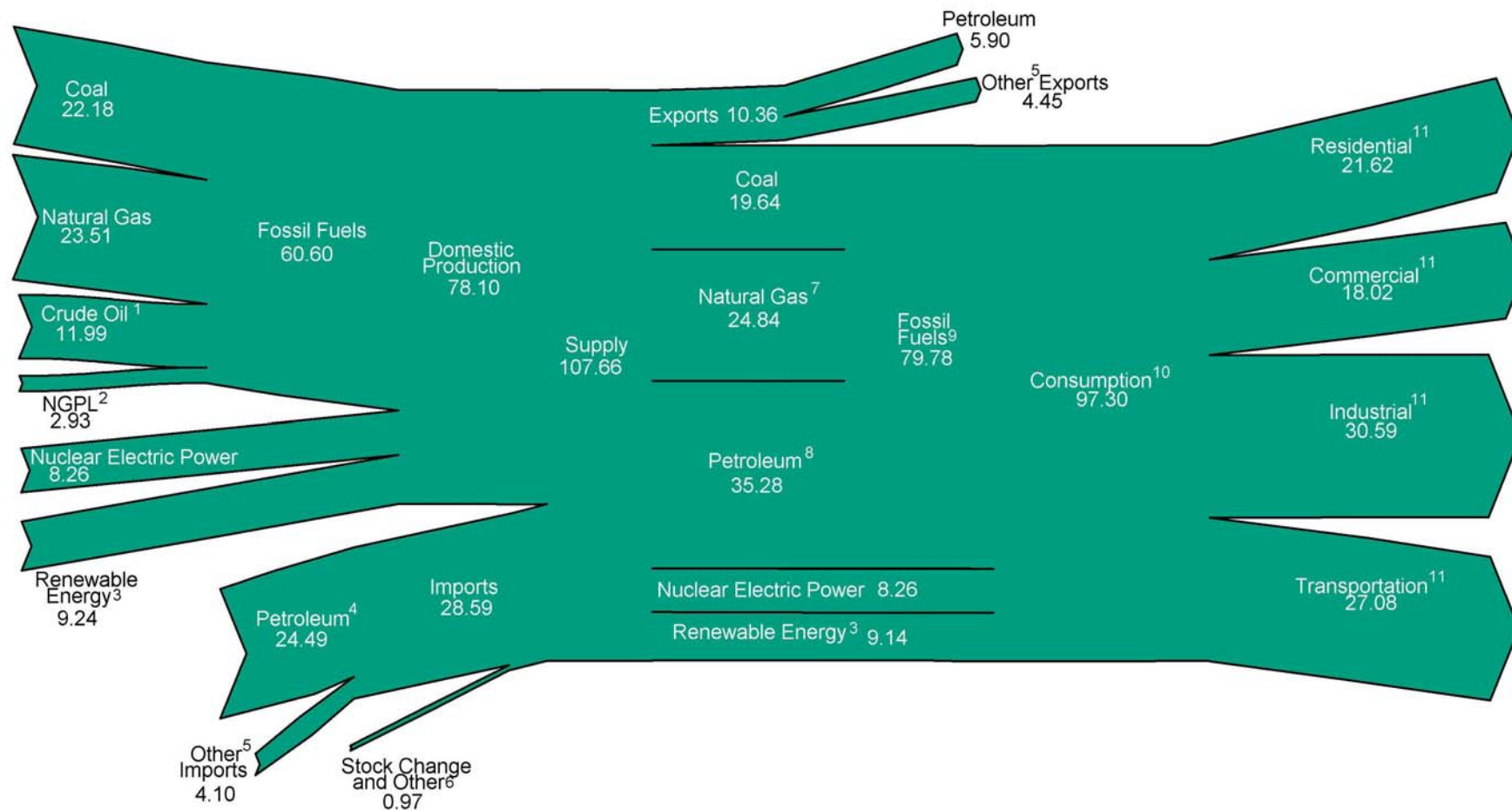


# 1. Energy Overview

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**Figure 1.0 Energy Flow, 2011**  
(Quadrillion Btu)



<sup>1</sup> Includes lease condensate.

<sup>2</sup> Natural gas plant liquids.

<sup>3</sup> Conventional hydroelectric power, biomass, geothermal, solar/photovoltaic, and wind.

<sup>4</sup> Crude oil and petroleum products. Includes imports into the Strategic Petroleum Reserve.

<sup>5</sup> Natural gas, coal, coal coke, biofuels, and electricity.

<sup>6</sup> Adjustments, losses, and unaccounted for.

<sup>7</sup> Natural gas only; excludes supplemental gaseous fuels.

<sup>8</sup> Petroleum products, including natural gas plant liquids, and crude oil burned as fuel.

<sup>9</sup> Includes 0.01 quadrillion Btu of coal coke net imports.

<sup>10</sup> Includes 0.13 quadrillion Btu of electricity net imports.

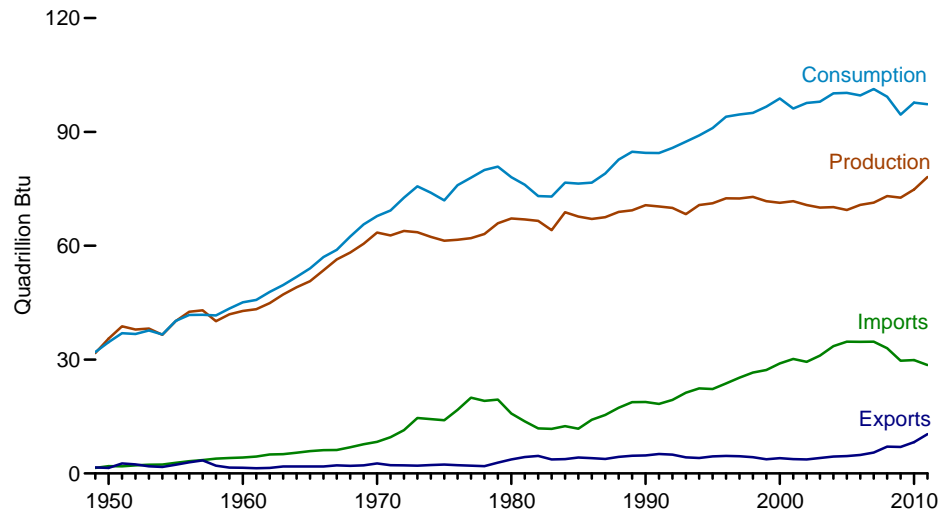
<sup>11</sup> Total energy consumption, which is the sum of primary energy consumption, electricity retail sales, and electrical system energy losses. Losses are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note, "Electrical Systems Energy Losses," at end of Section 2.

Notes: • Data are preliminary. • Values are derived from source data prior to rounding for publication. • Totals may not equal sum of components due to independent rounding.

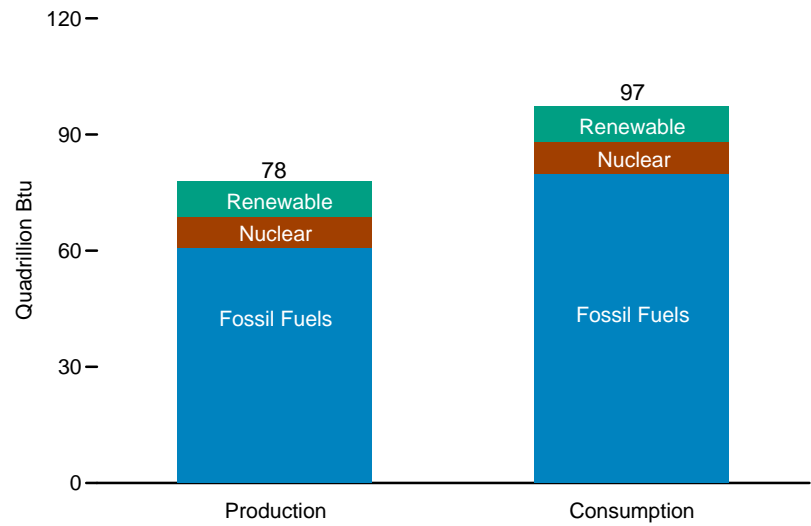
Sources: Tables 1.1, 1.2, 1.3, 1.4, and 2.1a.

**Figure 1.1 Primary Energy Overview**

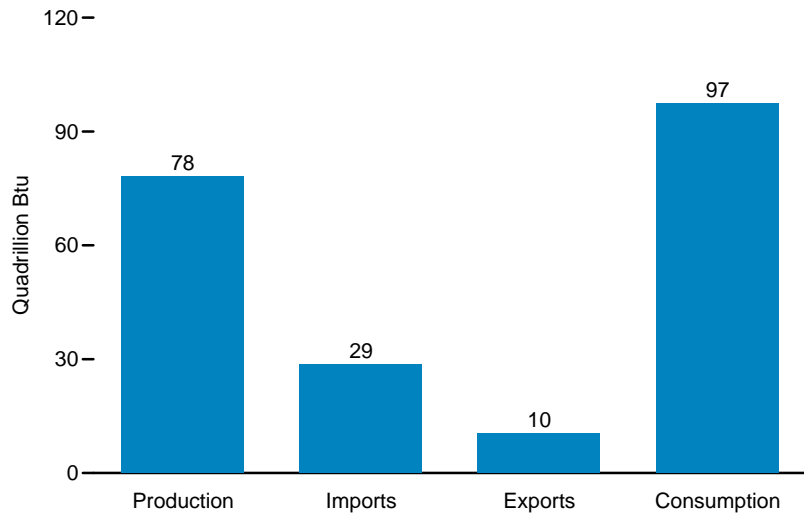
**Overview, 1949-2011**



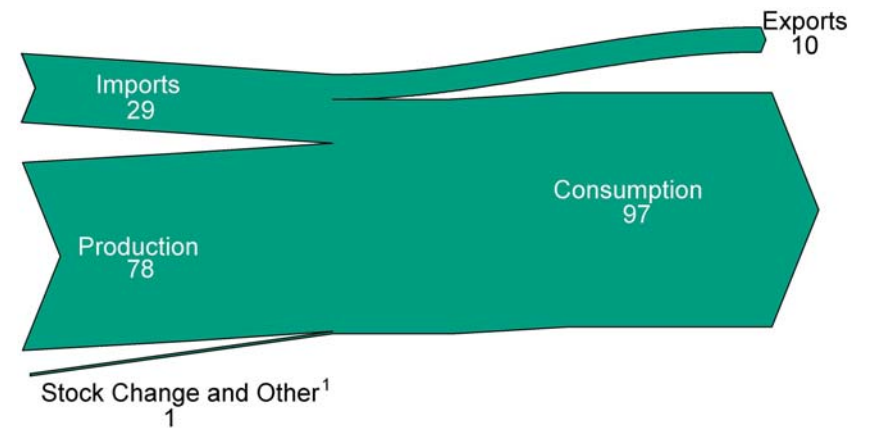
**Production and Consumption, 2011**



**Overview, 2011**



**Energy Flow, 2011**  
(Quadrillion Btu)



<sup>1</sup> Adjustments, losses, and unaccounted for.

Source: Table 1.1.

**Table 1.1 Primary Energy Overview, Selected Years, 1949-2011**  
(Quadrillion Btu)

Year	Production				Trade					Stock Change and Other <sup>8</sup>	Consumption			
	Fossil Fuels <sup>2</sup>	Nuclear Electric Power <sup>3</sup>	Renewable Energy <sup>4</sup>	Total	Imports		Exports		Net Imports <sup>1</sup>		Fossil Fuels <sup>9</sup>	Nuclear Electric Power <sup>3</sup>	Renewable Energy <sup>4</sup>	Total <sup>10</sup>
					Petroleum <sup>5</sup>	Total <sup>6</sup>	Coal	Total <sup>7</sup>	Total					
1949	28.748	0.000	2.974	31.722	1.427	1.448	0.877	1.592	-0.144	0.403	29.002	0.000	2.974	31.982
1950	32.563	.000	2.978	35.540	1.886	1.913	.786	1.465	.448	-1.372	31.632	.000	2.978	34.616
1955	37.364	.000	2.784	40.148	2.752	2.790	1.465	2.286	.504	-4.444	37.410	.000	2.784	40.208
1960	39.869	.006	2.928	42.803	3.999	4.188	1.023	1.477	2.710	-.427	42.137	.006	2.928	45.086
1965	47.235	.043	3.396	50.674	5.402	5.892	1.376	1.829	4.063	-.722	50.577	.043	3.396	54.015
1970	59.186	.239	4.070	63.495	7.470	8.342	1.936	2.632	5.709	-1.367	63.522	.239	4.070	67.838
1975	54.733	1.900	4.687	61.320	12.948	14.032	1.761	2.323	11.709	-1.065	65.357	1.900	4.687	71.965
1976	54.723	2.111	4.727	61.561	15.672	16.760	1.597	2.172	14.588	-.175	69.107	2.111	4.727	75.975
1977	55.101	2.702	4.209	62.012	18.756	19.948	1.442	2.052	17.896	-1.946	70.991	2.702	4.209	77.961
1978	55.074	3.024	5.005	63.104	17.824	19.106	1.078	1.920	17.186	-.339	71.854	3.024	5.005	79.950
1979	58.006	2.776	5.123	65.904	17.933	19.460	1.753	2.855	16.605	-1.650	72.891	2.776	5.123	80.859
1980	59.008	2.739	5.428	67.175	14.658	15.796	2.421	3.695	12.101	-1.210	69.828	2.739	5.428	78.067
1981	58.529	3.008	5.414	66.951	12.639	13.719	2.944	4.307	9.412	-.257	67.571	3.008	5.414	76.106
1982	57.458	3.131	5.980	66.569	10.777	11.861	2.787	4.608	7.253	-.723	63.888	3.131	5.980	73.099
1983	54.416	3.203	6.496	64.114	10.647	11.752	2.045	3.693	8.059	.798	63.152	3.203	6.496	72.971
1984	58.849	3.553	6.438	68.840	11.433	12.471	2.151	3.786	8.685	-.892	66.506	3.553	6.438	76.632
1985	57.539	4.076	6.084	67.698	10.609	11.781	2.438	4.196	7.584	1.110	66.093	4.076	6.084	76.392
1986	56.575	4.380	6.111	67.066	13.201	14.151	2.248	4.021	10.130	-.549	66.033	4.380	6.111	76.647
1987	57.167	4.754	5.622	67.542	14.162	15.398	2.093	3.812	11.586	-.074	68.521	4.754	5.622	79.054
1988	57.875	5.587	5.457	68.919	15.747	17.296	2.499	4.366	12.929	.861	71.557	5.587	5.457	82.709
1989	57.483	5.602	6.235	69.320	17.162	18.766	2.637	4.661	14.105	1.361	72.911	5.602	6.235	84.786
1990	58.560	6.104	6.041	70.705	17.117	18.817	2.772	4.752	14.065	-.284	72.332	6.104	6.041	84.485
1991	57.872	6.422	6.069	70.362	16.348	18.335	2.854	5.141	13.194	.882	71.880	6.422	6.069	84.438
1992	57.655	6.479	5.821	69.956	16.968	19.372	2.682	4.937	14.435	1.392	73.396	6.479	5.821	85.783
1993	55.822	6.410	6.083	68.315	18.510	21.273	1.962	4.258	17.014	2.094	74.836	6.410	6.083	87.424
1994	58.044	6.694	5.988	70.726	19.243	22.390	1.879	4.061	18.329	.037	76.256	6.694	5.988	89.091
1995	57.540	7.075	6.558	71.174	18.881	22.260	2.318	4.511	17.750	2.105	77.259	7.075	6.560	91.029
1996	58.387	7.087	7.012	72.486	20.284	23.702	2.368	4.633	19.069	2.468	79.785	7.087	7.014	94.022
1997	58.857	6.597	7.018	72.472	21.740	25.215	2.193	4.514	20.701	1.429	80.873	6.597	7.016	94.602
1998	59.314	7.068	6.494	72.876	22.908	26.581	2.092	4.299	22.281	-.140	81.369	7.068	6.493	95.018
1999	57.614	7.610	6.517	71.742	23.133	27.252	1.525	3.715	23.537	1.373	82.427	7.610	6.516	96.652
2000	57.366	7.862	6.104	71.332	24.531	28.973	1.528	4.006	24.967	R2.515	84.731	7.862	6.106	R98.814
2001	58.541	8.029	5.164	71.735	25.398	30.157	1.265	3.771	26.386	-1.953	82.902	8.029	5.163	96.168
2002	R56.837	8.145	5.734	R70.716	24.674	29.408	1.032	3.669	25.739	R1.190	R83.699	8.145	5.729	R97.645
2003	56.099	7.959	5.982	70.040	26.219	31.061	1.117	4.054	27.007	.931	84.014	7.959	5.983	97.978
2004	55.895	8.222	6.070	70.188	28.197	33.544	1.253	4.434	29.110	R.864	R85.819	8.222	6.082	R100.162
2005	55.038	8.161	6.229	R69.428	29.248	34.709	1.273	4.560	30.149	R.705	R85.794	8.161	6.242	R100.282
2006	55.968	8.215	R6.599	R70.782	29.169	34.679	1.264	4.872	29.806	R-.959	R84.702	8.215	R6.649	R99.629
2007	R56.409	8.455	R6.509	R71.373	28.781	34.703	1.507	5.482	29.221	R.702	R86.211	8.455	R6.523	R101.296
2008	57.482	8.427	R7.202	R73.111	27.685	32.992	2.071	7.060	25.932	R.231	R83.549	8.427	R7.186	R99.275
2009	R56.685	8.356	R7.616	R72.657	25.082	29.706	1.515	6.965	22.741	R-.839	R78.488	8.356	R7.600	R94.559
2010	R58.235	R8.434	R8.136	R74.806	R25.371	R29.877	2.101	R8.234	R21.643	R1.273	R81.109	R8.434	R8.090	R97.722
2011 <sup>P</sup>	60.601	8.259	9.236	78.096	24.491	28.587	2.751	10.356	18.232	.974	79.779	8.259	9.135	97.301

<sup>1</sup> Net imports equal imports minus exports. A minus sign indicates exports are greater than imports.

<sup>2</sup> Coal, natural gas (dry), crude oil, and natural gas plant liquids.

<sup>3</sup> Nuclear electricity net generation (converted to Btu using the nuclear heat rate—see Table A6).

<sup>4</sup> See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.

<sup>5</sup> Crude oil and petroleum products. Includes imports into the Strategic Petroleum Reserve.

<sup>6</sup> Also includes natural gas, coal, coal coke, fuel ethanol, biodiesel, and electricity.

<sup>7</sup> Also includes natural gas, petroleum, coal coke, biodiesel, and electricity.

<sup>8</sup> Calculated as consumption and exports minus production and imports. Includes petroleum stock change and adjustments; natural gas net storage withdrawals and balancing item; coal stock change, losses, and unaccounted for; fuel ethanol stock change; and biodiesel stock change and balancing item.

<sup>9</sup> Coal, coal coke net imports, natural gas, and petroleum. For petroleum, product supplied is used as an approximation of petroleum consumption. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of Section 5.

<sup>10</sup> Also includes electricity net imports.

R=Revised. P=Preliminary.

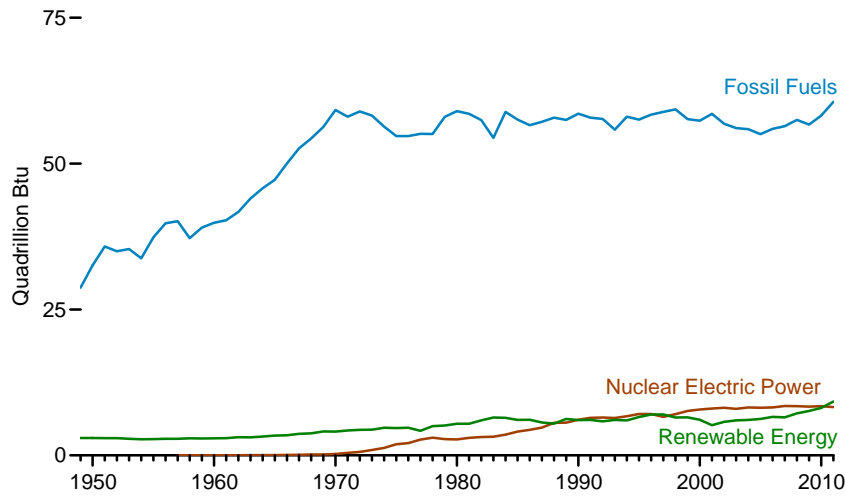
Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption" in Glossary. • Totals may not equal sum of components due to independent rounding.

Web Pages: • See <http://www.eia.gov/totalenergy/data/monthly/#summary> for updated monthly and annual data. • See <http://www.eia.gov/totalenergy/data/annual/#summary> for all annual data beginning in 1949.

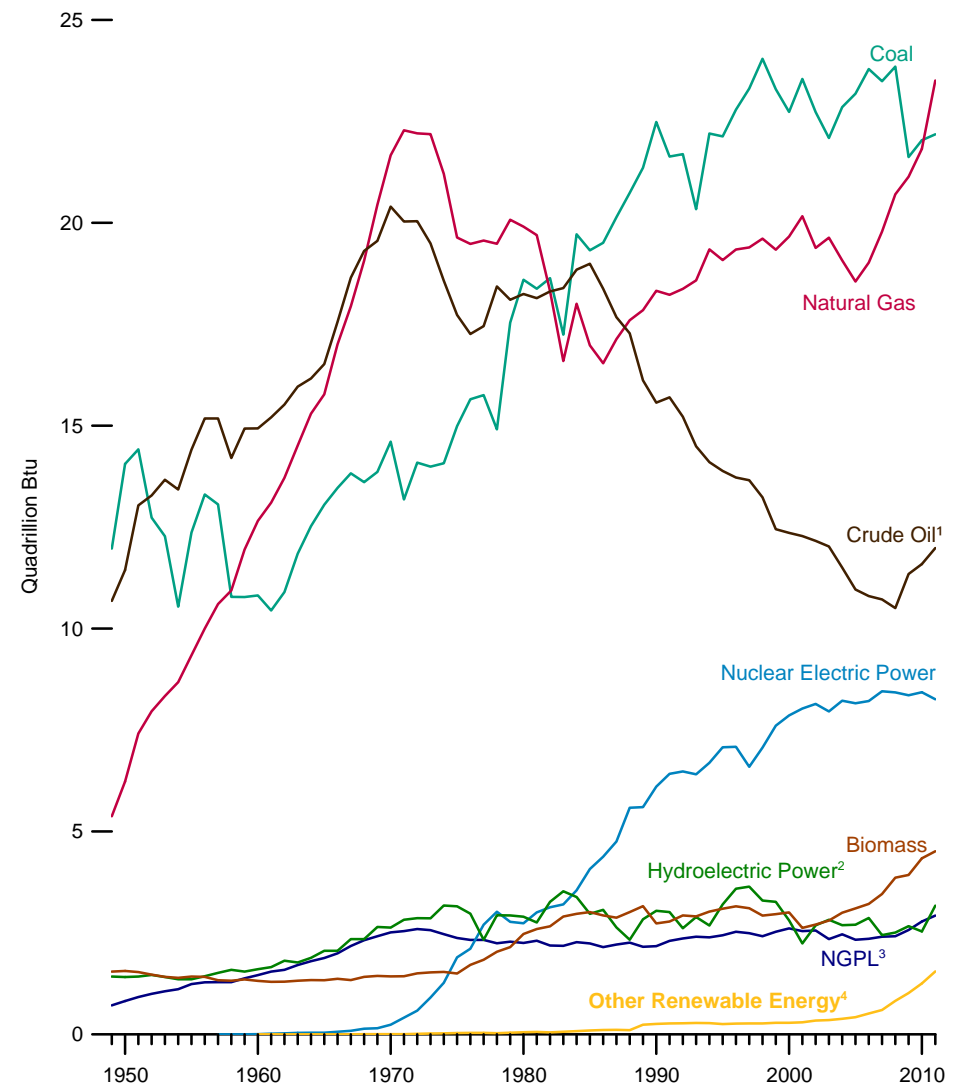
Sources: Tables 1.2, 1.3, and 1.4.

