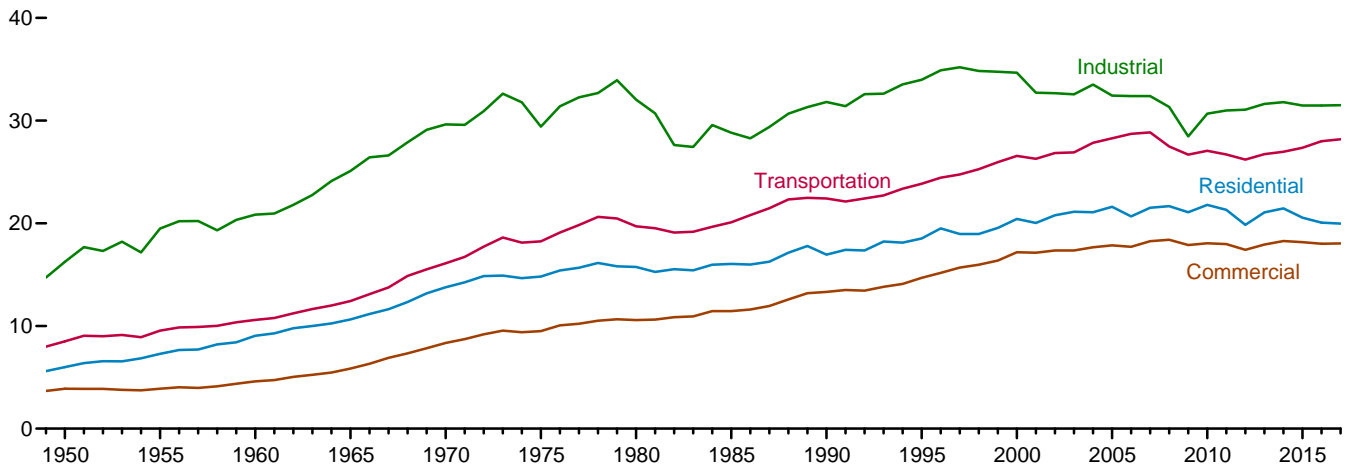


## **2. Energy Consumption by Sector**

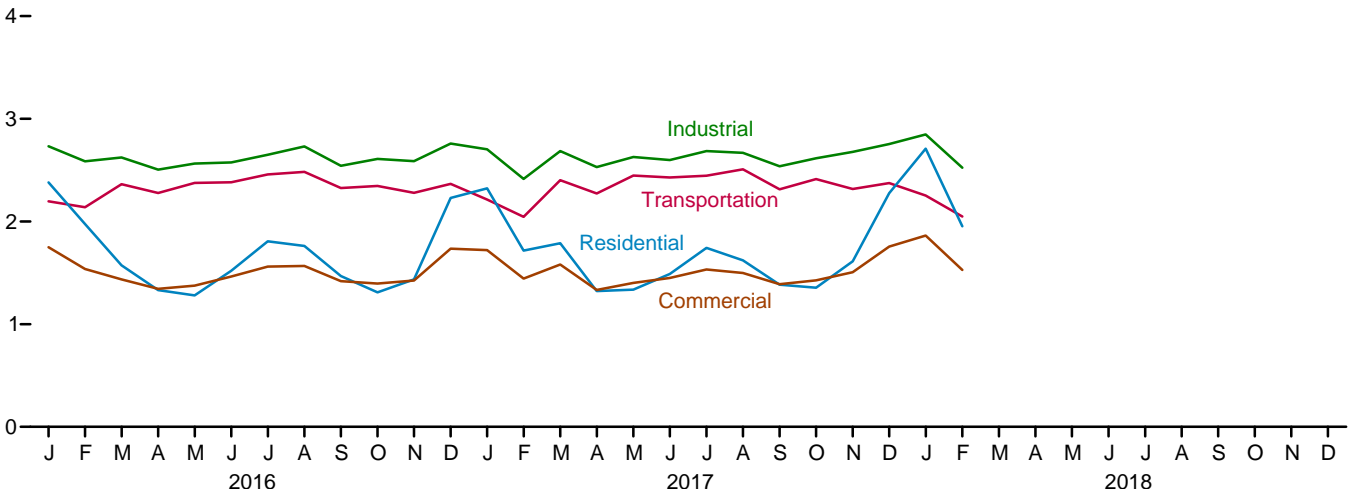
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**Figure 2.1 Energy Consumption by Sector**  
(Quadrillion Btu)

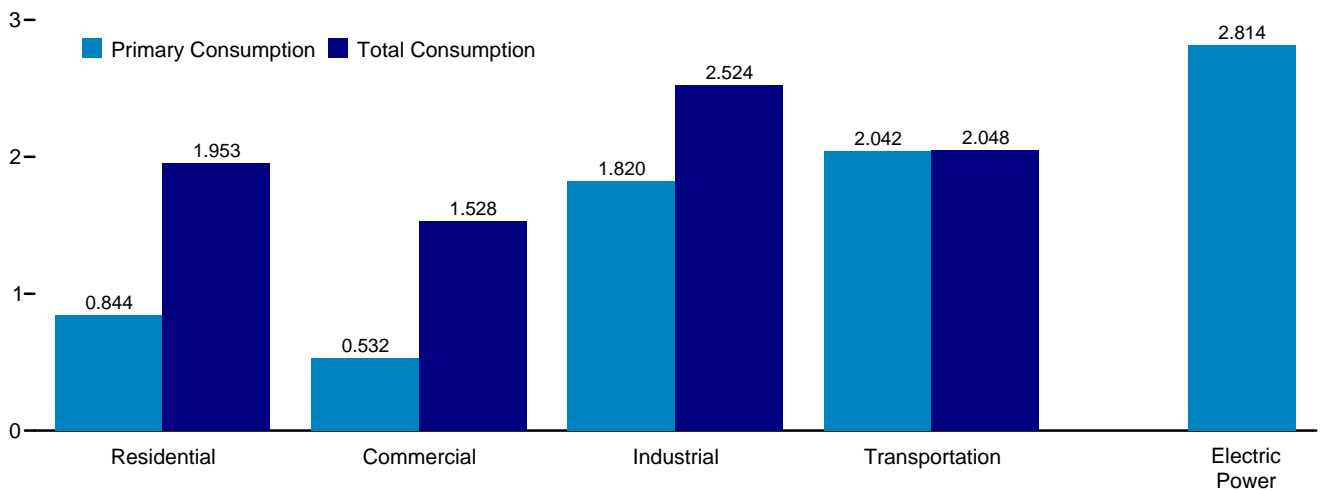
Total Consumption by End-Use Sector, 1949–2017



Total Consumption by End-Use Sector, Monthly



By Sector, February 2018



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

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

	End-Use Sectors								Electric Power Sector <sup>c,d</sup>	Balancing Item <sup>g</sup>	Primary Total <sup>h</sup>
	Residential		Commercial <sup>a</sup>		Industrial <sup>b</sup>		Transportation				
	Primary <sup>e</sup>	Total <sup>f</sup>	Primary <sup>e</sup>	Total <sup>f</sup>	Primary <sup>e</sup>	Total <sup>f</sup>	Primary <sup>e</sup>	Total <sup>f</sup>			
<b>1950 Total</b> .....	4,829	5,989	2,834	3,893	13,890	16,241	8,383	8,492	4,679	(s)	34,616
<b>1955 Total</b> .....	5,608	7,278	2,561	3,895	16,103	19,485	9,474	9,550	6,461	(s)	40,208
<b>1960 Total</b> .....	6,651	9,039	2,723	4,609	16,996	20,842	10,560	10,596	8,158	(s)	45,086
<b>1965 Total</b> .....	7,279	10,639	3,177	5,845	20,148	25,098	12,399	12,432	11,012	(s)	54,015
<b>1970 Total</b> .....	8,322	13,766	4,237	8,346	22,964	29,628	16,062	16,098	16,253	(s)	67,838
<b>1975 Total</b> .....	7,990	14,813	4,059	9,492	21,434	29,413	18,210	18,245	20,270	1	71,965
<b>1980 Total</b> .....	7,439	15,753	4,105	10,578	22,595	32,039	19,659	19,697	24,269	-1	78,067
<b>1985 Total</b> .....	7,148	16,041	3,732	11,451	19,443	28,816	20,041	20,088	26,032	-4	76,392
<b>1990 Total</b> .....	6,556	16,944	3,896	13,320	21,180	31,810	22,366	22,420	30,495	-9	84,484
<b>1995 Total</b> .....	6,934	18,517	4,100	14,690	22,718	33,970	23,796	23,851	33,479	3	91,031
<b>2000 Total</b> .....	7,156	20,421	4,278	17,175	22,823	34,662	26,495	26,555	38,062	2	98,817
<b>2001 Total</b> .....	6,864	20,038	4,085	17,137	21,793	32,719	26,219	26,282	37,215	-6	96,170
<b>2002 Total</b> .....	6,907	20,786	4,132	17,346	21,798	32,661	26,785	26,846	38,016	5	97,643
<b>2003 Total</b> .....	7,232	21,119	4,298	17,346	21,534	32,553	26,826	26,900	38,028	-1	97,918
<b>2004 Total</b> .....	6,987	21,081	4,232	17,655	22,411	33,516	27,764	27,843	38,701	-6	100,090
<b>2005 Total</b> .....	6,901	21,613	4,052	17,853	21,410	32,442	28,199	28,280	39,626	(s)	100,188
<b>2006 Total</b> .....	6,154	20,670	3,747	17,707	21,529	32,391	28,638	28,717	39,417	(s)	99,484
<b>2007 Total</b> .....	6,589	21,519	3,922	18,253	21,363	32,385	28,771	28,858	40,371	-1	101,015
<b>2008 Total</b> .....	6,889	21,668	4,100	18,402	20,528	31,334	27,404	27,486	39,969	1	98,891
<b>2009 Total</b> .....	6,633	21,077	4,055	17,887	18,756	28,466	26,605	26,687	38,069	(s)	94,118
<b>2010 Total</b> .....	R 6,539	R 21,794	4,023	18,058	R 20,421	R 30,669	R 26,971	R 27,052	39,619	7	97,580
<b>2011 Total</b> .....	R 6,398	R 21,307	R 4,064	R 17,980	R 20,591	R 30,979	R 26,622	R 26,702	39,293	8	96,976
<b>2012 Total</b> .....	R 5,666	R 19,851	R 3,723	R 17,420	R 20,884	R 31,057	R 26,129	R 26,205	38,131	2	94,535
<b>2013 Total</b> .....	R 6,697	R 21,060	R 4,161	R 17,929	R 21,478	R 31,625	R 26,649	R 26,728	38,357	-1	97,340
<b>2014 Total</b> .....	R 7,014	R 21,453	R 4,390	R 18,264	R 21,560	R 31,796	R 26,892	R 26,972	38,629	R	98,491
<b>2015 Total</b> .....	R 6,386	R 20,539	R 4,441	R 18,157	R 21,525	R 31,469	R 27,283	R 27,360	37,890	6	97,526
<b>2016 January</b> .....	1,048	R 2,381	R 626	R 1,749	R 1,930	R 2,732	R 2,190	R 2,196	3,265	4	9,063
<b>February</b> .....	R 847	R 1,975	R 530	R 1,537	R 1,839	R 2,586	R 2,133	R 2,139	2,888	(s)	8,237
<b>March</b> .....	593	1,572	403	R 1,437	R 1,848	R 2,623	R 2,357	R 2,363	2,793	-4	7,991
<b>April</b> .....	R 453	R 1,332	R 328	1,344	R 1,722	R 2,505	R 2,272	R 2,278	2,685	-3	7,457
<b>May</b> .....	315	1,280	264	R 1,375	R 1,730	R 2,564	R 2,369	R 2,375	2,916	-1	7,593
<b>June</b> .....	228	R 1,520	R 222	1,463	R 1,712	R 2,575	R 2,375	R 2,381	3,402	5	7,944
<b>July</b> .....	218	R 1,807	R 222	1,560	R 1,753	R 2,649	R 2,451	R 2,458	3,831	8	8,483
<b>August</b> .....	204	1,761	R 224	1,568	R 1,843	R 2,730	R 2,477	R 2,483	3,794	9	8,551
<b>September</b> .....	R 222	1,468	R 230	1,419	R 1,739	R 2,542	R 2,319	R 2,325	3,245	5	7,760
<b>October</b> .....	315	1,309	R 289	1,396	R 1,810	R 2,609	R 2,340	R 2,346	2,906	2	7,662
<b>November</b> .....	510	R 1,427	R 382	1,425	R 1,808	R 2,587	R 2,273	R 2,279	2,755	(s)	7,727
<b>December</b> .....	R 971	2,229	R 593	R 1,736	R 1,943	R 2,759	R 2,359	R 2,366	3,224	4	9,093
<b>Total</b> .....	R 5,922	R 20,063	R 4,311	R 18,012	R 21,678	R 31,466	R 27,914	R 27,989	37,705	30	97,561
<b>2017 January</b> .....	1,008	R 2,322	R 609	1,720	R 1,933	R 2,703	R 2,206	R 2,213	3,203	6	8,965
<b>February</b> .....	721	R 1,716	466	1,444	R 1,708	R 2,414	R 2,039	R 2,045	2,686	1	7,622
<b>March</b> .....	729	R 1,788	R 485	1,581	R 1,891	R 2,685	R 2,395	R 2,402	2,956	2	8,458
<b>April</b> .....	407	R 1,323	309	1,333	R 1,766	R 2,529	R 2,267	R 2,273	2,709	(s)	7,458
<b>May</b> .....	317	1,336	270	R 1,402	R 1,802	R 2,627	R 2,442	R 2,448	2,982	2	7,815
<b>June</b> .....	R 243	1,489	R 231	1,449	R 1,759	R 2,599	R 2,423	R 2,429	3,311	6	7,972
<b>July</b> .....	218	R 1,743	R 220	1,533	R 1,824	R 2,685	R 2,439	R 2,445	3,706	10	8,416
<b>August</b> .....	R 214	R 1,621	228	R 1,498	R 1,817	R 2,668	R 2,502	R 2,509	3,534	8	8,303
<b>September</b> .....	R 225	1,384	R 231	1,389	R 1,756	R 2,538	R 2,307	R 2,313	3,105	4	7,628
<b>October</b> .....	324	R 1,355	R 296	1,427	R 1,820	R 2,616	R 2,407	R 2,413	2,964	2	7,813
<b>November</b> .....	611	1,612	R 433	1,506	R 1,898	R 2,677	R 2,310	R 2,316	2,860	2	8,114
<b>December</b> .....	R 1,004	2,275	R 621	R 1,756	R 1,953	R 2,755	R 2,367	R 2,374	3,215	4	R 9,164
<b>Total</b> .....	R 6,021	R 19,962	R 4,398	R 18,040	R 21,928	R 31,498	R 28,104	R 28,180	37,229	48	97,728
<b>2018 January</b> .....	1,188	2,709	694	1,863	R 2,073	R 2,848	R 2,244	R 2,252	3,474	5	9,678
<b>February</b> .....	844	1,953	532	1,528	1,820	2,524	2,042	2,048	2,814	1	8,054
<b>2-Month Total</b> .....	<b>2,032</b>	<b>4,662</b>	<b>1,226</b>	<b>3,391</b>	<b>3,893</b>	<b>5,372</b>	<b>4,286</b>	<b>4,300</b>	<b>6,288</b>	<b>6</b>	<b>17,732</b>
<b>2017 2-Month Total</b> .....	<b>1,730</b>	<b>4,038</b>	<b>1,075</b>	<b>3,165</b>	<b>3,641</b>	<b>5,118</b>	<b>4,246</b>	<b>4,259</b>	<b>5,889</b>	<b>8</b>	<b>16,587</b>
<b>2016 2-Month Total</b> .....	<b>1,895</b>	<b>4,356</b>	<b>1,156</b>	<b>3,286</b>	<b>3,769</b>	<b>5,318</b>	<b>4,323</b>	<b>4,336</b>	<b>6,153</b>	<b>4</b>	<b>17,299</b>

