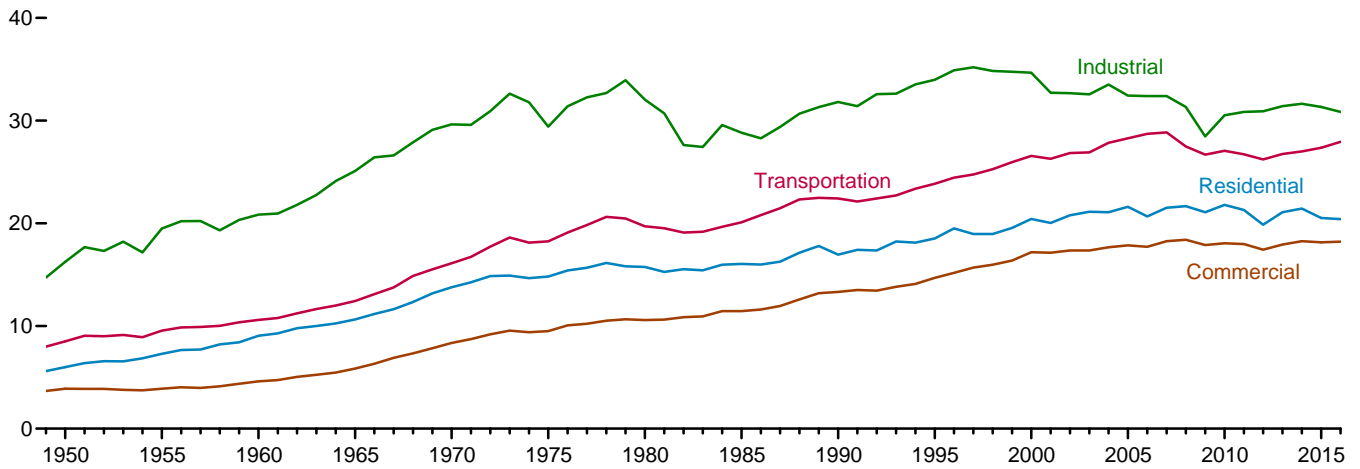


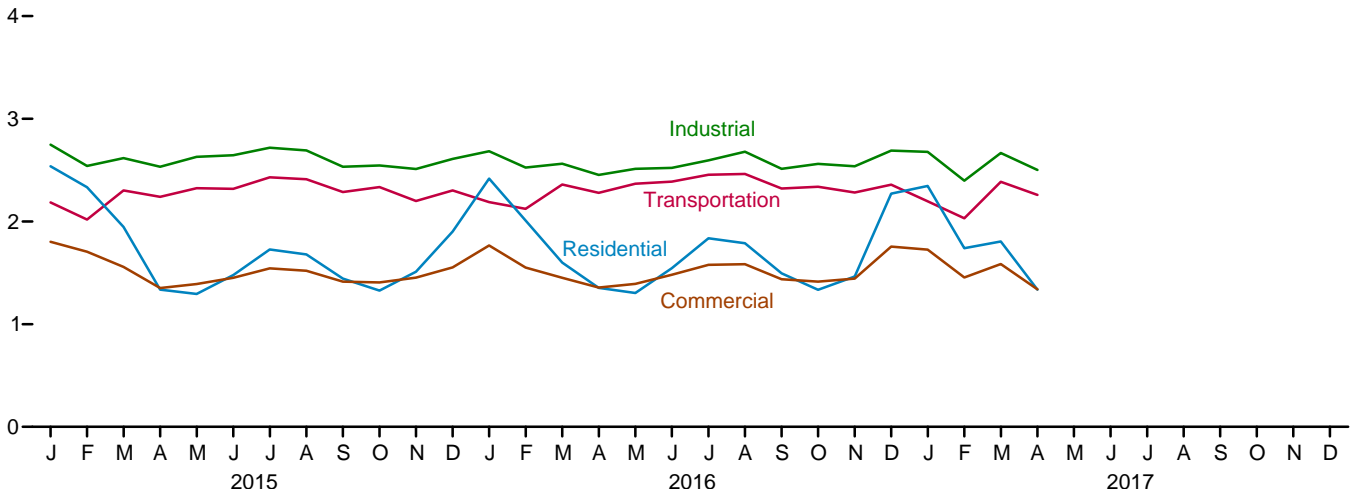
2. Energy Consumption by Sector

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)