# Figure 1.2 Primary Energy Production by Source

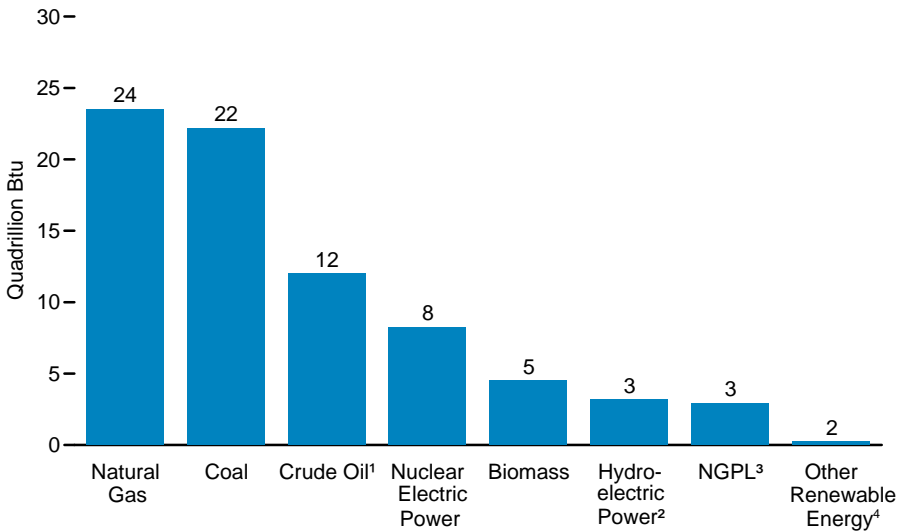
## By Source Category, 1949-2011



## By Source, 1949-2011



## By Source, 2011



<sup>1</sup> Includes lease condensate.

<sup>2</sup> Conventional hydroelectric power.

<sup>3</sup> Natural gas plant liquids.

<sup>4</sup> Geothermal, solar/photovoltaic, and wind.

Source: Table 1.2.

**Table 1.2 Primary Energy Production by Source, Selected Years, 1949-2011**

(Quadrillion Btu)

Year	Fossil Fuels					Nuclear Electric Power <sup>5</sup>	Renewable Energy <sup>1</sup>						Total
	Coal <sup>2</sup>	Natural Gas (Dry)	Crude Oil <sup>3</sup>	NGPL <sup>4</sup>	Total		Hydro-electric Power <sup>6</sup>	Geothermal <sup>7</sup>	Solar/PV <sup>8</sup>	Wind <sup>9</sup>	Biomass <sup>10</sup>	Total	
1949	11.974	5.377	10.683	0.714	28.748	0.000	1.425	NA	NA	NA	1.549	2.974	31.722
1950	14.060	6.233	11.447	.823	32.563	.000	1.415	NA	NA	NA	1.562	2.978	35.540
1955	12.370	9.345	14.410	1.240	37.364	.000	1.360	NA	NA	NA	1.424	2.784	40.148
1960	10.817	12.656	14.935	1.461	39.869	.006	1.608	(s)	NA	NA	1.320	2.928	42.803
1965	13.055	15.775	16.521	1.883	47.235	.043	2.059	.002	NA	NA	1.335	3.396	50.674
1970	14.607	21.666	20.401	2.512	59.186	.239	2.634	.006	NA	NA	1.431	4.070	63.495
1975	14.989	19.640	17.729	2.374	54.733	1.900	3.155	.034	NA	NA	1.499	4.687	61.320
1976	15.654	19.480	17.262	2.327	54.723	2.111	2.976	.038	NA	NA	1.713	4.727	61.561
1977	15.755	19.565	17.454	2.327	55.101	2.702	2.333	.037	NA	NA	1.838	4.209	62.012
1978	14.910	19.485	18.434	2.245	55.074	3.024	2.937	.031	NA	NA	2.038	5.005	63.104
1979	17.540	20.076	18.104	2.286	58.006	2.776	2.931	.040	NA	NA	2.152	5.123	65.904
1980	18.598	19.908	18.249	2.254	59.008	2.739	2.900	.053	NA	NA	2.476	5.428	67.175
1981	18.377	19.699	18.146	2.307	58.529	3.008	2.758	.059	NA	NA	2.596	5.414	66.951
1982	18.639	18.319	18.309	2.191	57.458	3.131	3.266	.051	NA	NA	2.663	5.980	66.569
1983	17.247	16.593	18.392	2.184	54.416	3.203	3.527	.064	NA	(s)	2.904	6.496	64.114
1984	19.719	18.008	18.848	2.274	58.849	3.553	3.386	.081	(s)	(s)	2.971	6.438	68.840
1985	19.325	16.980	18.992	2.241	57.539	4.076	2.970	.097	(s)	(s)	3.016	6.084	67.698
1986	19.509	16.541	18.376	2.149	56.575	4.380	3.071	.108	(s)	(s)	2.932	6.111	67.066
1987	20.141	17.136	17.675	2.215	57.167	4.754	2.635	.112	(s)	(s)	2.875	5.622	67.542
1988	20.738	17.599	17.279	2.260	57.875	5.587	2.334	.106	(s)	(s)	3.016	5.457	68.919
1989	<sup>2</sup> 21.360	17.847	16.117	2.158	57.483	5.602	2.837	.162	.055	.022	3.159	6.235	69.320
1990	22.488	18.326	15.571	2.175	58.560	6.104	3.046	.171	.059	.029	2.735	6.041	70.705
1991	21.636	18.229	15.701	2.306	57.872	6.422	3.016	.178	.062	.031	2.782	6.069	70.362
1992	21.694	18.375	15.223	2.363	57.655	6.479	2.617	.179	.064	.030	2.932	5.821	<sup>R</sup> 69.956
1993	20.336	18.584	14.494	2.408	55.822	6.410	2.892	.186	.066	.031	2.908	6.083	68.315
1994	22.202	19.348	14.103	2.391	58.044	6.694	2.683	.173	.068	.036	3.028	5.988	70.726
1995	22.130	19.082	13.887	2.442	57.540	7.075	3.205	.152	.069	.033	3.099	6.558	71.174
1996	22.790	19.344	13.723	2.530	58.387	7.087	3.590	.163	.070	.033	3.155	7.012	72.486
1997	23.310	19.394	13.658	2.495	58.857	6.597	3.640	.167	.070	.034	3.108	7.018	72.472
1998	24.045	19.613	13.235	2.420	59.314	7.068	3.297	.168	.069	.031	2.929	6.494	72.876
1999	23.295	19.341	12.451	2.528	57.614	7.610	3.268	.171	.068	.046	2.965	6.517	71.742
2000	22.735	19.662	12.358	2.611	57.366	7.862	2.811	.164	<sup>R</sup> .066	.057	3.006	6.104	71.332
2001	<sup>2</sup> 23.547	20.166	12.282	2.547	58.541	8.029	2.242	.164	.064	.070	2.624	5.164	71.735
2002	22.732	<sup>R</sup> 19.382	12.163	2.559	<sup>R</sup> 56.837	8.145	2.689	.171	.063	.105	2.705	5.734	<sup>R</sup> 70.716
2003	22.094	19.633	12.026	2.346	56.099	7.959	2.825	.175	.062	.115	2.805	5.982	70.040
2004	22.852	19.074	11.503	2.466	55.895	8.222	2.690	.178	.063	.142	2.998	6.070	70.188
2005	23.185	18.556	10.963	2.334	55.038	8.161	2.703	.181	.063	.178	3.104	6.229	<sup>R</sup> 69.428
2006	23.790	19.022	10.801	2.356	55.968	8.215	2.869	.181	.068	.264	<sup>R</sup> 3.216	<sup>R</sup> 6.599	<sup>R</sup> 70.782
2007	23.493	<sup>R</sup> 19.786	10.721	2.409	<sup>R</sup> 56.409	8.455	2.446	.186	.076	.341	<sup>R</sup> 3.461	<sup>R</sup> 6.509	<sup>R</sup> 71.373
2008	23.851	20.703	10.509	2.419	57.482	8.427	2.511	.192	.089	.546	<sup>R</sup> 3.864	<sup>R</sup> 7.202	<sup>R</sup> 73.111
2009	<sup>R</sup> 21.624	<sup>R</sup> 21.139	11.348	2.574	<sup>R</sup> 56.685	8.356	2.669	.200	.098	.721	<sup>R</sup> 3.928	<sup>R</sup> 7.616	<sup>R</sup> 72.657
2010	<sup>R</sup> 22.038	<sup>R</sup> 21.823	<sup>R</sup> 11.593	<sup>R</sup> 2.781	<sup>R</sup> 58.235	<sup>R</sup> 8.434	<sup>R</sup> 2.539	<sup>R</sup> .208	<sup>R</sup> .126	<sup>R</sup> .923	<sup>R</sup> 4.341	<sup>R</sup> 8.136	<sup>R</sup> 74.806
2011 <sup>P</sup>	22.181	23.506	11.986	2.928	60.601	8.259	3.171	.226	.158	1.168	4.511	9.236	78.096

<sup>1</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>2</sup> Beginning in 1989, includes waste coal supplied. Beginning in 2001, also includes a small amount of refuse recovery. See Table 7.1.

<sup>3</sup> Includes lease condensate.

<sup>4</sup> Natural gas plant liquids.

<sup>5</sup> Nuclear electricity net generation (converted to Btu using the nuclear heat rate—see Table A6).

<sup>6</sup> Conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

<sup>7</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>8</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>9</sup> Wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

<sup>10</sup> Wood and wood-derived fuels, biomass waste, and total biomass inputs to the production of fuel ethanol and biodiesel.

R=Revised. P=Preliminary. NA=Not available. (s)=Less than 0.0005 quadrillion Btu.

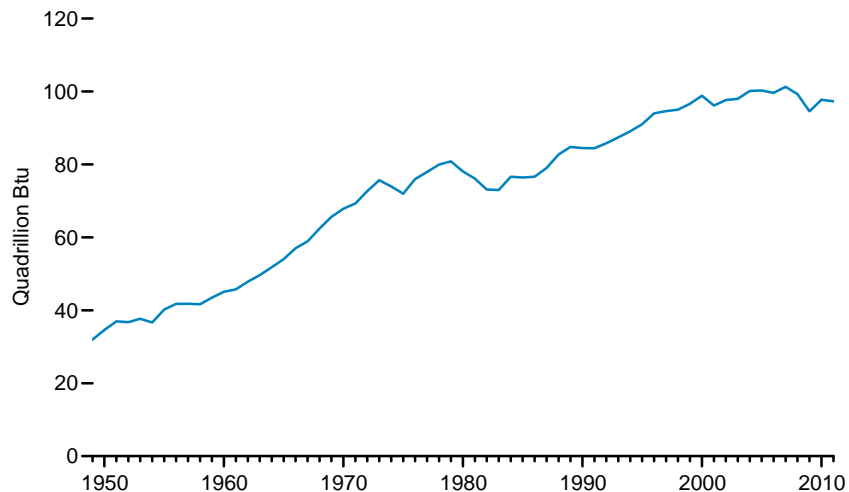
Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal sum of components due to independent rounding.

Web Pages: • See <http://www.eia.gov/totalenergy/data/monthly/#summary> for updated monthly and annual data. • See <http://www.eia.gov/totalenergy/data/annual/#summary> for all annual data beginning in 1949.

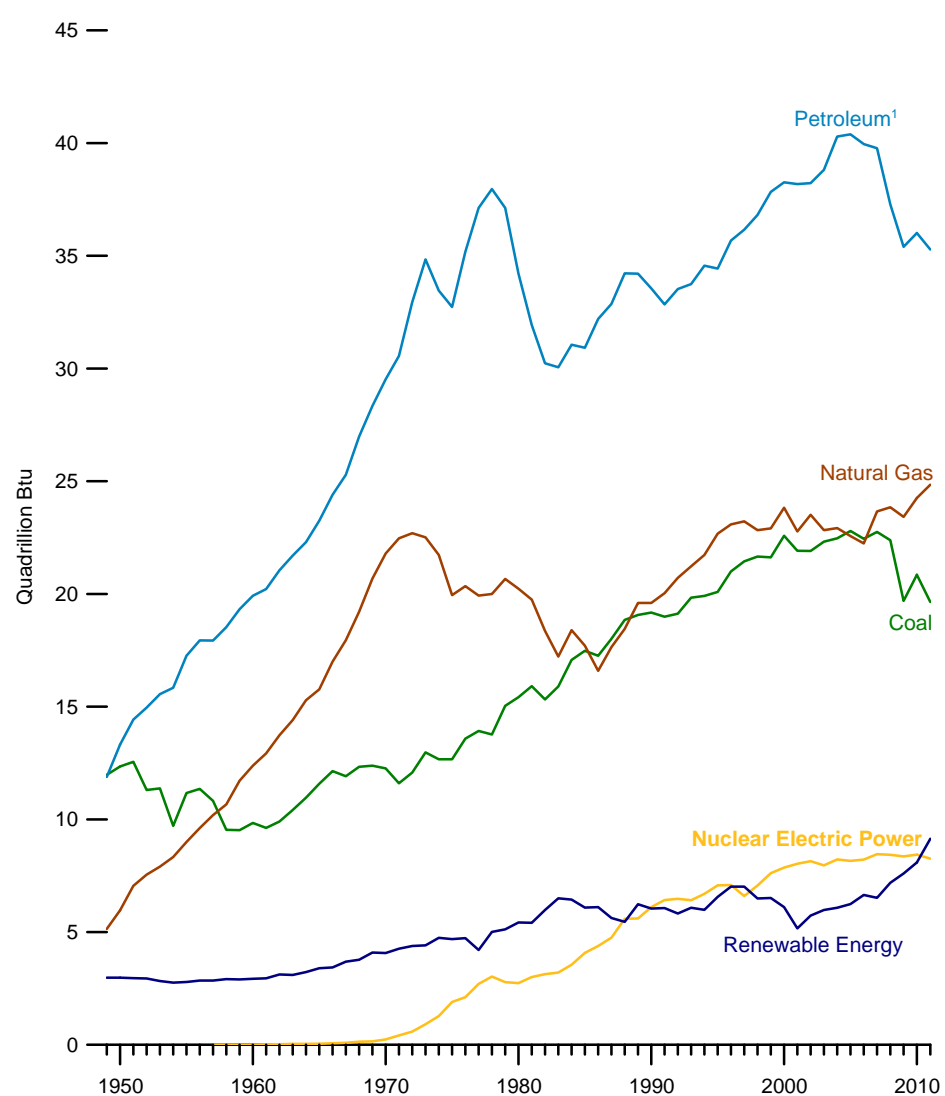
Sources: Tables 5.1, 6.1, 7.1, 8.2a, 10.1, A2, A4, A5, and A6.

**Figure 1.3 Primary Energy Consumption Estimates by Source**

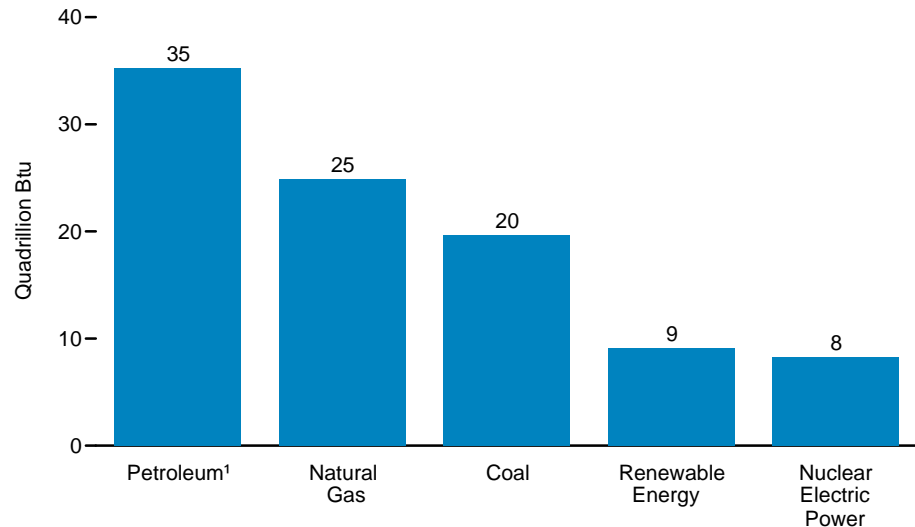
**Total, 1949-2011**



**By Major Source, 1949-2011**



**By Major Source, 2011**



<sup>1</sup> Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel. Does not include biofuels that have been blended with petroleum—biofuels are included in “Renewable Energy.” For petroleum, product supplied is used as an approximation of

petroleum consumption. See Note 1, “Petroleum Products Supplied and Petroleum Consumption,” at the end of Section 5  
Sources: Tables 1.2 and 1.3.



**Table 1.3 Primary Energy Consumption Estimates by Source, Selected Years, 1949-2011**  
(Quadrillion Btu)

Year	Fossil Fuels					Nuclear Electric Power	Renewable Energy <sup>1</sup>					Electricity Net Imports <sup>3</sup>	Total
	Coal	Coal Coke Net Imports <sup>3</sup>	Natural Gas <sup>4</sup>	Petroleum <sup>5</sup>	Total		Noncombustible <sup>2</sup>			Biomass <sup>7</sup>	Total		
							Captured Energy <sup>6</sup>	Adjustment for Fossil Fuel Equivalence <sup>6</sup>	Total <sup>6,7</sup>				
1949	11.981	-0.007	5.145	11.883	29.002	0.000	0.323	1.101	1.425	1.549	2.974	0.005	31.982
1950	12.347	.001	5.968	13.315	31.632	.000	.344	1.071	1.415	1.562	2.978	.006	34.616
1955	11.167	-.010	8.998	17.255	37.410	.000	.397	.963	1.360	1.424	2.784	.014	40.208
1960	9.838	-.006	12.385	19.919	42.137	.006	.510	1.098	1.608	1.320	2.928	.015	45.086
1965	11.581	-.018	15.769	23.246	50.577	.043	.673	1.388	2.061	1.335	3.396	(s)	54.015
1970	12.265	-.058	21.795	29.521	63.522	.239	.858	1.781	2.639	1.431	4.070	.007	67.838
1975	12.663	.014	19.948	32.732	65.357	1.900	1.045	2.143	3.188	1.499	4.687	.021	71.965
1976	13.584	(s)	20.345	35.178	69.107	2.111	.991	2.022	3.014	1.713	4.727	.029	75.975
1977	13.922	.015	19.931	37.124	70.991	2.702	.775	1.595	2.371	1.838	4.209	.059	77.961
1978	13.766	.125	20.000	37.963	71.854	3.024	.977	1.990	2.968	2.038	5.005	.067	79.950
1979	15.040	.063	20.666	37.122	72.891	2.776	.979	1.992	2.971	2.152	5.123	.069	80.859
1980	15.423	-.035	20.235	34.205	69.828	2.739	.970	1.983	2.953	2.476	5.428	.071	78.067
1981	15.908	-.016	19.747	31.932	67.571	3.008	.920	1.898	2.817	2.596	5.414	.113	76.106
1982	15.322	-.022	18.356	30.232	63.888	3.131	1.082	2.234	3.316	2.663	5.980	.100	73.099
1983	15.894	-.016	17.221	30.052	63.152	3.203	1.165	2.426	3.591	2.904	6.496	.121	72.971
1984	17.071	-.011	18.394	31.053	66.506	3.553	1.133	2.334	3.467	2.971	6.438	.135	76.632
1985	17.478	-.013	17.703	30.925	66.093	4.076	1.002	2.066	3.068	3.016	6.084	.140	76.392
1986	17.260	-.017	16.591	32.198	66.033	4.380	1.038	2.141	3.179	2.932	6.111	.122	76.647
1987	18.008	.009	17.640	32.864	68.521	4.754	.900	1.847	2.747	2.875	5.622	.158	79.054
1988	18.846	.040	18.448	34.223	71.557	5.587	.807	1.634	2.441	3.016	5.457	.108	82.709
1989	19.070	.030	19.602	34.209	72.911	5.602	1.048	2.028	3.076	3.159	6.235	.037	84.786
1990	19.173	.005	19.603	33.552	72.332	6.104	1.128	2.177	3.306	2.735	6.041	.008	84.485
1991	18.992	.010	20.033	32.846	71.880	6.422	1.121	2.166	3.287	2.782	6.069	.067	84.438
1992	19.122	.035	20.714	33.525	73.396	6.479	1.001	1.889	2.890	2.932	5.821	.087	85.783
1993	19.835	.027	21.229	33.745	74.836	6.410	1.100	2.074	3.174	2.908	6.083	.095	87.424
1994	19.909	.058	21.728	34.561	76.256	6.694	1.030	1.930	2.961	3.028	5.988	.153	89.091
1995	20.089	.061	22.671	34.438	77.259	7.075	1.197	2.262	3.459	3.101	6.560	.134	91.029
1996	21.002	.023	23.085	35.675	79.785	7.087	1.326	2.530	3.857	3.157	7.014	.137	94.022
1997	21.445	.046	23.223	36.159	80.873	6.597	1.360	2.550	3.910	3.105	7.016	.116	94.602
1998	21.656	.067	22.830	36.816	81.369	7.068	1.247	2.318	3.565	2.927	6.493	.088	95.018
1999	21.623	.058	22.909	37.838	82.427	7.610	1.240	2.312	3.552	2.963	6.516	.099	96.652
2000	22.580	.065	23.824	38.262	84.731	7.862	1.090	2.008	3.098	3.008	6.106	.115	R98.814
2001	21.914	.029	22.773	38.186	82.902	8.029	.893	1.647	2.540	2.622	5.163	.075	96.168
2002	21.904	.061	R23.510	38.224	R83.699	8.145	1.070	1.959	3.029	2.701	5.729	.072	R97.645
2003	22.321	.051	22.831	38.811	84.014	7.959	1.114	2.062	3.176	2.807	5.983	.022	97.978
2004	22.466	.138	R22.923	40.292	R85.819	8.222	1.103	1.969	3.073	3.010	6.082	.039	R100.162
2005	22.797	.044	R22.565	40.388	R85.794	8.161	1.127	1.998	3.125	R3.117	6.242	.085	R100.282
2006	22.447	.061	R22.239	39.955	R84.702	8.215	1.229	2.153	3.382	R3.267	R6.649	.063	R99.629
2007	22.749	.025	R23.663	39.774	R86.211	8.455	1.125	1.924	3.048	R3.474	R6.523	.107	R101.296
2008	22.385	.041	R23.843	37.280	R83.549	8.427	1.238	2.099	3.338	R3.849	R7.186	.112	R99.275
2009	19.692	-.024	R23.416	35.403	R78.488	8.356	1.382	2.306	3.688	R3.912	R7.600	.116	R94.559
2010	R20.850	-.006	R24.256	R36.010	R81.109	R8.434	R1.440	R2.355	R3.796	R4.294	R8.090	R.089	R97.722
2011 <sup>P</sup>	19.643	.011	24.843	35.283	79.779	8.259	1.785	2.939	4.724	4.411	9.135	.127	97.301

<sup>1</sup> Most data are estimates. See Note, "Renewable Energy Production and Consumption," at end of Section 10.

<sup>2</sup> Conventional hydroelectric power, geothermal, solar thermal, photovoltaic, and wind. See Note 1, "Noncombustible Renewable Energy," at end of section.

<sup>3</sup> Net imports equal imports minus exports. A minus sign indicates exports are greater than imports.

<sup>4</sup> Natural gas only; excludes supplemental gaseous fuels. See Note 1, "Supplemental Gaseous Fuels," at end of Section 6.

<sup>5</sup> Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel. Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass." For petroleum, product supplied is used as an approximation of petroleum consumption. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of Section 5.

<sup>6</sup> See Note 1, "Noncombustible Renewable Energy," at end of section.

<sup>7</sup> See Table 10.1 for a breakdown of individual sources.

R=Revised. P=Preliminary. (s)=Less than 0.0005 and greater than -0.0005 quadrillion Btu.

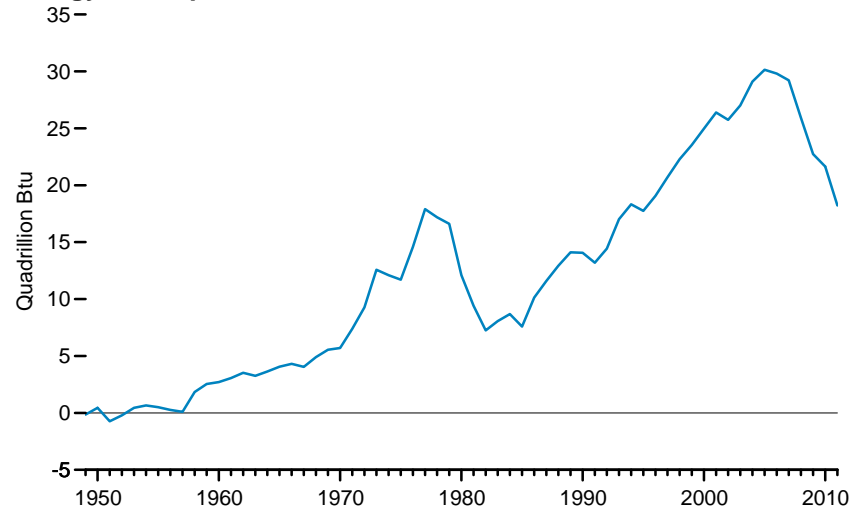
Notes: • See "Primary Energy Consumption" in Glossary. • See Table E1 for estimated energy consumption for 1635–1945. • See Note 3, "Electricity Imports and Exports," at end of Section 8. • Totals may not equal sum of components due to independent rounding.