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

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

<sup>c</sup> Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

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

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

<sup>f</sup> Total energy consumption in the end-use sectors consists of primary energy consumption, electricity retail sales, and electrical system energy losses. See Note 1, "Electrical System Energy Losses," at end of section.

<sup>g</sup> A balancing item. The sum of primary consumption in the five energy-use sectors equals the sum of total consumption in the four end-use sectors. However, total energy consumption does not equal the sum of the sectoral components due

to the use of sector-specific conversion factors for coal and natural gas.

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

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

Notes: • Data are estimates, except for the electric power sector. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

• See Note 2, "Energy Consumption Data and Surveys," at end of section.

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

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

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

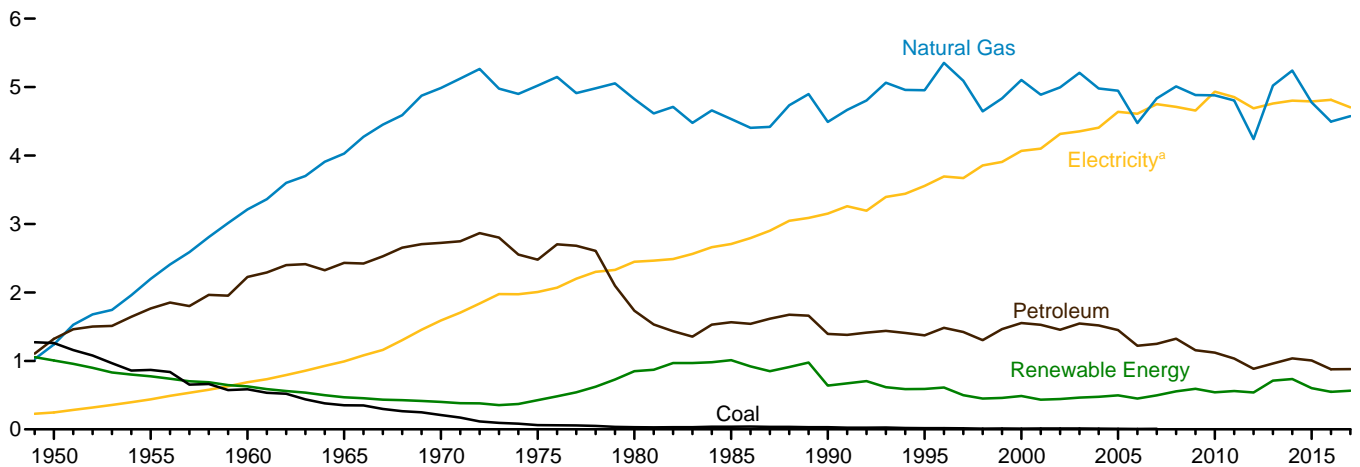
(Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **End-Use Sectors:** Tables 2.2–2.5. • **Electric Power Sector:** Table 2.6. • **Balancing Item:** Calculated as primary energy total consumption minus the sum of total energy consumption in the four end-use sectors.

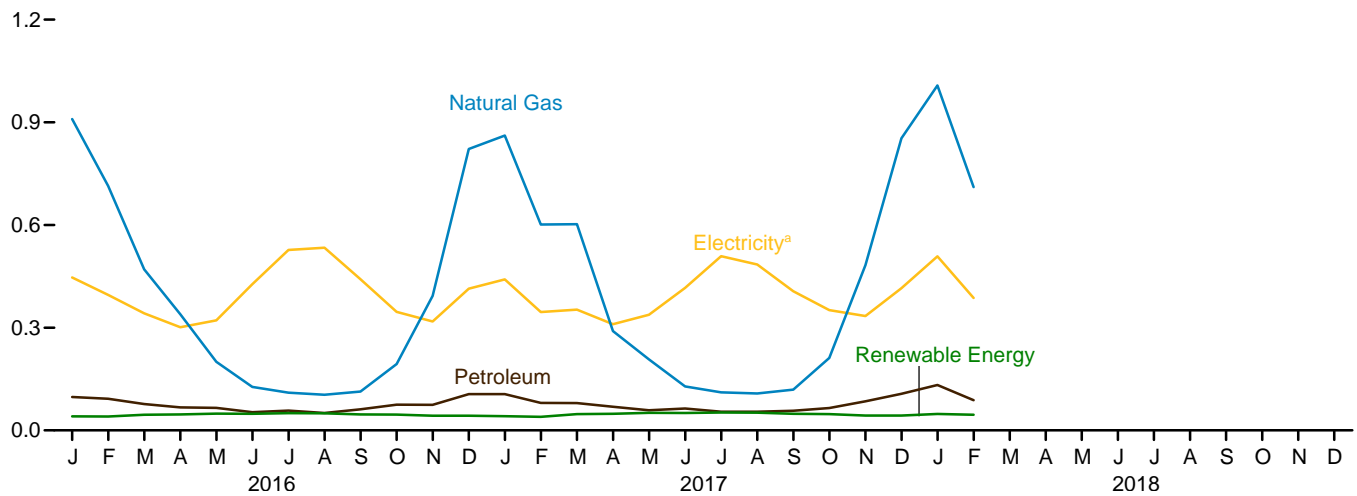
• **Primary Total:** Table 1.3.

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

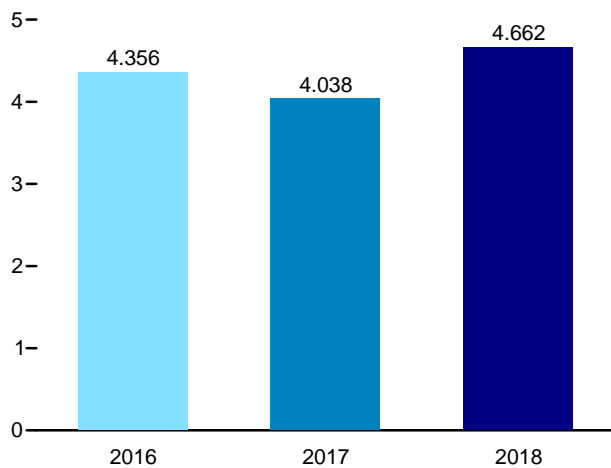
By Major Source, 1949–2017



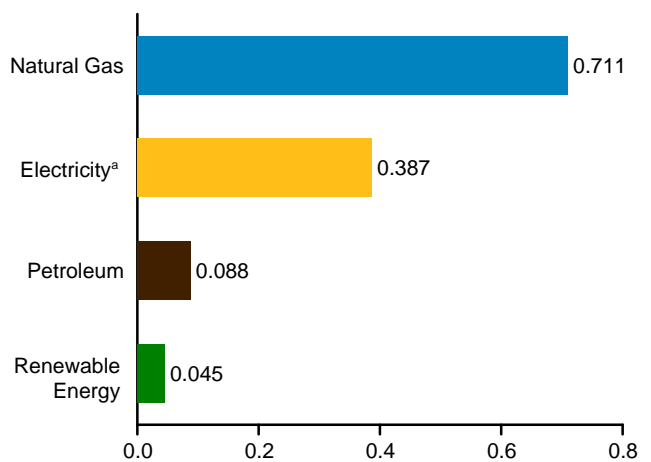
By Major Source, Monthly



Total, January–February



By Major Source, February 2018



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

**Table 2.2 Residential Sector Energy Consumption**  
(Trillion Btu)

	Primary Consumption <sup>a</sup>									Electricity Retail Sales <sup>e</sup>	Electrical System Energy Losses <sup>f</sup>	Total
	Fossil Fuels				Renewable Energy <sup>b</sup>				Total Primary			
	Coal	Natural Gas <sup>c</sup>	Petroleum	Total	Geo-thermal	Solar <sup>d</sup>	Bio-mass	Total				
1950 Total	1,261	1,240	1,322	3,824	NA	NA	1,006	1,006	4,829	246	913	5,989
1955 Total	867	2,198	1,767	4,833	NA	NA	775	775	5,608	438	1,232	7,278
1960 Total	585	3,212	2,227	6,024	NA	NA	627	627	6,651	687	1,701	9,039
1965 Total	352	4,028	2,432	6,811	NA	NA	468	468	7,279	993	2,367	10,639
1970 Total	209	4,987	2,725	7,922	NA	NA	401	401	8,322	1,591	3,852	13,766
1975 Total	63	5,023	2,479	7,564	NA	NA	425	425	7,990	2,007	4,817	14,813
1980 Total	31	4,825	1,734	6,589	NA	NA	850	850	7,439	2,448	5,866	15,753
1985 Total	39	4,534	1,565	6,138	NA	NA	1,010	1,010	7,148	2,709	6,184	16,041
1990 Total	31	4,491	1,394	5,916	6	55	580	640	6,556	3,153	7,235	16,944
1995 Total	17	4,954	1,373	6,345	7	63	520	589	6,934	3,557	8,026	18,517
2000 Total	11	5,105	1,553	6,669	9	58	420	486	7,156	4,069	9,197	20,421
2001 Total	12	4,889	1,528	6,429	9	55	370	435	6,864	4,100	9,074	20,038
2002 Total	12	4,995	1,456	6,463	10	53	380	443	6,907	4,317	9,562	20,786
2003 Total	12	5,209	1,546	6,768	13	52	400	465	7,232	4,353	9,534	21,119
2004 Total	11	4,981	1,519	6,511	14	51	410	475	6,987	4,408	9,687	21,081
2005 Total	8	4,946	1,450	6,405	16	50	430	496	6,901	4,638	10,074	21,613
2006 Total	6	4,476	1,221	5,704	18	53	380	451	6,154	4,611	9,905	20,670
2007 Total	8	4,835	1,249	6,092	22	55	420	497	6,589	4,750	10,180	21,519
2008 Total	NA	5,010	1,324	6,334	26	58	470	555	6,889	4,711	10,068	21,668
2009 Total	NA	4,883	1,157	6,040	33	60	500	593	6,633	4,657	9,788	21,077
2010 Total	NA	4,878	R 1,120	R 5,998	37	65	440	542	R 6,539	4,933	10,321	R 21,794
2011 Total	NA	4,805	R 1,033	R 5,838	40	71	450	560	R 6,398	4,855	10,524	R 21,307
2012 Total	NA	4,242	R 885	R 5,127	40	79	420	538	R 5,666	4,690	9,496	R 19,851
2013 Total	NA	5,023	R 963	R 5,986	40	91	580	711	R 6,697	4,759	9,604	R 21,060
2014 Total	NA	5,242	R 1,036	R 6,278	40	109	587	735	R 7,014	4,801	9,638	R 21,453
2015 Total	NA	4,777	R 1,007	R 5,783	40	127	436	602	R 6,386	4,791	9,362	R 20,539
2016 January	NA	910	R 98	1,007	3	8	30	41	1,048	447	886	R 2,381
February	NA	714	92	806	3	10	28	40	R 847	396	733	R 1,975
March	NA	471	R 77	547	3	13	30	46	593	342	637	1,572
April	NA	339	67	406	3	14	29	46	R 453	301	578	R 1,332
May	NA	200	66	266	3	16	30	49	315	321	643	1,280
June	NA	127	53	R 180	3	17	29	48	228	427	864	R 1,520
July	NA	110	R 58	168	3	17	30	50	218	527	1,062	1,807
August	NA	104	50	154	3	17	30	50	204	534	1,023	1,761
September	NA	113	61	175	3	15	29	47	R 222	441	805	1,468
October	NA	194	75	R 269	3	13	30	46	315	346	648	1,309
November	NA	393	R 75	467	3	11	29	43	510	318	608	R 1,437
December	NA	822	106	R 928	3	10	30	43	R 971	414	844	2,229
Total	NA	4,496	R 878	R 5,373	40	160	349	549	R 5,922	4,815	9,326	R 20,063
2017 January	NA	861	R 106	967	3	10	28	41	1,008	441	872	R 2,322
February	NA	602	80	R 682	3	11	26	39	721	346	649	1,716
March	NA	602	R 80	R 682	3	16	28	47	729	353	706	R 1,788
April	NA	290	69	359	3	18	27	48	407	310	605	R 1,323
May	NA	207	R 59	266	3	19	28	51	317	338	681	1,336
June	NA	128	R 64	192	3	20	27	51	R 243	416	830	1,489
July	NA	111	R 55	R 166	3	20	28	52	218	509	1,016	R 1,743
August	NA	108	R 55	162	3	20	28	52	R 214	485	922	R 1,621
September	NA	119	57	176	3	18	27	48	R 225	406	753	1,384
October	NA	211	65	276	3	16	28	48	324	351	679	R 1,355
November	NA	483	85	R 568	3	12	27	43	611	334	667	1,612
December	NA	854	R 107	960	3	12	28	43	R 1,004	415	856	2,275
Total	NA	4,576	R 880	R 5,456	40	191	334	565	R 6,021	4,705	9,237	R 19,962
2018 January	NA	1,008	132	1,140	3	12	33	48	1,188	508	1,013	2,709
February	NA	711	88	799	3	13	30	45	844	387	722	1,953
2-Month Total	NA	1,718	220	1,939	6	25	62	94	2,032	895	1,735	4,662
2017 2-Month Total	NA	1,463	186	1,649	6	20	54	81	1,730	787	1,522	4,038
2016 2-Month Total	NA	1,624	190	1,813	6	18	57	81	1,895	843	1,618	4,356

