup> Natural gas, excluding supplemental gaseous fuels.

Distillate fuel oil, excluding biodiesel. Liquefied petroleum gases.

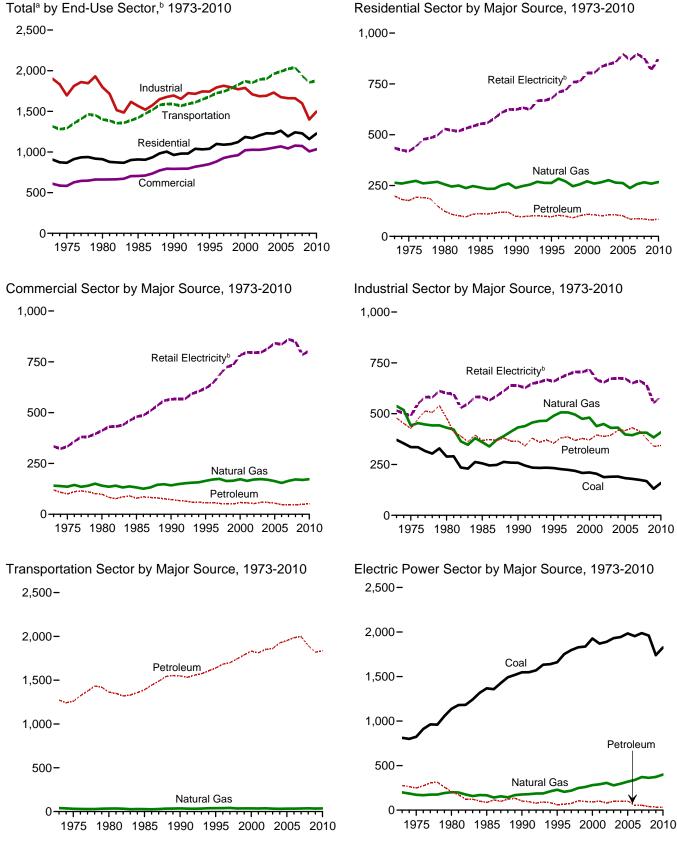
Finished motor gasoline, excluding fuel ethanol.

<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.

h Includes electric power sector use of geothermal energy and non-biomass waste. See Table 12.6.

Excludes emissions from biomass energy consumption. See Table 12.7.

Figure 12.2 Carbon Dioxide Emissions From Energy Consumption by Sector (Million Metric Tons of Carbon Dioxide)



<sup>&</sup>lt;sup>a</sup> Excludes emissions from biomass energy consumption.

total electricity retail sales.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#environment. Sources: Tables 12.2–12.6.

<sup>&</sup>lt;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

Table 12.2 Carbon Dioxide Emissions From Energy Consumption: Residential Sector

				Petrole	eum			
	Coal	Natural Gas <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Kerosene	<b>LPG</b> <sup>d</sup>	Total	Retail Elec- tricity <sup>e</sup>	Total <sup>f</sup>
1973 Total	9	264	147	16	36	199	435	907
1975 Total	6	266	132	12	32	176	419	867
1980 Total	3	256	96	8	20	124	529	911
1985 Total	4	241	80	11	20	111	553	909
	3	238	72	5	22	98	624	963
1990 Total	2	236 263	66	5	22 25	96 96	678	1.039
1995 Total	2	263 284	68	6	30	104	710	
1996 Total	2							1,099
1997 Total	4	270 247	64 56	7 8	29 27	99 91	719 759	1,090 1.097
1998 Total	- 1		61	8				
1999 Total	1	257			33	102	762	1,122
2000 Total	1	271	66	7	35	108	805	1,185
2001 Total	1	259	66	7	33	106	805	1,172
2002 Total	1	266	63	4	34	101	835	1,204
2003 Total	1	276	66	5	34	106	847	1,230
2004 Total	1	264	68	6	32	106	856	1,228
2005 Total	1	262	62	6	32	101	897	1,261
2006 Total	1	237	52	5	28	85	869	1,192
2007 Total	1	257	53	3	31	87	897	1,242
2008 Total	1	266	49	2	35	85	878	1,229
2009 January	(s)	51	6	(s)	3	9	85	146
February	(s)	41	5	(s)	3	8	67	116
March	(s)	33	5	(s)	3	8	62	102
April	(s)	21	4	(s)	3	6	53	80
May	(s)	11	3	(s)	3	5	56	72
June	(s)	8	2	(s)	2	5	70	82
July	(s)	6	3	(s)	3	5 5	83	95
August	(s)	6	3	(s)	3 3	6	85	97
	(s)	6	3	(s)	3	6	66	78
September		14	3		3	6	59	76 79
October	(s) (s)	20	3	(s)	3	7	57	84
November			5	(s)		9		
December Total	(s) <b>1</b>	41 <b>259</b>	44	(s) <b>2</b>	4 <b>35</b>	81	78 <b>819</b>	129 <b>1,159</b>
	(a)	52	7	(a)	4	10	91	R 153
2010 January	(s)	52 44		(s)			74	
February	(s)		6	(s)	3	10		128
March	(s)	33	4	(s)	3	7	65	105
April	(s)	18	3	(s)	3	5	51	74
May	(s)	1 <u>1</u>	3	(s)	3	6	59	76
June	(s)	7	3	(s)	3	6	R 79	93
July	(s)	6	3	(s)	3	6	97	109
August	(s)	6	2	(s)	3	5	R 96	R 107
September	(s)	.7	2	(s)	3	5	72	84
October	(s)	11	3	(s)	3	7	56	74
November	(s)	25	4	(s)	3	7	_ 56	_ 88
December	(s)	47	6	(s)	4	10	_R 81	R 139
Total	1	267	46	2	37	85	R 874	R 1,227
2011 January	(s)	53	5	(s)	4	9	88	<sup>R</sup> 149
February	(s)	42	5	(s)		8	68	R 118
March	(s)	33	4	(s)	3 3	7	60	100
April	(s)	19	2	(s)	3	5	54	78
May	(s)	11	2	(s)	3	5	59	74
June	(s)	7	2	(s)	3	5	76	89
July	(s)	6	2	(s)	3	5	97	108
August	(s)	6	3	(s)	3	6	R 93	R 105
September	(s)	7	3		3	6	69	82
			29	(s)	27	<b>5</b> 7	663	904
9-Month Total	(s)	184	29	1	21	5/	663	904
2010 9-Month Total	1	184	33	1	27	61	682	928

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.

a Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
b Natural gas, excluding supplemental gaseous fuels.
c Distillate fuel oil, excluding biodiesel.
d Liquefied petroleum gases.
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.
Excludes emissions from biomass energy consumption. See Table 12.7.

T Excludes emissions from biomass energy consumption. See Table 12.7. R=Revised. (s)=Less than 0.5 million metric tons.