Web Pages: • See <http://www.eia.gov/totalenergy/data/monthly/#summary> for updated monthly and annual data. • See <http://www.eia.gov/totalenergy/data/annual/#summary> for all annual data beginning in 1949.

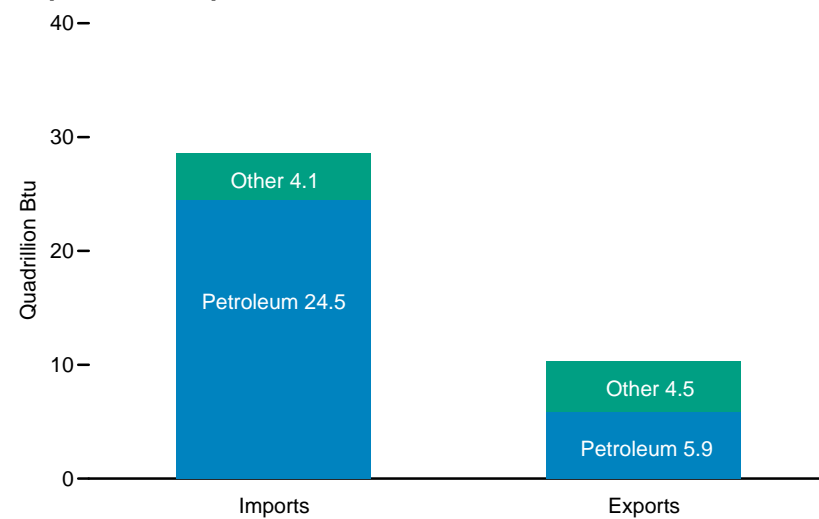
Sources: Tables 5.12, 6.1, 7.1, 7.8, 8.1, 8.2a, 10.1, 10.3, A4, A5, and A6.

**Figure 1.4 Primary Energy Trade by Source, 1949-2011**

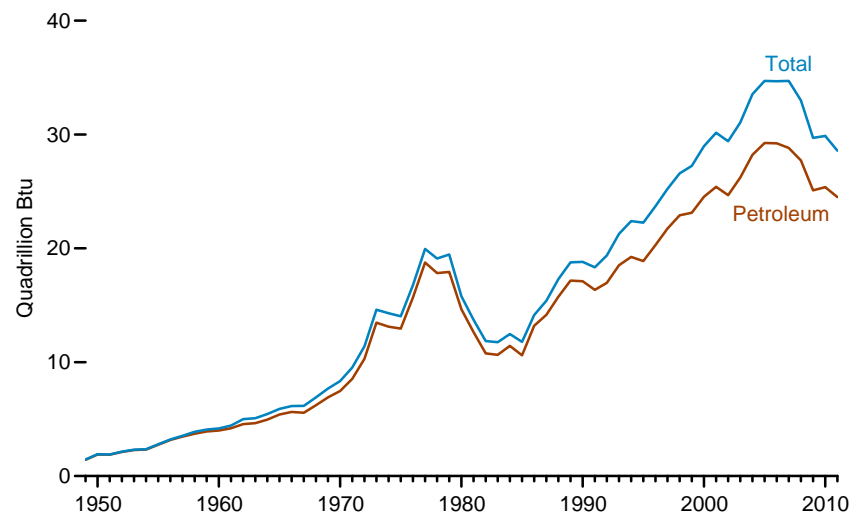
**Energy Net Imports**



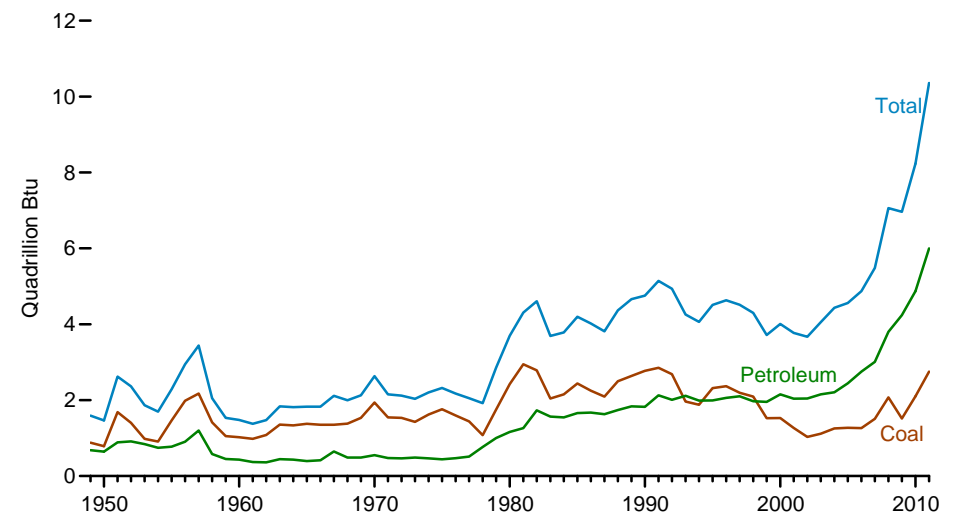
**Imports and Exports, 2011**



**Energy Imports**



**Energy Exports**



Note: Negative net imports are net exports.

Source: Table 1.4.

**Table 1.4 Primary Energy Trade by Source, Selected Years, 1949-2011**

(Quadrillion Btu)

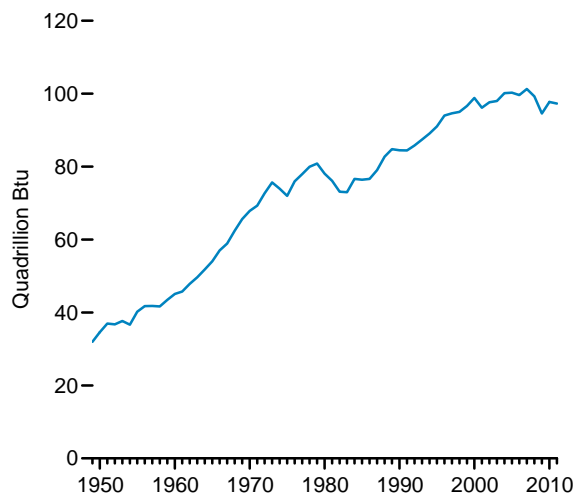
Year	Imports									Exports									Net Imports <sup>1</sup>
	Coal	Coal Coke	Natural Gas	Petroleum			Bio-fuels <sup>4</sup>	Elec-tricity	Total	Coal	Coal Coke	Natural Gas	Petroleum			Bio-fuels <sup>5</sup>	Elec-tricity	Total	
				Crude Oil <sup>2</sup>	Petroleum Products <sup>3</sup>	Total							Crude Oil <sup>2</sup>	Petroleum Products <sup>3</sup>	Total				
1949	0.008	0.007	0.000	0.915	0.513	1.427	NA	0.006	1.448	0.877	0.014	0.021	0.192	0.488	0.680	NA	0.001	1.592	-0.144
1950	.009	.011	.000	1.056	.830	1.886	NA	.007	1.913	.786	.010	.027	.202	.440	.642	NA	.001	1.465	.448
1955	.008	.003	.011	1.691	1.061	2.752	NA	.016	2.790	1.465	.013	.032	.067	.707	.774	NA	.002	2.286	.504
1960	.007	.003	.161	2.196	1.802	3.999	NA	.018	4.188	1.023	.009	.012	.018	.413	.431	NA	.003	1.477	2.710
1965	.005	.002	.471	2.654	2.748	5.402	NA	.012	5.892	1.376	.021	.027	.006	.386	.392	NA	.013	1.829	4.063
1970	.001	.004	.846	2.814	4.656	7.470	NA	.021	8.342	1.936	.061	.072	.029	.520	.549	NA	.014	2.632	5.709
1975	.024	.045	.978	8.721	4.227	12.948	NA	.038	14.032	1.761	.032	.074	.012	.427	.439	NA	.017	2.323	11.709
1976	.030	.033	.988	11.239	4.434	15.672	NA	.037	16.760	1.597	.033	.066	.017	.452	.469	NA	.008	2.172	14.588
1977	.041	.045	1.037	14.027	4.728	18.756	NA	.069	19.948	1.442	.031	.056	.106	.408	.514	NA	.009	2.052	17.896
1978	.074	.142	.995	13.460	4.364	17.824	NA	.072	19.106	1.078	.017	.053	.335	.432	.767	NA	.005	1.920	17.186
1979	.051	.099	1.300	13.825	4.108	17.933	NA	.077	19.460	1.753	.036	.056	.497	.505	1.002	NA	.007	2.855	16.605
1980	.030	.016	1.006	11.195	3.463	14.658	NA	.085	15.796	2.421	.051	.049	.609	.551	1.160	NA	.014	3.695	12.101
1981	.026	.013	.917	9.336	3.303	12.639	NA	.124	13.719	2.944	.029	.060	.482	.781	1.264	NA	.010	4.307	9.412
1982	.019	.003	.950	7.418	3.360	10.777	NA	.112	11.861	2.787	.025	.052	.500	1.231	1.732	NA	.012	4.608	7.253
1983	.032	.001	.940	7.079	3.568	10.647	NA	.132	11.752	2.045	.016	.055	.348	1.217	1.565	NA	.011	3.693	8.059
1984	.032	.014	.847	7.302	4.131	11.433	NA	.144	12.471	2.151	.026	.055	.384	1.161	1.545	NA	.009	3.786	8.685
1985	.049	.014	.952	6.814	3.796	10.609	NA	.157	11.781	2.438	.028	.056	.432	1.225	1.657	NA	.017	4.196	7.584
1986	.055	.008	.748	9.002	4.199	13.201	NA	.139	14.151	2.248	.025	.062	.326	1.344	1.670	NA	.016	4.021	10.130
1987	.044	.023	.992	10.067	4.095	14.162	NA	.178	15.398	2.093	.014	.055	.319	1.311	1.630	NA	.020	3.812	11.586
1988	.053	.067	1.296	11.027	4.720	15.747	NA	.133	17.296	2.499	.027	.075	.329	1.412	1.741	NA	.024	4.366	12.929
1989	.071	.057	1.387	12.596	4.565	17.162	NA	.089	18.766	2.637	.027	.109	.300	1.536	1.836	NA	.052	4.661	14.105
1990	.067	.019	1.551	12.766	4.351	17.117	NA	.063	18.817	2.772	.014	.087	.230	1.594	1.824	NA	.055	4.752	14.065
1991	.085	.029	1.798	12.553	3.794	16.348	NA	.075	18.335	2.854	.020	.132	.246	1.882	2.128	NA	.008	5.141	13.194
1992	.095	.052	2.161	13.253	3.714	16.968	NA	.096	19.372	2.682	.017	.220	.188	1.819	2.008	NA	.010	4.937	14.435
1993	.205	.053	2.397	14.749	3.760	18.510	.001	.107	21.273	1.962	.026	.142	.208	1.907	2.115	NA	.012	4.258	17.014
1994	.222	.083	2.682	15.340	3.904	19.243	.001	.160	22.390	1.879	.024	.164	.209	1.779	1.988	NA	.007	4.061	18.329
1995	.237	.095	2.901	15.669	3.211	18.881	.001	.146	22.260	2.318	.034	.156	.200	1.791	1.991	NA	.012	4.511	17.750
1996	.203	.063	3.002	16.341	3.943	20.284	.001	.148	23.702	2.368	.040	.155	.233	1.825	2.059	NA	.011	4.633	19.069
1997	.187	.078	3.063	17.876	3.864	21.740	(s)	.147	25.215	2.193	.031	.159	.228	1.872	2.100	NA	.031	4.514	20.701
1998	.218	.095	3.225	18.916	3.992	22.908	(s)	.135	26.581	2.092	.028	.161	.233	1.740	1.972	NA	.047	4.299	22.281
1999	.227	.080	3.664	18.935	4.198	23.133	(s)	.147	27.252	1.525	.022	.164	.250	1.705	1.955	NA	.049	3.715	23.537
2000	.313	.094	3.869	19.783	4.749	24.531	(s)	.166	28.973	1.528	.028	.245	.106	2.048	2.154	NA	.051	4.006	24.967
2001	.495	.063	4.068	20.348	5.051	25.398	.002	.131	30.157	1.265	.033	.377	.043	1.996	2.039	(s)	.056	3.771	26.386
2002	.422	.080	4.104	19.920	4.754	24.674	.002	.125	29.408	1.032	.020	.520	.019	2.023	2.042	(s)	.054	3.669	25.739
2003	.626	.068	4.042	21.060	5.159	26.219	.002	.104	31.061	1.117	.018	.686	.026	2.124	2.151	.001	.082	4.054	27.007
2004	.682	.170	4.365	22.082	6.114	28.197	.013	.117	33.544	1.253	.033	.862	.057	2.151	2.208	.001	.078	4.434	29.110
2005	.762	.088	4.450	22.091	7.157	29.248	.012	.150	34.709	1.273	.043	.735	.067	2.374	2.442	.001	.065	4.560	30.149
2006	.906	.101	4.291	22.085	7.084	29.169	.066	.146	34.679	1.264	.040	.730	.052	2.699	2.751	.004	.083	4.872	29.806
2007	.909	.061	4.723	21.914	6.868	28.781	.054	.175	34.703	1.507	.036	.830	.058	2.949	3.007	.035	.069	5.482	29.221
2008	.855	.089	4.084	21.448	6.237	27.685	.084	.195	32.992	2.071	.049	.972	.061	3.739	3.800	.086	.083	7.060	25.932
2009	.566	.009	3.845	19.699	5.383	25.082	.026	.178	29.706	1.515	.032	1.082	.093	4.147	4.240	.034	.062	6.965	22.741
2010	.484	.030	R3.834	R20.140	R5.231	R25.371	.004	.154	R29.877	2.101	.036	1.147	.088	R4.750	R4.838	R.046	R.065	R8.234	R21.643
2011 <sup>P</sup>	.327	.035	3.540	19.561	4.930	24.491	.016	.178	28.587	2.751	.024	1.521	.100	5.801	5.901	.108	.051	10.356	18.232

<sup>1</sup> Net imports equal imports minus exports. Minus sign indicates exports are greater than imports.  
<sup>2</sup> Crude oil and lease condensate. Imports data include imports into the Strategic Petroleum Reserve, which began in 1977.  
<sup>3</sup> Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include biofuels.  
<sup>4</sup> Fuel ethanol (minus denaturant) and biodiesel.  
<sup>5</sup> Biodiesel only.  
R=Revised. P=Preliminary. NA=Not available. (s)=Less than 0.0005 quadrillion Btu.

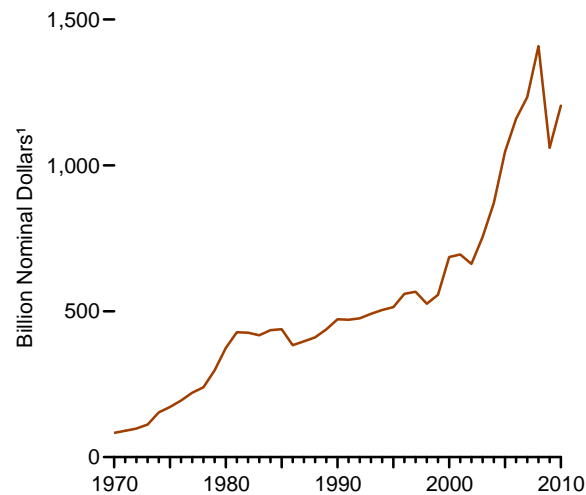
Notes: • Includes trade between the United States (50 States and the District of Columbia) and its territories and possessions. • See "Primary Energy" in Glossary. • See Note 3, "Electricity Imports and Exports," at end of Section 8. • Totals may not equal sum of components due to independent rounding.  
Web Pages: • See <http://www.eia.gov/totalenergy/data/monthly/#summary> for updated monthly and annual data. • See <http://www.eia.gov/totalenergy/data/annual/#summary> for all annual data beginning in 1949.  
Sources: Tables 5.1b, 5.3, 5.5, 6.1, 7.1, 7.8, 8.1, 10.3, 10.4, A2, A3, A4, A5, and A6.

**Figure 1.5 Energy Consumption and Expenditures Indicators Estimates**

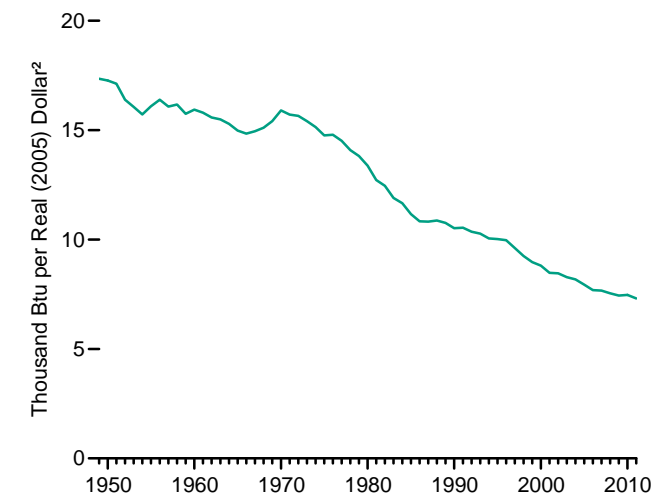
**Energy Consumption, 1949-2011**



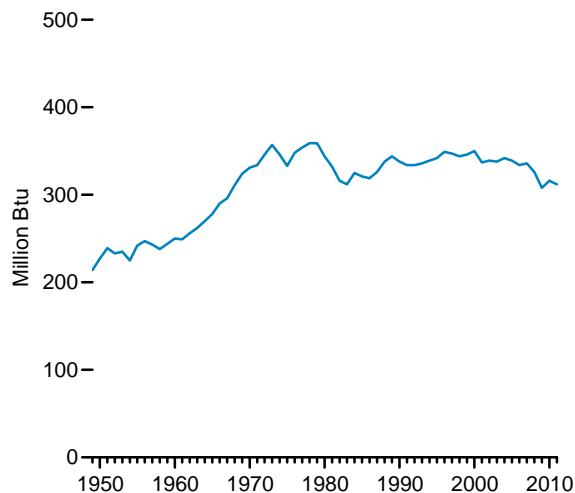
**Energy Expenditures, 1970-2010**



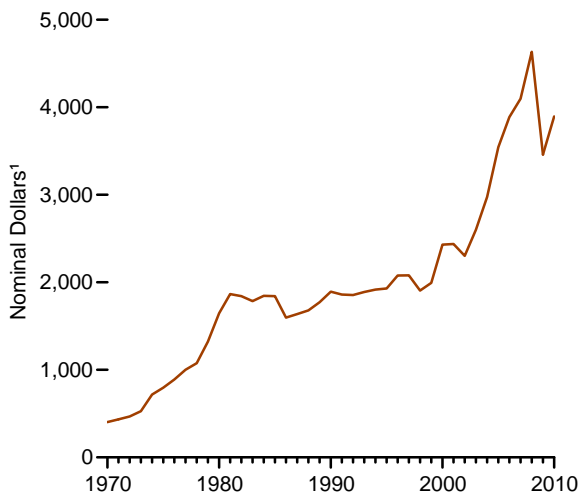
**Energy Consumption per Real Dollar<sup>2</sup> of Gross Domestic Product, 1949-2011**



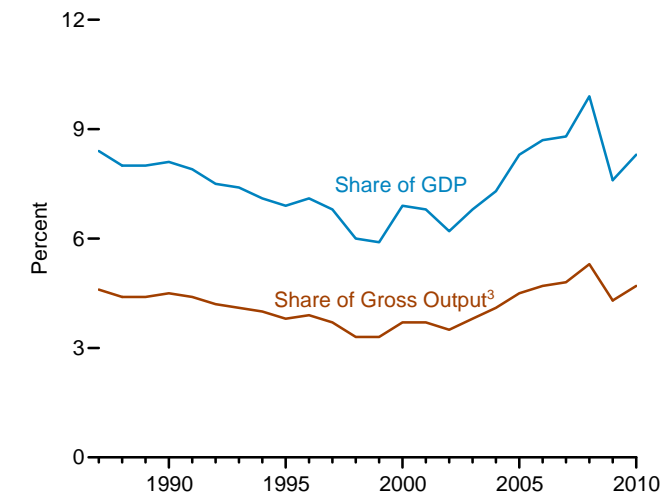
**Energy Consumption per Capita, 1949-2011**



**Energy Expenditures per Capita, 1970-2010**



**Energy Expenditures as Share of Gross Domestic Product and Gross Output,<sup>3</sup> 1987-2010**



<sup>1</sup> See "Nominal Dollars" in Glossary.

<sup>2</sup> In chained (2005) dollars, calculated by using gross domestic product implicit price deflators in Table D1. See "Chained Dollars" in Glossary.

<sup>3</sup> Gross output is the value of gross domestic product (GDP) plus the value of intermediate inputs used to produce GDP.

Source: Table 1.5.

**Table 1.5 Energy Consumption, Expenditures, and Emissions Indicators Estimates, Selected Years, 1949-2011**

Year	Energy Consumption	Energy Consumption per Capita	Energy Expenditures <sup>1</sup>	Energy Expenditures per Capita	Gross Output <sup>3</sup>	Energy Expenditures <sup>1</sup> as Share of Gross Output <sup>3</sup>	Gross Domestic Product (GDP)	Energy Expenditures <sup>1</sup> as Share of GDP	Gross Domestic Product (GDP)	Energy Consumption per Real Dollar of GDP	Carbon Dioxide Emissions <sup>2</sup> per Real Dollar of GDP
	Quadrillion Btu	Million Btu	Million Nominal Dollars <sup>4</sup>	Nominal Dollars <sup>4</sup>	Billion Nominal Dollars <sup>4</sup>	Percent	Billion Nominal Dollars <sup>4</sup>	Percent	Billion Real (2005) Dollars <sup>5</sup>	Thousand Btu per Real (2005) Dollar <sup>5</sup>	Metric Tons Carbon Dioxide per Million Real (2005) Dollars <sup>5</sup>
1949	31.982	214	NA	NA	NA	NA	267.2	NA	R1,843.1	R17.35	R1,197
1950	34.616	227	NA	NA	NA	NA	293.7	NA	R2,004.2	R17.27	R1,189
1955	40.208	242	NA	NA	NA	NA	414.7	NA	R2,498.2	R16.09	R1,075
1960	45.086	250	NA	NA	NA	NA	526.4	NA	R2,828.5	R15.94	R1,030
1965	54.015	278	NA	NA	NA	NA	719.1	NA	R3,607.0	R14.98	R960
1970	67.838	331	82,860	404	NA	NA	1,038.3	8.0	R4,266.3	R15.90	R999
1975	71.965	333	R171,837	R796	NA	NA	1,637.7	10.5	R4,875.4	R14.76	R910
1976	75.975	348	R193,896	889	NA	NA	1,824.6	10.6	R5,136.9	R14.79	R916
1977	77.961	354	R220,476	1,001	NA	NA	2,030.1	10.9	R5,373.1	R14.51	R902
1978	79.950	359	R239,255	R1,075	NA	NA	2,293.8	10.4	R5,672.8	R14.09	R863
1979	80.859	359	R297,549	1,322	NA	NA	2,562.2	11.6	R5,850.1	R13.82	R849
1980	78.067	344	R374,347	1,647	NA	NA	2,788.1	13.4	R5,834.0	R13.38	R818
1981	76.106	332	R427,898	R1,865	NA	NA	3,126.8	13.7	R5,982.1	R12.72	R776
1982	73.099	316	R426,479	R1,841	NA	NA	3,253.2	13.1	R5,865.9	R12.46	751
1983	72.971	312	R417,476	R1,786	NA	NA	3,534.6	11.8	R6,130.9	R11.90	R715
1984	76.632	325	R435,195	1,845	NA	NA	3,930.9	11.1	R6,571.5	R11.90	R702
1985	76.392	321	R438,347	1,842	NA	NA	4,217.5	10.4	R6,843.4	R11.16	672
1986	76.647	319	R383,518	1,597	NA	NA	4,460.1	8.6	R7,080.5	R10.83	R651
1987	79.054	326	R396,587	R1,637	8,639.9	4.6	4,736.4	8.4	R7,307.0	R10.82	R652
1988	82.709	338	R410,515	R1,679	9,359.5	4.4	5,100.4	8.0	R7,607.4	R10.87	R655
1989	84.786	344	R437,679	1,773	9,969.6	4.4	5,482.1	8.0	R7,879.2	R10.76	643
1990	84.485	338	R472,653	1,893	10,511.1	4.5	5,800.5	8.1	R8,027.1	10.52	R628
1991	84.438	334	R470,668	1,860	10,676.5	4.4	5,992.1	7.9	R8,008.3	R10.54	R624
1992	85.783	334	R475,644	R1,854	11,242.4	4.2	6,342.3	7.5	R8,280.0	R10.36	615
1993	87.424	336	R491,231	R1,890	11,857.6	4.1	6,667.4	7.4	R8,516.2	R10.27	R609
1994	89.091	339	504,073	1,916	12,647.2	4.0	7,085.2	7.1	R8,863.1	R10.05	593
1995	91.029	342	513,947	1,930	13,451.6	3.8	7,414.7	6.9	R9,086.0	R10.02	R585
1996	94.022	349	559,890	2,078	14,259.9	3.9	7,838.5	7.1	R9,425.8	9.97	R584
1997	94.602	347	566,714	2,079	15,160.5	3.7	8,332.4	6.8	R9,845.9	R9.61	566
1998	95.018	344	525,515	1,905	15,987.4	3.3	8,793.5	6.0	R10,274.7	R9.25	547
1999	96.652	346	R556,379	1,994	17,017.4	3.3	9,353.5	5.9	R10,770.7	8.97	R528
2000	R98.814	350	R685,902	2,431	18,305.7	3.7	9,951.5	6.9	R11,216.4	R8.81	523
2001	96.168	337	694,484	R2,437	18,576.5	3.7	10,286.2	6.8	R11,337.5	8.48	508
2002	R97.645	R339	R662,414	R2,303	18,874.2	3.5	10,642.3	6.2	R11,543.1	8.46	503
2003	97.978	338	754,708	R2,601	19,832.3	3.8	R11,142.2	6.8	R11,836.4	R8.28	495
2004	R100.162	342	R871,097	R2,975	21,267.7	4.1	R11,853.3	7.3	R12,246.9	R8.18	R488
2005	R100.282	339	R1,046,897	R3,543	23,046.9	4.5	R12,623.0	8.3	R12,623.0	R7.94	R475
2006	R99.629	334	R1,159,687	R3,887	24,477.0	4.7	R13,377.2	8.7	R12,958.5	R7.69	R457
2007	R101.296	336	R1,234,282	R4,097	25,819.7	4.8	R14,028.7	8.8	R13,206.4	R7.67	R456
2008	R99.275	326	R1,408,845	R4,633	26,561.9	5.3	R14,291.5	R9.9	R13,161.9	R7.54	R444
2009	R94.559	308	R1,061,220	R3,459	24,568.6	4.3	R13,939.0	R7.6	R12,703.1	R7.44	R427
2010	R97.722	R316	R1,204,827	R3,895	25,811.4	4.7	R14,526.5	R8.3	R13,088.0	R7.47	R429
2011 <sup>P</sup>	97.301	312	NA	NA	NA	NA	15,094.0	NA	13,315.1	7.31	412

<sup>1</sup> Expenditures include taxes where data are available.