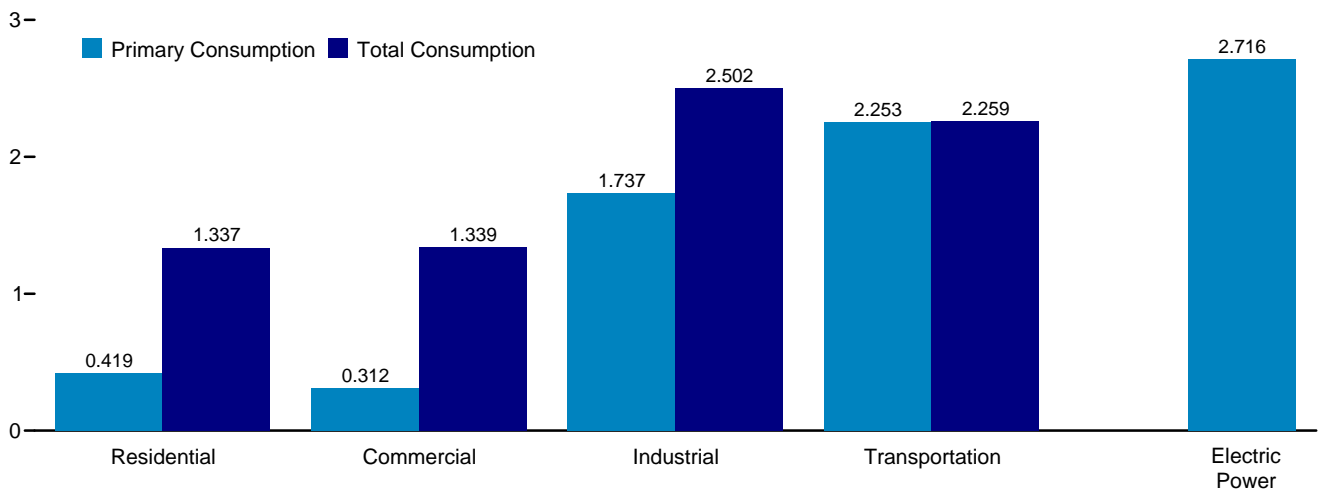
Total Consumption by End-Use Sector, 1949–2016