Table 12.3 Carbon Dioxide Emissions From Energy Consumption: Commercial Sector

	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 1990 Total 1995 Total 1995 Total 1997 Total 1997 Total 1998 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2007 Total	15 14 11 13 12 11 12 19 10 9 9 9 8 10 9	141 136 141 132 142 164 171 174 165 173 164 171 173 170 163 154 164	47 43 38 46 39 35 35 32 31 32 36 37 32 35 34 33 29 28 27	5 4 3 2 1 2 2 2 2 2 2 2 1 1 1 2 2 1 1 1 2 2 2 1	9 8 6 6 7 8 8 7 9 9 9 9 10 10 8 8 8 10	6 8 7 8 1 2 3 3 2 3 3 3 4 3 3 3 4 3 3 4 3	NA NA O (S)	52 39 44 18 11 11 9 7 6 6 6 9 10 9 6 6	120 100 98 79 73 56 57 54 51 51 58 57 52 59 58 48 47 46	334 333 412 480 566 620 643 686 724 735 783 797 795 816 842 836 861 850	609 583 662 704 793 851 883 926 947 960 1,022 1,027 1,027 1,036 1,054 1,069 1,043 1,079
Populary September Cotober November Total	1 1 (s) (s) (s) (s) (s) (s) (s) 1 1	28 23 19 14 9 7 7 7 7 11 14 23 <b>169</b>	4 3 3 2 2 2 2 2 2 2 2 2 2 2 4 30	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) 0 0 0 (s) (s) (s) (s)	1 1 (s) (s) (s) (s) (s) (s) (s) (s)	6 5 5 4 3 3 3 3 4 4 4 4 6 <b>49</b>	69 58 60 58 62 70 73 76 66 65 60 68 <b>785</b>	103 87 85 75 75 80 84 86 77 80 78 98 <b>1,008</b>
2010 January February March April May June July August September October November December Total	1 1 (s) (s) (s) (s) (s) (s) (s) (s) (s)	28 25 19 12 9 7 7 7 7 10 16 26	4 4 3 2 2 2 2 2 2 2 1 2 3 4 3 3	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(S) (S) (S) (S) (O) (S) (S) (S) (S) (S)	1 1 (s) (s) (s) (s) (s) (s) (s) (s) (s)	7 6 4 3 3 4 3 3 3 4 4 6 51	66 60 59 8 57 66 74 80 69 8 62 61 68 8 804	R 102 92 83 73 R 78 86 90 91 79 77 82 101 <b>1,034</b>
Page 1 January	1 1 (s) (s) (s) (s) (s) (s) (s)	29 24 20 13 9 7 7 7 8 123	4 3 3 2 1 2 2 2 2 2 2	(s) (s) (s) (s) (s) (s) (s) (s) (s)	1 1 1 1 1 1 1 1 1	(s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) 0 0 0 0 0 (s)	1 1 (s) (s) (s) (s) (s) (s) (s)	6 5 4 3 2 3 3 4 4 4 <b>34</b>	65 56 R 59 57 64 71 79 78 66 <b>595</b>	100 85 83 73 76 82 R 90 89 78 <b>756</b>
2010 9-Month Total 2009 9-Month Total	4 4	120 121	22 23	(s) (s)	7 6	3 3	(s) (s)	5 4	37 36	613 591	774 753

a Metric tons of carbon dioxide can be converted to metric tons of carbon

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.

Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
 Natural gas, excluding supplemental gaseous fuels.
 Distillate fuel oil, excluding biodiesel.
 Liquefied petroleum gases.
 Finished motor gasoline, excluding fuel ethanol.
 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.

§ Excludes emissions from biomass energy consumption. See Table 12.7.

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

Carbon Dioxide Emissions From Energy Consumption: Industrial Sector

		Coal		Petroleum										
	Coal	Coke Net Imports	Natural Gas <sup>b</sup>	Distillate Fuel Oil <sup>C</sup>	Kero- sene	LPG <sup>d</sup>	Lubri- cants	Motor Gasoline <sup>e</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>f</sup>	Total	Retail Elec- tricity <sup>g</sup>	Total <sup>h</sup>
1973 Total 1975 Total 1980 Total 1985 Total 1990 Total 1995 Total 1995 Total 1996 Total 1997 Total 1997 Total 1998 Total 1998 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2007 Total 2007 Total 2007 Total 2007 Total 2007 Total 2008 Total	371 336 289 256 258 233 227 224 219 208 211 204 188 190 191 183 179 175	-1 2 -4 -2 1 7 3 5 8 7 7 3 7 6 16 5 7 7 3 5	538 442 431 360 432 490 506 495 474 481 439 449 431 398 398 406 407	106 97 96 81 84 82 86 88 88 88 87 95 88 83 83 83 92 92 92	11 9 13 3 1 1 1 1 2 1 1 2 2 2 3 2 2 1 (s)	43 39 61 58 45 46 48 39 48 56 49 54 50 55 51 54 42	76767776666666666666666666666666666666	18 16 11 15 13 14 14 15 14 11 21 22 23 26 25 26 21	49 48 45 54 67 70 68 77 81 74 77 76 82 80 82 80 76	144 117 105 57 31 24 24 21 16 14 17 17 12 10 16 13 15 17	100 97 142 93 127 114 132 138 125 130 117 132 127 140 142 141 150 148 130	478 427 480 369 365 381 386 378 379 395 388 394 419 417 430 415	515 490 601 583 659 678 694 706 704 719 667 654 672 673 650 662 642	1,902 1,696 1,797 1,566 1,695 1,743 1,796 1,796 1,778 1,709 1,686 1,731 1,675 1,661 1,662 1,598
Pebruary	12 12 12 10 10 10 10 11 11 11 11 11	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	36 32 33 31 30 29 30 31 30 32 33 36 383	11 8 8 5 6 6 4 4 6 7 8 8 80	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	5 4 4 3 3 3 3 3 4 5 5 <b>46</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	1 1 1 1 1 1 1 1 1 1 1 1	6 6 7 7 8 5 6 7 5 6 <b>7</b> 7	1 1 1 1 1 (s) 1 (s) 1 1 7	11 10 9 8 9 8 10 9 10 9 111	36 30 29 26 27 27 25 25 28 28 28 31	47 41 43 42 45 46 47 50 46 47 46 49 <b>551</b>	130 115 117 109 111 111 112 117 115 119 118 127 <b>1,401</b>
Pebruary	12 13 13 13 13 13 13 14 13 14 159	(s) (s) (s) (s) (s) (s) (s) (s) (s) -1 -1	38 35 R 35 32 33 32 33 33 32 33 34 38 408	66 9 86 55 4 7 9 7 8 9	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	5 5 4 3 3 3 3 3 4 4 6 47	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 4 6 5 5 5 5 6 6 5 6 5 6 5 6 5 6 5 6 5 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 9 11 11 10 10 10 11 11 10 9 9 10	27 26 32 30 27 27 25 30 31 27 30 32 344	46 44 R 46 45 51 R 52 R 54 R 55 48 47 48 50 R 587	R 123 118 127 121 124 R 124 R 125 131 R 125 R 121 R 125 R 134 R 1,497
2011 January	13 13 14 13 13 13 13 14 13 14	(S) (S) (S) (S) (S) (S) (S) (S)	39 35 37 34 34 33 33 34 33	10 7 10 7 8 8 4 7 8 <b>71</b>	(s) (s) (s) (s) (s) (s) (s) (s)	5 4 4 3 3 3 3 3 3 3 3 3 3	(s) (s) 1 (s) (s) (s) (s) (s) (s)	1 1 1 1 1 1 1 1 1	5 3 5 5 6 5 7 5 <b>46</b>	1 1 1 1 1 (s) (s)	10 9 12 10 9 10 11 10 9	33 26 33 28 28 28 26 29 27 259	48 42 46 45 R 48 50 54 53 47 <b>433</b>	R 134 117 130 120 124 R 124 126 131 120 <b>1,126</b>
2010 9-Month Total 2009 9-Month Total	118 97	1 -2	303 282	60 57	(s) (s)	34 31	4 4	12 12	47 57	6 5	91 85	254 252	441 407	1,117 1,037

a Metric tons of carbon dioxide can be converted to metric tons of carbon

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.

equivalent by multiplying by 12/44.

b Natural gas, excluding supplemental gaseous fuels.

Natural gas, excluding supported to Distillate fuel oil, excluding biodiesel.
 Liquefied petroleum gases.

Liquefied petroleum gases.
 e Finished motor gasoline, excluding fuel ethanol.
 f Aviation gasoline blending components, crude oil, motor gasoline blending components, pentanes plus, petrochemical feedstocks, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products.
 g Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See

Tables 7.6 and 12.6.

h Excludes emissions from biomass energy consumption. See Table 12.7.