<sup>2</sup> Carbon dioxide emissions from energy consumption. See Table 11.1.

<sup>3</sup> Gross output is the value of GDP plus the value of intermediate inputs used to produce GDP.

<sup>4</sup> See "Nominal Dollars" in Glossary.

<sup>5</sup> In chained (2005) dollars. See "Chained Dollars" in Glossary.

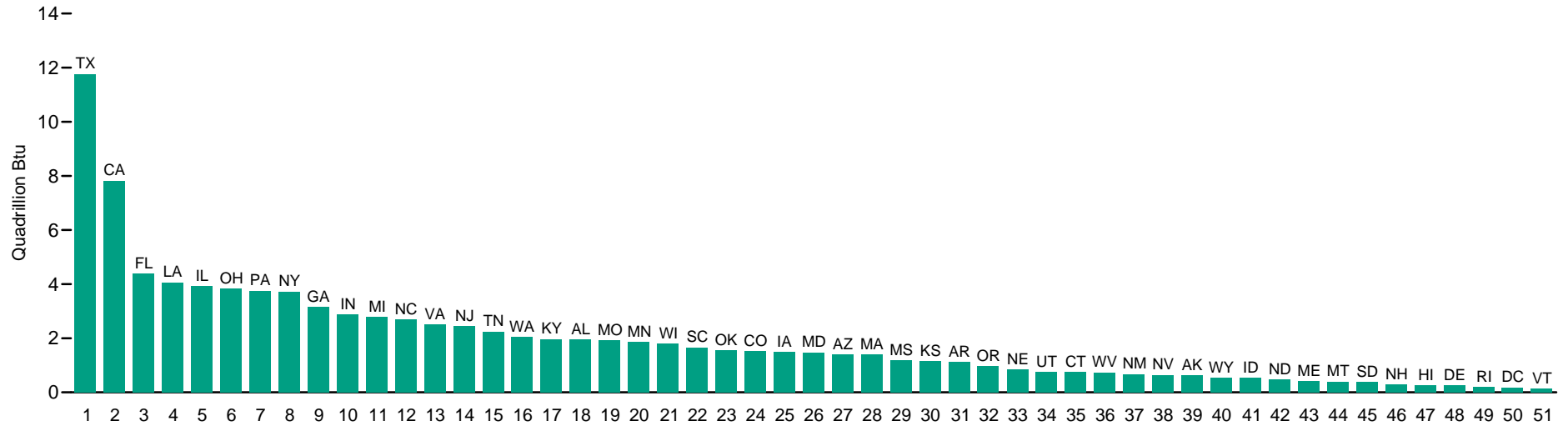
R=Revised. P=Preliminary. NA=Not available.

Web Page: For all data beginning in 1949, see <http://www.eia.gov/totalenergy/data/annual/#summary>.

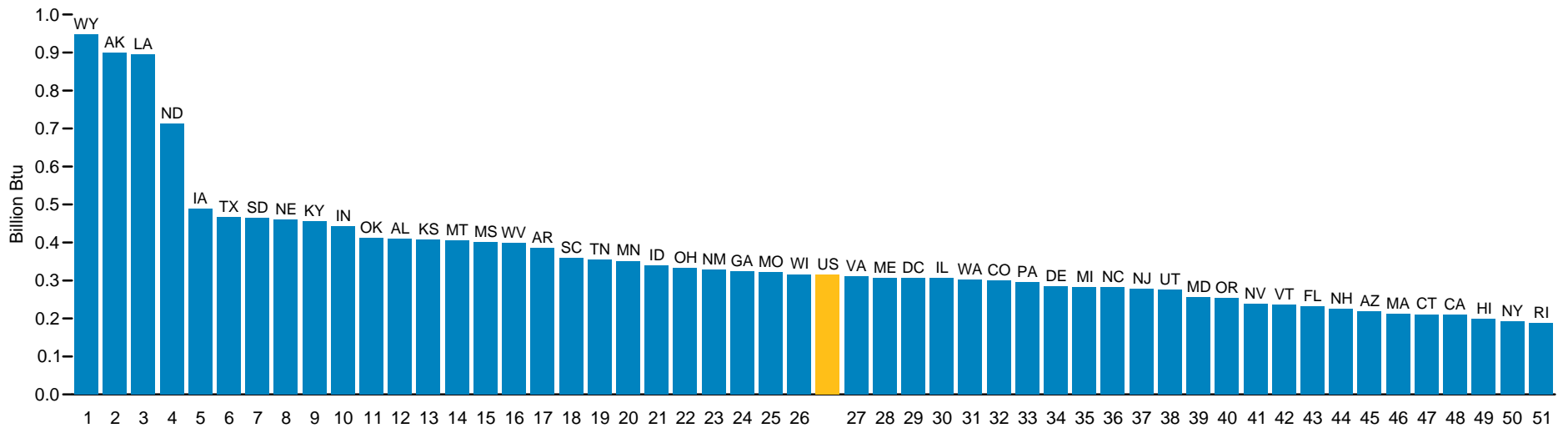
Sources: **Energy Consumption:** Table 1.3. **Energy Expenditures:** Table 3.5. **Gross Domestic Product:** Table D1. **Population Data:** Table D1. **Gross Output:** U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by Industry Data, Gross Output, All Industries. **Carbon Dioxide Emissions:** Table 11.1. **Other Columns:** Calculated by U.S. Energy Information Administration.

**Figure 1.6 State-Level Energy Consumption Estimates and Estimated Consumption per Capita, 2010**

**Consumption**



**Consumption per Capita**



Source: Table 1.6.

**Table 1.6 State-Level Energy Consumption, Expenditure, and Price Estimates, 2010**

Rank	Consumption		Consumption per Capita		Expenditures <sup>1</sup>		Expenditures <sup>1</sup> per Capita		Prices <sup>1</sup>	
	Trillion Btu		Million Btu		Million Dollars <sup>2</sup>		Dollars <sup>2</sup>		Dollars <sup>2</sup> per Million Btu	
1	Texas	11,769.9	Wyoming	948.1	Texas	137,532	Alaska	8,807	Hawaii	30.75
2	California	7,825.7	Alaska	898.5	California	117,003	Louisiana	8,661	District of Columbia	26.19
3	Florida	4,381.9	Louisiana	894.4	New York	61,619	Wyoming	7,904	Connecticut	25.63
4	Louisiana	4,065.4	North Dakota	712.6	Florida	60,172	North Dakota	6,740	Vermont	24.20
5	Illinois	3,936.7	Iowa	489.3	Pennsylvania	48,701	Texas	5,446	New Hampshire	23.87
6	Ohio	3,833.7	Texas	466.1	Ohio	45,081	Iowa	4,841	Massachusetts	23.32
7	Pennsylvania	3,758.8	South Dakota	464.9	Illinois	44,989	Maine	4,746	Rhode Island	23.12
8	New York	3,728.4	Nebraska	461.1	Louisiana	39,369	South Dakota	4,651	Delaware	22.95
9	Georgia	3,155.7	Kentucky	454.7	New Jersey	37,362	Montana	4,610	New York	22.91
10	Indiana	2,871.1	Indiana	442.3	Georgia	37,338	Kentucky	4,526	Maryland	22.48
11	Michigan	2,798.1	Oklahoma	412.6	Michigan	34,540	Alabama	4,494	Arizona	21.78
12	North Carolina	2,705.2	Alabama	409.5	North Carolina	32,989	Mississippi	4,446	Florida	21.66
13	Virginia	2,502.1	Kansas	407.6	Virginia	29,826	Nebraska	4,421	New Jersey	20.91
14	New Jersey	2,447.5	Montana	405.1	Indiana	27,374	Kansas	4,357	Nevada	20.87
15	Tennessee	2,250.6	Mississippi	400.4	Tennessee	25,153	Vermont	4,344	California	20.66
16	Washington	2,036.5	West Virginia	398.4	Massachusetts	24,512	Oklahoma	4,268	Alaska	20.25
17	Kentucky	1,976.5	Arkansas	385.3	Washington	22,893	West Virginia	4,251	North Carolina	19.98
18	Alabama	1,959.7	South Carolina	358.3	Missouri	22,885	New Jersey	4,246	Pennsylvania	19.56
19	Missouri	1,928.4	Tennessee	354.0	Maryland	21,517	Indiana	4,217	New Mexico	19.40
20	Minnesota	1,867.3	Minnesota	351.6	Alabama	21,507	Hawaii	4,191	Virginia	18.91
21	Wisconsin	1,800.1	Idaho	339.7	Wisconsin	21,483	Arkansas	4,128	Oregon	18.89
22	South Carolina	1,661.6	Ohio	332.3	Minnesota	20,869	South Carolina	4,034	Maine	18.78
23	Oklahoma	1,551.6	New Mexico	329.2	Kentucky	19,675	District of Columbia	4,033	Missouri	18.54
24	Colorado	1,516.9	Georgia	324.9	Arizona	19,374	Delaware	4,019	Tennessee	18.33
25	Iowa	1,492.3	Missouri	321.6	South Carolina	18,705	Connecticut	3,977	South Carolina	18.26
26	Maryland	1,481.1	Wisconsin	316.3	Colorado	16,751	New Hampshire	3,971	Michigan	18.22
27	Arizona	1,399.6	Virginia	311.8	Oklahoma	16,049	Tennessee	3,956	Wisconsin	18.22
28	Massachusetts	1,396.9	Maine	306.8	Iowa	14,766	Minnesota	3,930	Washington	18.11
29	Mississippi	1,189.2	District of Columbia	306.6	Connecticut	14,221	Ohio	3,907	Georgia	17.96
30	Kansas	1,165.3	Illinois	306.5	Mississippi	13,206	Georgia	3,844	Ohio	17.93
31	Arkansas	1,125.6	Washington	302.0	Oregon	12,592	Pennsylvania	3,829	Montana	17.73
32	Oregon	977.1	Colorado	300.5	Kansas	12,457	Missouri	3,817	Kansas	17.72
33	Nebraska	843.8	Pennsylvania	295.6	Arkansas	12,061	Wisconsin	3,774	Mississippi	17.63
34	Utah	763.7	Delaware	284.7	Nevada	9,294	Massachusetts	3,739	Alabama	17.49
35	Connecticut	754.0	Michigan	283.3	Utah	8,332	Maryland	3,719	Texas	17.46
36	West Virginia	738.9	North Carolina	283.0	Nebraska	8,091	Virginia	3,717	Colorado	17.24
37	New Mexico	680.1	New Jersey	278.1	West Virginia	7,882	Idaho	3,622	Illinois	17.17
38	Nevada	646.1	Utah	275.2	New Mexico	7,435	New Mexico	3,599	West Virginia	17.09
39	Alaska	641.7	Maryland	256.0	Maine	6,300	Rhode Island	3,506	South Dakota	16.92
40	Wyoming	535.3	Oregon	254.6	Alaska	6,289	Illinois	3,503	Kentucky	16.89
41	Idaho	533.8	Nevada	238.9	Hawaii	5,714	Michigan	3,497	Minnesota	16.82
42	North Dakota	480.7	Vermont	235.9	Idaho	5,691	North Carolina	3,451	Oklahoma	16.78
43	Maine	407.3	Florida	232.6	New Hampshire	5,229	Nevada	3,437	Arkansas	16.76
44	Montana	401.4	New Hampshire	224.4	Montana	4,568	Washington	3,395	Idaho	16.68
45	South Dakota	379.6	Arizona	218.2	North Dakota	4,547	Colorado	3,319	Utah	16.66
46	New Hampshire	295.5	Massachusetts	213.1	Wyoming	4,462	Oregon	3,281	Nebraska	16.27
47	Hawaii	272.2	Connecticut	210.9	South Dakota	3,798	Florida	3,194	Iowa	15.46
48	Delaware	256.2	California	209.6	Rhode Island	3,690	New York	3,177	Wyoming	15.16
49	Rhode Island	197.2	Hawaii	199.6	Delaware	3,616	California	3,134	Indiana	14.75
50	District of Columbia	185.5	New York	192.2	Vermont	2,719	Arizona	3,021	Louisiana	14.73
51	Vermont	147.6	Rhode Island	187.4	District of Columbia	2,439	Utah	3,002	North Dakota	13.73
	<b>United States</b>	<b>3,497,710.6</b>	<b>United States</b>	<b>315.9</b>	<b>United States</b>	<b>51,204,827</b>	<b>United States</b>	<b>3,895</b>	<b>United States</b>	<b>18.73</b>

<sup>1</sup> Prices and expenditures include taxes where data are available.

<sup>2</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

<sup>3</sup> Includes -6.2 trillion Btu of coal coke net imports, which are not allocated to the States.

<sup>4</sup> The U.S. consumption value in this table does not match those in Tables 1.1 and 1.3 because it: 1) does not include biodiesel; and 2) is the sum of State values, which use State average heat contents to convert physical units of coal and natural gas to Btu.

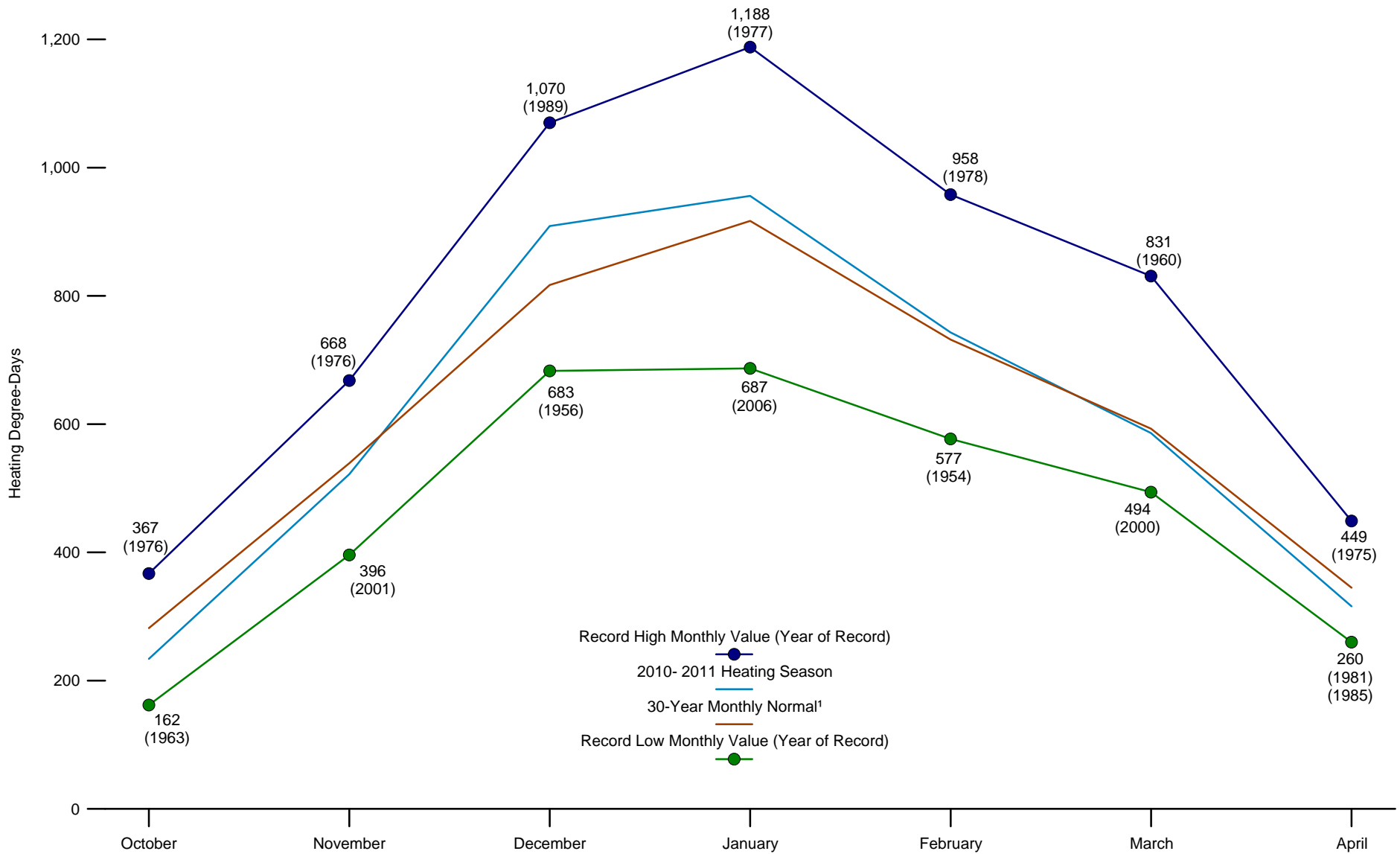
<sup>5</sup> Includes \$158 million for coal coke net imports, which are not allocated to the States.

Note: Rankings based on unrounded data.

Web Page: For related information, see <http://www.eia.gov/state/seds/seds-data-complete.cfm>.

Sources: **Consumption:** U.S. Energy Information Administration (EIA), "State Energy Data 2010: Consumption" (June 2012), Tables C10 and C11. **Expenditures and Prices:** EIA, "State Energy Data 2010: Prices and Expenditures" (June 2012), Table E15. "State Energy Data 2010" includes State-level data by end-use sector and type of energy. Consumption estimates are annual 1960 through 2010, and price and expenditure estimates are annual 1970 through 2010.

**Figure 1.7 Heating Degree-Days by Month, 1949-2011**



<sup>1</sup> Based on calculations of data from 1971 through 2000.

Source: Table 1.7.



**Table 1.7 Heating Degree-Days by Month, Selected Years, 1949-2011**

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1949	858	701	611	330	128	21	7	9	94	209	503	763	4,234
1950	761	721	693	412	162	40	11	18	85	196	565	872	4,536
1955	927	759	600	272	121	48	9	6	56	237	600	886	4,521
1960	884	780	831	278	160	33	7	11	48	254	502	936	4,724
1965	907	780	738	355	114	48	11	14	78	271	494	739	4,549
1970	1,063	758	685	344	120	31	4	9	55	253	541	801	4,664
1975	821	742	686	449	117	37	5	13	100	235	462	805	4,472
1976	974	609	544	309	178	28	8	19	81	367	668	941	4,726
1977	1,188	751	529	270	119	38	6	13	59	295	493	844	4,605
1978	1,061	958	677	350	157	31	7	11	59	283	517	847	4,958
1979	1,079	950	575	364	148	37	6	15	58	271	528	750	4,781
1980	887	831	680	338	142	49	5	10	54	316	564	831	4,707
1981	984	689	620	260	165	25	6	11	76	327	504	845	4,512
1982	1,067	776	620	408	114	62	7	19	75	264	515	692	4,619
1983	874	706	588	421	189	35	6	5	53	251	509	990	4,627
1984	1,000	645	704	371	172	28	7	7	88	223	565	704	4,514
1985	1,057	807	557	260	123	47	5	17	69	243	506	951	4,642
1986	859	734	542	295	123	30	9	18	76	258	558	793	4,295
1987	920	714	573	309	107	20	8	13	61	345	491	773	4,334
1988	1,004	778	594	344	134	30	3	5	72	352	506	831	4,653
1989	789	832	603	344	163	32	5	14	73	259	542	1,070	4,726
1990	728	655	535	321	184	29	6	10	56	246	457	789	4,016
1991	921	639	564	287	98	30	6	7	69	242	586	751	4,200
1992	852	644	603	345	152	46	14	24	74	301	564	822	4,441
1993	860	827	664	368	128	38	11	9	89	302	580	824	4,700
1994	1,031	813	594	293	174	21	6	16	65	268	479	723	4,483
1995	847	750	556	375	174	31	4	7	77	233	605	872	4,531
1996	945	748	713	360	165	27	8	9	72	276	630	760	4,713
1997	932	672	552	406	198	31	7	16	63	273	592	800	4,542
1998	765	623	596	331	109	41	4	5	33	245	482	717	3,951
1999	861	647	645	319	139	31	5	12	62	275	413	760	4,169
2000	886	643	494	341	115	29	12	12	69	244	610	1,005	4,460
2001	935	725	669	302	115	29	8	6	69	260	396	689	4,203
2002	776	669	622	281	184	23	3	8	37	298	560	812	4,273
2003	944	801	572	344	165	41	4	5	62	260	477	784	4,459
2004	968	766	495	303	107	37	7	20	47	251	487	802	4,290
2005	859	676	648	305	186	25	3	6	39	236	466	866	4,315
2006	687	731	600	264	137	23	2	9	82	304	467	690	3,996
2007	841	853	502	372	111	24	5	7	44	175	521	800	4,255
2008	892	741	617	319	183	26	5	13	52	281	534	831	4,494
2009	969	705	583	330	132	40	14	12	60	330	441	877	4,493
2010	940	820	552	263	132	27	5	7	50	234	522	909	4,461
2011 <sup>P</sup>	956	743	586	316	166	35	4	6	67	259	469	713	4,320
Normal <sup>1</sup>	917	732	593	345	159	39	9	15	77	282	539	817	4,524

<sup>1</sup> Based on calculations of data from 1971 through 2000.

P=Preliminary.