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

<sup>b</sup> See Table 10.2a for notes on series components.

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

<sup>d</sup> Distributed (small-scale) solar photovoltaic (PV) electricity generation in the residential sector and distributed solar thermal energy in the residential, commercial, and industrial sectors. See Tables 10.2a and 10.5.

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

<sup>f</sup> Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

electricity retail sales. See Note 1, "Electrical System Energy Losses," at end of section.

R=Revised. NA=Not available.

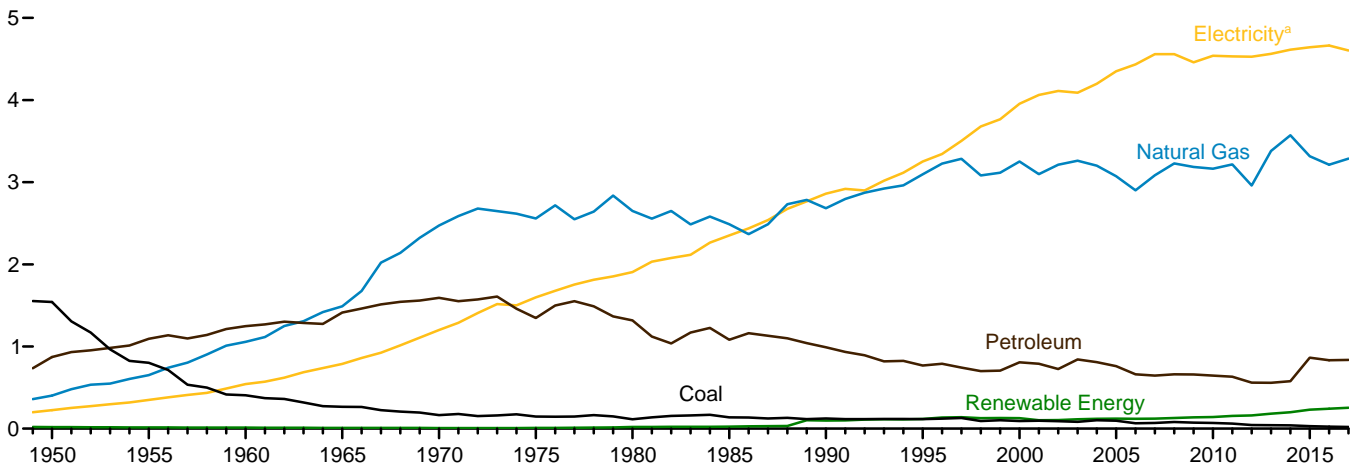
Notes: • Data are estimates, except for electricity retail sales. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

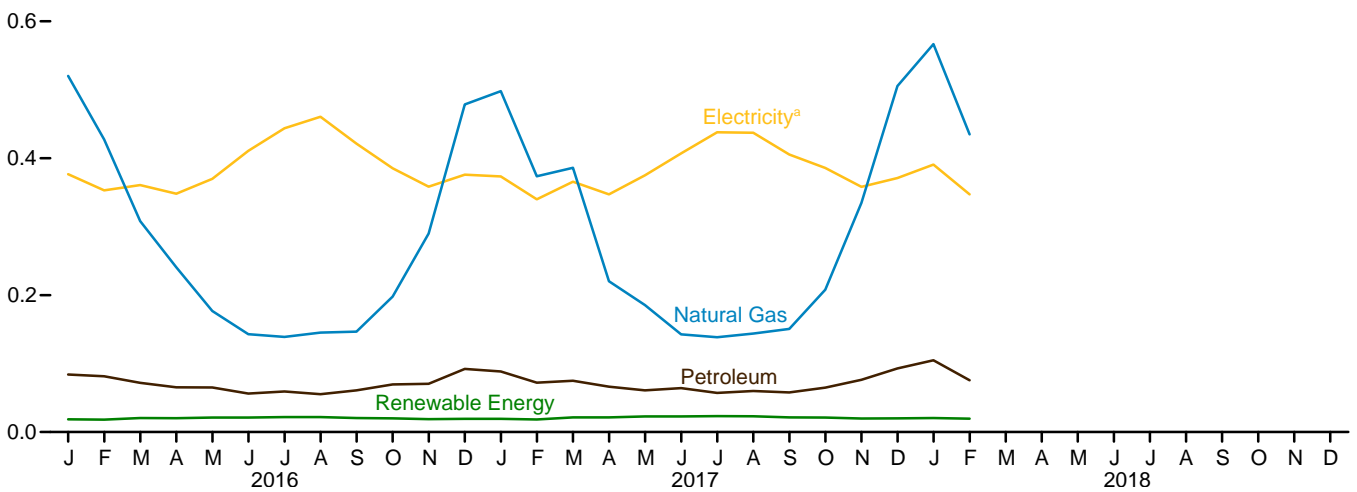
Sources: See end of section.

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

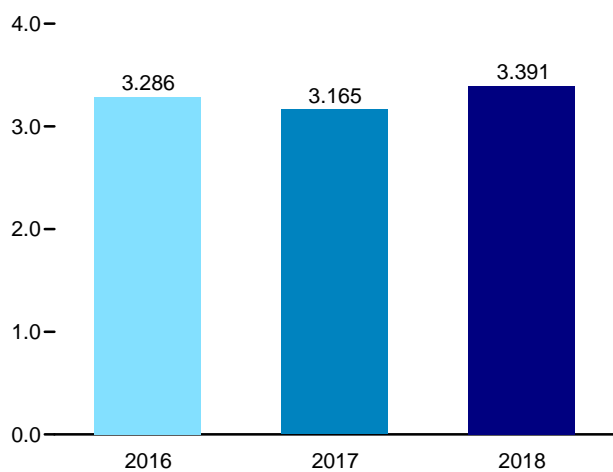
By Major Source, 1949–2017



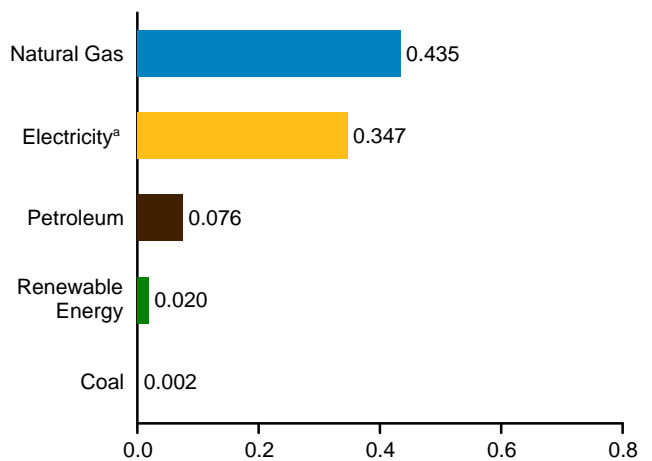
By Major Source, Monthly



Total, January–February



By Major Source, February 2018



<sup>a</sup> Electricity retail sales.  
Web Page: <http://www.eia.gov/totalenergy/data/monthly/#consumption>.  
Source: Table 2.3.