Table 12.5 Carbon Dioxide Emissions From Energy Consumption: Transportation Sector

			Petroleum									
	Coal	Natural Gas <sup>b</sup>	Aviation Gasoline	Distillate Fuel Oil <sup>c</sup>	Jet Fuel	<b>LPG</b> <sup>d</sup>	Lubri- cants	Motor Gasoline <sup>e</sup>	Residual Fuel Oil	Total	Retail Elec- tricity <sup>f</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 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2007 Total 2007 Total 2007 Total	(s) (hhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhh	39 32 34 28 36 38 39 41 35 36 35 37 33 32 33 33 35 37	65 44 33 33 33 32 22 22 22 22 22 22 22 22	163 155 204 232 268 307 327 342 352 366 378 387 394 414 434 444 469 472 440	152 145 155 178 223 222 234 238 245 254 243 237 231 240 246 240 238 226	3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6666777766655655	886 889 881 908 967 1,029 1,047 1,057 1,090 1,115 1,121 1,127 1,158 1,161 1,185 1,186 1,194 1,201 1,146	57 56 110 62 80 72 67 56 53 52 70 46 53 45 58 66 71 78 72	1,273 1,258 1,363 1,391 1,548 1,639 1,683 1,699 1,743 1,789 1,833 1,813 1,851 1,926 1,926 1,953 1,999 1,895	222333333444555555555555555555555555555	1,315 1,292 1,400 1,421 1,588 1,681 1,725 1,744 1,782 1,828 1,872 1,852 1,892 1,892 1,991 2,022 2,040 1,937
2009 January	( h h ) ( h h ) ( h h h ) ( h h h ) ( h h h h	4 3 3 3 2 2 2 2 3 2 2 2 3 4 4	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	32 29 33 35 35 36 36 34 35 33 33	16 15 18 17 17 19 18 17 16 17	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	93 86 96 94 98 95 99 100 92 96 92 95 <b>1,137</b>	7 4 7 8 4 6 3 5 3 6 5 7 <b>6</b> 4	149 135 154 152 154 157 157 159 147 155 147 153 1,818	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	153 139 158 155 157 157 160 162 150 158 150 158 1,857
2010 January  February  March  April  May  June  July  August  September  October  November  December  Total	(h) (h) (h) (h) (h) (h) (h) (h) (h) (h)	4 4 3 3 2 2 3 3 2 3 3 4 36	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	31 29 35 35 36 36 37 37 37 37 37 34 35	17 15 18 17 18 19 19 19 18 17 17	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	91 82 94 94 98 96 99 98 94 96 90 94	656765656665 <b>69</b>	145 133 154 154 R 159 156 162 161 155 157 149 153	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	150 137 157 157 161 159 165 165 157 160 152 157
2011 January  February  March  April  May  June  July  August  September  9-Month Total	(h) (h) (h) (h) (h) (h) (h) (h) (h)	4 4 3 3 3 2 3 3 2 27	(s) (s) (s) (s) (s) (s) (s) (s)	33 30 36 35 37 37 37 39 36	17 15 17 17 18 19 18 19 17	(s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) 1 (s) (s) (s) (s) (s) (s)	89 83 93 90 93 93 96 94 90 <b>821</b>	7 7 7 7 6 5 3 3 6 <b>51</b>	147 135 153 150 155 155 155 156 149 <b>1,356</b>	(s) (s) (s) (s) (s) (s) (s) (s)	152 139 157 154 R 158 157 158 160 152 <b>1,386</b>
2010 9-Month Total 2009 9-Month Total	(h)	27 25	1 1	316 302	158 154	1 1	4 4	846 854	52 47	1,378 1,363	4 4	1,408 1,392

a Metric tons of carbon dioxide can be converted to metric tons of carbon

R=Revised. (s)=Less than 0.5 million metric tons.

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 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

<sup>a Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
b Natural gas, excluding supplemental gaseous fuels.
c Distillate fuel oil, excluding biodiesel.
d Liquefied petroleum gases.
e Finished motor gasoline, excluding fuel ethanol.
f Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 7.6 and 12.6.
g Excludes emissions from biomass energy consumption. See Table 12.7.
h Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.</sup> 

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 Dioxidea)

				Petro	leum				
	Coal	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>
1973 Total	812	199	20	2	254	276	NA NA	NA	1,286
1975 Total	824	172	17	(s)	231	248	NA NA	NA NA	1,244
1980 Total	1,137	200	12	1	194	207	NA NA	NA NA	1,544
1985 Total	1,367	166	6	i	79	86	NA NA	NA NA	1,619
1990 Total	1,548	176	7	3	92	102	(s)	6	1,831
	,	228	8	8	45				1,960
1995 Total	1,661					61	(s)	10	
1996 Total	1,752	205	8	8	50	66	(s)	10	2,033
1997 Total	1,797	219	8	10	56	75	(s)	10	2,101
1998 Total	1,828	248	10	13	82	105	(s)	10	2,192
1999 Total	1,836	260	10	11	76	97	(s)	10	2,204
2000 Total	1,927	281	13	10	69	91	(s)	10	2,310
2001 Total	1,870	290	12	11	79	102	(s)	11	2,273
2002 Total	1,890	306	9	18	52	79	(s)	13	2,288
2003 Total	1,931	278	12	18	69	98	(s)	11	2,319
2004 Total	1,943	297	8	23	69	100	(s)	11	2,352
2005 Total	1,984	319	8	25	69	102	(s)	11	2,417
2006 Total	1,954	338	5	22	28	56	(s)	12	2,359
2007 Total	1,987	372	7	17	31	55	(s)	11	2,426
		362	5		19	40		12	
2008 Total	1,959	302	3	16	19	40	(s)	12	2,374
2009 January	169	26	1	1	3	5	(s)	1	201
February	138	25	(s)	1	1	3	(s)	1	167
March	134	27	1	1	1	3	(s)	1	165
April	125	24	(s)	1	1	2	(s)	1	153
May	131	28	(s)	1	1	3	(s)	1	163
June	147	35	(s)	1	1	3	(s)	1	186
July	157	42	(s)	1	1	3	(s)	1	203
August	162	46	(s)	1	i	3	(s)	i	211
September	137	37	(s)	i 1	1	3	(s)	i	178
	139	29		1	1	2		1	171
October		29 25	(s)	•	•	2	(s)	•	
November	136		(s)	1	1		(s)	1	164
December  Total	165 <b>1,741</b>	28 <b>373</b>	(s) 5	1 <b>14</b>	1 <b>14</b>	2 <b>34</b>	(s) (s)	1 <b>11</b>	196 <b>2,159</b>
	,						''		,
2010 January	_ 169	R 30	1	1	1	4	(s)	1	_ 204
February	<sup>R</sup> 150	26	(s)	1	1	2	(s)	1	<sup>R</sup> 179
March	143	R 25	(s)	1	1	2	(s)	1	<sup>R</sup> 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	1	2	4	(s)	1	206
July	177	R 48	1	2	2	4	(s)	1	R 230
August	177	51	(s)	1	2	3	(s)	i	232
September	148	38	(s)	i	1	2	(s)	i	189
October	R 132	31	(s)	1	1	2	(s)	i	166
November	136	27	(s)	1	1	2	(s)	1	165
December	165	R 31	1	1	i	3	(s)	i	200
Total	R 1,827	<b>399</b>	6	15	12	33	(s)	11	R <b>2,270</b>
		Paa	]						
<b>2011</b> January	168	R 29	1	2	1	3	(s)	1	R 201
February	137	26	(s)	1	1	2	(s)	1	166
March	135	26	(s)	1	1	2	(s)	1	164
April	125	28	(s)	1	1	2	(s)	1	156
May	137	31	(s)	1	1	2	(s)	1	<sup>R</sup> 171
June	157	38	(s)	1	1	2	(s)	1	198
July	176	51	(s)	1	1	3	(s)	1	230
August	172	50	(s)	1	1	2	(s)	1	225
September	143	37	(s)	<u>i</u>	i	2	(s)	i	183
9-Month Total	1,349	317	4	11	6	20	(s)	8	1,695
2010 0 Month Total	4 202	244	4	44	10	26	(2)	8	4 720
2010 9-Month Total 2009 9-Month Total	1,393 1,301	311 290	4	11 12	10 12	26 28	(s) (s)	8 8	1,739 1,628
LUUJ J-WUHILII TULAI	1,301	250		14	14	20	(5)	0	1,040

<sup>&</sup>lt;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.

all available data beginning in 1973.

Sources: See end of section.

Municipal solid waste from non-biogenic sources, and tire-derived fuels.
 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.