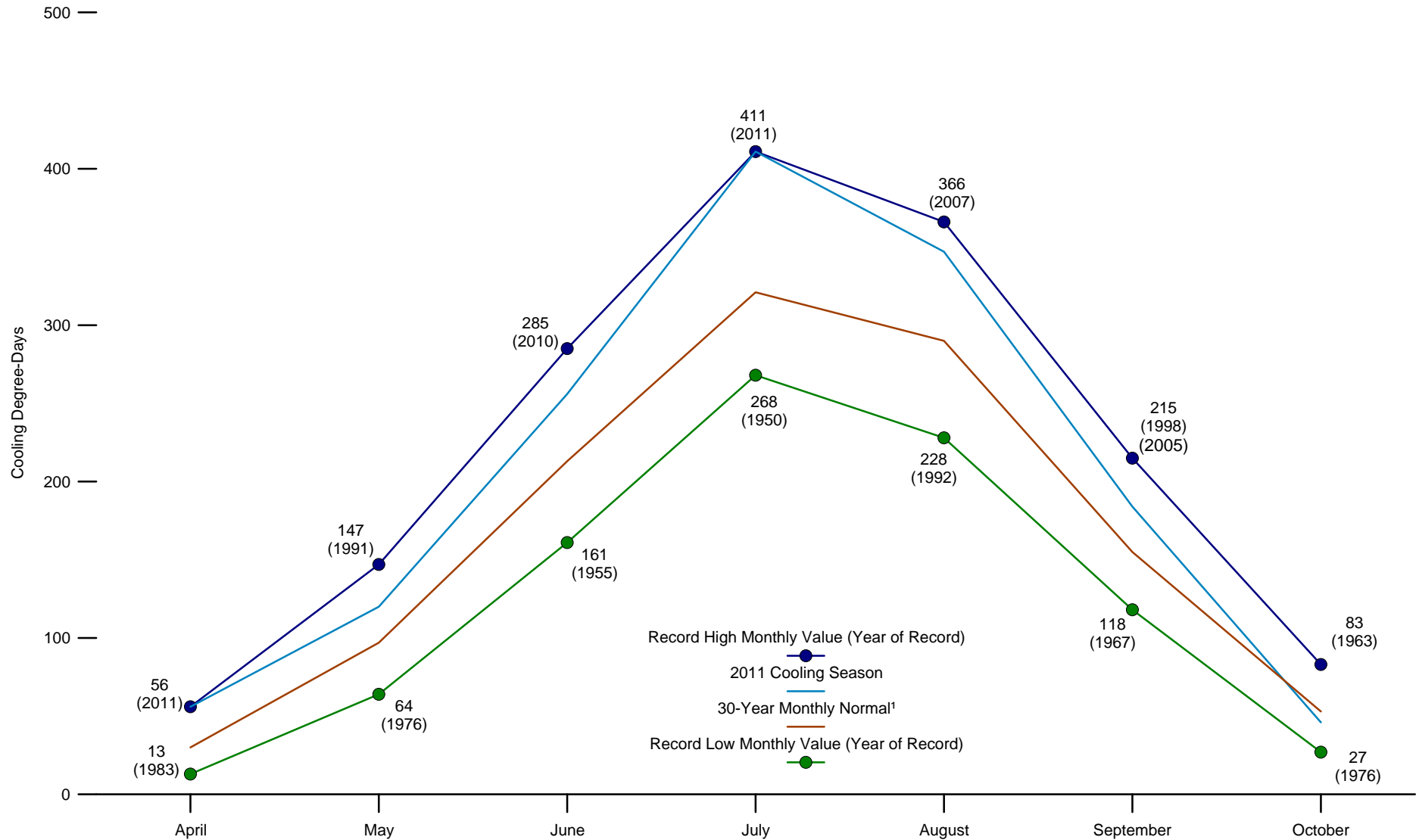
Notes: • This table excludes Alaska and Hawaii. • Degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations below the mean daily temperature of 65° F. For example, a weather station recording a mean daily temperature of 40° F would report 25 heating degree-days. • Temperature information recorded by weather stations is used to calculate State-wide degree-day averages based on resident State population. Beginning in July 2001, data are weighted by the 2000 population. The population-weighted State figures are aggregated into Census divisions and the national average.

Web Pages: • See <http://www.eia.gov/totalenergy/data/annual/#summary> for all data beginning in 1949.

• For current data, see <http://www.eia.gov/totalenergy/data/monthly/#summary>.

Sources: • 1949-2010—U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Climatic Data Center, Asheville, North Carolina, Historical Climatology Series 5-1. Data are compiled from about 8,000 weather stations. • 2011 and Normal—U.S. Department of Commerce, NOAA, National Weather Service Climate Prediction Center, Camp Springs, Maryland, *Degree Days Statistics*. The data are based on mean daily temperatures recorded at about 200 major weather stations around the country.

**Figure 1.8 Cooling Degree-Days by Month, 1949-2011**



<sup>1</sup> Based on calculations of data from 1971 through 2000.

Source: Table 1.8.

**Table 1.8 Cooling Degree-Days by Month, Selected Years, 1949-2011**

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1949	16	14	14	27	110	253	367	294	131	70	12	10	1,318
1950	27	12	13	21	105	201	268	244	128	78	9	4	1,110
1955	6	7	20	45	121	161	381	355	182	50	10	6	1,344
1960	7	4	6	37	76	215	301	302	181	59	15	3	1,206
1965	9	7	10	42	125	179	280	273	155	48	19	6	1,153
1970	3	4	10	36	104	201	323	313	185	48	6	9	1,242
1975	14	11	14	24	117	203	301	296	120	55	12	5	1,172
1976	5	11	23	27	64	208	282	243	127	27	8	4	1,029
1977	2	5	21	35	121	212	351	293	180	44	15	6	1,285
1978	3	1	10	31	93	218	310	300	180	52	19	9	1,226
1979	4	4	13	32	82	187	295	266	160	53	11	6	1,113
1980	9	4	13	23	95	199	374	347	192	42	10	5	1,313
1981	3	6	10	52	75	257	333	275	138	43	12	5	1,209
1982	6	10	21	26	115	165	318	262	140	47	15	11	1,136
1983	6	5	9	13	72	193	353	362	172	58	12	5	1,260
1984	5	6	14	24	92	233	291	312	143	70	9	15	1,214
1985	3	5	22	39	108	193	313	269	145	68	25	4	1,194
1986	8	10	17	33	106	231	340	259	161	52	23	9	1,249
1987	5	7	13	23	127	244	334	298	156	40	14	8	1,269
1988	5	5	13	28	89	218	359	348	149	45	18	6	1,283
1989	15	7	19	36	88	208	312	266	138	49	16	2	1,156
1990	15	14	21	29	86	234	316	291	172	57	16	9	1,260
1991	10	9	19	42	147	235	336	305	149	62	8	9	1,331
1992	6	10	15	29	77	170	286	228	150	49	13	7	1,040
1993	13	5	11	19	91	207	347	317	146	47	11	4	1,218
1994	7	9	18	37	76	262	328	263	141	50	20	9	1,220
1995	7	7	18	29	91	202	348	363	150	61	12	5	1,293
1996	7	6	8	26	116	226	299	287	139	45	14	7	1,180
1997	8	11	31	19	81	189	315	268	171	48	10	5	1,156
1998	12	7	10	23	135	228	350	337	215	62	20	11	1,410
1999	12	11	12	40	94	219	374	305	152	55	17	6	1,297
2000	10	10	25	28	131	221	284	302	156	50	8	4	1,229
2001	3	12	11	37	114	220	302	333	138	46	18	11	1,245
2002	8	6	17	53	92	243	370	332	202	57	11	5	1,396
2003	5	7	24	30	110	187	336	345	156	65	21	4	1,290
2004	6	6	28	29	138	208	299	252	177	67	17	5	1,232
2005	10	7	12	24	82	250	367	351	215	55	20	4	1,397
2006	13	5	18	53	109	236	388	337	138	46	14	11	1,368
2007	10	5	29	23	119	236	310	366	191	82	16	12	1,399
2008	7	11	17	31	91	264	334	283	171	48	12	8	1,277
2009	7	7	17	29	117	222	284	307	169	47	16	7	1,229
2010	3	2	7	34	126	285	380	356	195	55	13	1	1,457
2011 <sup>P</sup>	3	10	20	56	120	256	411	347	184	46	16	8	1,477
Normal <sup>1</sup>	R 9	8	18	R30	R97	R213	R321	R290	R155	R53	R15	R 7	R1,216

<sup>1</sup> Based on calculations of data from 1971 through 2000.

R=Revised. P=Preliminary.

Notes: • This table excludes Alaska and Hawaii. • Degree-days are relative measurements of outdoor air temperature. Cooling degree-days are deviations above the mean daily temperature of 65° F. For example, a weather station recording a mean daily temperature of 78° F would report 13 cooling degree-days. • Temperature information recorded by weather stations is used to calculate State-wide degree-day averages based on resident State population. Beginning in 2002, data are weighted by the 2000 population. The population-weighted State figures are aggregated into Census divisions and the national average.

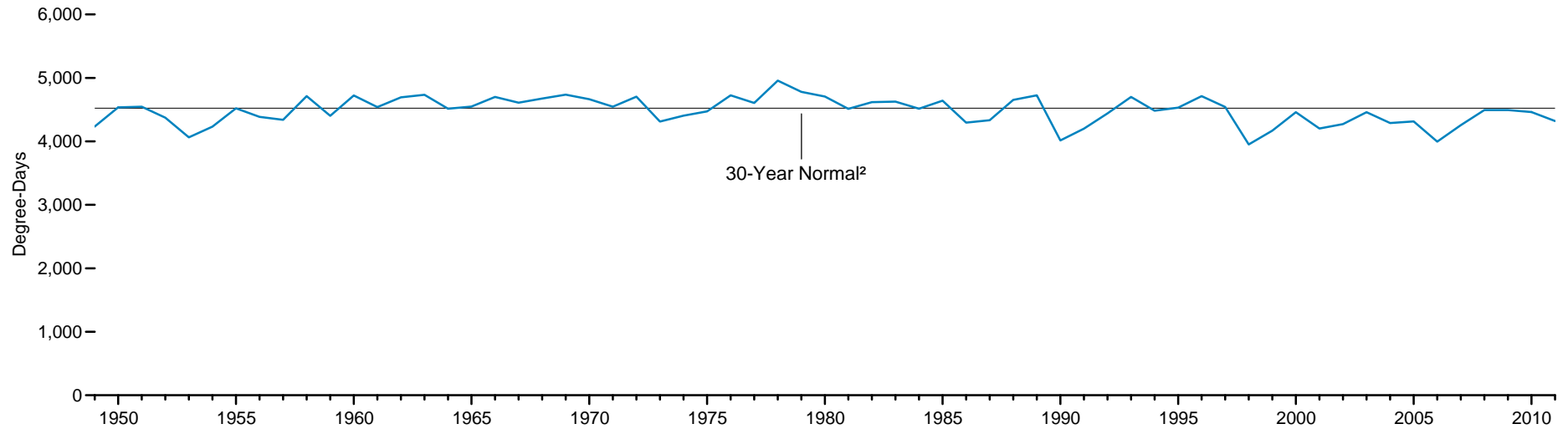
Web Pages: • See <http://www.eia.gov/totalenergy/data/annual/#summary> for all data beginning in 1949.

• For current data, see <http://www.eia.gov/totalenergy/data/monthly/#summary>.

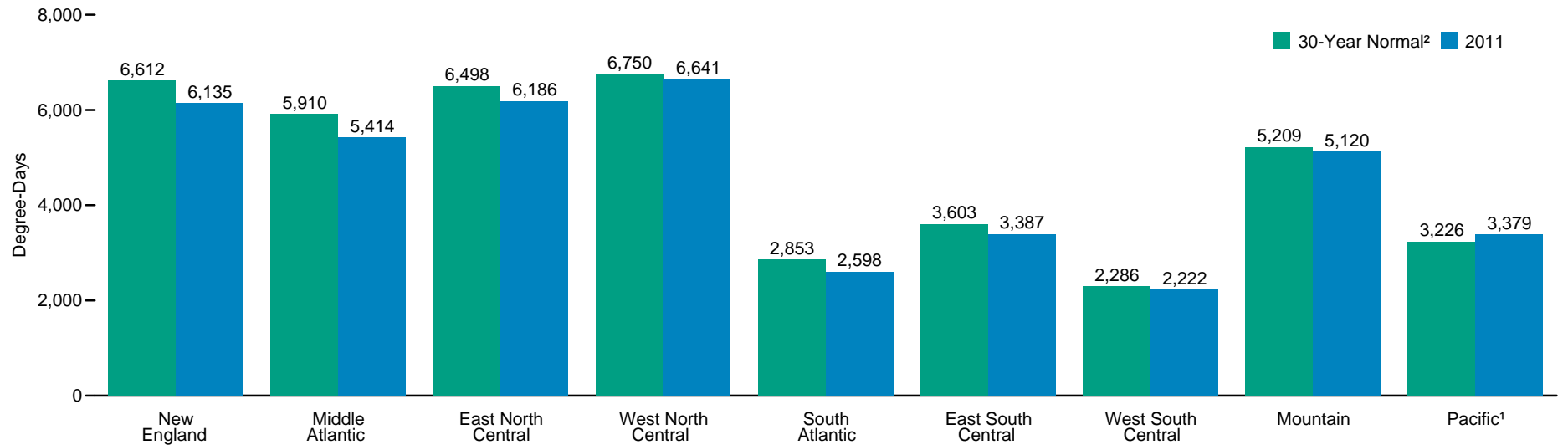
Sources: • 1949-2010—U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Climatic Data Center, Asheville, North Carolina, Historical Climatology Series 5-2. Data are compiled from about 8,000 weather stations. • 2011 and Normal—U.S. Department of Commerce, NOAA, National Weather Service Climate Prediction Center, Camp Springs, Maryland, *Degree Days Statistics*. The data are based on mean daily temperatures recorded at about 200 major weather stations around the country.

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

**U.S.<sup>1</sup> Heating Degree-Days, 1949-2011**



**Heating Degree-Days by Census Division, 2011**



<sup>1</sup> Excludes Alaska and Hawaii.

<sup>2</sup> Based on calculations of data from 1971 through 2000.

Note: See Appendix C for map of Census divisions.

Source: Table 1.9.

**Table 1.9 Heating Degree-Days by Census Division, Selected Years, 1949-2011**

Year	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific <sup>1</sup>	United States <sup>1</sup>
1949	5,829	5,091	5,801	6,479	2,367	2,942	2,133	5,483	3,729	4,234
1950	6,470	5,765	6,619	7,136	2,713	3,315	1,974	4,930	3,355	4,536
1955	6,577	5,708	6,101	6,630	2,786	3,314	2,083	5,517	3,723	4,521
1960	6,561	5,901	6,544	6,884	3,147	3,958	2,551	5,328	3,309	4,724
1965	6,825	5,933	6,284	6,646	2,830	3,374	2,078	5,318	3,378	4,549
1970	6,839	5,943	6,455	6,835	2,997	3,685	2,396	5,436	3,257	4,664
1975	6,362	5,477	6,169	6,678	2,640	3,336	2,187	5,693	3,623	4,472
1976	6,839	6,097	6,768	6,670	3,040	3,881	2,446	5,303	3,115	4,726
1977	6,579	5,889	6,538	6,506	3,047	3,812	2,330	5,060	3,135	4,605
1978	7,061	6,330	7,095	7,324	3,187	4,062	2,764	5,370	3,168	4,958
1979	6,348	5,851	6,921	7,369	2,977	3,900	2,694	5,564	3,202	4,781
1980	6,900	6,143	6,792	6,652	3,099	3,855	2,378	5,052	2,986	4,707
1981	6,612	5,989	6,446	6,115	3,177	3,757	2,162	4,671	2,841	4,512
1982	6,697	5,866	6,542	7,000	2,721	3,357	2,227	5,544	3,449	4,619
1983	6,305	5,733	6,423	6,901	3,057	3,892	2,672	5,359	3,073	4,627
1984	6,442	5,777	6,418	6,582	2,791	3,451	2,194	5,592	3,149	4,514
1985	6,571	5,660	6,546	7,119	2,736	3,602	2,466	5,676	3,441	4,642
1986	6,517	5,665	6,150	6,231	2,686	3,294	2,058	4,870	2,807	4,295
1987	6,546	5,699	5,810	5,712	2,937	3,466	2,292	5,153	3,013	4,334
1988	6,715	6,088	6,590	6,634	3,122	3,800	2,346	5,148	2,975	4,653
1989	6,887	6,134	6,834	6,996	2,944	3,713	2,439	5,173	3,061	4,726
1990	5,848	4,998	5,681	6,011	2,230	2,929	1,944	5,146	3,148	4,016
1991	5,960	5,177	5,906	6,319	2,503	3,211	2,178	5,259	3,109	4,200
1992	6,844	5,964	6,297	6,262	2,852	3,498	2,145	5,054	2,763	4,441
1993	6,728	5,948	6,646	7,168	2,981	3,768	2,489	5,514	3,052	4,700
1994	6,672	5,934	6,378	6,509	2,724	3,394	2,108	5,002	3,155	4,483
1995	6,559	5,831	6,664	6,804	2,967	3,626	2,145	4,953	2,784	4,531
1996	6,679	5,986	6,947	7,345	3,106	3,782	2,285	5,011	2,860	4,713
1997	6,661	5,809	6,617	6,761	2,845	3,664	2,418	5,188	2,754	4,542
1998	5,680	4,812	5,278	5,774	2,429	3,025	2,021	5,059	3,255	3,951
1999	5,952	5,351	5,946	5,921	2,652	3,142	1,835	4,768	3,158	4,169
2000	6,489	5,774	6,284	6,456	2,959	3,548	2,194	4,881	3,012	4,460
2001	6,055	5,323	5,824	6,184	2,641	3,312	2,187	4,895	3,136	4,203
2002	6,099	5,372	6,122	6,465	2,671	3,420	2,307	5,018	3,132	4,273
2003	6,851	6,090	6,528	6,539	2,891	3,503	2,230	4,605	2,918	4,459
2004	6,612	5,749	6,199	6,290	2,748	3,289	2,088	4,844	2,925	4,290
2005	6,551	5,804	6,241	6,202	2,844	3,402	2,051	4,759	2,959	4,315
2006	5,809	5,050	5,712	5,799	2,535	3,239	1,863	4,778	3,116	3,996
2007	6,501	5,623	6,096	6,374	2,584	3,213	2,156	4,830	3,113	4,255
2008	6,395	5,643	6,696	7,112	2,782	3,641	2,178	5,114	3,186	4,494
2009	6,646	5,799	6,540	6,837	2,879	3,588	2,212	5,016	3,150	4,493
2010	5,942	5,455	6,207	6,584	3,219	3,994	2,521	4,954	3,171	4,461
2011 <sup>P</sup>	6,135	5,414	6,186	6,641	2,598	3,387	2,222	5,120	3,379	4,320
Normal <sup>2</sup>	6,612	5,910	6,498	6,750	2,853	3,603	2,286	5,209	3,226	4,524

<sup>1</sup> Excludes Alaska and Hawaii.

<sup>2</sup> Based on calculations of data from 1971 through 2000.

P=Preliminary.

Notes: • Degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations below the mean daily temperature of 65° F. For example, a weather station recording a mean daily temperature of 40° F would report 25 heating degree-days. • Temperature information recorded by weather stations is used to calculate State-wide degree-day averages based on resident State population. Beginning in July 2001, data are weighted by the 2000 population. The population-weighted State figures are aggregated into Census divisions and the national average. • See Appendix C for map of Census

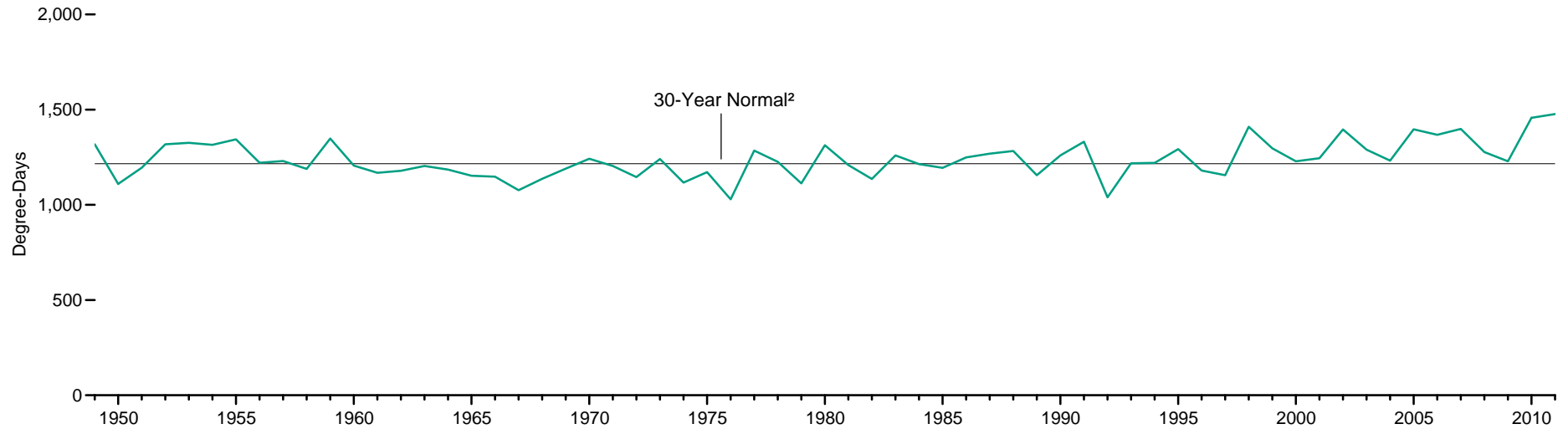
divisions.

Web Pages: • See <http://www.eia.gov/totalenergy/data/annual/#summary> for all data beginning in 1949. • For current data, see <http://www.eia.gov/totalenergy/data/monthly/#summary>.

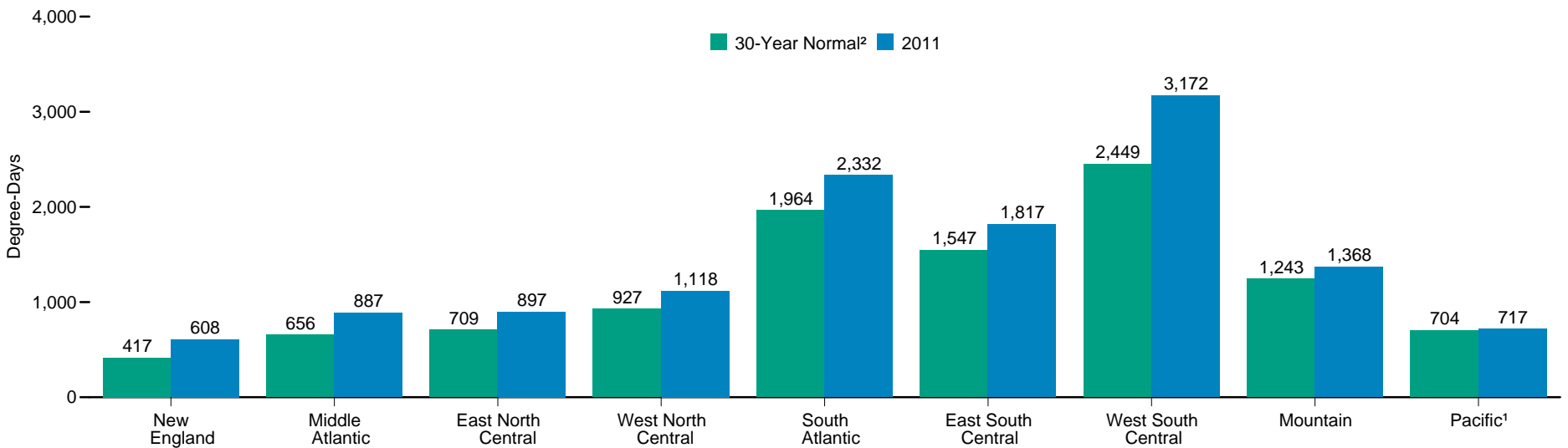
Sources: • 1949-2010—U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Climatic Data Center, Asheville, North Carolina, Historical Climatology Series 5-1. Data are compiled from about 8,000 weather stations. • 2011 and Normal—U.S. Department of Commerce, NOAA, National Weather Service Climate Prediction Center, Camp Springs, Maryland, *Degree Days Statistics*. The data are the sum of monthly values and are based on mean daily temperatures recorded at about 200 major weather stations around the country.

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

**U.S.<sup>1</sup> Cooling Degree-Days, 1949-2011**



**Cooling Degree-Days by Census Division, 2011**



<sup>1</sup> Excludes Alaska and Hawaii.

<sup>2</sup> Based on calculations of data from 1971 through 2000.

Note: See Appendix C for map of Census divisions.

Source: Table 1.10.