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

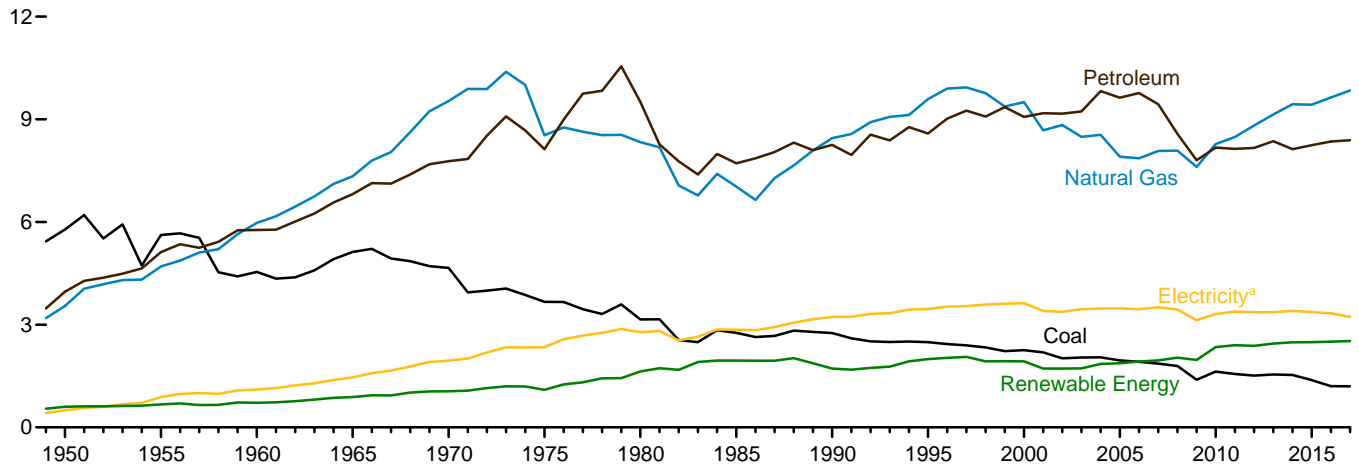
	Primary Consumption <sup>a</sup>										Total Primary	Elec- tricity Retail Sales <sup>g</sup>	Electrical System Energy Losses <sup>h</sup>	Total
	Fossil Fuels				Renewable Energy <sup>b</sup>									
	Coal	Natural Gas <sup>c</sup>	Petro- leum <sup>d</sup>	Total	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar <sup>f</sup>	Wind	Bio- mass	Total				
1950 Total	1,542	401	872	2,815	NA	NA	NA	NA	19	19	2,834	225	834	3,893
1955 Total	801	651	1,095	2,547	NA	NA	NA	NA	15	15	2,561	350	984	3,895
1960 Total	407	1,056	1,248	2,711	NA	NA	NA	NA	12	12	2,723	543	1,344	4,609
1965 Total	265	1,490	1,413	3,168	NA	NA	NA	NA	9	9	3,177	789	1,880	5,845
1970 Total	165	2,473	1,592	4,229	NA	NA	NA	NA	8	8	4,237	1,201	2,908	8,346
1975 Total	147	2,558	1,346	4,051	NA	NA	NA	NA	8	8	4,059	1,598	3,835	9,492
1980 Total	115	2,651	1,318	4,084	NA	NA	NA	NA	21	21	4,105	1,906	4,567	10,578
1985 Total	137	2,488	1,083	3,708	NA	NA	NA	NA	24	24	3,732	2,351	5,368	11,451
1990 Total	124	2,682	991	3,798	1	3	(s)	—	94	98	3,896	2,860	6,564	13,320
1995 Total	117	3,096	769	3,982	1	5	(s)	—	113	119	4,100	3,252	7,337	14,690
2000 Total	92	3,252	806	4,150	1	8	1	—	119	128	4,278	3,956	8,942	17,175
2001 Total	97	3,097	789	3,983	1	8	1	—	92	101	4,085	4,062	8,990	17,137
2002 Total	90	3,212	725	4,027	(s)	9	1	—	95	105	4,132	4,110	9,104	17,346
2003 Total	82	3,261	641	4,184	1	11	1	—	101	114	4,298	4,090	8,958	17,346
2004 Total	103	3,201	809	4,113	1	12	1	—	105	120	4,232	4,198	9,225	17,655
2005 Total	97	3,073	761	3,931	1	14	2	—	105	121	4,052	4,351	9,451	17,853
2006 Total	65	2,902	661	3,627	1	14	2	—	103	120	3,747	4,435	9,525	17,707
2007 Total	70	3,085	646	3,801	1	14	4	—	103	121	3,922	4,560	9,771	18,253
2008 Total	81	3,228	660	3,970	1	15	6	—	109	130	4,100	4,559	9,743	18,402
2009 Total	73	3,187	659	3,919	1	17	7	(s)	112	137	4,055	4,459	9,373	17,887
2010 Total	70	3,165	R 646	R 3,881	1	19	11	(s)	111	142	4,023	4,539	9,497	18,058
2011 Total	62	3,216	R 632	R 3,910	(s)	20	19	(s)	115	154	R 4,064	4,531	9,385	R 17,980
2012 Total	44	2,960	R 560	R 3,563	(s)	20	32	1	108	161	R 3,723	4,528	9,168	R 17,420
2013 Total	41	3,380	R 558	R 3,979	(s)	20	41	1	120	182	R 4,161	4,562	9,206	R 17,929
2014 Total	40	3,572	R 577	R 4,190	(s)	20	52	1	127	200	R 4,390	4,614	9,261	R 18,264
2015 Total	31	3,316	R 864	R 4,211	(s)	20	57	1	152	230	R 4,441	4,643	9,073	R 18,157
2016 January	3	520	R 84	R 607	(s)	2	3	(s)	13	19	R 626	377	747	R 1,749
February	3	427	R 82	R 512	(s)	2	4	(s)	12	18	R 530	353	654	R 1,537
March	3	308	R 72	R 383	(s)	2	5	(s)	13	20	R 403	361	672	R 1,437
April	1	241	R 65	R 307	(s)	2	6	(s)	13	20	R 328	348	668	R 1,344
May	1	177	R 65	R 243	(s)	2	6	(s)	13	21	R 264	370	741	R 1,375
June	2	143	R 56	R 201	(s)	2	6	(s)	13	21	R 222	411	831	R 1,463
July	1	139	R 59	R 200	(s)	2	6	(s)	14	22	R 222	444	895	R 1,560
August	1	145	R 55	R 202	(s)	2	6	(s)	14	22	R 224	461	883	R 1,568
September	1	147	R 61	R 209	(s)	2	6	(s)	13	20	R 230	421	769	R 1,419
October	2	198	R 70	R 269	(s)	2	5	(s)	13	20	R 289	385	721	R 1,396
November	2	290	R 71	R 363	(s)	2	4	(s)	13	19	R 382	358	685	R 1,425
December	3	479	R 92	R 573	(s)	2	4	(s)	13	19	R 593	376	767	R 1,736
Total	24	3,213	R 832	R 4,069	2	20	62	1	158	242	R 4,311	4,665	9,036	R 18,012
2017 January	3	498	R 89	R 589	(s)	2	4	(s)	13	19	R 609	373	739	1,720
February	2	374	R 72	R 448	(s)	2	4	(s)	12	18	R 466	340	638	1,444
March	2	386	R 75	R 463	(s)	2	6	(s)	13	21	R 485	366	731	1,581
April	1	220	R 66	R 288	(s)	2	7	(s)	13	21	R 309	347	677	1,333
May	1	186	R 61	R 248	(s)	2	8	(s)	13	23	R 270	375	757	R 1,402
June	1	143	R 64	R 208	(s)	2	8	(s)	13	23	R 231	407	811	R 1,449
July	1	139	R 57	R 197	(s)	2	8	(s)	13	23	R 220	438	875	R 1,533
August	1	144	R 60	R 205	(s)	2	8	(s)	13	23	R 228	437	832	R 1,498
September	1	151	R 58	R 210	(s)	2	7	(s)	12	21	R 231	405	752	R 1,389
October	2	208	R 65	R 274	(s)	2	6	(s)	13	21	R 296	386	746	R 1,427
November	2	335	R 76	R 413	(s)	2	5	(s)	13	20	R 433	358	715	1,506
December	2	505	R 93	R 601	(s)	2	5	(s)	13	20	R 621	371	764	R 1,756
Total	21	3,287	R 836	R 4,144	2	20	76	1	155	255	R 4,398	4,603	9,039	R 18,040
2018 January	2	567	R 105	R 674	(s)	2	5	(s)	13	20	694	391	779	1,863
February	2	435	R 76	R 513	(s)	2	6	(s)	12	20	532	347	648	1,528
2-Month Total	4	1,001	181	1,186	(s)	3	11	(s)	25	40	1,226	738	1,427	3,391
2017 2-Month Total	5	872	161	1,037	(s)	3	8	(s)	25	38	1,075	713	1,377	3,165
2016 2-Month Total	6	948	166	1,119	(s)	3	7	(s)	25	37	1,156	730	1,400	3,286

<sup>a</sup> See "Primary Energy Consumption" in Glossary.  
<sup>b</sup> See Table 10.2a for notes on series components and estimation.  
<sup>c</sup> Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.  
<sup>d</sup> Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."  
<sup>e</sup> Conventional hydroelectric power.  
<sup>f</sup> Solar photovoltaic (PV) electricity net generation in the commercial sector, both utility-scale and distributed (small-scale). See Tables 10.2a and 10.5.  
<sup>g</sup> Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.  
<sup>h</sup> Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note 1, "Electrical System Energy Losses," at end of

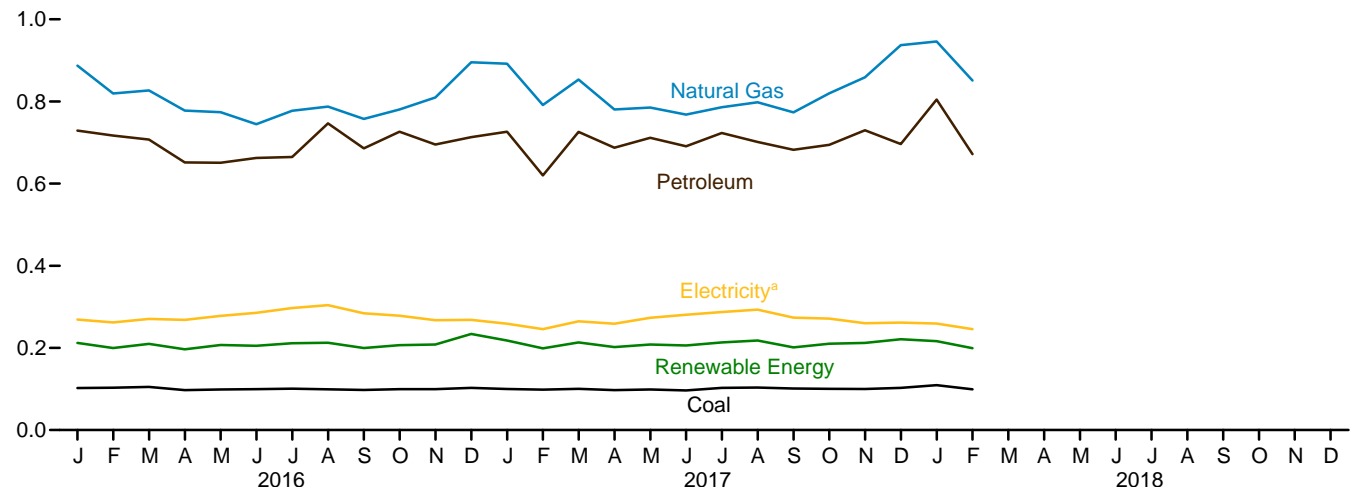
section.  
R=Revised. NA=Not available. —=No data reported. (s)=Less than 0.5 trillion Btu.  
Notes: • Data are estimates, except for coal totals beginning in 2008; hydroelectric power; solar; wind; and electricity retail sales beginning in 1979.  
• The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.  
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.  
Sources: See end of section.

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

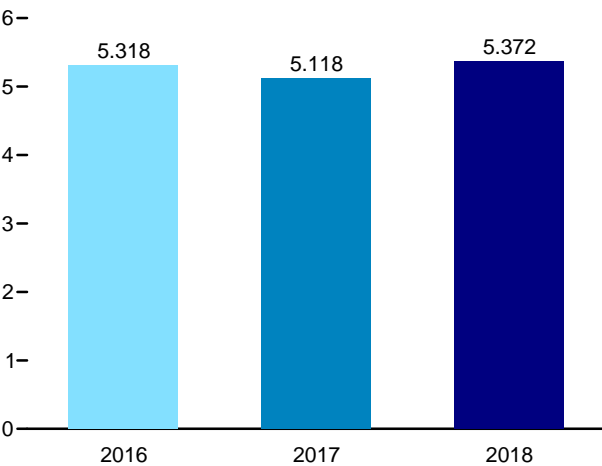
By Major Source, 1949–2017



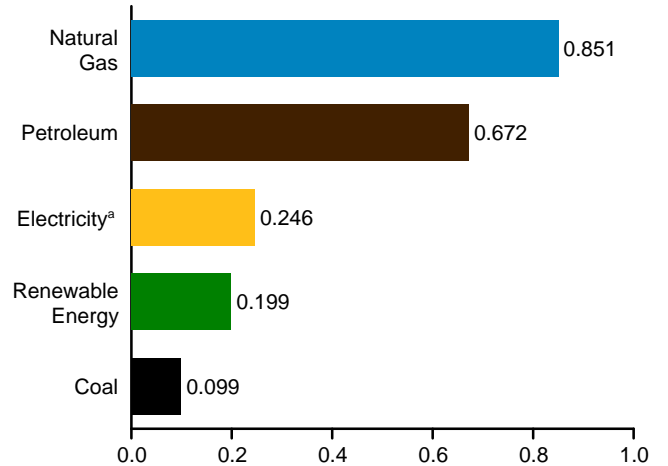
By Major Source, Monthly



Total, January–February



By Major Source, February 2018



<sup>a</sup> Electricity retail sales.  
Web Page: <http://www.eia.gov/totalenergy/data/monthly/#consumption>.  
Source: Table 2.4.