<sup>•</sup> 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

Table 12.7 Carbon Dioxide Emissions From Biomass Energy Consumption

			By Source			By Sector						
	Woodb	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 1995 Total 1995 Total 1995 Total 1996 Total 1997 Total 1998 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2007 Total 2007 Total 2008 Total	143 140 232 252 208 222 229 222 205 208 212 188 187 188 199 200 198 197	(s) (s) (s) 14 24 30 32 30 30 29 27 33 36 35 37 40	NA NA NA 3 4 8 6 7 8 8 9 10 12 16 20 23 31 39 55	NA NA NA NA NA NA NA NA NA NA (S) (S) 2 3 3	143 141 232 270 237 260 266 259 242 245 248 231 235 240 255 261 267 277 289	33 40 80 95 54 49 51 40 36 37 39 35 36 38 38 40 47 40 42	1 1 2 2 8 9 10 10 9 9 9 9 9 10 10 9 9 9 9 9 9	109 100 150 168 147 166 170 172 160 161 147 144 141 151 150 151 146 140	NA NA NA 3 4 8 6 7 8 8 9 10 12 16 20 23 33 41 57	(s) (s) (s) 1 23 28 30 30 30 30 30 31 35 37 36 37 38 39 40	143 141 232 270 237 260 266 259 242 245 248 231 235 240 255 261 267 277 289	
Page 1 Pa	15 14 15 14 14 15 16 15 15 15	3 3 4 3 3 4 4 3 3 4 4 4 4	5 4 5 5 5 5 6 6 6 5 6 6 6 <b>62</b>	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	23 21 23 22 23 23 25 25 24 25 24 25 24 25 28	3 3 3 3 3 3 3 3 3 3 3 3	1 1 1 1 1 1 1 1 1 1 1 1	11 10 10 10 10 10 11 11 11 11 11 11 11	5 4 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6	3 3 3 3 3 4 4 4 3 3 3 4 4 4 4 4 4 4 4 4	23 21 23 22 23 23 25 25 24 25 24 25 24 25 28	
Partial January	16 14 16 15 15 16 16 R 16 R 16 R 16 15 16	R 4 3 R 4 R 4 4 4 4 3 R 4 R 4 R 4 R 4 R 4	6 5 6 6 6 6 6 6 6 6 6 73	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	25 23 25 25 25 26 26 25 R 26 25 R 27 R 304	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 1 1 1 1 1 1 1 1 1 1 1 1	12 11 12 11 R 11 R 11 12 12 12 12 12 12 139	6 5 6 6 6 6 6 6 6 6 6	R 4 3 R 4 4 4 3 3 R 4 4 R 42	25 23 25 25 25 25 26 26 25 R 26 25 R 27 R 304	
2011 January	16 14 15 R 15 R 16 R 16 R 16 R 16 15	R 4 R 3 R 4 R 3 R 4 A 4 4 4 32	6 6 6 6 6 7 6 <b>54</b>	(s) (s) (s) (s) (s) 1 1 1 1 5	R 26 R 24 R 26 24 25 26 26 R 27 26 <b>229</b>	3 3 3 3 3 3 3 3 29	1 1 1 1 1 1 1 1 1 7	12 R 11 R 12 11 11 R 12 R 12 R 12 12	6 6 6 7 7 7 7 7 <b>58</b>	3 3 3 3 3 4 8 4 3 3 3	R 26 R 24 R 26 24 25 26 26 R 27 26 <b>229</b>	
2010 9-Month Total 2009 9-Month Total	138 131	32 30	54 45	2 2	226 209	29 30	8 8	103 94	55 46	32 30	226 209	

<sup>&</sup>lt;sup>a</sup> Metric tons of carbon dioxide can be converted to metric tons of carbon

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 ond of section. See Note: , Enlissing to 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.

equivalent by multiplying by 12/44.

b Wood and wood-derived fuels.

Wood and wood-derived ruels.
 Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.
 Fuel ethanol minus denaturant.
 Commercial sector, including commercial combined-heat-and-power (CHP)

and commercial electricity-only plants.

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

g The electric power sector comprises electricity-only and

g 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.

# **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<sub>2</sub> emissions. The vast majority of CO<sub>2</sub> emissions come from fossil fuel combustion, with smaller amounts from the nonfuel use of fossil fuels, as well as from electricity generation using geothermal energy and non-biomass waste. Other sources of CO<sub>2</sub> 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<sub>2</sub> emissions from energy consumption, including the nonfuel use of fossil fuels (excluded are estimates for CO<sub>2</sub> 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<sub>2</sub> emissions from biomass can potentially lead to confusion in accounting for and understanding the flow of CO<sub>2</sub> emissions within energy and nonenergy systems. In recognition of this issue, reporting of CO<sub>2</sub> emissions from biomass combustion alongside other energy-related CO<sub>2</sub> 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<sub>2</sub> emissions from biomass and energy-related CO<sub>2</sub> 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 fossil-based petroleum denaturant, to make the fuel ethanol undrinkable. For 1993-2008, petroleum denaturant is double counted in the PSA product supplied statistics, in both the original product category-e.g., pentanes plus-and also in the finished motor gasoline category; for this time period for MER Section 12, petroleum denaturant is removed along with the fuel ethanol from motor gasoline, but left in the original product. Beginning in 2009, petroleum denaturant is counted only in the PSA/PSM product supplied statistics for motor gasoline; for this time period for MER Section 12, petroleum denaturant is left in motor gasoline.)

# Step 3. Remove Carbon Sequestered by Nonfuel Use

The following fuels have industrial nonfuel uses as chemical feedstocks and other products: coal, natural gas, asphalt and road oil, distillate fuel oil, liquefied petroleum gases (ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene), lubricants (which have industrial and transportation nonfuel uses), naphthas for petrochemical feedstock use, other oils for petrochemical feedstock use, pentanes plus, petroleum coke, residual fuel oil, special naphthas, still gas, waxes, and miscellaneous petroleum products. In the nonfuel use of these fuels, some of the carbon is sequestered, and is thus subtracted from the fuel consumption values in Steps 1 and 2.

Estimates of annual nonfuel use and associated carbon sequestration are 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(2008).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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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.



### **Appendix**

### **British Thermal Unit Conversion Factors**

The thermal conversion factors presented in the following tables can be used to estimate the heat content in British thermal units (Btu) of a given amount of energy measured in physical units, such as barrels or cubic feet. For example, 10 barrels of asphalt has a heat content of approximately 66.36 million Btu (10 barrels x 6.636 million Btu per barrel = 66.36 million Btu).

The heat content rates (i.e., thermal conversion factors) provided in this section represent the gross (or higher or upper) energy content of the fuels. Gross heat content rates are applied in all Btu calculations for the *Monthly Energy Review* and are commonly used in energy calculations in the United States; net (or lower) heat content rates are typically used in European energy calculations. The difference between the two rates is the amount of energy that is consumed to vaporize water that is created during the combustion process. Generally, the difference ranges from 2 percent to 10 percent, depending on the specific fuel and its hydrogen content. Some fuels, such as unseasoned wood, can be more than 40 percent different in their gross

and net heat content rates. See "Heat Content" and "British Thermal Unit (Btu)" in the Glossary for more information.

Thermal conversion factors for hydrocarbon mixes (Table A1) are weighted averages of the thermal conversion factors for each hydrocarbon included in the mix. For example, in calculating the thermal conversion factor for a 60-40 butane-propane mixture, the thermal conversion factor for butane is weighted 1.5 times the thermal conversion factor for propane.

In general, the annual thermal conversion factors presented in Tables A2 through A6 are computed from final annual data or from the best available data and labeled "preliminary." Often, the previous year's factor is used as a preliminary value until data become available to calculate the factor appropriate to the year. The source of each factor is described in the section entitled "Thermal Conversion Factor Source Documentation," which follows Table A6 in this appendix.

Table A1. Approximate Heat Content of Petroleum Products (Million Btu per Barrel)

Petroleum Product	Heat Content	Petroleum Product	Heat Content
Asphalt	6.636	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 Gasolined		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>&</sup>lt;sup>a</sup> 60 percent butane and 40 percent propane.

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

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

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

<sup>&</sup>lt;sup>b</sup> Does not include biodiesel. See Table A3 for biodiesel heat contents.

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

<sup>&</sup>lt;sup>d</sup> See Table A3 for motor gasoline weighted heat contents beginning in 1994, and for fuel ethanol heat contents.