**Table 1.10 Cooling Degree-Days by Census Division, Selected Years, 1949-2011**

Year	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific <sup>1</sup>	United States <sup>1</sup>
1949	654	901	949	1,038	2,128	1,776	2,510	1,198	593	1,318
1950	353	542	602	729	1,919	1,568	2,473	1,120	597	1,110
1955	602	934	1,043	1,238	2,045	1,791	2,643	1,124	560	1,344
1960	368	640	722	961	1,926	1,613	2,492	1,308	770	1,206
1965	352	638	688	914	1,931	1,634	2,579	961	542	1,153
1970	479	779	827	1,066	2,007	1,662	2,375	1,163	689	1,242
1975	467	708	788	1,003	2,011	1,520	2,261	1,031	547	1,172
1976	402	597	619	939	1,675	1,232	2,035	1,058	620	1,029
1977	407	689	823	1,122	2,020	1,808	2,720	1,256	715	1,285
1978	378	615	741	1,027	1,972	1,685	2,638	1,174	738	1,226
1979	434	588	618	871	1,833	1,412	2,242	1,164	770	1,113
1980	487	793	816	1,217	2,075	1,834	2,734	1,202	658	1,313
1981	436	657	658	924	1,889	1,576	2,498	1,331	876	1,209
1982	321	541	643	859	1,958	1,537	2,502	1,121	619	1,136
1983	538	799	934	1,178	1,925	1,579	2,288	1,174	776	1,260
1984	468	649	724	955	1,865	1,508	2,469	1,190	956	1,214
1985	372	627	643	830	2,004	1,596	2,599	1,210	737	1,194
1986	301	626	738	1,021	2,149	1,792	2,618	1,188	664	1,249
1987	406	729	918	1,115	2,067	1,718	2,368	1,196	706	1,269
1988	545	782	975	1,230	1,923	1,582	2,422	1,320	729	1,283
1989	426	658	652	864	1,977	1,417	2,295	1,330	685	1,156
1990	477	656	647	983	2,143	1,622	2,579	1,294	827	1,260
1991	511	854	959	1,125	2,197	1,758	2,499	1,182	672	1,331
1992	276	460	449	637	1,777	1,293	2,201	1,206	905	1,040
1993	486	764	735	817	2,092	1,622	2,369	1,113	708	1,218
1994	548	722	664	887	2,005	1,448	2,422	1,436	801	1,220
1995	507	803	921	985	2,081	1,671	2,448	1,234	754	1,293
1996	400	623	629	821	1,867	1,474	2,515	1,381	856	1,180
1997	395	586	574	873	1,886	1,393	2,361	1,335	921	1,156
1998	505	788	889	1,138	2,277	1,928	3,026	1,271	732	1,410
1999	631	882	855	970	2,024	1,733	2,645	1,242	635	1,297
2000	317	542	658	1,023	1,929	1,736	2,787	1,488	756	1,229
2001	519	722	744	1,028	1,891	1,535	2,565	1,498	794	1,245
2002	570	863	933	1,087	2,209	1,808	2,545	1,543	739	1,396
2003	522	685	645	946	2,007	1,494	2,522	1,639	941	1,290
2004	402	670	604	752	2,037	1,549	2,485	1,376	823	1,232
2005	642	990	960	1,094	2,081	1,696	2,636	1,457	728	1,397
2006	528	778	752	1,079	2,037	1,670	2,776	1,586	916	1,368
2007	484	788	900	1,135	2,212	1,927	2,488	1,663	811	1,399
2008	497	745	698	847	1,987	1,560	2,494	1,504	868	1,277
2009	362	587	547	720	2,025	1,497	2,570	1,504	884	1,229
2010	657	997	975	1,123	2,267	2,004	2,750	1,450	655	1,457
2011 <sup>P</sup>	608	887	897	1,118	2,332	1,817	3,172	1,368	717	1,477
Normal <sup>2</sup>	R 417	R 656	R 709	R 927	R1,964	R1,547	R2,449	R1,243	R 704	R1,216

<sup>1</sup> Excludes Alaska and Hawaii.

<sup>2</sup> Based on calculations of data from 1971 through 2000.

R=Revised. P=Preliminary.

Notes: • Degree-days are relative measurements of outdoor air temperature. Cooling degree-days are deviations above the mean daily temperature of 65° F. For example, a weather station recording a mean daily temperature of 78° F would report 13 cooling degree-days. • Temperature information recorded by weather stations is used to calculate State-wide degree-day averages based on resident State population. Beginning in 2002, data are weighted by the 2000 population. The population-weighted State figures are aggregated into Census divisions and the national average. • See Appendix C for map of Census

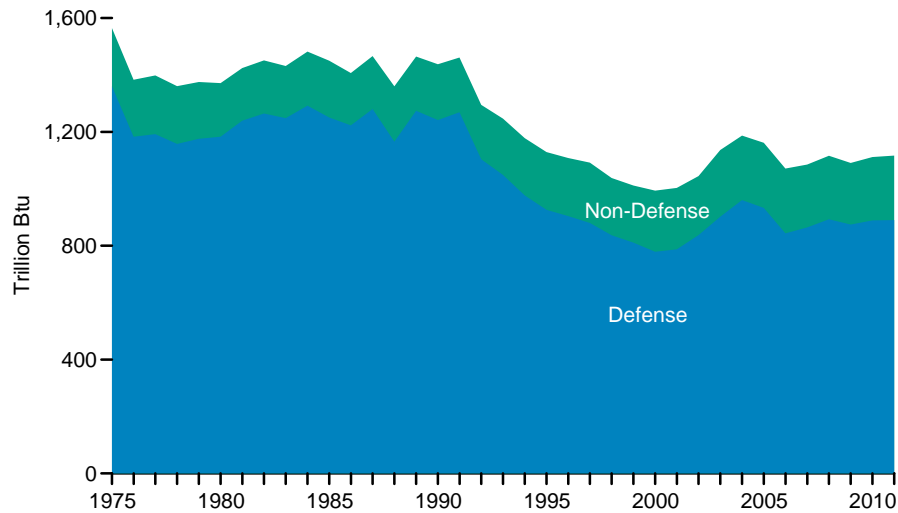
divisions.

Web Pages: • See <http://www.eia.gov/totalenergy/data/annual/#summary> for all data beginning in 1949. • For current data, see <http://www.eia.gov/totalenergy/data/monthly/#summary>.

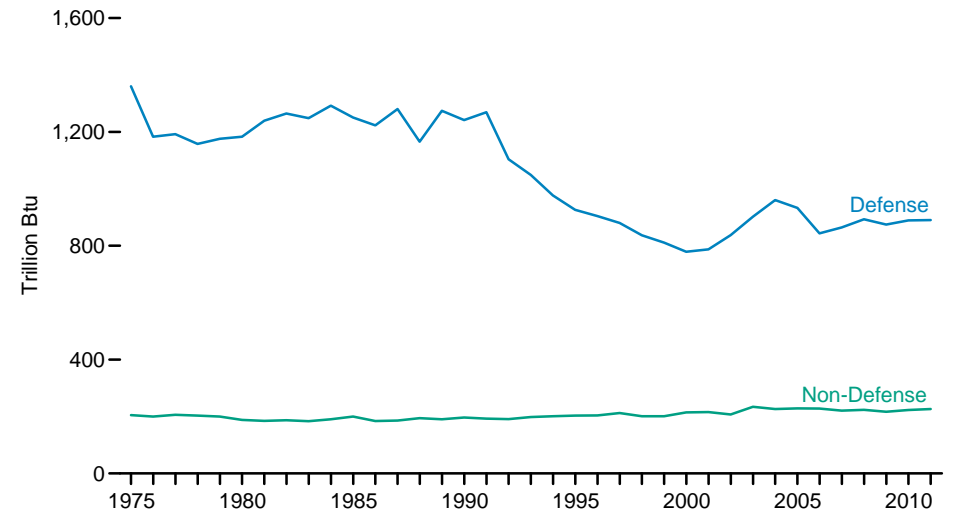
Sources: • 1949-2010—U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Climatic Data Center, Asheville, North Carolina, Historical Climatology Series 5-2. Data are compiled from about 8,000 weather stations. • 2011 and Normal—U.S. Department of Commerce, NOAA, National Weather Service Climate Prediction Center, Camp Springs, Maryland, *Degree Days Statistics*. The data are the sum of monthly values and are based on mean daily temperatures recorded at about 200 major weather stations around the country.

**Figure 1.11 U.S. Government Energy Consumption by Agency**

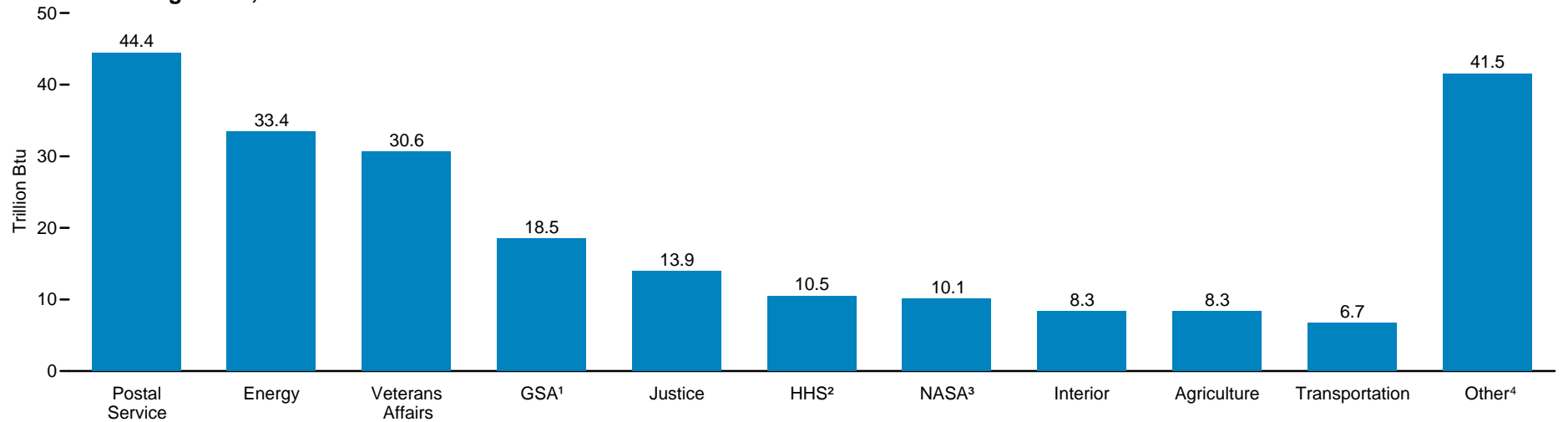
**Total and U.S. Department of Defense, Fiscal Years 1975-2011**



**U.S. Department of Defense and Non-Defense Agencies, Fiscal Years 1975-2011**



**Non-Defense Agencies, Fiscal Year 2011**



<sup>1</sup> General Services Administration.

<sup>2</sup> Health and Human Services.

<sup>3</sup> National Aeronautics and Space Administration.

<sup>4</sup> See Table 1.11 for list of agencies.

Note: The U.S. Government's fiscal year was October 1 through September 30, except in 1975 and 1976 when it was July 1 through June 30.

Source: Table 1.11.



**Table 1.11 U.S. Government Energy Consumption by Agency, Fiscal Years 1975-2011**

(Trillion Btu)

Year	Agriculture	Defense	Energy	GSA <sup>1</sup>	HHS <sup>2</sup>	Interior	Justice	NASA <sup>3</sup>	Postal Service	Transportation	Veterans Affairs	Other <sup>4</sup>	Total
1975	9.5	1,360.2	50.4	22.3	6.5	9.4	5.9	13.4	30.5	19.3	27.1	10.5	1,565.0
1976	9.3	1,183.3	50.3	20.6	6.7	9.4	5.7	12.4	30.0	19.5	25.0	11.2	1,383.4
1977	8.9	1,192.3	51.6	20.4	6.9	9.5	5.9	12.0	32.7	20.4	25.9	11.9	1,398.5
1978	9.1	1,157.8	50.1	20.4	6.5	9.2	5.9	11.2	30.9	20.6	26.8	12.4	1,360.9
1979	9.2	1,175.8	49.6	19.6	6.4	10.4	6.4	11.1	29.3	19.6	25.7	12.3	1,375.4
1980	8.6	1,183.1	47.4	18.1	6.0	8.5	5.7	10.4	27.2	19.2	24.8	12.3	1,371.2
1981	7.9	1,239.5	47.3	18.0	6.7	7.6	5.4	10.0	27.9	18.8	24.0	11.1	1,424.2
1982	7.6	1,264.5	49.0	18.1	6.4	7.4	5.8	10.1	27.5	19.1	24.2	11.6	1,451.4
1983	7.4	1,248.3	49.5	16.1	6.2	7.7	5.5	10.3	26.5	19.4	24.1	10.8	1,431.8
1984	7.9	1,292.1	51.6	16.2	6.4	8.4	6.4	10.6	27.7	19.8	24.6	10.7	1,482.5
1985	8.4	1,250.6	52.2	20.7	6.0	7.8	8.2	10.9	27.8	19.6	25.1	13.1	1,450.3
1986	6.8	1,222.8	46.9	14.0	6.2	6.9	8.6	11.2	28.0	19.4	25.0	10.8	1,406.7
1987	7.3	1,280.5	48.5	13.1	6.6	6.6	8.1	11.3	28.5	19.0	24.9	11.9	1,466.3
1988	7.8	1,165.8	49.9	12.4	6.4	7.0	9.4	11.3	29.6	18.7	26.3	15.8	1,360.3
1989	8.7	1,274.4	44.2	12.7	6.7	7.1	7.7	12.4	30.3	18.5	26.2	15.6	1,464.7
1990	9.6	1,241.7	43.5	17.5	7.1	7.4	7.0	12.4	30.6	19.0	24.9	17.5	1,438.0
1991	9.6	1,269.3	42.1	14.0	6.2	7.1	8.0	12.5	30.8	19.0	25.1	18.1	1,461.7
1992	9.1	1,104.0	44.3	13.8	6.8	7.0	7.5	12.6	31.7	17.0	25.3	15.7	1,294.8
1993	9.3	1,048.8	43.4	14.1	7.2	7.5	9.1	12.4	33.7	19.4	25.7	16.2	1,246.8
1994	9.4	977.0	42.1	14.0	7.5	7.9	10.3	12.6	35.0	19.8	25.6	17.1	1,178.2
1995	9.0	926.0	47.3	13.7	6.1	6.4	10.2	12.4	36.2	18.7	25.4	17.9	1,129.3
1996	9.1	904.5	44.6	14.5	6.6	4.3	12.1	11.5	36.4	19.6	26.8	18.5	1,108.5
1997	7.4	880.0	43.1	14.4	7.9	6.6	12.0	12.0	40.8	19.1	27.3	21.6	1,092.0
1998	7.9	837.1	31.5	14.1	7.4	6.4	15.8	11.7	39.5	18.5	27.6	20.3	1,037.9
1999	7.8	810.7	27.0	14.4	7.1	7.5	15.4	11.4	39.8	22.6	27.5	20.6	1,011.6
2000	7.4	779.1	30.5	17.6	8.0	7.8	19.7	11.1	43.3	21.2	27.0	21.0	993.8
2001	7.4	787.2	31.1	18.4	8.5	9.5	19.7	10.9	43.4	17.8	27.7	21.4	1,003.0
2002	7.2	837.5	30.7	17.5	8.0	8.2	17.7	10.7	41.6	18.3	27.7	19.8	1,044.8
2003	7.7	902.3	31.6	19.6	10.1	8.2	22.7	10.8	50.9	5.6	30.5	36.2	1,136.3
2004	7.0	960.7	31.4	18.3	8.8	8.7	17.5	9.9	50.5	5.2	29.9	39.2	1,187.0
2005	7.5	933.2	29.6	18.4	9.6	8.6	18.8	10.3	53.5	5.0	30.0	37.2	1,161.6
2006	6.8	843.7	32.9	18.2	9.3	8.1	23.5	10.2	51.8	4.6	29.3	33.2	1,071.5
2007	6.8	864.6	31.5	19.1	9.9	7.5	20.7	10.6	45.8	5.6	30.0	33.2	1,085.3
2008	6.5	893.0	31.5	18.8	10.5	7.9	18.9	10.2	47.0	6.4	28.9	36.6	1,116.2
2009	6.6	<sup>R</sup> 874.3	31.1	18.6	10.8	7.9	16.5	10.2	44.2	4.3	29.9	<sup>R</sup> 36.5	<sup>R</sup> 1,090.9
2010	6.8	<sup>R</sup> 889.3	<sup>R</sup> 31.7	18.8	10.3	8.3	<sup>R</sup> 15.7	10.1	<sup>R</sup> 42.3	5.7	30.2	<sup>R</sup> 42.8	<sup>R</sup> 1,112.0
2011 <sup>P</sup>	8.3	890.3	33.4	18.5	10.5	8.3	13.9	10.1	44.4	6.7	30.6	41.5	1,116.6

<sup>1</sup> General Services Administration.

<sup>2</sup> Health and Human Services.

<sup>3</sup> National Aeronautics and Space Administration.

<sup>4</sup> Includes National Archives and Records Administration, U.S. Department of Commerce, Tennessee Valley Authority, U.S. Department of Labor, National Science Foundation, Federal Trade Commission, Federal Communications Commission, Environmental Protection Agency, U.S. Department of Homeland Security, U.S. Department of Housing and Urban Development, Railroad Retirement Board, Equal Employment Opportunity Commission, Nuclear Regulatory Commission, U.S. Department of State, U.S. Department of the Treasury, Small Business Administration, Office of Personnel Management, Central Intelligence Agency, Consumer Product Safety Commission, Social Security Administration, U.S. Information Agency (International Broadcasting Bureau), Corporation for National Community Service, Court Services and Offender Supervision Agency, Federal Housing Finance Agency, National Labor Relations Board, Securities and Exchange Commission, National Capital Planning Commission, Office of Special Counsel, and Peace Corps and Broadcasting Board of Governors.  
R=Revised. P=Preliminary.

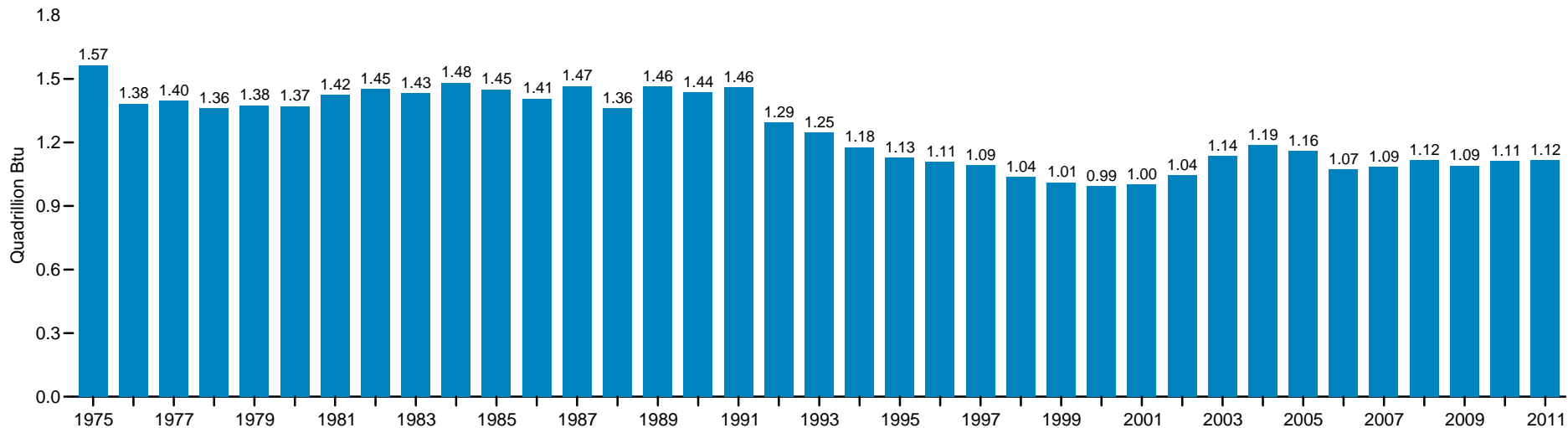
Notes: • For 1975 and 1976, the U.S. Government's fiscal year was July 1 through June 30. Beginning in 1977, the U.S. Government's fiscal year is October 1 through September 30 (for example, fiscal year 2011 is October 2010 through September 2011). • Data in this table are developed using the following conversion factors (which in most cases are different from those in Tables A1-A6)—coal: 24.580 million Btu/short ton; natural gas: 1,031 Btu/cubic foot; aviation gasoline: 5.250 million Btu/barrel; fuel oil: 5.8254 million Btu/barrel; jet fuel: 5.460 million Btu/barrel; liquefied petroleum gases: 4.011 million Btu/barrel; motor gasoline: 5.250 million Btu/barrel; electricity: 3,412 Btu/kilowatt-hour; and purchased steam: 1,000 Btu/pound. • Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the U.S. Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. • Totals may not equal sum of components due to independent rounding.

Web Page: See [http://www1.eere.energy.gov/femp/regulations/facility\\_reporting.html](http://www1.eere.energy.gov/femp/regulations/facility_reporting.html) for related information.

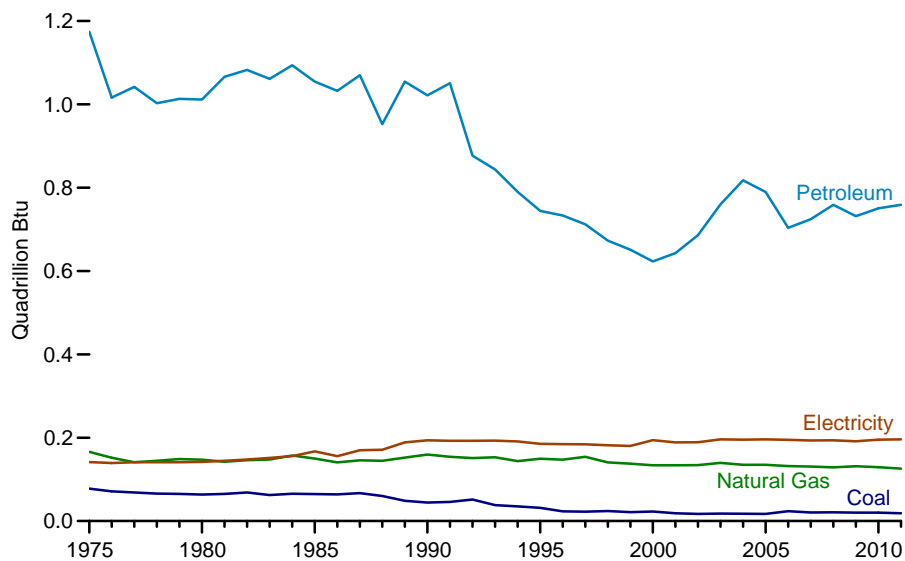
Source: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Federal Energy Management Program.

**Figure 1.12 U.S. Government Energy Consumption by Source, Fiscal Years 1975-2011**

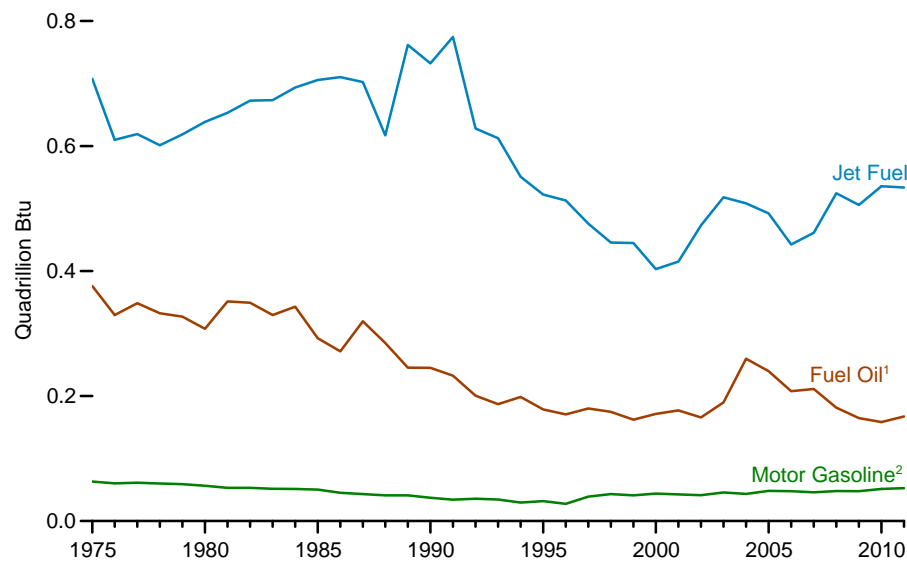
**Total U.S. Government Energy Consumption**



**By Major Energy Source**



**By Selected Petroleum Product**



<sup>1</sup> Distillate fuel oil and residual fuel oil.