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

	Primary Consumption <sup>a</sup>											Total Primary	Electricity Retail Sales <sup>i</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f</sup>
	Fossil Fuels <sup>b</sup>				Renewable Energy <sup>c</sup>										
	Coal	Natural Gas <sup>d</sup>	Petroleum <sup>e</sup>	Total <sup>f</sup>	Hydroelectric Power <sup>g</sup>	Geothermal	Solar <sup>h</sup>	Wind	Bio-mass	Total					
1950 Total	5,781	3,546	3,960	13,288	69	NA	NA	NA	532	602	13,890	500	1,852	16,241	
1955 Total	5,620	4,701	5,123	15,434	38	NA	NA	NA	631	669	16,103	887	2,495	19,485	
1960 Total	4,543	5,973	5,766	16,277	39	NA	NA	NA	680	719	16,996	1,107	2,739	20,842	
1965 Total	5,127	7,339	6,813	19,260	33	NA	NA	NA	855	888	20,148	1,463	3,487	25,098	
1970 Total	4,656	9,536	7,776	21,911	34	NA	NA	NA	1,019	1,053	22,964	1,948	4,716	29,628	
1975 Total	3,667	8,532	8,127	20,339	32	NA	NA	NA	1,063	1,096	21,434	2,346	5,632	29,413	
1980 Total	3,155	8,333	9,509	20,962	33	NA	NA	NA	1,600	1,633	22,595	2,781	6,664	32,039	
1985 Total	2,760	7,032	7,714	17,492	33	NA	NA	NA	1,918	1,951	19,443	2,855	6,518	28,816	
1990 Total	2,756	8,451	8,251	19,463	31	2	(s)	-	1,684	1,717	21,180	3,226	7,404	31,810	
1995 Total	2,488	9,592	8,585	20,726	55	3	(s)	-	1,934	1,992	22,718	3,455	7,796	33,970	
2000 Total	2,256	9,500	9,073	20,895	42	4	(s)	-	1,881	1,928	22,823	3,631	8,208	34,662	
2001 Total	2,192	8,676	9,177	20,074	33	5	(s)	-	1,681	1,719	21,793	3,400	7,526	32,719	
2002 Total	2,019	8,832	9,167	20,078	39	5	(s)	-	1,676	1,720	21,798	3,379	7,484	32,661	
2003 Total	2,041	8,488	9,229	19,809	43	3	(s)	-	1,678	1,725	21,534	3,454	7,565	32,553	
2004 Total	2,047	8,550	9,825	20,560	33	4	(s)	-	1,815	1,852	22,411	3,473	7,631	33,516	
2005 Total	1,954	7,907	9,634	19,540	32	4	(s)	-	1,834	1,871	21,410	3,477	7,554	32,442	
2006 Total	1,914	7,861	9,767	19,603	29	4	1	-	1,892	1,926	21,529	3,451	7,411	32,391	
2007 Total	1,865	8,074	9,442	19,405	16	5	1	-	1,937	1,958	21,363	3,507	7,515	32,385	
2008 Total	1,793	8,083	8,576	18,493	17	5	1	-	2,012	2,035	20,528	3,444	7,362	31,334	
2009 Total	1,392	7,609	7,806	16,784	18	4	2	-	1,948	1,972	18,756	3,130	6,580	28,466	
2010 Total	1,631	8,278	8,175	18,078	16	4	3	-	2,320	2,343	20,421	3,314	6,934	30,669	
2011 Total	1,561	8,481	8,138	18,191	17	4	4	(s)	2,375	2,401	20,591	3,382	7,005	30,979	
2012 Total	1,513	8,819	8,166	18,502	22	4	7	(s)	2,349	2,382	20,884	3,363	6,810	31,057	
2013 Total	1,546	9,140	8,360	19,029	33	4	9	(s)	2,403	2,449	21,478	3,362	6,785	31,625	
2014 Total	1,530	9,441	8,126	19,076	12	4	11	1	2,456	2,484	21,560	3,404	6,832	31,796	
2015 Total	1,380	9,426	8,246	19,034	13	4	14	(s)	2,460	2,491	21,525	3,366	6,578	31,469	
2016 January	102	887	872	1,718	1	(s)	1	(s)	209	212	1,930	269	533	2,732	
February	103	819	717	1,639	1	(s)	1	(s)	197	200	1,839	262	485	2,586	
March	105	827	707	1,639	1	(s)	2	(s)	206	210	1,848	270	504	2,623	
April	97	778	651	1,525	1	(s)	2	(s)	193	196	1,722	268	515	2,505	
May	99	774	651	1,523	1	(s)	2	(s)	204	207	1,730	278	557	2,564	
June	100	745	663	1,507	1	(s)	2	(s)	202	205	1,712	285	578	2,575	
July	101	777	665	1,542	1	(s)	2	(s)	208	211	1,753	297	599	2,649	
August	99	788	747	1,631	1	(s)	2	(s)	209	213	1,843	304	583	2,730	
September	98	758	686	1,540	1	(s)	2	(s)	197	200	1,739	284	518	2,542	
October	99	780	726	1,603	1	(s)	2	(s)	204	207	1,810	278	521	2,609	
November	99	810	695	1,600	1	(s)	1	(s)	206	208	1,808	268	512	2,587	
December	103	896	713	1,709	1	(s)	1	(s)	231	234	1,943	268	547	2,759	
Total	1,205	9,638	8,350	19,175	12	4	19	1	2,467	2,503	21,678	3,333	6,456	31,466	
2017 January	100	892	726	1,715	1	(s)	1	(s)	215	218	1,933	259	512	2,703	
February	99	791	620	1,509	1	(s)	1	(s)	196	199	1,708	246	461	2,414	
March	100	853	726	1,678	1	(s)	2	(s)	210	213	1,891	265	529	2,685	
April	97	780	687	1,564	1	(s)	2	(s)	198	202	1,766	259	505	2,529	
May	99	785	711	1,594	1	(s)	2	(s)	204	208	1,802	273	552	2,627	
June	97	768	691	1,553	1	(s)	2	(s)	202	206	1,759	281	559	2,599	
July	103	786	723	1,611	1	(s)	3	(s)	209	213	1,824	287	574	2,685	
August	103	798	701	1,600	1	(s)	2	(s)	214	218	1,817	293	558	2,668	
September	101	773	682	1,555	1	(s)	2	(s)	198	201	1,756	274	508	2,538	
October	100	820	695	1,610	1	(s)	2	(s)	207	210	1,820	271	524	2,616	
November	100	859	730	1,686	1	(s)	2	(s)	209	212	1,898	260	519	2,677	
December	103	937	696	1,732	1	(s)	1	(s)	218	221	1,953	262	539	2,755	
Total	1,201	9,843	8,390	19,406	13	4	24	1	2,480	2,522	21,928	3,229	6,340	31,498	
2018 January	109	946	805	1,856	1	(s)	2	(s)	213	216	2,073	259	516	2,848	
February	99	851	672	1,621	1	(s)	2	(s)	196	199	1,820	246	459	2,524	
2-Month Total	209	1,797	1,477	3,477	2	1	3	(s)	409	415	3,893	505	975	5,372	
2017 2-Month Total	199	1,683	1,346	3,224	2	1	3	(s)	411	417	3,641	504	973	5,118	
2016 2-Month Total	205	1,706	1,446	3,357	2	1	2	(s)	407	412	3,769	531	1,018	5,318	

<sup>a</sup> See "Primary Energy Consumption" in Glossary.  
<sup>b</sup> Includes non-combustion use of fossil fuels.  
<sup>c</sup> See Table 10.2b for notes on series components and estimation.  
<sup>d</sup> Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.  
<sup>e</sup> Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."  
<sup>f</sup> Includes coal coke net imports, which are not separately displayed. See Tables 1.4a and 1.4b.  
<sup>g</sup> Conventional hydroelectric power.  
<sup>h</sup> Solar photovoltaic (PV) electricity net generation in the industrial sector, both utility-scale and distributed (small-scale). See Tables 10.2b and 10.5.  
<sup>i</sup> Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.  
<sup>j</sup> Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

electricity retail sales. See Note 1, "Electrical System Energy Losses," at end of section.

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

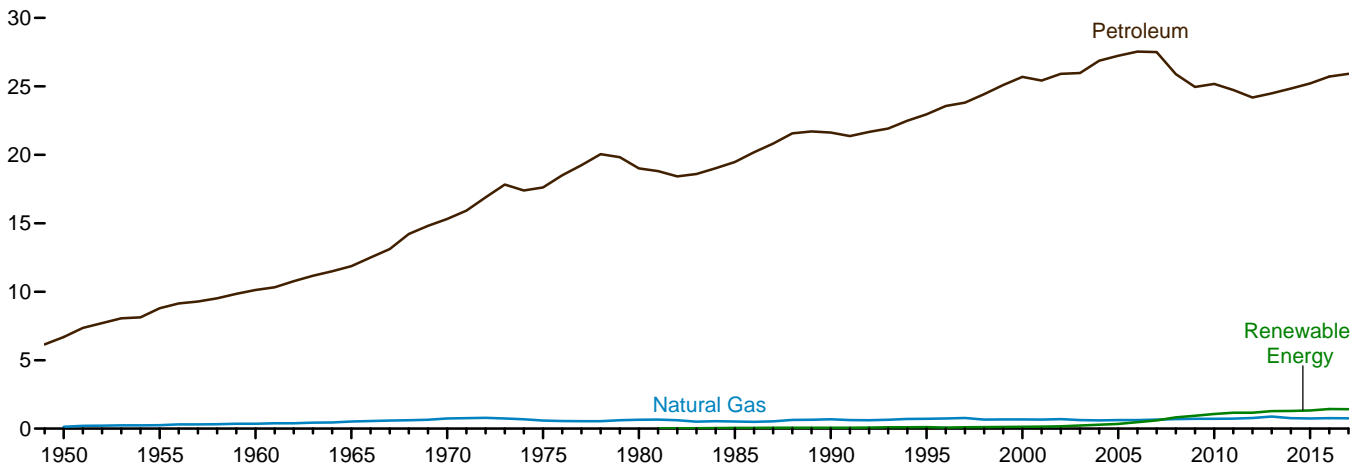
Notes: • Data are estimates, except for coal totals; hydroelectric power in 1949–1978 and 1989 forward; solar; wind; and electricity retail sales. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

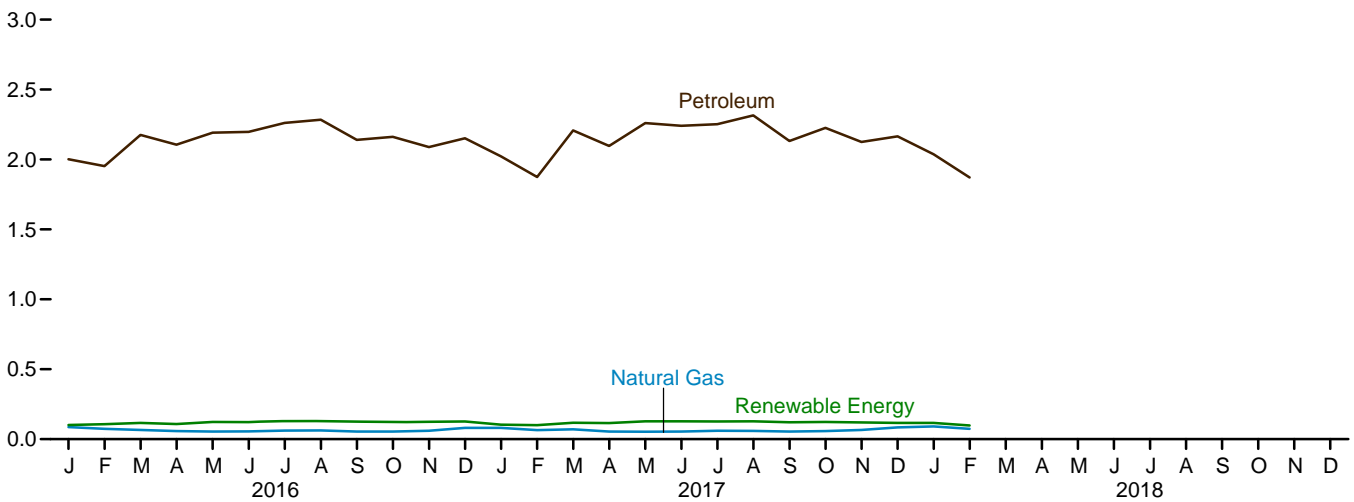
Sources: See end of section.