Total Consumption by End-Use Sector, Monthly



By Sector, April 2017



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 ^{c,d}	Balancing Item ^g	Primary Total ^h
	Residential		Commercial ^a		Industrial ^b		Transportation				
	Primary ^e	Total ^f	Primary ^e	Total ^f	Primary ^e	Total ^f	Primary ^e	Total ^f			
1950 Total	4,829	5,989	2,834	3,893	13,890	16,241	8,383	8,492	4,679	(s)	34,616
1955 Total	5,608	7,278	2,561	3,895	16,103	19,485	9,474	9,550	6,461	(s)	40,208
1960 Total	6,651	9,039	2,723	4,609	16,996	20,842	10,560	10,596	8,158	(s)	45,086
1965 Total	7,279	10,639	3,177	5,845	20,148	25,098	12,399	12,432	11,012	(s)	54,015
1970 Total	8,322	13,766	4,237	8,346	22,964	29,628	16,062	16,098	16,253	(s)	67,838
1975 Total	7,990	14,813	4,059	9,492	21,434	29,413	18,210	18,245	20,270	1	71,965
1980 Total	7,439	15,753	4,105	10,578	22,595	32,039	19,659	19,697	24,269	-1	78,067
1985 Total	7,148	16,041	3,732	11,451	19,443	28,816	20,041	20,088	26,032	-4	76,392
1990 Total	6,556	16,944	3,896	13,320	21,180	31,810	22,366	22,420	^d 30,495	-9	84,484
1995 Total	6,934	18,517	4,100	14,690	22,718	33,970	23,796	23,851	33,479	3	91,031
2000 Total	7,156	20,421	4,278	17,175	22,823	34,662	26,495	26,555	38,062	2	98,817
2001 Total	6,864	20,038	4,085	17,137	21,793	32,719	26,219	26,282	37,215	-6	96,170
2002 Total	6,907	20,786	4,132	17,346	21,798	32,661	26,785	26,846	38,016	5	97,643
2003 Total	7,232	21,119	4,298	17,346	21,534	32,553	26,826	26,900	38,028	-1	97,918
2004 Total	6,987	21,081	4,232	17,655	22,411	33,516	27,764	27,843	38,701	-6	100,090
2005 Total	6,901	21,613	4,052	17,853	21,410	32,442	28,199	28,280	39,626	(s)	100,188
2006 Total	6,154	20,670	3,747	17,707	21,529	32,391	28,638	28,717	39,417	(s)	99,485
2007 Total	6,589	21,519	3,922	18,253	21,363	32,385	28,771	28,858	40,371	-1	101,015
2008 Total	6,889	21,668	4,100	18,402	20,528	31,334	27,404	27,486	39,989	1	98,891
2009 Total	6,633	21,077	4,055	17,887	18,756	28,466	26,605	26,687	38,069	(s)	94,118
2010 Total	6,540	21,795	4,023	18,058	20,278	30,526	26,978	27,059	39,619	7	97,445
2011 Total	6,392	21,301	4,063	17,979	20,456	30,843	26,632	26,712	39,293	8	96,842
2012 Total	5,672	19,858	3,725	17,422	20,742	30,915	26,144	26,219	38,131	2	94,416
2013 Total	6,705	21,068	4,164	17,932	21,263	31,409	26,671	26,750	38,357	-1	97,157
2014 Total	6,900	21,429	4,380	18,255	21,407	31,643	26,917	26,996	38,629	6	98,329
2015 January	1,135	2,538	665	1,802	1,936	2,747	2,178	2,185	3,357	2	9,273
February	1,081	2,334	638	1,705	1,765	2,541	2,011	2,018	3,103	3	8,601
March	794	1,946	498	1,558	1,833	2,617	2,296	2,303	3,002	(s)	8,424
April	444	1,336	323	1,352	1,738	2,534	2,235	2,241	2,723	-2	7,460
May	303	1,295	251	1,391	1,765	2,629	2,318	2,324	3,002	(s)	7,639
June	232	1,478	216	1,452	1,752	2,646	2,312	2,318	3,383	3	7,897
July	222	1,727	219	1,543	1,814	2,719	2,424	2,431	3,741	6	8,425
August	220	1,679	222	1,520	1,800	2,692	2,405	2,412	3,655	6	8,308
September	220	1,444	221	1,414	1,706	2,533	2,280	2,286	3,251	4	7,682
October	359	1,327	307	1,407	1,734	2,546	2,329	2,335	2,886	-1	7,614
November	573	1,511	399	1,453	1,717	2,511	2,194	2,200	2,792	-1	7,674
December	777	1,901	478	1,554	1,823	2,610	2,297	2,303	2,993	-1	8,367
Total	6,359	20,512	4,436	18,152	21,383	31,327	27,278	27,355	37,890	19	97,365
2016 January	1,071	^R 2,418	634	1,766	1,901	2,683	2,182	2,189	3,268	1	^R 9,057
February	^R 867	2,010	537	1,551	1,797	2,526	2,116	2,122	2,892	-3	8,206
March	607	^R 1,599	409	1,452	1,809	2,562	2,355	2,361	2,794	-6	^R 7,967
April	464	1,354	332	^R 1,356	1,688	2,453	2,273	2,279	2,685	-5	^R 7,438
May	324	1,303	268	1,392	1,698	2,513	2,361	2,367	2,925	-3	7,573
June	^R 235	^R 1,545	225	^R 1,480	1,680	2,522	2,381	2,388	3,414	3	^R 7,938
July	225	1,836	226	1,578	1,723	2,595	2,448	2,455	3,842	6	8,471
August	211	1,789	226	1,584	1,818	2,680	2,457	2,463	3,803	7	^R 8,522
September	231	1,496	233	1,437	1,732	2,513	2,315	2,321	3,256	3	7,771
October	326	1,335	294	1,414	1,784	2,561	2,333	2,339	2,913	(s)	^R 7,649
November	526	1,464	387	1,444	1,779	2,538	2,276	2,282	2,761	-2	7,726
December	^R 996	^R 2,271	^R 599	1,755	1,898	2,691	2,351	2,358	3,231	1	^R 9,076
Total	^R 6,082	20,413	^R 4,368	^R 18,212	21,308	30,841	27,849	27,925	37,784	3	^R 97,394
2017 January	^R 1,029	^R 2,346	611	1,726	^R 1,906	^R 2,678	2,190	2,197	3,211	^R 1	^R 8,948
February	739	^R 1,739	471	1,455	1,687	2,397	2,025	2,031	2,702	-3	^R 7,619
March	743	1,805	^R 486	^R 1,586	^R 1,874	^R 2,667	2,379	2,386	2,961	-3	8,440
April	419	1,337	312	1,339	1,737	2,502	2,253	2,259	2,716	(s)	7,436
4-Month Total	2,929	7,227	1,879	6,106	7,205	10,244	8,846	8,872	11,589	-6	32,443
2016 4-Month Total	3,009	7,381	1,911	6,125	7,196	10,224	8,926	8,951	11,640	-13	32,669
2015 4-Month Total	3,454	8,154	2,124	6,417	7,272	10,439	8,720	8,746	12,186	2	33,758

^a Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

^b Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

^c 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.