<sup>2</sup> Includes ethanol blended into motor gasoline.

Note: U.S. Government's fiscal year was October 1 through September 30, except in 1975

and 1976 when it was July 1 through June 30.

Source: Table 1.12.

**Table 1.12 U.S. Government Energy Consumption by Source, Fiscal Years 1975-2011**  
(Trillion Btu)

Year	Coal	Natural Gas <sup>1</sup>	Petroleum						Electricity	Purchased Steam and Other <sup>6</sup>	Total
			Aviation Gasoline	Fuel Oil <sup>2</sup>	Jet Fuel	LPG <sup>3</sup> and Other <sup>4</sup>	Motor Gasoline <sup>5</sup>	Total			
1975	77.9	166.2	22.0	376.0	707.4	5.6	63.2	1,174.2	141.5	5.1	1,565.0
1976	71.3	151.8	11.6	329.7	610.0	4.7	60.4	1,016.4	139.3	4.6	1,383.4
1977	68.4	141.2	8.8	348.5	619.2	4.1	61.4	1,042.1	141.1	5.7	1,398.5
1978	66.0	144.7	6.2	332.3	601.1	3.0	60.1	1,002.9	141.0	6.4	1,360.9
1979	65.1	148.9	4.7	327.1	618.6	3.7	59.1	1,013.1	141.2	7.1	1,375.4
1980	63.5	147.3	4.9	307.7	638.7	4.0	56.5	1,011.8	141.9	6.8	1,371.2
1981	65.1	142.2	4.6	351.3	653.3	3.7	53.2	1,066.2	144.5	6.2	1,424.2
1982	68.6	146.2	3.6	349.4	672.7	3.9	53.1	1,082.8	147.5	6.2	1,451.4
1983	62.4	147.8	2.6	329.5	673.4	4.0	51.6	1,061.1	151.5	9.0	1,431.8
1984	65.3	157.4	1.9	342.9	693.7	4.1	51.2	1,093.8	155.9	10.1	1,482.5
1985	64.8	149.9	1.9	292.6	705.7	4.0	50.4	1,054.6	167.2	13.9	1,450.3
1986	63.8	140.9	1.4	271.6	710.2	3.9	45.3	1,032.4	155.8	13.7	1,406.7
1987	67.0	145.6	1.0	319.5	702.3	4.0	43.1	1,069.9	169.9	13.9	1,466.3
1988	60.2	144.6	6.0	284.8	617.2	3.2	41.2	952.4	171.2	32.0	1,360.3
1989	48.7	152.4	.8	245.3	761.7	5.7	41.1	1,054.5	188.6	20.6	1,464.7
1990	44.3	159.4	.5	245.2	732.4	6.4	37.2	1,021.7	193.6	19.1	1,438.0
1991	45.9	154.1	.4	232.6	774.5	9.0	34.1	1,050.7	192.7	18.3	1,461.7
1992	51.7	151.2	1.0	200.6	628.2	11.4	35.6	876.8	192.5	22.5	1,294.8
1993	38.3	152.9	.7	187.0	612.4	9.3	34.5	843.9	193.1	18.6	1,246.8
1994	35.0	143.9	.6	198.5	550.7	10.9	29.5	790.2	190.9	18.2	1,178.2
1995	31.7	149.7	.3	178.5	522.3	11.4	31.9	744.4	185.3	18.2	1,129.3
1996	23.3	147.4	.2	170.6	513.0	21.7	27.6	733.2	184.5	20.1	1,108.5
1997	22.5	154.0	.3	180.1	475.7	17.2	39.0	712.2	184.0	19.2	1,092.0
1998	23.9	140.7	.2	174.6	445.5	9.4	43.1	672.8	181.8	18.8	1,037.9
1999	21.2	137.6	.1	162.2	444.7	2.9	41.1	650.9	180.4	21.5	1,011.6
2000	22.7	134.0	.2	171.4	403.1	4.3	43.9	622.9	194.0	20.2	993.8
2001	18.8	133.9	.2	177.0	415.2	7.9	42.5	642.9	188.8	18.6	1,003.0
2002	16.9	134.1	.2	165.7	472.9	6.0	41.3	686.1	189.1	18.5	1,044.8
2003	17.7	139.7	.3	189.8	517.9	6.6	45.7	760.3	196.1	22.5	1,136.3
2004	17.4	134.8	.2	259.8	508.2	6.0	43.5	817.8	195.4	21.6	1,187.0
2005	17.1	135.1	.4	239.8	492.2	9.0	48.2	789.6	195.9	23.9	1,161.6
2006	23.5	132.0	.6	207.8	442.6	4.7	47.8	703.5	194.9	17.7	1,071.5
2007	20.4	130.8	.4	211.4	461.1	5.6	46.0	724.5	193.2	16.4	1,085.3
2008	20.8	128.9	.4	181.4	524.3	4.6	48.1	758.8	193.6	14.1	1,116.2
2009	20.3	<sup>R</sup> 131.4	.3	<sup>R</sup> 164.8	505.6	<sup>R</sup> 13.3	<sup>R</sup> 47.7	<sup>R</sup> 731.7	<sup>R</sup> 191.5	<sup>R</sup> 16.1	<sup>R</sup> 1,090.9
2010	20.1	<sup>R</sup> 129.3	.4	<sup>R</sup> 158.4	535.8	4.8	<sup>R</sup> 51.3	<sup>R</sup> 750.7	<sup>R</sup> 195.1	<sup>R</sup> 16.8	<sup>R</sup> 1,112.0
2011 <sup>P</sup>	18.6	125.7	.9	167.3	533.6	4.7	52.5	759.0	195.9	17.4	1,116.6

<sup>1</sup> Natural gas, plus a small amount of supplemental gaseous fuels.

<sup>2</sup> Distillate fuel oil and residual fuel oil.

<sup>3</sup> Liquefied petroleum gases.

<sup>4</sup> Other types of fuel used in vehicles and equipment, primarily alternative fuels like methanol, ethanol, compressed natural gas, and biodiesel.

<sup>5</sup> Includes ethanol blended into motor gasoline.

<sup>6</sup> "Other" is chilled water, renewable energy, and other fuels reported as used in facilities.

R=Revised. P=Preliminary.

Notes: • For 1975 and 1976, the U.S. Government's fiscal year was July 1 through June 30. Beginning in 1977, the U.S. Government's fiscal year is October 1 through September 30 (for example, fiscal year 2011 is October 2010 through September 2011). • Data in this table are developed using the following conversion factors (which in most cases are different from those in Tables A1-A6)—coal: 24.580 million

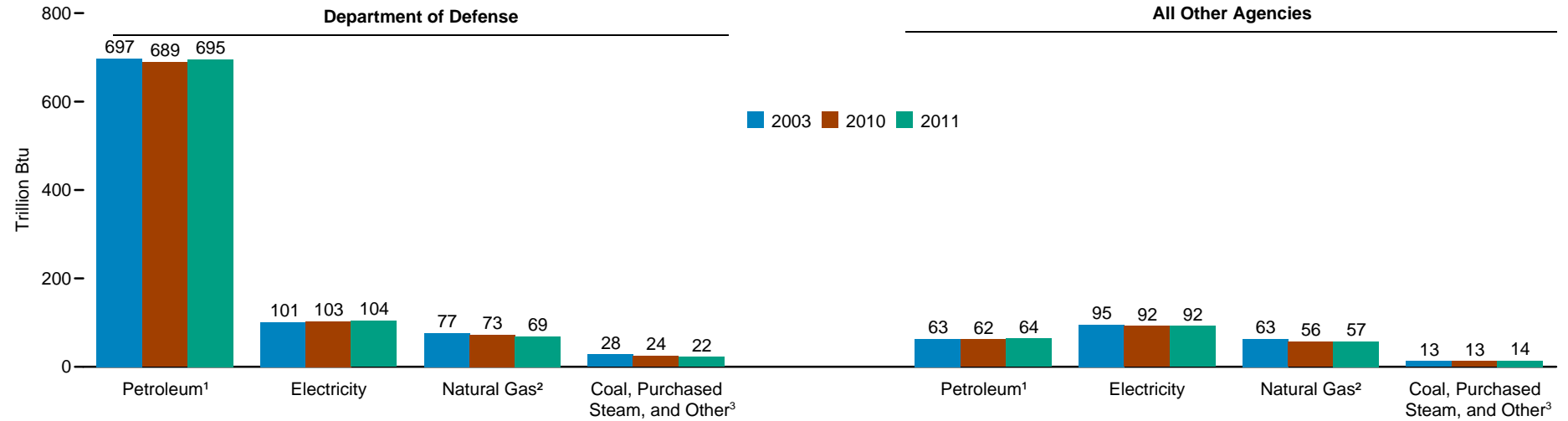
Btu/short ton; natural gas: 1,031 Btu/cubic foot; aviation gasoline: 5.250 million Btu/barrel; fuel oil: 5.8254 million Btu/barrel; jet fuel: 5.460 million Btu/barrel; liquefied petroleum gases: 4.011 million Btu/barrel; motor gasoline: 5.250 million Btu/barrel; electricity: 3,412 Btu/kilowatt-hour; and purchased steam: 1,000 Btu/pound. • Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the U.S. Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. • Totals may not equal sum of components due to independent rounding.

Web Page: See [http://www1.eere.energy.gov/femp/regulations/facility\\_reporting.html](http://www1.eere.energy.gov/femp/regulations/facility_reporting.html) for related information.

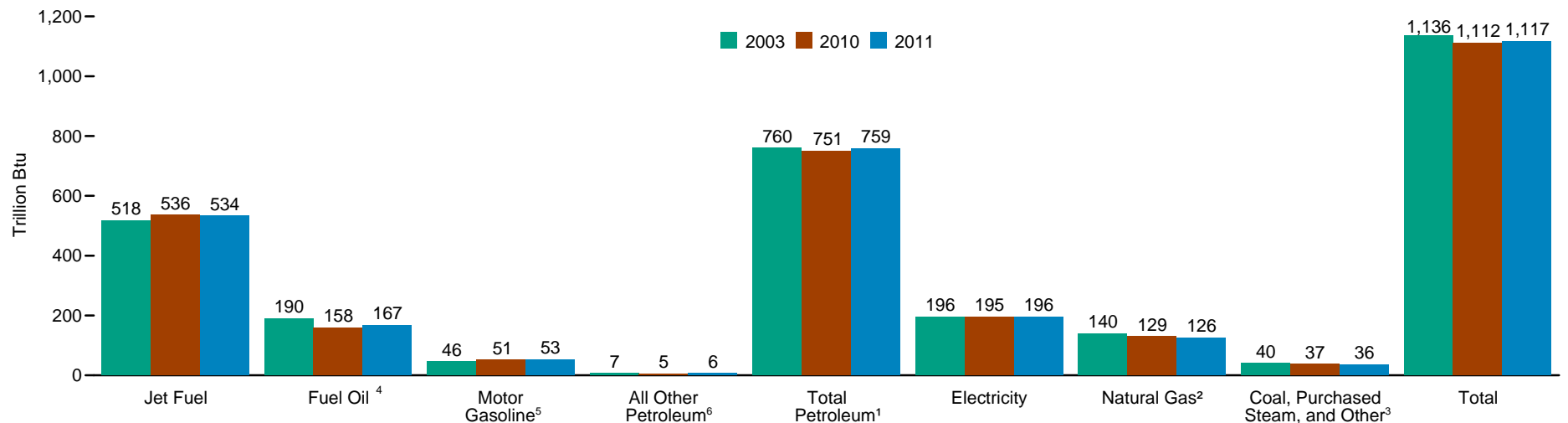
Source: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Federal Energy Management Program.

**Figure 1.13 U.S. Government Energy Consumption by Agency and Source, Fiscal Years 2003, 2010, and 2011**

**By Agency**



**By Source**



<sup>1</sup> Includes small amount of renewable energy; see Table 1.13, footnote 8.

<sup>2</sup> Natural gas, plus a small amount of supplemental gaseous fuels.

<sup>3</sup> Chilled water, renewable energy, and other fuels reported as used in facilities.

<sup>4</sup> Distillate fuel oil and residual fuel oil.

<sup>5</sup> Includes ethanol blended into motor gasoline.

<sup>6</sup> Aviation gasoline, liquefied petroleum gas, and other types of fuel used in vehicles and equipment, primarily alternative fuels like methanol, ethanol, compressed natural gas, and biodiesel.

Note: The U.S. Government's fiscal year runs from October 1 through September 30.  
Source: Table 1.13.

**Table 1.13 U.S. Government Energy Consumption by Agency and Source, Fiscal Years 2003, 2010, and 2011**  
(Trillion Btu)

Resource and Fiscal Years	Agriculture	Defense	Energy	GSA <sup>1</sup>	HHS <sup>2</sup>	Interior	Justice	NASA <sup>3</sup>	Postal Service	Transportation	Veterans Affairs	Other <sup>4</sup>	Total
<b>Coal</b>													
2003 .....	(s)	15.4	2.0	0.0	(s)	(s)	0.0	0.0	0.0	0.0	0.2	0.0	17.7
2010 .....	(s)	15.5	4.5	.0	0.0	0.0	.0	.0	(s)	.0	.1	.0	20.1
2011 P .....	0.0	14.3	4.2	.0	.0	.0	.0	.0	(s)	.0	.1	.0	18.6
<b>Natural Gas <sup>5</sup></b>													
2003 .....	1.4	76.6	7.0	7.6	3.7	1.3	8.6	2.9	10.4	.7	15.6	4.2	139.7
2010 .....	1.4	72.9	7.1	7.0	5.9	1.1	6.8	2.6	4.5	.3	14.9	<sup>R</sup> 4.7	<sup>R</sup> 129.3
2011 P .....	1.7	68.6	7.4	7.1	5.9	1.2	4.2	2.5	6.3	.8	15.1	5.0	125.7
<b>Petroleum</b>													
2003 .....	3.3	697.1	3.0	.2	1.5	4.4	6.5	1.4	18.2	1.6	2.8	20.3	760.3
2010 .....	3.2	688.8	2.8	.2	.8	3.8	3.4	1.2	19.4	1.5	2.1	<sup>R</sup> 23.4	<sup>R</sup> 750.7
2011 P .....	4.6	695.3	3.6	.2	.9	3.7	4.1	1.1	20.5	1.1	2.3	21.6	759.0
<b>Aviation Gasoline</b>													
2003 .....	(s)	(s)	(s)	.0	.0	(s)	.1	(s)	.0	(s)	.0	(s)	.3
2010 .....	(s)	.2	.0	.0	.0	(s)	.1	(s)	.0	(s)	.0	(s)	.4
2011 P .....	.1	.2	.0	.0	.0	(s)	.1	(s)	.0	(s)	.0	.5	.9
<b>Fuel Oil <sup>6</sup></b>													
2003 .....	.4	166.5	2.0	.1	.9	1.2	.4	.4	5.1	.3	1.9	10.7	189.8
2010 .....	.6	138.2	1.6	.1	.6	1.3	.3	.3	4.6	.2	1.1	<sup>R</sup> 9.5	<sup>R</sup> 158.4
2011 P .....	.6	146.1	2.4	.1	.6	1.4	.3	.2	4.9	.1	1.1	9.5	167.3
<b>Jet Fuel</b>													
2003 .....	.0	509.9	(s)	.0	.0	.1	1.5	.6	.0	.6	.0	5.2	517.9
2010 .....	.0	529.0	.2	.0	.0	(s)	.2	.8	.0	.5	.0	5.1	535.8
2011 P .....	.9	526.7	.2	.0	.0	(s)	.6	.7	.0	.5	.0	4.0	533.6
<b>LPG <sup>7</sup> and Other <sup>8</sup></b>													
2003 .....	.7	4.2	.1	(s)	.1	.7	(s)	.1	.2	.1	(s)	.3	6.6
2010 .....	.4	2.7	.4	(s)	.1	.4	.1	.1	.3	(s)	.1	.3	4.8
2011 P .....	.4	2.6	.4	(s)	.1	.2	.2	.1	.3	(s)	.1	.3	4.7
<b>Motor Gasoline <sup>9</sup></b>													
2003 .....	2.2	16.5	.9	.1	.5	2.4	4.5	.2	12.9	.7	.9	4.1	45.7
2010 .....	2.2	18.6	.6	.1	.2	2.1	2.8	.1	14.5	.6	.9	<sup>R</sup> 8.5	<sup>R</sup> 51.3
2011 P .....	2.6	19.7	.7	.1	.2	2.0	3.0	.1	15.4	.4	1.1	7.3	52.5
<b>Electricity</b>													
2003 .....	2.6	101.1	18.0	10.0	3.6	2.4	7.0	5.8	21.7	3.2	10.2	10.5	196.1
2010 .....	1.9	<sup>R</sup> 103.2	<sup>R</sup> 17.1	9.9	3.4	<sup>R</sup> 2.7	5.4	<sup>R</sup> 5.4	17.8	<sup>R</sup> 4.0	<sup>R</sup> 11.1	<sup>R</sup> 13.3	<sup>R</sup> 195.1
2011 P .....	1.8	104.1	17.9	9.5	3.5	2.7	5.3	5.4	16.9	4.1	11.4	13.4	195.9
<b>Purchased Steam and Other <sup>10</sup></b>													
2003 .....	.3	12.2	1.6	1.8	1.3	.1	.7	.8	.7	(s)	1.7	1.2	22.5
2010 .....	.3	<sup>R</sup> 8.8	<sup>R</sup> .2	1.8	.1	.8	.1	<sup>R</sup> .8	.5	<sup>R</sup> (s)	2.0	<sup>R</sup> 1.4	<sup>R</sup> 16.8
2011 P .....	.2	8.0	.4	1.8	.2	.7	.4	1.1	.7	.7	1.7	1.5	17.4
<b>Total Energy</b>													
2003 .....	7.7	902.3	31.6	19.6	10.1	8.2	22.7	10.8	50.9	5.6	30.5	36.2	1,136.3
2010 .....	6.8	<sup>R</sup> 889.3	<sup>R</sup> 31.7	18.8	10.3	8.3	<sup>R</sup> 15.7	10.1	<sup>R</sup> 42.3	5.7	30.2	<sup>R</sup> 42.8	<sup>R</sup> 1,112.0
2011 P .....	8.3	890.3	33.4	18.5	10.5	8.3	13.9	10.1	44.4	6.7	30.6	41.5	1,116.6

<sup>1</sup> General Services Administration.

<sup>2</sup> Health and Human Services.

<sup>3</sup> National Aeronautics and Space Administration.

<sup>4</sup> Includes National Archives and Records Administration, U.S. Department of Commerce, Tennessee Valley Authority, U.S. Department of Labor, National Science Foundation, Federal Trade Commission, Federal Communications Commission, Environmental Protection Agency, U.S. Department of Homeland Security, U.S. Department of Housing and Urban Development, Railroad Retirement Board, Equal Employment Opportunity Commission, Nuclear Regulatory Commission, U.S. Department of State, U.S. Department of the Treasury, Office of Personnel Management, Consumer Product Safety Commission, Central Intelligence Agency, Social Security Administration, U.S. Information Agency (International Broadcasting Bureau), Corporation for National Community Service, Court Services and Offender Supervision Agency, Federal Housing Finance Agency, National Labor Relations Board, Small Business Administration, Securities and Exchange Commission, National Capital Planning Commission, Office of Special Counsel, and Peace Corps and Broadcasting Board of Governors.

<sup>5</sup> Natural gas, plus a small amount of supplemental gaseous fuels.

<sup>6</sup> Distillate fuel oil and residual fuel oil.

<sup>7</sup> Liquefied petroleum gases.

<sup>8</sup> Other types of fuel used in vehicles and equipment, primarily alternative fuels like methanol, ethanol,

compressed natural gas, and biodiesel.

<sup>9</sup> Includes ethanol blended into motor gasoline.

<sup>10</sup> Chilled water, renewable energy, and other fuels reported as used in facilities.

R=Revised, P=Preliminary, (s)=Less than 0.05 trillion.

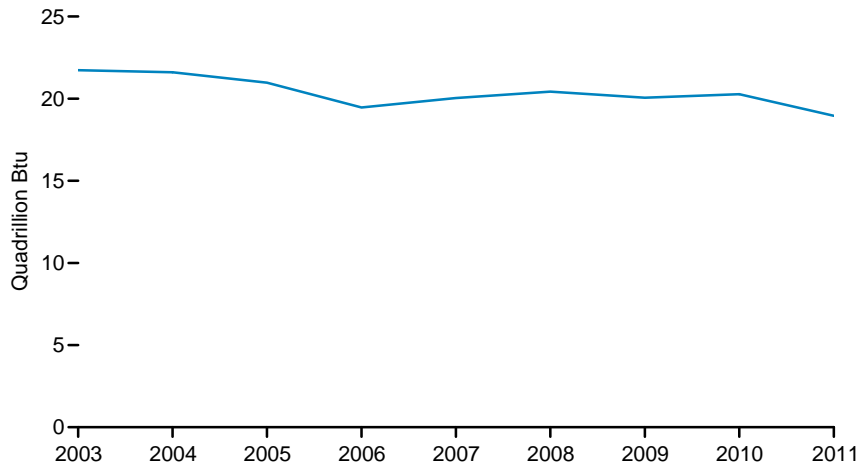
Notes: • Beginning in 1977, the U.S. Government's fiscal year is October 1 through September 30 (for example, fiscal year 2011 is October 2010 through September 2011). • Data in this table are developed using the following conversion factors (which in most cases are different from those in Tables A1-A6)—coal: 24,580 million Btu/short ton; natural gas: 1,031 Btu/cubic foot; aviation gasoline: 5,250 million Btu/barrel; fuel oil: 5,8254 million Btu/barrel; jet fuel: 5,460 million Btu/barrel; liquefied petroleum gases: 4,011 million Btu/barrel; motor gasoline: 5,250 million Btu/barrel; electricity: 3,412 Btu/kilowatt-hour; and purchased steam: 1,000 Btu/pound. • Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the U.S. Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. • Totals may not equal sum of components due to independent rounding.

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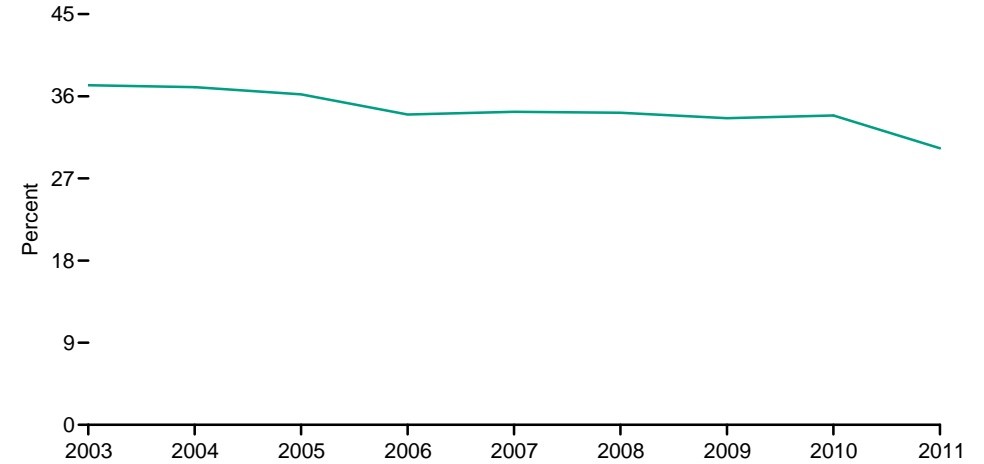
Source: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Federal Energy Management Program.