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

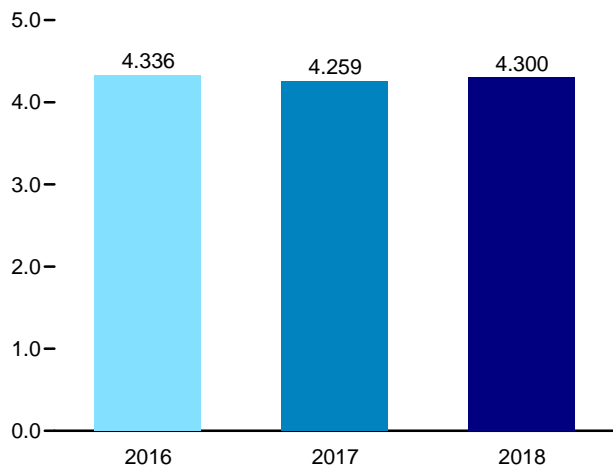
By Major Source, 1949–2017



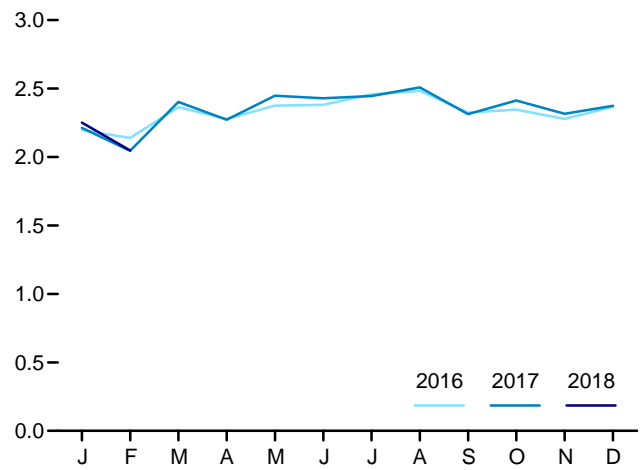
By Major Source, Monthly



Total, January–February



Total, Monthly



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

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

	Primary Consumption <sup>a</sup>						Electricity Retail Sales <sup>e</sup>	Electrical System Energy Losses <sup>f</sup>	Total
	Fossil Fuels				Renewable Energy <sup>b</sup>	Total Primary			
	Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Total	Biomass				
<b>1950 Total</b> .....	1,564	130	6,690	8,383	NA	8,383	23	86	8,492
<b>1955 Total</b> .....	421	254	8,799	9,474	NA	9,474	20	56	9,550
<b>1960 Total</b> .....	75	359	10,125	10,560	NA	10,560	10	26	10,596
<b>1965 Total</b> .....	16	517	11,866	12,399	NA	12,399	10	24	12,432
<b>1970 Total</b> .....	7	745	15,310	16,062	NA	16,062	11	26	16,098
<b>1975 Total</b> .....	1	595	17,615	18,210	NA	18,210	10	24	18,245
<b>1980 Total</b> .....	(g)	650	19,009	19,659	NA	19,659	11	27	19,697
<b>1985 Total</b> .....	(g)	519	19,472	19,992	50	20,041	14	32	20,088
<b>1990 Total</b> .....	(g)	680	21,626	22,306	60	22,366	16	37	22,420
<b>1995 Total</b> .....	(g)	724	22,959	23,683	112	23,796	17	38	23,851
<b>2000 Total</b> .....	(g)	672	25,689	26,361	135	26,495	18	42	26,555
<b>2001 Total</b> .....	(g)	658	25,419	26,077	142	26,219	20	43	26,282
<b>2002 Total</b> .....	(g)	699	25,917	26,616	170	26,785	19	42	26,846
<b>2003 Total</b> .....	(g)	627	25,969	26,596	230	26,826	23	51	26,900
<b>2004 Total</b> .....	(g)	602	26,872	27,474	290	27,764	25	54	27,843
<b>2005 Total</b> .....	(g)	624	27,236	27,860	339	28,199	26	56	28,280
<b>2006 Total</b> .....	(g)	625	27,538	28,163	475	28,638	25	54	28,717
<b>2007 Total</b> .....	(g)	663	27,505	28,169	602	28,771	27	60	28,858
<b>2008 Total</b> .....	(g)	692	25,888	26,580	825	27,404	27	56	27,486
<b>2009 Total</b> .....	(g)	715	24,955	25,670	935	26,605	26	56	26,687
<b>2010 Total</b> .....	(g)	719	R 25,177	R 25,896	1,075	R 26,971	26	55	R 27,052
<b>2011 Total</b> .....	(g)	734	R 24,730	R 25,464	1,158	R 26,622	26	54	R 26,702
<b>2012 Total</b> .....	(g)	780	R 24,187	R 24,967	1,162	R 26,129	25	51	R 26,205
<b>2013 Total</b> .....	(g)	887	R 24,484	R 25,372	1,278	R 26,649	26	53	R 26,728
<b>2014 Total</b> .....	(g)	760	R 24,841	R 25,600	1,292	R 26,892	26	53	R 26,972
<b>2015 Total</b> .....	(g)	745	R 25,213	R 25,957	1,326	R 27,283	26	51	R 27,360
<b>2016 January</b> .....	(g)	86	R 2,002	R 2,088	102	R 2,190	2	4	R 2,196
February .....	(g)	74	R 1,952	R 2,026	107	R 2,133	2	4	R 2,139
March .....	(g)	66	R 2,176	R 2,242	116	R 2,357	2	4	R 2,363
April .....	(g)	58	R 2,106	R 2,164	108	R 2,272	2	4	R 2,278
May .....	(g)	55	R 2,192	R 2,246	122	R 2,369	2	4	R 2,375
June .....	(g)	56	R 2,197	R 2,253	122	R 2,375	2	4	R 2,381
July .....	(g)	61	R 2,262	R 2,323	128	R 2,451	2	4	R 2,458
August .....	(g)	62	R 2,284	R 2,346	131	R 2,477	2	4	R 2,483
September .....	(g)	55	R 2,140	R 2,195	124	R 2,319	2	4	R 2,325
October .....	(g)	54	R 2,162	R 2,216	123	R 2,340	2	4	R 2,346
November .....	(g)	61	R 2,088	R 2,149	124	R 2,273	2	4	R 2,279
December .....	(g)	80	R 2,152	R 2,232	127	R 2,359	2	5	R 2,366
<b>Total</b> .....	(g)	767	R 25,713	R 26,480	1,434	R 27,914	26	50	R 27,989
<b>2017 January</b> .....	(g)	80	R 2,023	R 2,103	104	R 2,206	2	4	R 2,213
February .....	(g)	65	R 1,875	R 1,940	100	R 2,039	2	4	R 2,045
March .....	(g)	70	R 2,208	R 2,278	117	R 2,395	2	4	R 2,402
April .....	(g)	54	R 2,097	R 2,151	116	R 2,267	2	4	R 2,273
May .....	(g)	54	R 2,261	R 2,314	127	R 2,442	2	4	R 2,448
June .....	(g)	54	R 2,241	R 2,295	128	R 2,423	2	4	R 2,429
July .....	(g)	60	R 2,253	R 2,313	126	R 2,439	2	4	R 2,445
August .....	(g)	59	R 2,315	R 2,374	128	R 2,502	2	4	R 2,509
September .....	(g)	54	R 2,132	R 2,186	121	R 2,307	2	4	R 2,313
October .....	(g)	57	R 2,227	R 2,284	123	R 2,407	2	4	R 2,413
November .....	(g)	65	R 2,126	R 2,191	119	R 2,310	2	4	R 2,316
December .....	(g)	85	R 2,166	R 2,250	117	R 2,367	2	5	R 2,374
<b>Total</b> .....	(g)	758	R 25,921	R 26,679	1,425	R 28,104	26	50	R 28,180
<b>2018 January</b> .....	(g)	91	R 2,037	R 2,128	117	R 2,244	3	5	R 2,252
February .....	(g)	74	1,871	1,944	98	2,042	2	4	2,048
<b>2-Month Total</b> .....	(g)	165	3,907	4,072	214	4,286	5	9	4,300
<b>2017 2-Month Total</b> .....	(g)	145	3,898	4,042	203	4,246	4	9	4,259
<b>2016 2-Month Total</b> .....	(g)	160	3,954	4,114	209	4,323	4	9	4,336

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

<sup>b</sup> See Table 10.2b for notes on series components.

<sup>c</sup> Natural gas only; does not include supplemental gaseous fuels—see Note 3, "Supplemental Gaseous Fuels," at end of Section 4. Data are for natural gas consumed in the operation of pipelines (primarily in compressors) and small amounts consumed as vehicle fuel—see Table 4.3.

<sup>d</sup> Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass." Includes non-combustion use of lubricants.

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

<sup>f</sup> Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note 1, "Electrical System Energy Losses," at end of

section.

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

R=Revised. NA=Not available.

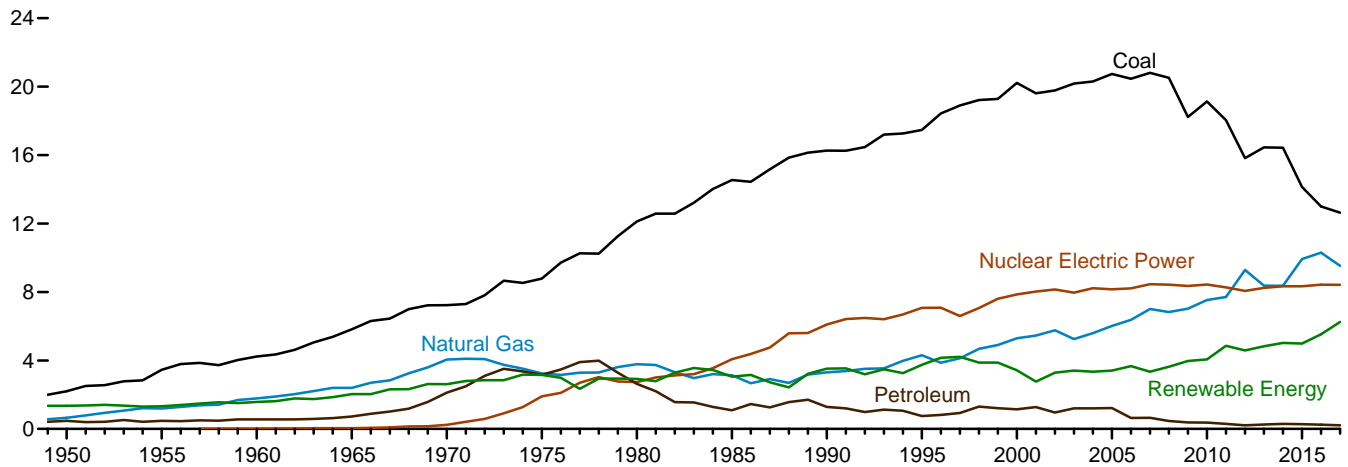
Notes: • Data are estimates, except for coal totals through 1977; and electricity retail sales beginning in 1979. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

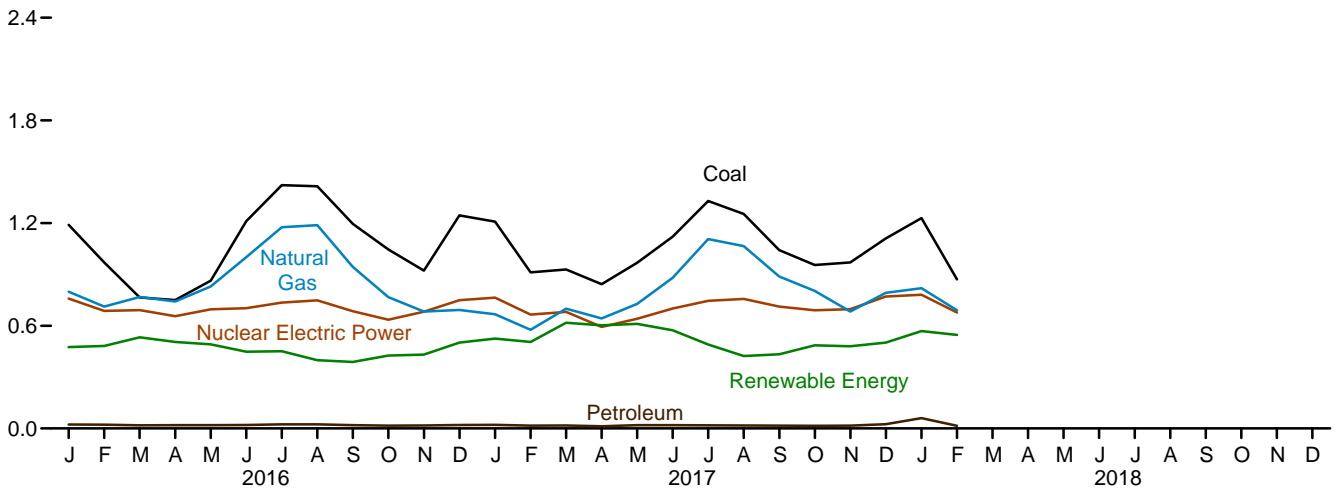
Sources: See end of section.