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

^e See "Primary Energy Consumption" in Glossary.

^f 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.

^g 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.

^h Primary energy consumption total. See Table 1.3.

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

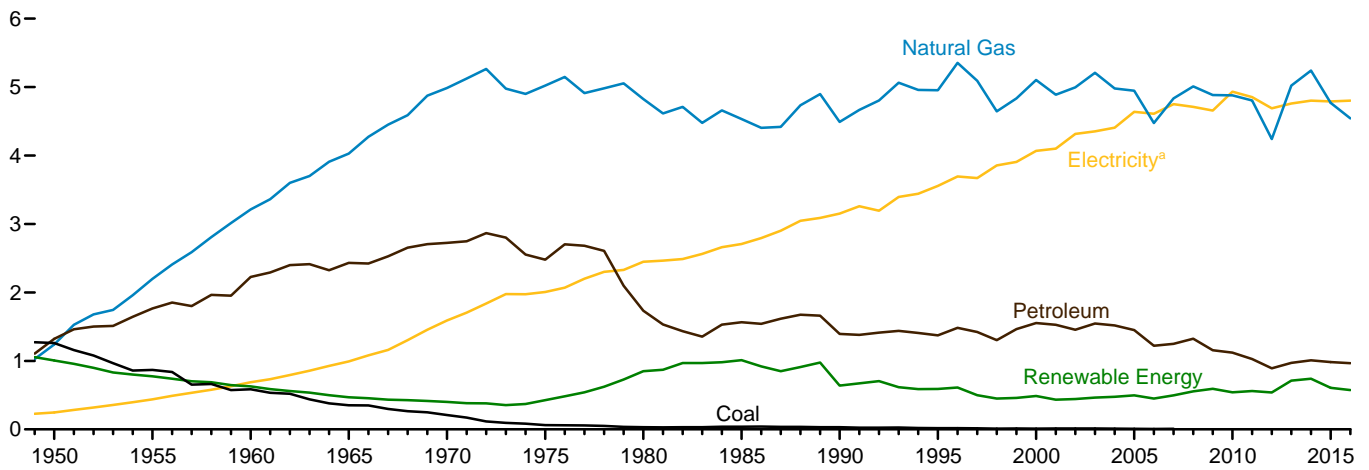
Notes: • Data are estimates, except for the electric power sector. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • 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.

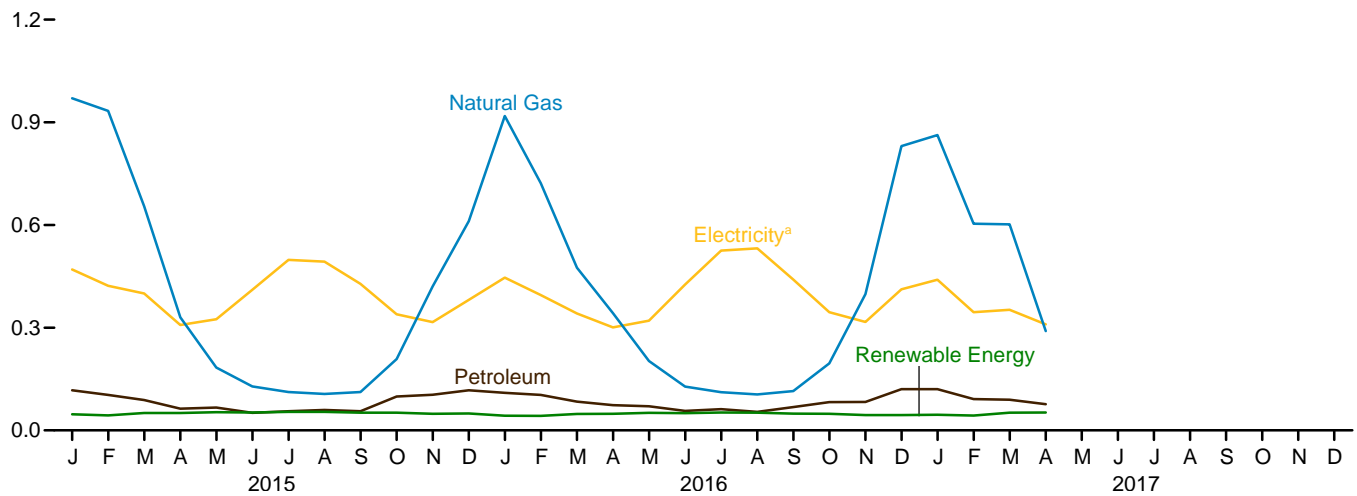
Sources: • **End-Use Sectors:** Tables 2.2–2.5. • **Electric Power Sector:** Table 2.6. • **Balancing Item:** Calculated as primary energy total consumption minus the sum of total energy consumption in the four end-use sectors. • **Primary Total:** Table 1.3.