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

	Pro	duction		Imports			Exports	
	Crude Oil <sup>a</sup>	Natural Gas Plant Liquids	Crude Oil <sup>a</sup>	Petroleum Products	Total	Crude Oil <sup>a</sup>	Petroleum Products	Total
1973	5.800	4.049	5.817	5.983	5.897	5.800	5.752	5.752
1974	5.800	4.011	5.827	5.959	5.884	5.800	5.773	5.774
1975	5.800	3.984	5.821	5.935	5.858	5.800	5.747	5.748
1976	5.800	3.964	5.808	5.980	5.856	5.800	5.743	5.745
1977	5.800	3.941	5.810	5.908	5.834	5.800	5.796	5.797
1978	5.800	3.925	5.802	5.955	5.839	5.800	5.814	5.808
979	5.800	3.955	5.810	5.811	5.810	5.800	5.864	5.832
1980	5.800	3.914	5.812	5.748	5.796	5.800	5.841	5.820
1981	5.800	3.930	5.818	5.659	5.775	5.800	5.837	5.821
	5.800	3.872	5.826	5.664	5.775	5.800	5.829	5.820
1982								
1983	5.800	3.839	5.825	5.677	5.774	5.800	5.800	5.800
1984	5.800	3.812	5.823	5.613	5.745	5.800	5.867	5.850
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
988	5.800	3.800	5.900	5.618	5.820	5.800	5.842	5.840
989	5.800	3.826	5.906	5.641	5.833	5.800	5.869	5.857
1990	5.800	3.822	5.934	5.614	5.849	5.800	5.838	5.833
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
1994	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
996	5.800	3.777	5.947	5.468	5.847	5.800	5.728	5.736
1997	5.800	3.762	5.954	5.469	5.862	5.800	5.726	5.734
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
2000	5.800	3.733	5.959	5.432	5.849	5.800	5.651	5.658
2001	5.800	3.735	5.976	5.443	5.862	5.800	5.751	5.752
2002	5.800	3.729	5.971	5.451	5.863	5.800	5.687	5.688
2003	5.800	3.739	5.970	5.438	5.857	5.800	5.739	5.740
2004	5.800	3.724	5.981	5.475	5.863	5.800	5.753	5.754
2005	5.800	3.724	5.977	5.474	5.845	5.800	5.741	5.743
2006	5.800	3.712	5.980	5.454	5.842	5.800	5.723	5.724
2007	5.800	3.701	5.985	5.503	5.862	5.800	5.749	5.750
2007	5.800	3.701	5.990	5.503 5.479	5.862 5.866	5.800	5.749 5.762	5.762
2009	5.800	3.692	5.988	5.525	5.882	5.800	5.737	5.738
2010	5.800	3.674	5.989	5.557	5.894	5.800	5.670	5.672
2011 <sup>E</sup>	5.800	3.674	5.989	5.557	5.894	5.800	5.670	5.672

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

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	troleum <sup>a</sup> C	onsumption b	y Sector		Liquefied	Mater		Fuel		Biodissol
	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>	Petroleum Gases Con- sumption <sup>f</sup>	Motor Gasoline Con- sumption <sup>g</sup>	Fuel Ethanol <sup>h</sup>	Ethanol Feed- stock Factor <sup>i</sup>	Biodiesel	Biodiesel Feed- stock Factor
1072	5.258	5.689	5.557	F 200	6.245	5.515	3.746	5.253	NA	A/A	NA	NA
1973 1974	5.258	5.683	5.525	5.396 5.394	6.238	5.504	3.746	5.253	NA NA	NA NA	NA NA	NA NA
1974	5.253		5.523	5.392	6.250		3.730	5.253				NA NA
1976	5.277	5.649 5.672	5.523	5.396	6.251	5.494 5.504	3.713	5.253	NA NA	NA NA	NA NA	NA NA
1977	5.285		5.539		6.249		3.677	5.253	NA NA			NA NA
1977	5.287	5.682		5.401		5.518				NA	NA NA	NA NA
		5.665	5.536	5.405	6.251	5.519	3.669	5.253	NA	NA	NA NA	NA NA
1979	5.365 5.321	5.717	5.409	5.429	6.258	5.494	3.680	5.253	NA 2.562	NA 6 F06	NA	NA NA
1980		5.751	5.366	5.441	6.254	5.479	3.674	5.253	3.563	6.586	NA	NA NA
1981	5.283	5.693	5.299	5.433	6.258	5.448	3.643	5.253	3.563	6.562	NA	
1982	5.266	5.698	5.247	5.423	6.258	5.415	3.615	5.253	3.563	6.539	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	6.2 <i>4</i> 2	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	<i>5.4</i> 33
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
2003	4.907	5.307	5.142	5.409	6.182	5.340	3.629	5.207	3.563	6.116	5.359	5.433
2004	4.953	5.328	5.144	5.421	6.192	5.350	3.618	5.215	3.563	6.089	5.359	<i>5.4</i> 33
2005	4.916	5.364	5.178	5.427	6.188	5.365	3.620	5.218	3.563	6.063	5.359	<i>5.4</i> 33
2006	4.894	5.310	5.160	5.431	6.143	5.353	3.605	5.218	3.563	6.036	5.359	<i>5.4</i> 33
2007	4.850	5.298	5.127	5.434	6.151	5.346	3.591	5.219	3.563	6.009	5.359	<i>5.4</i> 33
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	E4.685	E5.267	E4.995	E5.420	P6.085	5.297	3.557	5.218	3.561	5.930	5.359	5.433
2011	E4.685	E5.267	E4.995	E5.420	E6.085	E5.297	E3.557	E5.218	E3.561	5.904	5.359	5.433

<sup>&</sup>lt;sup>a</sup> Petroleum products supplied, including natural gas plant liquids and crude oil burned directly as fuel. Quantity-weighted averages of the petroleum products included in each category are calculated by using heat content values shown in Table A1.

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

Note: The 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.

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

<sup>&</sup>lt;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.

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

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

<sup>&</sup>lt;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 A3.

<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.

i 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.

j Soybean oil input to the production of biodiesel (million Btu soybean oil per barrel biodiesel), used as the factor to estimate total biomass inputs to the production of biodiesel. It is assumed that 7.65 pounds of soybean oil are needed to produce one gallon of biodiesel, and 5.433 million Btu of soybean oil are needed to produce one barrel of biodiesel. Soybean oil is assumed to have a gross heat content of 16,909 Btu per pound, or 5.483 million Btu per barrel. Biodiesel is assumed to have a gross heat content of 17,253 Btu per pound, or 5.359 million Btu per barrel.

Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Produ	ction		Consumption <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	1,020	1,026	1,021	1,026	1,014
976	1,093	1,020	1,019	1,023	1,020	1,025	1,013
977	1,093	1,021	1,019	1,029	1,021	1,026	1,013
978	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
980	1,098	1,026	1,024	1,035	1,026	1,022	1,013
981	1,103	1,027	1,025	1,035	1,027	1,014	1,011
982	1.107	1.028	1.026	1,036	1.028	1.018	1,011
983	1,115	1,031	1,031	1,030	1,031	1,024	1,010
984	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
987	1,112	1,031	1,029	1,032	1,031	999	1,011
88	1,112	1,029	1,029	1.028	1,029	1,002	1,018
	1,109	1,029	1,029	c <sub>1,028</sub>	1,029	1,002	1,018
89	1,107	1,029	1,030	1,027	1,029	,	1,019
990	1,105	1,029	1,030	1,027	1,029	1,012 1,014	1,018
91		,				,	
92	1,110	1,030	1,031	1,025	1,030	1,011	1,018
93	1,106	1,027	1,028	1,025	1,027	1,020	1,016
94	1,105	1,028	1,029	1,025	1,028	1,022	1,011
95	1,106	1,026	1,027	1,021	1,026	1,021	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	1,023	1,011
98	1,109	1,031	1,033	1,024	1,031	1,023	1,011
99	1,107	1,027	1,028	1,022	1,027	1,022	1,006
00	1,107	1,025	1,026	1,021	1,025	1,023	1,006
001	1,105	1,028	1,029	1,026	1,028	1,023	1,010
002	1,106	1,027	1,029	1,020	1,027	1,022	1,008
003	1,106	1,028	1,029	1,025	1,028	1,025	1,009
04	1,104	1,026	1,026	1,027	1,026	1,025	1,009
05	1,104	1,028	1,028	1,028	1,028	1,025	1,009
06	1,103	1,028	1,028	1,028	1,028	1,025	1,009
07	1,104	1,029	1,030	1,027	1,029	1,025	1,009
80	1,100	1,027	1,027	1,027	1,027	1,025	1,009
009	_1,101	_1,025	_1,025	_1,025	_1,025	_1,025	_1,009
)10	E1,101	E1,024	E1,025	P1,022	E1,024	E1,025	E1,009
)11	E1,101	E1,024	E1,025	E1.022	E1.024	E1,025	E1,009