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

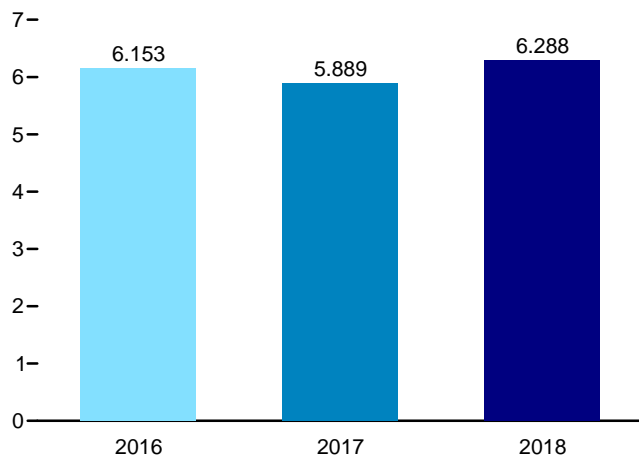
By Major Source, 1949–2017



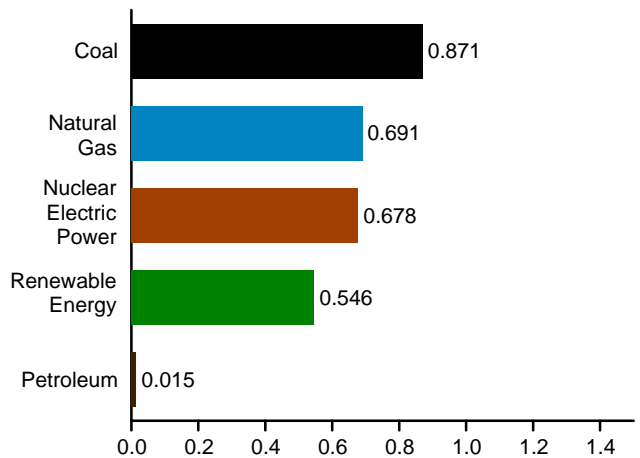
By Major Source, Monthly



Total, January–February



By Major Source, February 2018



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

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

	Primary Consumption <sup>a</sup>												Elec- tricity Net Imports <sup>f</sup>	Total Primary
	Fossil Fuels				Nuclear Electric Power	Renewable Energy <sup>b</sup>								
	Coal	Natural Gas <sup>c</sup>	Petro- leum	Total		Hydro- electric Power <sup>d</sup>	Geo- thermal	Solar <sup>e</sup>	Wind	Bio- mass	Total			
1950 Total .....	2,199	651	472	3,322	0	1,346	NA	NA	NA	5	1,351	6	4,679	
1955 Total .....	3,458	1,194	471	5,123	0	1,322	NA	NA	NA	3	1,325	14	6,461	
1960 Total .....	4,228	1,785	553	6,565	6	1,569	(s)	NA	NA	2	1,571	15	8,158	
1965 Total .....	5,821	2,395	722	8,938	43	2,026	2	NA	NA	3	2,031	(s)	11,012	
1970 Total .....	7,227	4,054	2,117	13,399	239	2,600	6	NA	NA	4	2,609	7	16,253	
1975 Total .....	8,786	3,240	3,166	15,191	1,900	3,122	34	NA	NA	2	3,158	21	20,270	
1980 Total .....	12,123	3,778	2,634	18,534	2,739	2,867	53	NA	NA	4	2,925	71	24,269	
1985 Total .....	14,542	3,135	1,090	18,767	4,076	2,937	97	(s)	(s)	14	3,049	140	26,032	
1990 Total <sup>g</sup> .....	16,261	3,309	1,289	20,859	6,104	3,014	161	4	29	317	3,524	8	30,495	
1995 Total .....	17,466	4,302	755	22,523	7,075	3,149	138	5	33	422	3,747	134	33,479	
2000 Total .....	20,220	5,293	1,144	26,658	7,862	2,768	144	5	57	453	3,427	115	38,062	
2001 Total .....	19,614	5,458	1,276	26,348	8,029	2,209	142	6	70	337	2,763	75	37,215	
2002 Total .....	19,783	5,767	961	26,511	8,145	2,650	147	6	105	380	3,288	72	38,016	
2003 Total .....	20,185	5,246	1,205	26,636	7,960	2,749	146	5	113	397	3,411	22	38,028	
2004 Total .....	20,305	5,595	1,201	27,101	8,223	2,655	148	6	142	388	3,339	39	38,701	
2005 Total .....	20,737	6,015	1,222	27,974	8,161	2,670	147	6	178	406	3,406	85	39,626	
2006 Total .....	20,462	6,375	637	27,474	8,215	2,839	145	5	264	412	3,665	63	39,417	
2007 Total .....	20,808	7,005	648	28,461	8,459	2,430	145	6	341	423	3,345	107	40,371	
2008 Total .....	20,513	6,829	459	27,801	8,426	2,494	146	9	546	435	3,630	112	39,969	
2009 Total .....	18,225	7,022	382	25,630	8,355	2,650	146	9	721	441	3,967	116	38,069	
2010 Total .....	19,133	7,528	370	27,031	8,434	2,521	148	12	923	459	4,064	89	39,619	
2011 Total .....	18,035	7,712	295	26,042	8,269	3,085	149	17	1,167	437	4,855	127	39,293	
2012 Total .....	15,821	9,287	214	25,322	8,062	2,606	148	40	1,339	453	4,586	161	38,131	
2013 Total .....	16,451	8,376	255	25,082	8,244	2,529	151	83	1,600	470	4,833	197	38,357	
2014 Total .....	16,427	8,362	295	25,085	8,338	2,454	151	165	1,726	530	5,026	182	38,629	
2015 Total .....	14,138	9,926	276	24,341	8,337	2,308	148	228	1,776	525	4,985	227	37,890	
<b>2016</b> January .....	1,190	799	23	2,012	759	235	12	13	170	44	475	19	3,265	
February .....	970	712	22	1,704	687	222	11	20	186	43	482	16	2,888	
March .....	765	768	18	1,552	692	251	12	24	202	43	533	16	2,793	
April .....	750	741	19	1,510	656	238	11	26	192	39	506	13	2,685	
May .....	863	830	19	1,712	696	234	12	31	174	40	491	16	2,916	
June .....	1,211	1,001	20	2,232	703	213	12	32	150	41	448	19	3,402	
July .....	1,422	1,176	24	2,622	736	197	12	36	163	44	451	22	3,831	
August .....	1,415	1,188	24	2,627	748	180	12	36	125	45	399	20	3,794	
September .....	1,195	944	20	2,158	685	150	12	33	151	41	388	13	3,245	
October .....	1,046	767	16	1,830	635	159	12	29	188	37	426	16	2,906	
November .....	923	683	18	1,623	682	173	13	25	179	42	432	19	2,755	
December .....	1,245	692	20	1,958	750	207	13	22	213	46	501	15	3,224	
<b>Total</b> .....	<b>12,996</b>	<b>10,301</b>	<b>244</b>	<b>23,542</b>	<b>8,427</b>	<b>2,459</b>	<b>146</b>	<b>328</b>	<b>2,094</b>	<b>505</b>	<b>5,531</b>	<b>206</b>	<b>37,705</b>	
<b>2017</b> January .....	1,208	668	21	1,897	765	256	13	20	191	45	525	16	3,203	
February .....	912	576	16	1,504	665	225	11	23	205	41	505	12	2,686	
March .....	928	700	17	1,645	681	278	13	40	241	46	618	12	2,956	
April .....	843	643	13	1,498	593	269	13	44	238	40	603	15	2,709	
May .....	968	728	19	1,715	641	296	12	53	209	42	611	14	2,982	
June .....	1,121	880	19	2,020	701	279	12	57	182	44	573	16	3,311	
July .....	1,329	1,107	18	2,454	746	236	13	50	145	46	490	15	3,706	
August .....	1,254	1,065	17	2,336	757	195	13	49	121	46	423	17	3,534	
September .....	1,042	888	17	1,946	712	174	12	47	159	41	433	13	3,105	
October .....	955	804	16	1,774	690	158	12	44	229	43	486	13	2,964	
November .....	970	683	16	1,669	697	182	12	28	215	43	480	14	2,860	
December .....	1,110	792	25	1,928	771	207	13	28	210	45	502	14	3,215	
<b>Total</b> .....	<b>12,640</b>	<b>9,534</b>	<b>214</b>	<b>22,388</b>	<b>8,419</b>	<b>2,755</b>	<b>147</b>	<b>483</b>	<b>2,345</b>	<b>519</b>	<b>6,249</b>	<b>173</b>	<b>37,229</b>	
<b>2018</b> January .....	1,229	820	60	2,109	781	233	13	30	248	45	569	15	3,474	
February .....	871	691	15	1,577	678	235	12	37	221	42	546	13	2,814	
<b>2-Month Total</b> .....	<b>2,101</b>	<b>1,510</b>	<b>75</b>	<b>3,686</b>	<b>1,458</b>	<b>468</b>	<b>25</b>	<b>67</b>	<b>468</b>	<b>87</b>	<b>1,115</b>	<b>28</b>	<b>6,288</b>	
<b>2017 2-Month Total</b> .....	<b>2,120</b>	<b>1,243</b>	<b>37</b>	<b>3,401</b>	<b>1,430</b>	<b>481</b>	<b>24</b>	<b>42</b>	<b>396</b>	<b>86</b>	<b>1,030</b>	<b>28</b>	<b>5,889</b>	
<b>2016 2-Month Total</b> .....	<b>2,160</b>	<b>1,511</b>	<b>45</b>	<b>3,716</b>	<b>1,445</b>	<b>457</b>	<b>24</b>	<b>34</b>	<b>356</b>	<b>87</b>	<b>957</b>	<b>35</b>	<b>6,153</b>	

<sup>a</sup> See "Primary Energy Consumption" in Glossary.  
<sup>b</sup> See Table 10.2c for notes on series components.  
<sup>c</sup> Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.  
<sup>d</sup> Conventional hydroelectric power.  
<sup>e</sup> Solar photovoltaic (PV) and solar thermal electricity net generation in the electric power sector. See Tables 10.2c and 10.5.  
<sup>f</sup> Net imports equal imports minus exports.  
<sup>g</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.  
 NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Data are for fuels consumed to produce electricity and useful thermal output. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.  
 Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.  
 Sources: See end of section.

**Table 2.7 U.S. Government Energy Consumption by Agency, Fiscal Years**  
(Trillion Btu)

Fiscal Year <sup>a</sup>	Agri-culture	Defense	Energy	GSA <sup>b</sup>	HHS <sup>c</sup>	Interior	Justice	NASA <sup>d</sup>	Postal Service	Trans- portation	Veterans Affairs	Other <sup>e</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	17.1	1,128.5
1996	9.1	904.5	44.6	14.5	6.6	4.3	12.1	11.5	36.4	19.6	26.8	17.7	1,107.7
1997	7.4	880.0	43.1	14.4	7.9	6.6	12.0	12.0	40.8	19.1	27.3	20.8	1,091.2
1998	7.9	837.1	31.5	14.1	7.4	6.4	15.8	11.7	39.5	18.5	27.6	19.5	1,037.1
1999	7.8	810.7	27.0	14.4	7.1	7.5	15.4	11.4	39.8	22.6	27.5	19.8	1,010.9
2000	7.4	779.1	30.5	17.6	8.0	7.8	19.7	11.1	43.3	21.2	27.0	20.3	993.1
2001	7.4	787.2	31.1	18.4	8.5	9.5	19.7	10.9	43.4	17.8	27.7	20.7	1,002.3
2002	7.2	837.5	30.7	17.5	8.0	8.2	17.7	10.7	41.6	18.3	27.7	18.4	1,043.4
2003	7.7	895.1	31.9	18.5	10.1	7.3	22.7	10.8	50.9	5.5	30.6	41.0	1,132.3
2004	7.0	960.7	31.4	18.3	8.8	8.7	17.5	9.9	50.5	5.2	29.9	44.0	1,191.7
2005	7.5	933.2	29.6	18.4	9.6	8.6	18.8	10.3	53.5	5.0	30.0	42.1	1,166.4
2006	6.8	843.7	32.9	18.2	9.3	8.1	23.5	10.2	51.8	4.6	29.3	38.1	1,076.4
2007	6.8	864.6	31.5	19.1	9.9	7.5	20.7	10.6	45.8	5.6	30.0	38.1	1,090.2
2008	6.5	910.8	32.1	18.8	10.3	7.1	19.0	10.8	47.1	7.7	29.0	44.1	1,143.2
2009	6.6	874.3	31.1	18.6	10.8	7.9	16.5	10.2	44.2	4.3	29.9	40.4	1,094.8
2010	6.8	889.9	31.7	18.8	10.4	7.3	15.7	10.1	43.3	5.7	30.2	42.9	1,112.7
2011	8.3	890.3	33.1	18.5	10.5	7.3	13.9	10.1	43.0	6.7	30.6	41.7	1,114.1
2012	6.7	828.5	30.3	16.3	10.0	6.7	15.1	8.9	40.8	5.6	29.7	40.6	1,039.3
2013	7.3	749.5	28.9	16.4	10.5	6.2	15.3	8.7	41.9	5.3	29.9	39.3	959.3
2014	6.3	730.6	29.4	17.0	9.5	6.2	15.6	8.3	43.0	5.2	31.4	39.0	941.5
2015	6.2	734.5	30.1	16.9	9.0	6.8	16.2	8.4	44.0	6.0	30.7	37.8	946.5
2016	6.2	709.2	28.9	15.8	8.7	6.4	15.6	8.5	43.9	6.0	30.3	37.6	917.2

<sup>a</sup> 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 2014 is October 2013 through September 2014).

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

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

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

<sup>e</sup> Includes all U.S. government agencies not separately displayed. See <http://ctsedweb.ee.doe.gov/Annual/Report/AgencyReference.aspx> for agency list.

Notes: • Data in this table are developed using conversion factors that often differ from those in Tables A1–A6. • 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://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all annual data beginning in 1975.

Source: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Federal Energy Management Program. See <http://ctsedweb.ee.doe.gov/Annual/Report/Report.aspx>, "A-1 Total Site-Delivered Energy Use in All End-Use Sectors, by Federal Agency (Billion Btu)" dataset.

**Table 2.8 U.S. Government Energy Consumption by Source, Fiscal Years**  
(Trillion Btu)

Fiscal Year <sup>a</sup>	Coal	Natural Gas <sup>b</sup>	Petroleum					Other Mobility Fuels <sup>f</sup>	Electricity	Purchased Steam and Other <sup>g</sup>	Total	
			Aviation Gasoline	Fuel Oil <sup>c</sup>	Jet Fuel	LPG <sup>d</sup>	Motor Gasoline <sup>e</sup>					Total
1975	77.9	166.2	22.0	376.0	707.4	5.6	63.2	1,174.2	0.0	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	.0	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	.0	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	.0	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	.0	141.2	7.1	1,375.4
1980	63.5	147.3	4.9	307.7	638.7	3.8	56.5	1,011.6	.2	141.9	6.8	1,371.2
1981	65.1	142.2	4.6	351.3	653.3	3.5	53.2	1,066.0	.2	144.5	6.2	1,424.2
1982	68.6	146.2	3.6	349.4	672.7	3.7	53.1	1,082.5	.2	147.5	6.2	1,451.4
1983	62.4	147.8	2.6	329.5	673.4	3.8	51.6	1,060.8	.2	151.5	9.0	1,431.8
1984	65.3	157.4	1.9	342.9	693.7	3.9	51.2	1,093.6	.2	155.9	10.1	1,482.5
1985	64.8	149.9	1.9	292.6	705.7	3.8	50.4	1,054.3	.2	167.2	13.9	1,450.3
1986	63.8	140.9	1.4	271.6	710.2	3.6	45.3	1,032.1	.3	155.8	13.7	1,406.7
1987	67.0	145.6	1.0	319.5	702.3	3.6	43.1	1,069.5	.4	169.9	13.9	1,466.3
1988	60.2	144.6	6.0	284.8	617.2	2.7	41.2	951.9	.4	171.2	32.0	1,360.3
1989	48.7	152.4	.8	245.3	761.7	3.5	41.1	1,052.4	2.2	188.6	20.6	1,464.7
1990	44.3	159.4	.5	245.2	732.4	3.8	37.2	1,019.1	2.6	193.6	19.1	1,438.0
1991	45.9	154.1	.4	232.6	774.5	3.0	34.1	1,044.7	6.0	192.7	18.3	1,461.7
1992	51.7	151.2	1.0	200.6	628.2	3.0	35.6	868.4	8.4	192.5	22.5	1,294.8
1993	38.3	152.9	.7	187.0	612.4	3.5	34.5	838.1	5.8	193.1	18.6	1,246.8
1994	35.0	143.9	.6	198.5	550.7	3.2	29.5	782.6	7.7	190.9	18.2	1,178.2
1995	31.7	149.4	.3	178.4	522.3	3.0	31.9	735.9	8.4	184.8	18.2	1,128.5
1996	23.3	147.3	.2	170.5	513.0	3.1	27.6	714.4	18.7	184.0	20.1	1,107.7
1997	22.5	153.8	.3	180.0	475.7	2.6	39.0	697.6	14.5	183.6	19.2	1,091.2
1998	23.9	140.4	.2	174.5	445.5	3.5	43.0	666.8	5.9	181.4	18.8	1,037.1
1999	21.2	137.4	.1	162.1	444.7	2.4	41.1	650.4	.4	180.0	21.5	1,010.9
2000	22.7	133.8	.2	171.3	403.1	2.5	43.9	621.0	1.8	193.6	20.2	993.1
2001	18.8	133.7	.2	176.9	415.2	3.1	42.5	638.0	4.8	188.4	18.6	1,002.3
2002	16.9	133.7	.2	165.6	472.9	2.8	41.3	682.8	3.2	188.3	18.5	1,043.4
2003	18.1	135.5	.3	190.8	517.9	3.2	46.3	758.4	3.3	193.8	23.2	1,132.3
2004	17.4	135.3	.2	261.4	508.2	2.9	44.1	816.9	3.1	197.1	22.0	1,191.7
2005	17.1	135.7	.4	241.4	492.2	3.4	48.8	786.1	5.6	197.6	24.3	1,166.4
2006	23.5	132.6	.6	209.3	442.6	2.7	48.3	703.6	2.1	196.7	18.2	1,076.4
2007	20.4	131.5	.4	212.9	461.1	2.7	46.5	723.7	2.9	194.9	16.7	1,090.2
2008	20.8	129.6	.4	198.4	525.4	2.3	49.0	775.4	3.6	196.1	17.7	1,143.2
2009	20.3	131.7	.3	166.4	505.7	3.2	48.3	723.9	10.1	191.3	17.7	1,094.8
2010	20.0	130.1	.4	157.8	535.8	2.5	51.3	747.7	3.0	193.7	18.2	1,112.7
2011	18.5	124.7	.9	166.5	533.6	2.0	52.7	755.8	2.7	193.2	19.1	1,114.1
2012	15.9	116.2	.4	148.6	493.5	1.7	50.1	694.4	3.1	187.2	22.5	1,039.3
2013	14.3	122.5	.7	140.0	424.0	1.9	46.6	613.2	2.8	184.7	21.8	959.3
2014	13.5	125.6	.3	133.5	414.3	1.8	44.9	594.8	3.6	182.1	21.9	941.5
2015	12.6	123.3	.3	134.4	418.9	1.8	46.8	602.2	3.7	184.4	20.3	946.5
2016	10.2	115.4	.3	129.7	403.9	1.7	46.5	582.2	3.6	184.5	21.4	917.2

<sup>a</sup> 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 2014 is October 2013 through September 2014).