Figure 2.2 Residential Sector Energy Consumption
(Quadrillion Btu)

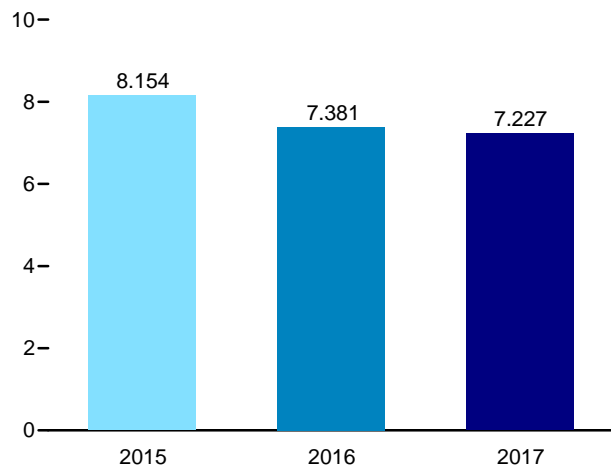
By Major Source, 1949–2016



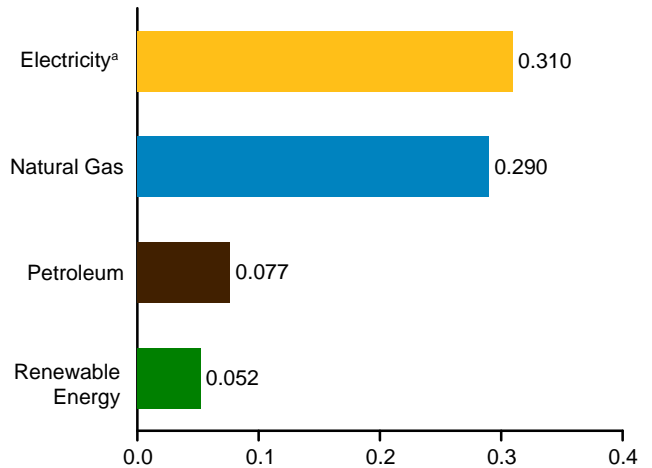
By Major Source, Monthly



Total, January–April



By Major Source, April 2017



^a 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 ^a									Electricity Retail Sales ^e	Electrical System Energy Losses ^f	Total
	Fossil Fuels				Renewable Energy ^b				Total Primary			
	Coal	Natural Gas ^c	Petroleum	Total	Geo-thermal	Solar ^d	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	444	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	1,121	5,999	37	65	440	541	6,540	4,933	10,321	21,795
2011 Total	NA	4,805	1,027	5,832	40	71	450	560	6,392	4,855	10,054	21,301
2012 Total	NA	4,242	892	5,134	40	79	420	539	5,672	4,690	9,496	19,858
2013 Total	NA	5,023	970	5,993	40	92	580	711	6,705	4,759	9,604	21,068
2014 Total	NA	5,242	1,009	6,251	40	109	590	739	6,990	4,801	9,638	21,429
2015												
January	NA	970	117	1,088	3	6	37	47	1,135	470	933	2,538
February	NA	933	104	1,037	3	7	34	44	1,081	423	830	2,334
March	NA	655	89	743	3	10	37	51	794	400	752	1,946
April	NA	330	63	393	3	11	36	51	444	308	584	1,336
May	NA	183	67	250	3	12	37	53	303	325	667	1,295
June	NA	128	51	179	3	13	36	52	232	410	836	1,478
July	NA	112	56	168	3	13	37	54	222	498	1,007	1,727
August	NA	106	60	166	3	13	37	54	220	493	966	1,679
September	NA	112	56	168	3	12	36	52	220	428	797	1,444
October	NA	208	99	307	3	11	37	52	359	339	630	1,327
November	NA	420	104	524	3	9	36	49	573	316	622	1,511
December	NA	611	117	728	3	8	37	49	777	381	743	1,901
Total	NA	4,769	982	5,751	40	128	440	607	6,359	4,791	9,362	20,512