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

 <sup>&</sup>lt;sup>a</sup> Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels.
 <sup>b</sup> Residential, commercial, industrial, and transportation sectors.
 <sup>c</sup> Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.
 P=Preliminary. E=Estimate.
 Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.
 Web Page: http://www.eia.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
				С	onsumption					
		Wests	Residential Industrial Sector Electric							
	Production <sup>a</sup>	Waste Coal Supplied <sup>b</sup>	Commercial Sectors	Coke Plants	Other <sup>c</sup>	Power Sector <sup>d,e</sup>	Total	Imports	Exports	Imports and Exports
1973	23.376	NA	22.831	26.780	22.586	22.246	23.057	25.000	26.596	24.800
1974	23.072	NA	22.479	26.778	22.419	21.781	22.677	25.000	26.700	24.800
1975	22.897	NA	22.261	26.782	22.436	21.642	22.506	25.000	26.562	24.800
1976	22.855	NA	22.774	26.781	22.530	21.679	22.498	25.000	26.601	24.800
1977	22.597	NA	22.919	26.787	22.322	21.508	22.265	25.000	26.548	24.800
1978	22.248	NA	22.466	26.789	22.207	21.275	22.017	25.000	26.478	24.800
	22.454		22.242				22.100			
1979		NA NA		26.788	22.452	21.364 21.295		25.000	26.548	24.800
1980	22.415		22.543	26.790	22.690		21.947	25.000	26.384	24.800
1981 1982	22.308	NA	22.474	26.794	22.585	21.085	21.713	25.000	26.160	24.800
	22.239	NA	22.695	26.797	22.712	21.194	21.674	25.000	26.223	24.800
1983	22.052	NA	22.775	26.798	22.691	21.133	21.576	25.000	26.291	24.800
1984	22.010	NA	22.844	26.799	22.543	21.101	21.573	25.000	26.402	24.800
1985	21.870	NA	22.646	26.798	22.020	20.959	21.366	25.000	26.307	24.800
1986	21.913	NA	22.947	26.798	22.198	21.084	21.462	25.000	26.292	24.800
1987	21.922	NA	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
1988	21.823	NA	23.571	26.799	22.360	20.900	21.328	25.000	26.299	24.800
1989	21.765	<sup>b</sup> 10.391	23.650	26.800	22.347	<sup>d</sup> 20.898	21.307	25.000	26.160	24.800
1990	21.822	9.303	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
1991	21.681	10.758	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
1992	21.682	10.396	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
1993	21.418	10.638	22.994	26.800	22.123	20.677	21.010	25.000	26.335	24.800
1994	21.394	11.097	23.112	26.800	22.068	20.589	20.929	25.000	26.329	24.800
1995	21.326	11.722	23.118	26.800	21.950	20.543	20.880	25.000	26.180	24.800
1996	21.322	12.147	23.011	26.800	22.105	20.547	20.870	25.000	26.174	24.800
1997	21.296	12.158	22.494	26.800	22.172	20.518	20.830	25.000	26.251	24.800
1998	21.418	12.639	21.620	27.426	23.164	20.516	20.881	25.000	26.800	24.800
1999	21.070	12.552	23.880	27.426	22.489	20.490	20.818	25.000	26.081	24.800
2000	21.072	12.360	25.020	27.426	22.433	20.511	20.828	25.000	26.117	24.800
2001	<sup>a</sup> 20.772	12.169	24.909	27.426	22.622	20.337	20.671	25.000	25.998	24.800
2002	20.673	12.165	22.962	27.426	22.562	20.238	20.541	25.000	26.062	24.800
2003	20.499	12.360	22.242	27.425	22.468	20.082	20.387	25.000	25.972	24.800
2004	20.424	12.266	22.324	27.426	22.473	19.980	20.290	25.000	26.108	24.800
2004			22.324							
2005	20.348	12.093 12.080	22.342 22.066	26.279	22.178 22.050	19.988	20.246	25.000	25.494	24.800 24.800
2006	20.310			26.271		19.931	20.181	25.000	25.453	
2007	20.340	12.090	22.069	26.329	22.371	19.909	20.168	25.000	25.466	24.800
2008	20.208	12.121	21.887	26.281	22.348	19.713	19.977	25.000	25.399	24.800
2009	19.969	11.862	22.059	26.334	21.893	19.521	19.742	25.000	25.633	24.800
2010 <sup>P</sup>	20.192	11.755	21.254	26.296	21.909	19.612	19.858	25.000	25.713	24.800
2011 <sup>E</sup>	20.192	11.755	21.254	26.296	21.909	19.612	19.858	25.000	25.713	24.800

a Beginning in 2001, includes a small amount of refuse recovery (coal recaptured from a refuse mine, and cleaned to reduce the concentration of noncombustible

materials).

b Waste coal (including fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and a country dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and a country dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and a country dam and the same amount of waste coal included in "Consumption."

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

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

<sup>&</sup>lt;sup>e</sup> Electric power sector factors are for anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and, beginning in 1998, coal synfuel.

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

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

Web Page: http://www.eia.gov/totalenergy/data/monthly/#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 I	Heat Rates <sup>a</sup> for Electricity N	let Generation	
	Fossil Fuels <sup>b,c</sup>	<b>N</b> uclear <sup>d</sup>	Geothermal <sup>e</sup>	Heat Content <sup>f</sup> o Electricity <sup>g</sup>
973	10.389	10.903	21.674	3.412
974	10,442	11,161	21,674	3,412
975	10.406	11.013	21,611	3,412
976	10,373	11,047	21,611	3,412
977	10,435	10.769	21,611	3,412
978	10,361	10,769	21,611	3,412
		•	,	· '
979	10,353	10,879	21,545	3,412
980	10,388	10,908	21,639	3,412
981	10,453	11,030	21,639	3,412
982	10,454	11,073	21,629	3,412
983	10,520	10,905	21,290	3,412
984	10,440	10,843	21,303	3,412
985	10,447	10,622	21,263	3,412
986	10,446	10,579	21,263	3,412
987	10,419	10,442	21,263	3,412
988	10,324	10,602	21,096	3,412
989	10,432	10,583	21,096	3,412
990	10,402	10,582	21,096	3,412
991	10,436	10,484	20.997	3.412
992	10.342	10.471	20.914	3.412
993	10,309	10,504	20,914	3,412
994	10,316	10.452	20.914	3.412
995	10,312	10,507	20,914	3,412
996	10,340	10,503	20,960	3,412
997	10,213	10,494	20,960	3,412
998	10,197	10,494	,	· '
999	10,197		21,017	3,412
		10,450	21,017	3,412
000	10,201	10,429	21,017	3,412
001	<sup>c</sup> 10,333	10,443	21,017	3,412
002	10,173	10,442	21,017	3,412
003	10,241	10,421	21,017	3,412
004	10,022	10,427	21,017	3,412
005	9,999	10,436	21,017	3,412
006	9,919	10,436	21,017	3,412
007	9,884	10,485	21,017	3,412
008	9,854	10,453	21,017	3,412
009	9,760	10,460	21,017	3,412
010	<sup>R</sup> 9,756	R 10,452	21,017	3,412
011	RE 9.756	RE 10.452	E 21,017	3,412

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

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

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

b Used as the thermal conversion factor for hydro, geothermal, solar thermal/photovoltaic, and wind electricity net generation to approximate the quantity of fossil fuels replaced by these sources. Through 2000, also used as the thermal conversion factor for wood and waste electricity net generation at electric utilities; beginning in 2001, Btu data for wood and waste at electric utilities are available from surveys.

<sup>&</sup>lt;sup>©</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.

d Used as the thermal conversion factor for nuclear electricity net generation.

<sup>&</sup>lt;sup>e</sup> Technology-based thermal conversion factors for geothermal electricity net generation. Beginning with the April 2011 *Monthly Energy Review*, the technology-based geothermal heat rates are no longer used in Btu calculations in this report, but they are retained on this table for purposes of comparison.

f See "Heat Content" in Glossary.

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

# 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/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Consumption, Electric Power Sector**. Calculated annually by EIA as the average of the thermal

conversion factors for all petroleum products consumed by the electric power sector weighted by the quantities consumed by the electric power sector. Data are from Form EIA-923, "Power Plant Operations Report," and predecessor forms.