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

<sup>c</sup> Distillate fuel oil, including diesel fuel; and residual fuel oil, including Navy Special.

<sup>d</sup> Liquefied petroleum gases, primarily propane.

<sup>e</sup> Includes E10 (a mixture of 10% ethanol and 90% motor gasoline) and E15 (a mixture of 15% ethanol and 85% motor gasoline).

<sup>f</sup> Other types of fuel used in vehicles and equipment. Primarily includes alternative fuels such as compressed natural gas (CNG); liquefied natural gas (LNG); E85 (a mixture of 85% ethanol and 15% motor gasoline); B20 (a mixture of 20% biodiesel and 80% diesel fuel); B100 (100% biodiesel); hydrogen; and methanol.

<sup>g</sup> Other types of energy used in facilities. Primarily includes chilled water, but also includes small amounts of renewable energy such as wood and solar thermal.

Notes: • Data in this table are developed using conversion factors that often differ from those in Tables A1–A6. • 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://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all annual data beginning in 1975.

Source: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Federal Energy Management Program. See <http://ctsedwweb.ee.doe.gov/Annual/Report/Report.aspx>, "A-5 Historical Federal Energy Consumption and Cost Data by Agency and Energy Type (FY 1975 to Present)" dataset.

## Energy Consumption by Sector

**Note 1. Electrical System Energy Losses.** Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector (see Table 2.6) and the total energy content of electricity retail sales (see Tables 7.6 and A6). Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. The loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric, geothermal, solar thermal, photovoltaic, and wind energy sources. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line losses"), and unaccounted-for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, about two thirds of total energy input is lost in conversion. Currently, of electricity generated, approximately 5% is lost in plant use and 7% is lost in transmission and distribution.

**Note 2. Energy Consumption Data and Surveys.** Most of the data in this section of the *Monthly Energy Review (MER)* are developed from a group of energy-related surveys, typically called "supply surveys," conducted by the U.S. Energy Information Administration (EIA). Supply surveys are directed to suppliers and marketers of specific energy sources. They measure the quantities of specific energy sources produced, or the quantities supplied to the market, or both. The data obtained from EIA's supply surveys are integrated to yield the summary consumption statistics published in this section (and in Section 1) of the MER.

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

### Table 2.2 Sources

#### Coal

1949–2007: Residential sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the

residential and commercial sectors coal consumption heat content factors in Table A5.

#### Natural Gas

1949–1979: Residential sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4.

1980 forward: Residential sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4. The residential sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Residential sector natural gas (excluding supplemental gaseous fuels) consumption is equal to residential sector natural gas (including supplemental gaseous fuels) consumption minus the residential sector portion of supplemental gaseous fuels.

#### Petroleum

1949 forward: Table 3.8a.

#### Fossil Fuels Total

1949–2007: Residential sector total fossil fuels consumption is the sum of the residential sector consumption values for coal, natural gas, and petroleum.

2008 forward: Residential sector total fossil fuels consumption is the sum of the residential sector consumption values for natural gas and petroleum.

#### Renewable Energy

1949 forward: Table 10.2a.

#### Total Primary Energy Consumption

1949 forward: Residential sector total primary energy consumption is the sum of the residential sector consumption values for fossil fuels and renewable energy.

#### Electricity Retail Sales

1949 forward: Residential sector electricity retail sales from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

#### Electrical System Energy Losses

1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity retail sales from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor in Table A6). Total electrical system energy losses are allocated to the residential sector in proportion to the residential sector's share of total electricity retail sales from Table 7.6. See Note 1, "Electrical System Energy Losses."

#### Total Energy Consumption

1949 forward: Residential sector total energy consumption is the sum of the residential sector consumption values for



total primary energy, electricity retail sales, and electrical system energy losses.

### Table 2.3 Sources

#### Coal

1949 forward: Commercial sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the residential and commercial sectors coal consumption heat content factors in Table A5.

#### Natural Gas

1949–1979: Commercial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4.

1980 forward: Commercial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4. The commercial sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, “Supplemental Gaseous Fuels,” at the end of Section 4. Commercial sector natural gas (excluding supplemental gaseous fuels) consumption is equal to commercial sector natural gas (including supplemental gaseous fuels) consumption minus the commercial sector portion of supplemental gaseous fuels.

#### Petroleum

1949–1992: Table 3.8a.

1993–2008: The commercial sector share of motor gasoline consumption is equal to commercial sector motor gasoline consumption from Table 3.7a divided by motor gasoline product supplied from Table 3.5. Commercial sector fuel ethanol (including denaturant) consumption is equal to total fuel ethanol (including denaturant) consumption from Table 10.3 multiplied by the commercial sector share of motor gasoline consumption. Commercial sector petroleum (excluding biofuels) consumption is equal to commercial sector petroleum (including biofuels) consumption from Table 3.8a minus commercial sector fuel ethanol (including denaturant) consumption.

2009 forward: Commercial sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the commercial sector share of motor gasoline consumption (see 1993–2008 sources above). Commercial sector petroleum (excluding biofuels) consumption is equal to commercial sector petroleum (including biofuels) consumption from Table 3.8a minus commercial sector fuel ethanol (minus denaturant) consumption.

#### Fossil Fuels Total

1949 forward: Commercial sector total fossil fuels consumption is the sum of the commercial sector consumption values for coal, natural gas, and petroleum.

#### Renewable Energy

1949 forward: Table 10.2a.

### Total Primary Energy Consumption

1949 forward: Commercial sector total primary energy consumption is the sum of the commercial sector consumption values for fossil fuels and renewable energy.

#### Electricity Retail Sales

1949 forward: Commercial sector electricity retail sales from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

#### Electrical System Energy Losses

1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity retail sales from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor in Table A6). Total electrical system energy losses are allocated to the commercial sector in proportion to the commercial sector’s share of total electricity retail sales from Table 7.6. See Note 1, “Electrical System Energy Losses.”

### Total Energy Consumption

1949 forward: Commercial sector total energy consumption is the sum of the commercial sector consumption values for total primary energy, electricity retail sales, and electrical system energy losses.

### Table 2.4 Sources

#### Coal

1949 forward: Coke plants coal consumption from Table 6.2 is converted to Btu by multiplying by the coke plants coal consumption heat content factors in Table A5. Other industrial coal consumption from Table 6.2 is converted to Btu by multiplying by the other industrial coal consumption heat content factors in Table A5. Industrial sector coal consumption is equal to coke plants coal consumption and other industrial coal consumption.

#### Natural Gas

1949–1979: Industrial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4.

1980 forward: Industrial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4. The industrial sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, “Supplemental Gaseous Fuels,” at the end of Section 4. Industrial sector natural gas (excluding supplemental gaseous fuels) consumption is equal to industrial sector natural gas (including supplemental gaseous fuels) consumption minus the industrial sector portion of supplemental gaseous fuels.

#### Petroleum

1949–1992: Table 3.8b.

1993–2008: The industrial sector share of motor gasoline consumption is equal to industrial sector motor gasoline consumption from Table 3.7b divided by motor gasoline product supplied from Table 3.5. Industrial sector fuel ethanol (including denaturant) consumption is equal to total fuel ethanol (including denaturant) consumption from Table 10.3 multiplied by the industrial sector share of motor gasoline consumption. Industrial sector petroleum (excluding biofuels) consumption is equal to industrial sector petroleum (including biofuels) consumption from Table 3.8b minus industrial sector fuel ethanol (including denaturant) consumption.

2009 forward: Industrial sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the industrial sector share of motor gasoline consumption (see 1993–2008 sources above). Industrial sector petroleum (excluding biofuels) consumption is equal to industrial sector petroleum (including biofuels) consumption from Table 3.8b minus industrial sector fuel ethanol (minus denaturant) consumption.

#### **Coal Coke Net Imports**

1949 forward: Coal coke net imports are equal to coal coke imports from Table 1.4a minus coal coke exports from Table 1.4b.

#### **Fossil Fuels Total**

1949 forward: Industrial sector total fossil fuels consumption is the sum of the industrial sector consumption values for coal, natural gas, and petroleum, plus coal coke net imports.

#### **Renewable Energy**

1949 forward: Table 10.2b.

#### **Total Primary Energy Consumption**

1949 forward: Industrial sector total primary energy consumption is the sum of the industrial sector consumption values for fossil fuels and renewable energy.

#### **Electricity Retail Sales**

1949 forward: Industrial sector electricity retail sales from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

#### **Electrical System Energy Losses**

1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity retail sales from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor in Table A6). Total electrical system energy losses are allocated to the industrial sector in proportion to the industrial sector's share of total electricity retail sales from Table 7.6. See Note 1, "Electrical System Energy Losses."

#### **Total Energy Consumption**

1949 forward: Industrial sector total energy consumption is the sum of the industrial sector consumption values for total primary energy, electricity retail sales, and electrical system energy losses.

## **Table 2.5 Sources**

#### **Coal**

1949–1977: Transportation sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the other industrial sector coal consumption heat content factors in Table A5.

#### **Natural Gas**

1949 forward: Transportation sector natural gas consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4.

#### **Petroleum**

1949–1992: Table 3.8c.

1993–2008: The transportation sector share of motor gasoline consumption is equal to transportation sector motor gasoline consumption from Table 3.7c divided by motor gasoline product supplied from Table 3.5. Transportation sector fuel ethanol (including denaturant) consumption is equal to total fuel ethanol (including denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption. Transportation sector petroleum (excluding biofuels) consumption is equal to transportation sector petroleum (including biofuels) consumption from Table 3.8c minus transportation sector fuel ethanol (including denaturant) consumption.

2009 forward: Transportation sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption (see 1993–2008 sources above). Transportation sector petroleum (excluding biofuels) consumption is equal to: transportation sector petroleum (including biofuels) consumption from Table 3.8c; minus transportation sector fuel ethanol (minus denaturant) consumption; minus refinery and blender net inputs of renewable fuels (excluding fuel ethanol) from U.S. Energy Information Administration, *Petroleum Supply Annual/Petroleum Supply Monthly*, Table 1 (for biomass-based diesel fuel, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1; for other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1).

#### **Fossil Fuels Total**

1949–1977: Transportation sector total fossil fuels consumption is the sum of the transportation sector consumption values for coal, natural gas, and petroleum.

1978 forward: Transportation sector total fossil fuels consumption is the sum of the transportation sector consumption values for natural gas and petroleum.

#### **Renewable Energy**

1981 forward: Table 10.2b.

#### **Total Primary Energy Consumption**

1949–1980: Transportation sector total primary energy consumption is equal to transportation sector fossil fuels consumption.

1981 forward: Transportation sector total primary energy consumption is the sum of the transportation sector consumption values for fossil fuels and renewable energy.

### **Electricity Retail Sales**

1949 forward: Transportation sector electricity retail sales from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

### **Electrical System Energy Losses**

1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity retail sales from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor in Table A6). Total electrical system energy losses are allocated to the transportation sector in proportion to the transportation sector's share of total electricity retail sales from Table 7.6. See Note 1, "Electrical System Energy Losses."

### **Total Energy Consumption**

1949 forward: Transportation sector total energy consumption is the sum of the transportation sector consumption values for total primary energy, electricity retail sales, and electrical system energy losses.

## **Table 2.6 Sources**

### **Coal**

1949 forward: Electric power sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the electric power sector coal consumption heat content factors in Table A5.

### **Natural Gas**

1949–1979: Electric power sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas electric power sector consumption heat content factors in Table A4.

1980 forward: Electric power sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas electric power sector consumption heat content factors in Table A4. The electric power sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Electric power sector natural gas (excluding supplemental gaseous fuels) consumption is equal to electric power sector natural gas (including supplemental gaseous fuels) consumption minus the electric power sector portion of supplemental gaseous fuels.

### **Petroleum**

1949 forward: Table 3.8c.

### **Fossil Fuels Total**

1949 forward: Electric power sector total fossil fuels consumption is the sum of the electric power sector consumption values for coal, natural gas, and petroleum.

### **Nuclear Electric Power**

1949 forward: Nuclear electricity net generation data from Table 7.2a are converted to Btu by multiplying by the nuclear heat rate factors in Table A6.

### **Renewable Energy**

1949 forward: Table 10.2c.

### **Electricity Net Imports**

1949 forward: Electricity net imports are equal to electricity imports from Table 1.4a minus electricity exports from Table 1.4b.

### **Total Primary Energy Consumption**

1949 forward: Electric power sector total primary energy consumption is the sum of the electric power sector consumption values for fossil fuels, nuclear electric power, and renewable energy, plus electricity net imports.

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