**Figure 1.14 Sales of Fossil Fuels Produced on Federal and American Indian Lands**

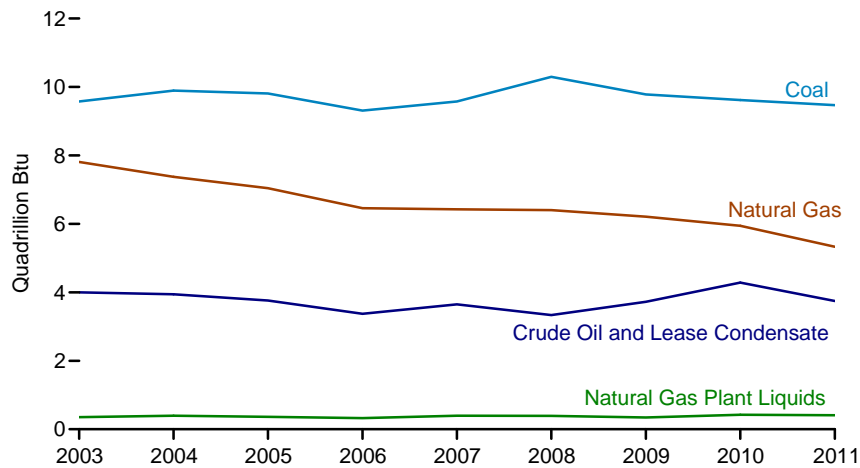
**Total, Fiscal Years<sup>1</sup> 2003-2011**



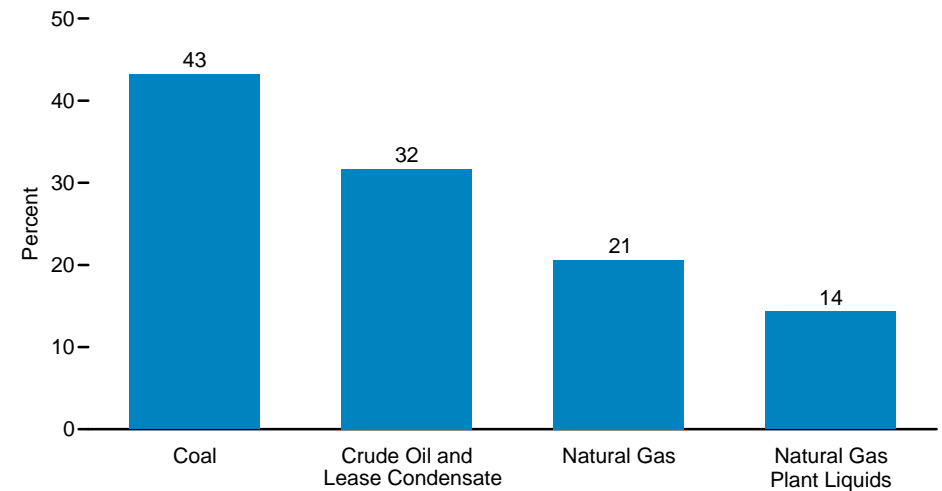
**Federal and American Indian Lands Fossil Fuels Sales as Share of Total U.S. Fossil Fuels Production, Fiscal Years<sup>1</sup> 2003-2011**



**By Source, Fiscal Years<sup>1</sup> 2003-2011**



**Federal and American Indian Lands Fossil Fuels Sales as Share of Total U.S. Fossil Fuels Production, By Source, Fiscal Year<sup>1</sup> 2011**



<sup>1</sup> The U.S. Government's fiscal year runs from October 1 through September 30. The fiscal year is designated by the calendar year in which it ends.

Source: Table 1.14.

**Table 1.14 Sales of Fossil Fuels Produced on Federal and American Indian Lands, Fiscal Years 2003-2011**

Fiscal Year <sup>7</sup>	Crude Oil and Lease Condensate			Natural Gas Plant Liquids <sup>1</sup>			Natural Gas <sup>2</sup>			Coal <sup>3</sup>			Total Fossil Fuels <sup>4</sup>	
	Sales <sup>5,6</sup>		Sales as Share of Total U.S. Production	Sales <sup>5,6</sup>		Sales as Share of Total U.S. Production	Sales <sup>5,6</sup>		Sales as Share of Total U.S. Production	Sales <sup>5,6</sup>		Sales as Share of Total U.S. Production	Sales <sup>5,6</sup>	Sales as Share of Total U.S. Production
	Million Barrels	Quadrillion Btu	Percent	Million Barrels	Quadrillion Btu	Percent	Trillion Cubic Feet	Quadrillion Btu	Percent	Million Short Tons	Quadrillion Btu	Percent	Quadrillion Btu	Percent
2003	R689	R4.00	R33.3	R94	R0.35	R14.9	R7.08	R7.81	R35.5	R466	R9.58	R43.3	R21.74	R37.2
2004	R680	R3.94	R33.8	R105	R.39	R16.0	R6.68	R7.38	R34.0	R484	R9.89	R43.9	R21.60	R37.0
2005	R649	R3.76	R33.4	R98	.36	R15.0	R6.38	R7.04	R33.3	R482	R9.81	R42.6	R20.98	R36.2
2006	R582	R3.37	R31.8	R87	R.32	R14.2	R5.85	R6.46	R30.8	R458	R9.31	R39.7	R19.46	R34.0
2007	R629	R3.65	R33.9	R107	R.40	R16.6	R5.83	R6.42	R29.2	R471	R9.57	R41.0	R20.04	R34.3
2008	R575	R3.34	R31.5	R106	R.39	R15.9	R5.82	R6.40	R27.7	R509	R10.30	R43.8	R20.43	R34.2
2009	R642	R3.72	R33.7	R93	R.34	R13.8	R5.64	R6.21	R26.1	R488	R9.78	R43.8	R20.05	R33.6
2010	R739	R4.29	R37.2	R115	R.42	R15.4	R5.42	R5.95	R24.6	R478	R9.62	R44.8	R20.27	R33.9
2011 <sup>P</sup>	646	3.74	31.7	111	.41	14.3	4.86	5.33	20.6	470	9.47	43.2	18.95	30.3

<sup>1</sup> Includes those quantities for which royalties were paid based on the value of the natural gas plant liquids produced. Additional quantities of natural gas plant liquids were produced; however, the royalties paid were based on the value of natural gas processed. These latter quantities are included with natural gas.

<sup>2</sup> Sales and production volumes are for marketed production. See "Natural Gas Marketed Production" in Glossary.

<sup>3</sup> Excludes waste coal. See "Waste Coal" in Glossary.

<sup>4</sup> The sum of crude oil and lease condensate, natural gas plant liquids, natural gas, and coal.

<sup>5</sup> Sales of fossil fuels produced in offshore and onshore areas the Federal Government owns or administers, including American Indian lands.

<sup>6</sup> Sales volumes are reported for the fiscal year in which the sales occurred as opposed to the date of the royalty payment. Volumes include fossil fuels for which royalties were paid, as well as those amounts exempt from royalty payments, such as additions to the Strategic Petroleum Reserve.

<sup>7</sup> The U.S. Government's fiscal year runs from October 1 through September 30. The fiscal year is designated by the calendar year in which it ends.

R=Revised. P=Preliminary.

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

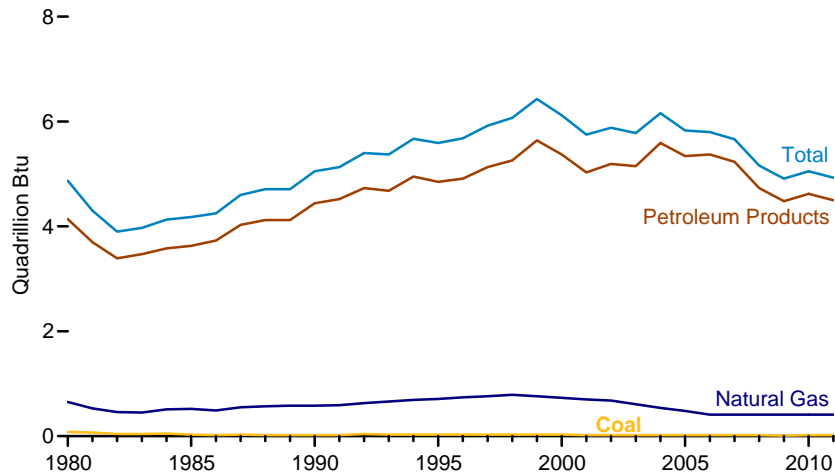
Sources: **Sales, Physical Data (Columns 1, 4, 7, and 10):** U.S. Department of the Interior, Office of Natural Resources Revenue (ONRR), data for "Sales Year" (as opposed to "Accounting Year") revenue and non-revenue sales volumes (as of Feb. 6, 2012). For natural gas, the ONRR "Gas" data have been adjusted to remove nitrogen (using unpublished ONRR data). See [http://www.onrr.gov/ONRRWebStats/Disbursements\\_Royalties.aspx?report=AllReportedRoyaltyRevenues&yeartype=](http://www.onrr.gov/ONRRWebStats/Disbursements_Royalties.aspx?report=AllReportedRoyaltyRevenues&yeartype=)

[http://www.onrr.gov/ONRRWebStats/Disbursements\\_Royalties.aspx?report=AllNonRevenueVolumesByCategoryAndCommodity&yeartype=FY&year=2011&datatype=PY](http://www.onrr.gov/ONRRWebStats/Disbursements_Royalties.aspx?report=AllNonRevenueVolumesByCategoryAndCommodity&yeartype=FY&year=2011&datatype=PY).

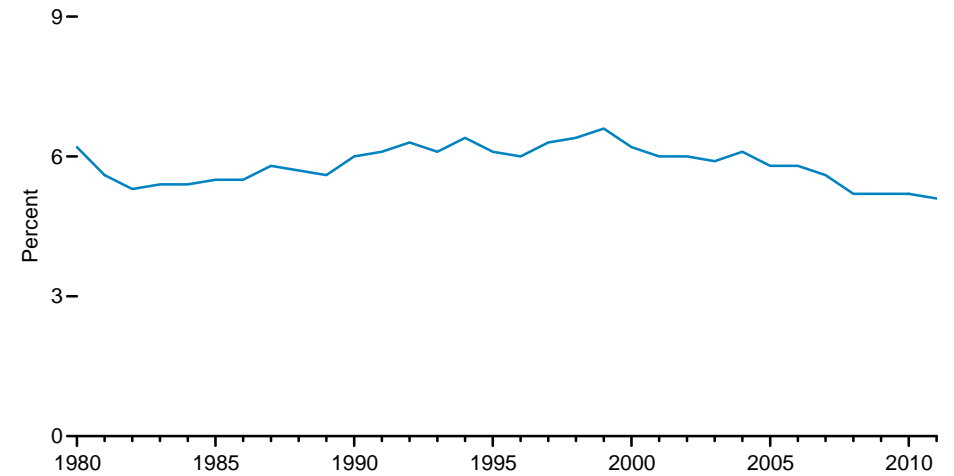
**Sales, Btu Data (Columns 2, 5, 8, 11, and 13):** Calculated by the U.S. Energy Information Administration (EIA). Monthly estimates of the ONRR physical sales data are created by dividing the fiscal-year values by 12. These monthly estimates are converted to Btu using the appropriate heat content factors in Appendix A (crude oil and natural gas plants liquids production factors in Table A2; natural gas marketed production factors in Table A4; and coal production factors in Table A5). For the individual fuels, fiscal-year Btu estimates are calculated by summing the October-September monthly Btu values for each fiscal year. For total fossil fuels, the fiscal-year Btu estimates are the sum of the fiscal-year Btu values for crude oil and lease condensate, natural gas plant liquids, natural gas, and coal. **Sales As Share of Total U.S. Production:** Calculated by EIA by dividing fiscal-year Btu data for sales by fiscal-year Btu data for total U.S. production, then multiplying by 100. For crude oil and lease condensate total U.S. production, monthly values from the *Monthly Energy Review (MER)* (May 2012), Table 3.1, are converted to Btu using the crude oil production factors in Table A2. For natural gas plant liquids total U.S. production, monthly values from the MER (May 2012), Table 3.1, are converted to Btu using the natural gas plant liquids production factors in Table A2. For natural gas total U.S. marketed production, monthly values from the MER (May 2012), Table 4.1, are converted to Btu using the natural gas marketed production factors in Table A4. For coal total U.S. production, monthly values from the MER (May 2012), Table 6.1, are converted to Btu using the coal production factors in Table A5. For the individual fuels, fiscal-year total U.S. production Btu values are calculated by summing the October-September monthly Btu values for each fiscal year. For fossil fuels total U.S. production, the fiscal-year Btu values are the sum of the fiscal-year total U.S. production Btu values for crude oil and lease condensate, natural gas plant liquids, natural gas, and coal.

**Figure 1.15 Non-Combustion Use of Fossil Fuels**

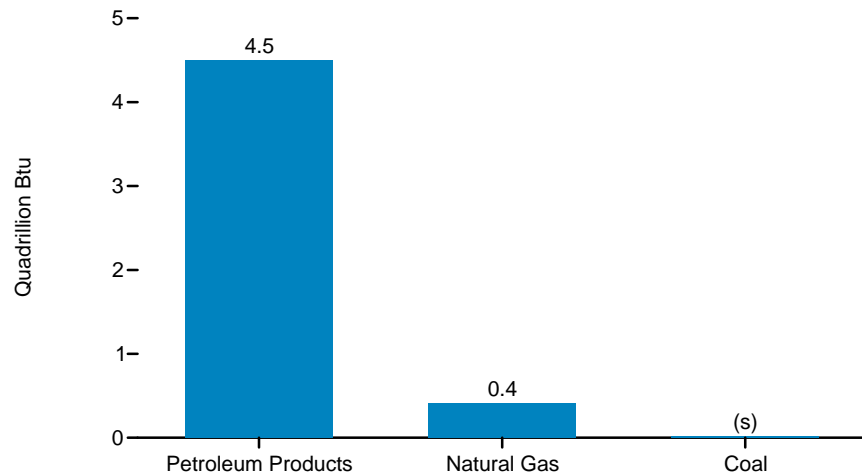
**Total, 1980-2011**



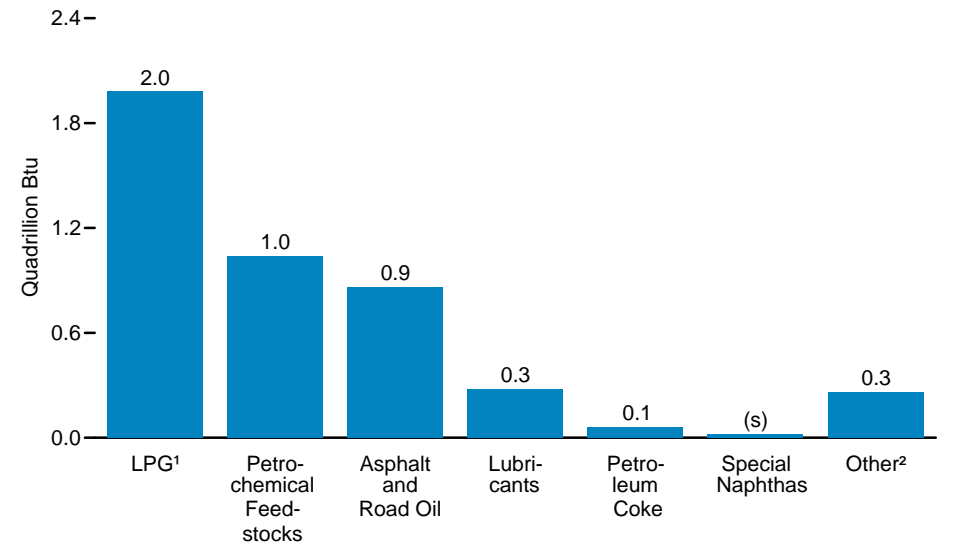
**As Share of Total Energy Consumption, 1980-2011**



**By Fuel, 2011**



**By Petroleum Product, 2011**



<sup>1</sup> Liquefied petroleum gases and pentanes plus are aggregated to avoid disclosure of proprietary information.

<sup>2</sup> Distillate fuel oil, residual fuel oil, waxes, and miscellaneous products.

(s)=Less than 0.05 quadrillion Btu.

Note: See Note 2, "Non-Combustion Use of Fossil Fuels" at end of section.

Source: Table 1.15.



**Table 1.15 Non-Combustion Use of Fossil Fuels, Selected Years, 1980-2011**

Year	Petroleum Products								Natural Gas <sup>4</sup>	Coal	Total	Percent of Total Energy Consumption
	Asphalt and Road Oil	Liquefied Petroleum Gases <sup>1</sup>	Lubricants	Petro-chemical Feedstocks <sup>2</sup>	Petroleum Coke	Special Naphthas	Other <sup>3</sup>	Total				
Physical Units <sup>5</sup>												
1980	145	230	58	253	R14	37	58	R795	639	2.4	--	--
1985	156	R278	53	144	R16	30	41	R719	500	1.1	--	--
1990	176	R373	60	199	20	20	39	R887	R567	.6	--	--
1991	162	R426	53	203	17	17	44	R922	R573	.6	--	--
1992	166	R448	54	214	R28	20	35	R966	R606	1.2	--	--
1993	174	R436	55	216	R18	20	35	R955	R640	.9	--	--
1994	176	R483	58	224	R21	15	35	R1,013	673	.9	--	--
1995	178	R479	57	215	R20	13	33	R996	R695	.9	--	--
1996	177	R502	55	217	R20	14	33	R1,019	R718	.9	--	--
1997	184	R501	58	250	R15	14	34	R1,056	R740	.9	--	--
1998	190	R485	61	252	25	20	39	R1,073	762	.8	--	--
1999	200	R566	62	238	36	28	37	R1,166	R736	.8	--	--
2000	192	R545	61	243	16	19	38	R1,114	R710	.8	--	--
2001	189	R492	56	214	29	15	39	R1,034	R683	.7	--	--
2002	187	R526	55	229	24	20	38	R1,078	657	.7	--	--
2003	184	R511	51	247	20	15	36	R1,064	R592	.7	--	--
2004	196	R536	52	287	36	10	34	R1,151	R528	.7	--	--
2005	199	R498	51	266	31	12	34	R1,092	R463	.7	--	--
2006	R190	R521	42	265	35	13	41	R1,108	R398	.6	--	--
2007	180	R526	52	242	33	15	40	R1,089	R398	.6	--	--
2008	152	R484	48	210	37	16	41	R989	R398	.6	--	--
2009	R132	R532	43	185	R30	9	41	R972	R398	.4	--	--
2010	132	R581	48	R196	R10	5	43	R1,015	R398	.6	--	--
2011 <sup>P</sup>	130	575	46	187	11	4	44	996	398	.6	--	--
Quadrillion Btu												
1980	0.96	0.78	0.35	1.43	R0.09	0.19	0.34	R4.14	0.65	0.08	R4.87	R6.2
1985	1.03	R.96	.32	.82	R.10	.16	.24	3.63	.52	.03	4.18	5.5
1990	1.17	R1.33	.36	1.12	.12	.11	.23	R4.44	R.58	.02	R5.05	R6.0
1991	1.08	R1.52	.32	1.15	.11	.09	.26	R4.52	.59	.02	R5.13	R6.1
1992	1.10	R1.61	.33	1.20	.17	.10	.21	R4.73	R.63	.04	R5.40	R6.3
1993	1.15	R1.55	.34	1.22	R.11	.10	.20	R4.68	R.66	.03	R5.37	R6.1
1994	1.17	R1.75	.35	1.26	R.13	.08	.20	4.95	R.69	.03	5.67	6.4
1995	1.18	R1.72	.35	1.21	R.12	.07	.20	R4.85	R.71	.03	R5.59	R6.1
1996	1.18	R1.80	.34	1.21	R.12	.07	.20	R4.91	R.74	.03	R5.68	R6.0
1997	1.22	R1.80	.35	1.40	R.09	.07	.20	R5.13	R.76	.03	R5.92	6.3
1998	1.26	1.73	.37	1.40	.15	.11	.23	R5.26	.79	.03	R6.07	R6.4
1999	1.32	R2.04	.37	1.33	.22	.15	.22	R5.64	R.76	.03	R6.43	R6.6
2000	1.28	R1.96	.37	1.35	.10	.10	.22	R5.37	R.73	.03	R6.12	R6.2
2001	1.26	R1.76	.34	1.19	.17	.08	.23	R5.03	R.70	.02	R5.75	R6.0
2002	1.24	R1.87	.33	1.27	.15	.10	.22	R5.19	.68	.02	R5.88	R6.0
2003	1.22	R1.83	.31	1.37	.12	.08	.21	R5.15	R.61	.02	R5.78	R5.9
2004	1.30	R1.92	.31	1.59	.22	.05	.20	R5.59	R.54	.02	R6.16	6.1
2005	1.32	R1.78	.31	1.47	.19	.06	.20	R5.34	R.48	.02	R5.83	5.8
2006	1.26	R1.85	.25	1.48	.21	.07	.24	R5.37	R.41	.02	R5.80	5.8
2007	1.20	R1.86	.31	1.35	.20	.08	.24	R5.23	R.41	.02	R5.66	R5.6
2008	1.01	R1.70	.29	1.17	.23	.08	.24	R4.73	R.41	.02	R5.16	R5.2
2009	.87	R1.85	.26	1.03	.18	.05	.24	R4.48	R.41	.01	4.91	5.2
2010	.88	R2.02	.29	1.09	R.06	.03	.25	R4.62	R.41	.02	R5.05	R5.2
2011 <sup>P</sup>	.86	1.98	.28	1.04	.06	.02	.26	4.50	.41	.02	4.93	5.1

<sup>1</sup> Liquefied petroleum gases and pentanes plus are aggregated to avoid disclosure of proprietary information.

<sup>2</sup> Includes still gas not burned as refinery fuel.

<sup>3</sup> Distillate fuel oil, residual fuel oil, waxes, and miscellaneous products.

<sup>4</sup> U.S. Energy Information Administration (EIA) has altered the methodology for the natural gas estimates. The estimates are linearly interpolated between Manufacturing Energy Consumption Survey (MECS) years and held constant until data are available for the most recent MECS year.

<sup>5</sup> Petroleum—million barrels; natural gas—billion cubic feet; and coal—million short tons.

R=Revised. P=Preliminary. --=Not applicable.

Notes: • Estimates of consumption for non-combustion use shown in this table are included in total energy consumption (see Table 1.3). • See Note 2, "Non-Combustion Use of Fossil Fuels," at end of section. • Because of changes in methodology, data series may be revised annually. • Estimates of

non-combustion use in this table are considered industrial uses with the exception of approximately half of the lubricants which are considered transportation use. • Totals may not equal sum of components due to independent rounding.

Web Pages: • See <http://www.eia.gov/totalenergy/data/annual/#summary> for all data beginning in 1980.

• For related information, see <http://www.eia.gov/environment/>.

Sources: **Petroleum Products:** • 1980—EIA, Energy Data Reports, *Petroleum Statement, Annual and Sales of Liquefied Petroleum Gases and Ethane in 1980*. • 1981 forward—EIA, *Petroleum Supply Annual*, annual reports, and unpublished data. **Natural Gas:** • 1980—Bureau of the Census, 1980 Survey of Manufactures, *Hydrocarbon, Coal, and Coke Materials Consumed*. • 1981 forward—U.S. Department of Commerce. **Coal:** • 1980 forward—EIA estimates based on the methodology underlying the nonfuel emissions calculations in EIA's *Emissions of Greenhouse Gases in the United States 2008*. **Percent of Total Energy Consumption:** Derived by dividing total by total consumption on Table 1.3.

## Energy Overview

**Note 1. Noncombustible Renewable Energy.** Noncombustible renewable energy is the sum of hydroelectric power, geothermal, solar/PV, and wind. In Table 1.3, total primary consumption of noncombustible renewable energy is reported as the sum of “Captured Energy” and the “Adjustment for Fossil Fuel Equivalence.”

Captured energy represents the energy from noncombustible renewable resources that is actually "captured" for final use. It includes the electricity generated from noncombustible resources (i.e., net generation from Table 8.2a converted to Btu using the energy conversion factor of 3,412 Btu/kWh) and the direct consumption of noncombustible renewable energy. Direct consumption of noncombustible renewable energy includes: solar thermal direct use energy, residential and commercial self-generated photovoltaic energy, geothermal energy from heat pumps, and direct use of geothermal energy.

The adjustment for fossil-fuel equivalence represents the energy losses that would have occurred if electricity from noncombustible renewable resources had been generated using the average fossil-fuel mix in a given year. The fossil-fuel

equivalent value is determined by converting electricity generation to Btu using the average fossil-fuel heat rate from Table A6. The “Adjustment for Fossil Fuel Equivalence” is then calculated as the difference between the fossil-fuel equivalent value of electricity generated and "captured" electricity generation.

For more information, see Appendix F.

**Note 2. Non-Combustion Use of Fossil Fuels.** Most fossil fuels consumed in the United States and elsewhere are combusted to produce heat and power. However, some are used directly for non-combustion use as construction materials, lubricants, chemical feedstocks, solvents, and waxes. For example, asphalt and road oil are used for roofing and paving; liquefied petroleum gases are used to create intermediate products that are used in making plastics; lubricants, including motor oil and greases, are used in vehicles and various industrial processes; petrochemical feedstocks are used to make plastics, synthetic fabrics, and related products; and natural gas is used to make nitrogenous fertilizers and as feedstock in the chemical industry. Estimates of non-combustion use of fossil fuels are based on the methodology underlying the nonfuel emissions calculations in EIA’s “Emissions of Greenhouse Gases in the United States,” Chapter 2, at [http://www.eia.gov/environment/emissions/ghg\\_report/](http://www.eia.gov/environment/emissions/ghg_report/).