**Petroleum Consumption, Industrial Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the industrial sector weighted by the estimated quantities consumed by the industrial sector. The quantities of petroleum products consumed by the industrial sector are estimated in the State Energy Data System—see documentation at http://www.eia.gov/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Consumption, Residential Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the residential sector weighted by the estimated quantities consumed by the residential sector. The quantities of petroleum products consumed by the residential sector are estimated in the State Energy Data System—see documentation at http://www.eia.gov/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Consumption, Total.** Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed weighted by the quantities consumed.

Petroleum Consumption, Transportation Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the transportation sector weighted by the estimated quantities consumed by the transportation sector. The quantities of petroleum products consumed by the transportation sector are estimated in the State Energy Data System—see documentation at

http://www.eia.gov/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Products Exports.** Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product exported weighted by the quantities exported.

**Petroleum Products Imports.** Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product imported weighted by the quantities imported.

**Plant Condensate**. Estimated to be 5.418 million Btu per barrel by EIA from data provided by McClanahan Consultants, Inc., Houston, Texas.

**Propane**. EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Residual Fuel Oil.** EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in the

Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

**Road Oil.** EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel, which was assumed to be equal to that of asphalt (see **Asphalt**) and was first published by the Bureau of Mines in the *Petroleum Statement, Annual, 1970*.

**Special Naphthas.** EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel, which was assumed to be equal to that of the total gasoline (aviation and motor) factor and was first published in the *Petroleum Statement, Annual, 1970*.

**Still Gas.** EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel, first published in the *Petroleum Statement*, *Annual*, 1970.

**Total Petroleum Exports**. Calculated annually by EIA as the average of the thermal conversion factors for crude oil and each petroleum product exported weighted by the quantities exported. See **Crude Oil Exports** and **Petroleum Products Exports**.

**Total Petroleum Imports**. Calculated annually by EIA as the average of the thermal conversion factors for each type of crude oil and petroleum product imported weighted by the quantities imported. See **Crude Oil Imports** and **Petroleum Products Imports**.

**Unfinished Oils.** EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel or equal to that for distillate fuel oil (see **Distillate Fuel Oil**) and first published it in EIA's *Annual Report to Congress, Volume 3, 1977.* 

**Unfractionated Stream**. EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel or equal to that for plant condensate (see **Plant Condensate**) and first published it in EIA's *Annual Report to Congress, Volume 2, 1981*.

**Waxes**. EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

#### **Approximate Heat Content of Biofuels**

**Biodiesel.** EIA estimated the thermal conversion factor for biodiesel to be 5.359 million Btu per barrel, or 17,253 Btu per pound.

**Biodiesel Feedstock.** EIA used soybean oil input to the production of biodiesel (million Btu soybean oil per barrel biodiesel) as the factor to estimate total biomass inputs to the production of biodiesel. EIA assumed that 7.65 pounds

of soybean oil are needed to produce one gallon of biodiesel, and 5.433 million Btu of soybean oil are needed to produce one barrel of biodiesel. EIA also assumed that soybean oil has a gross heat content of 16,909 Btu per pound, or 5.483 million Btu per barrel.

**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, Fossil Fuels. 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. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu. 1973–1988: The weighted annual average heat rate for fossil-fueled

steam-electric power plants in the United States, as published in EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9. 1989–2000: Calculated annually by EIA by using the heat rate 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 all electric utilities and electricity-only independent power producers using fossil fuels.

Electricity Net Generation, Geothermal. 1973–1981: Calculated annually by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on Form FPC-12, "Power System Statement." 1982 forward: Estimated annually by EIA on the basis of an informal survey of relevant plants. Beginning with the April 2011

Monthly Energy Review, the technology-based geothermal heat rates are no longer used in Btu calculations in this report, but they are retained on Table A6 for purposes of comparison.

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 reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms), and the generation reported on Form EIA-923, "Power Plant Operations Report" (and predecessor forms).



### **Appendix**

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

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

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

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

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

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

**Table B1. Metric Conversion Factors** 

Type of Unit	U.S. Unit		Equivalent in	Metric Units
Mass	1 short ton (2,000 lb)	=	0.907 184 7	metric tons (t)
	1 long ton	=	1.016 047	metric tons (t)
	1 pound (lb)	=	0.453 592 37ª	kilograms (kg)
	1 pound uranium oxide (lb U <sub>3</sub> O <sub>8</sub> )	=	0.384 647 <sup>b</sup>	kilograms uranium (kgU)
	1 ounce, avoirdupois (avdp oz)	=	28.349 52	grams (g)
Volume	1 barrel of oil (bbl)	=	0.158 987 3	cubic meters (m³)
	1 cubic yard (yd³)	=	0.764 555	cubic meters (m³)
	1 cubic foot (ft <sup>3</sup> )	=	0.028 316 85	cubic meters (m³)
	1 U.S. gallon (gal)	=	3.785 412	liters (L)
	1 ounce, fluid (fl oz)	=	29.573 53	milliliters (mL)
	1 cubic inch (in³)	=	16.387 06	milliliters (mL)
Length	1 mile (mi)	=	1.609 344ª	kilometers (km)
	1 yard (yd)	=	0.914 4 <sup>a</sup>	meters (m)
	1 foot (ft)	=	0.304 8 <sup>a</sup>	meters (m)
	1 inch (in)	=	2.54ª	centimeters (cm)
Area	1 acre	=	0.404 69	hectares (ha)
	1 square mile (mi²)	=	2.589 988	square kilometers (km²)
	1 square yard (yd²)	=	0.836 127 4	square meters (m²)
	1 square foot (ft²)	=	0.092 903 04 <sup>a</sup>	square meters (m²)
	1 square inch (in²)	=	6.451 6ª	square centimeters (cm <sup>2</sup> )
Energy	1 British thermal unit (Btu)°	=	1,055.055 852 62ª	joules (J)
	1 calorie (cal)	=	4.186 8 <sup>a</sup>	joules (J)
	1 kilowatthour (kWh)	=	3.6ª	megajoules (MJ)
Temperature <sup>d</sup>	32 degrees Fahrenheit (°F)	=	O <sup>a</sup>	degrees Celsius (°C)
	212 degrees Fahrenheit (°F)	=	100°	degrees Celsius (°C)

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

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

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

<sup>&</sup>lt;sup>c</sup>The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956. <sup>d</sup>To convert degrees Fahrenheit (°F) to degrees Celsius (°C) exactly, subtract 32, then multiply by 5/9.

Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading. • Most metric units belong to the International System of Units (SI), and the liter, hectare, and metric ton are accepted for use with the SI units. For more information about the SI units, see http://physics.nist.gov/cuu/Units/index.html.

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

**Table B2. Metric Prefixes** 

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10¹	deka	da	10 <sup>-1</sup>	deci	d
10 <sup>2</sup>	hecto	h	10 <sup>-2</sup>	centi	С
10 <sup>3</sup>	kilo	k	10 <sup>-3</sup>	milli	m
10 <sup>6</sup>	mega	M	10 <sup>-6</sup>	micro	μ
10 <sup>9</sup>	giga	G	10 <sup>-9</sup>	nano	n
10 <sup>12</sup>	tera	Т	10 <sup>-12</sup>	pico	р
10 <sup>15</sup>	peta	Р	10 <sup>-15</sup>	femto	f
10 <sup>18</sup>	exa	E	10 <sup>-18</sup>	atto	а
10 <sup>21</sup>	zetta	Z	10 <sup>-21</sup>	zepto	Z
10 <sup>24</sup>	yotta	Υ	10 <sup>-24</sup>	yocto	у

Web Page: http://www.eia.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)	=	1,000 <sup>a</sup>	kilograms (kg)		
Wood	1 cord (cd)	=	1.25 <sup>b</sup>	shorts tons		
	1 cord (cd)	=	128ª	cubic feet (ft <sup>3</sup> )		

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

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

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

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

## 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 branched-chain hydrocarbon ( $C_4H_{10}$ ). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

*Isobutane*: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

*Normal Butane*: A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

**Butylene:** An olefinic hydrocarbon ( $C_4H_8$ ) recovered from refinery processes.

**Capacity Factor:** The ratio of the electrical energy produced by a generating unit for a given period of time to the electrical energy that could have been produced at continuous full-power operation during the same period.

Carbon Dioxide (CO<sub>2</sub>): A colorless, odorless, non-poisonous gas that is a normal part of Earth's atmosphere. Carbon dioxide is a product of **fossil-fuel** combustion as well as other processes. It is considered a **greenhouse gas** as it traps heat (infrared energy) radiated by the Earth into the atmosphere and thereby contributes to the potential for **global warming**. The **global warming potential** (GWP) of other greenhouse gases is measured in relation to that of carbon dioxide, which by international scientific convention is assigned a value of one (1).

Chained Dollars: A measure used to express real prices. Real prices are those that have been adjusted to remove the effect of changes in the purchasing power of the dollar; they usually reflect buying power relative to a reference year. Prior to 1996, real prices were expressed in constant dollars, a measure based on the weights of goods and services in a single year, usually a recent year. In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period and is therefore subject to less distortion over time.

CIF: See Cost, Insurance, Freight.

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

Climate Change: A term used to refer to all forms of climatic inconsistency, but especially to significant change from one prevailing climatic condition to another. In some cases, "climate change" has been used synonymously with the term "global warming"; scientists, however, tend to use the term in a wider sense inclusive of natural changes in climate, including climatic cooling.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time. See Anthracite, Bituminous Coal, Lignite, Subbituminous Coal, Waste Coal, and Coal Synfuel.

Coal Coke: See Coke, Coal.

**Coal Stocks:** Coal quantities that are held in storage for future use and disposition. Note: When coal data are collected for a particular reporting period (month, quarter, or year), coal stocks are commonly measured as of the last day of the period.

**Coal Synfuel:** Coal-based solid fuel that has been processed by a **coal synfuel plant**; and coal-based fuels such as briquettes, pellets, or extrusions, which are formed from fresh or recycled coal and binding materials.

**Coal Synfuel Plant:** A plant engaged in the chemical transformation of **coal** into **coal synfuel**.

Coke, Coal: A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000° 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 <a href="http://www.eia.gov/neic/datadefinitions/Guideforwebcom.htm">http://www.eia.gov/neic/datadefinitions/Guideforwebcom.htm</a>. 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 and 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 included; 2) small amounts of nonhydrocarbons produced with the oil, such as sulfur and

various metals; and 3) drip gases, and liquid hydrocarbons produced from tar sands, oil sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

**Crude Oil F.O.B. Price:** The crude oil price actually charged at the oil-producing country's port of loading. Includes deductions for any rebates and discounts or additions of premiums, where applicable. It is the actual price paid with no adjustment for credit terms.

Crude Oil (Including Lease Condensate): A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

**Crude Oil Landed Cost:** The price of crude oil at the port of discharge, including charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. The cost does not include charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage).

**Crude Oil Refinery Input:** The total crude oil put into processing units at refineries.

**Crude Oil Stocks:** Stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

**Crude Oil Used Directly:** Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

**Crude Oil Well:** A well completed for the production of crude oil from one or more oil zones or reservoirs. Wells producing both crude oil and natural gas are classified as oil wells.

**Cubic Foot (Natural Gas):** A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60° F.

**Degree-Day Normals:** Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1961-1990). The averages may be simple degree-day normals or population-weighted degree-day normals.

Degree-Days, Cooling (CDD): A measure of how warm a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the base temperature (65 degrees) from the average of the day's high and low temperatures, with negative values set equal to zero. Each day's cooling degree-days are summed to create a cooling degree-day measure for a specified reference period. Cooling degree-days are used in energy analysis as an indicator of air conditioning energy requirements or use.

Degree-Days, Heating (HDD): A measure of how cold a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the average of the day's high and low temperatures from the base temperature (65 degrees), with negative values set equal to zero. Each day's heating degree-days are summed to create a heating degree-day measure for a specified reference period. Heating degree-days are used in energy analysis as an indicator of space heating energy requirements or use.

Degree-Days, Population-Weighted: Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State population-weighted degree-days, each State is divided into from one to nine climatically homogeneous divisions, which are assigned weights based on the ratio of the population of the division to the total population of the State. Degree-day readings for each division are multiplied by the corresponding population weight for each division and those products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions, each comprising from three to eight States, which are assigned weights based on the ratio of the population of the region to the total population of the Nation. 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° F. It is extracted from natural gas or refinery gas streams. See **Butane**.

**Isobutylene:** An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**Isopentane:** A saturated branched-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Jet Fuel:** A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

**Jet Fuel, Kerosene-Type:** A kerosene-based product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used primarily for commercial turbojet and turboprop aircraft engines.

**Jet Fuel, Naphtha-Type:** A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290° to 470° F and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used by the military for turbojet and turboprop engines.

**Kerosene:** A petroleum distillate having a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

**Kilowatt:** A unit of electrical power equal to 1,000 watts.

**Kilowatthour (kWh):** A measure of electricity defined as a unit of work or energy, measured as 1 **kilowatt** (1,000 **watts**) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu. See **Watthour**.

**Landed Costs:** The dollar-per-barrel price of crude oil at the port of discharge. Included are the charges associated

with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage charges).

**Lease and Plant Fuel:** Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and used as fuel in natural gas processing plants.

**Lease Condensate:** A mixture consisting primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease or field separation facilities. Note: This category excludes natural gas liquids, such as butane and propane, which are recovered at natural gas processing plants or facilities.

**Lignite:** The lowest rank of **coal**, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 13 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Liquefied Natural Gas (LNG):** Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260° F at atmospheric pressure.

**Liquefied Petroleum Gases (LPG):** Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

**Low-Power Testing:** The period of time between a nuclear generating unit's initial fuel loading date and the issuance of its operating (full-power) license. The maximum level of operation during that period is 5 percent of the unit's design thermal rating.

Lubricants: Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Lubricant categories are paraffinic and naphthenic.

Marketed Production (Natural Gas): Gross withdrawals less gas used for repressuring, quantities vented and

flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations.

**Methane:** A colorless, flammable, odorless, hydrocarbon gas (CH<sub>4</sub>) that is the principal constituent of natural gas. It is also an important source of hydrogen in various industrial processes.

**Methyl Tertiary Butyl Ether (MTBE):** An ether,  $(CH_3)_3COCH_3$ , 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 self-service.

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

motor gasoline blending components but excluding stocks of oxygenates.

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

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

http://www.census.gov/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 heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

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

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

Oil: See Crude Oil.

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

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

Organization for Economic Cooperation and Development (OECD): 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 geothermal plants heat rate), and geothermal heat pump energy and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and wood-derived fuels consumption; biomass waste consumption; fuel ethanol and biodiesel consumption; losses and co-products from the production of fuel ethanol and biodiesel; and electricity net imports (converted to Btu using the electricity heat content of 3,412 Btu per kilowatthour). See Total Energy Consumption.

Primary Energy Production: Production of primary The U.S. Energy Information Administration includes the following in U.S. primary energy production: coal production, waste coal supplied, and coal refuse recovery; crude oil and lease condensate production; natural gas plant liquids production; dry natural gas-excluding supplemental gaseous fuels-production; nuclear electricity net generation (converted to Btu using the nuclear plants heat rate); conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate); geothermal electricity net generation (converted to Btu using the geothermal plants heat rate), and geothermal heat pump energy and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and wood-derived fuels consumption; biomass waste consumption; and biofuels feedstock.

**Prime Mover:** The engine, turbine, water wheel, or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity directly.

**Products Supplied (Petroleum):** Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas-processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted-for crude oil (plus net receipts when calculated on a PAD District basis) minus stock change, minus crude oil losses, minus refinery inputs, and minus exports.

**Propane:** A normally gaseous straight-chain hydrocarbon ( $C_3H_8$ ). It is a colorless paraffinic gas that boils at a temperature of -43.67° 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 horsepower.

Watthour (Wh): The electrical energy unit of measure equal to one watt of power supplied to, or taken from, an electric circuit steadily for one hour.

Waxes: Solid or semisolid material derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

**Wellhead Price:** The value of crude oil or natural gas at the mouth of the well.

**Wind Energy:** Kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.

Wood and Wood-Derived Fuels: Wood and products derived from wood that are used as fuel, including round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, paper pellets, railroad ties, utility poles, black liquor, red liquor, sludge wood, spent sulfite liquor, and other wood-based solids and liquids.

Working Gas: The volume of gas in a reservoir that is in addition to the base gas. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.