2016												
January	NA	^R 918	110	1,028	3	8	32	43	1,071	446	901	^R 2,418
February	NA	722	103	825	3	10	30	42	^R 867	395	747	2,010
March	NA	475	84	559	3	13	32	48	607	342	651	^R 1,599
April	NA	343	74	416	3	14	31	48	464	301	589	1,354
May	NA	203	70	273	3	16	32	51	324	321	658	1,303
June	NA	128	57	185	3	17	31	50	^R 235	426	884	^R 1,545
July	NA	111	62	173	3	17	32	52	225	525	1,085	1,836
August	NA	105	54	159	3	17	32	52	211	532	1,046	1,789
September	NA	115	68	^R 182	3	15	31	49	231	441	824	1,496
October	NA	196	82	278	3	13	32	48	326	345	664	1,335
November	NA	398	83	481	3	11	31	45	526	317	622	1,464
December	NA	^R 831	120	^R 951	3	10	32	45	^R 996	412	863	^R 2,271
Total	NA	4,543	967	^R 5,509	40	161	373	573	^R 6,082	4,802	9,528	20,413
2017												
January	NA	^R 863	120	^R 983	3	10	32	46	^R 1,029	440	877	^R 2,346
February	NA	604	91	695	3	11	29	43	739	345	656	^R 1,739
March	NA	602	90	692	3	16	32	51	743	352	709	1,805
April	NA	290	77	367	3	18	31	52	419	310	608	1,337
4-Month Total	NA	2,359	378	2,737	13	54	125	192	2,929	1,447	2,851	7,227
2016 4-Month Total	NA	2,458	370	2,828	13	45	123	181	3,009	1,484	2,888	7,381
2015 4-Month Total	NA	2,889	373	3,262	13	35	145	193	3,454	1,600	3,099	8,154

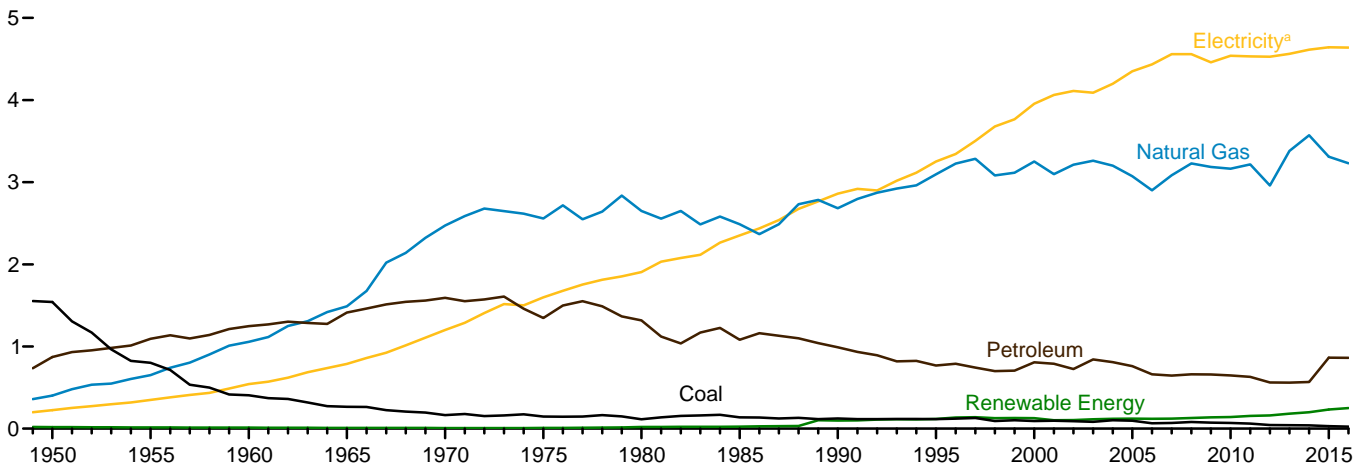
a See "Primary Energy Consumption" in Glossary.
b See Table 10.2a for notes on series components.
c Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
d Distributed (small-scale) solar photovoltaic (PV) electricity generation in the residential, commercial, and industrial sectors. See Tables 10.2a and 10.5.
e Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
f 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.

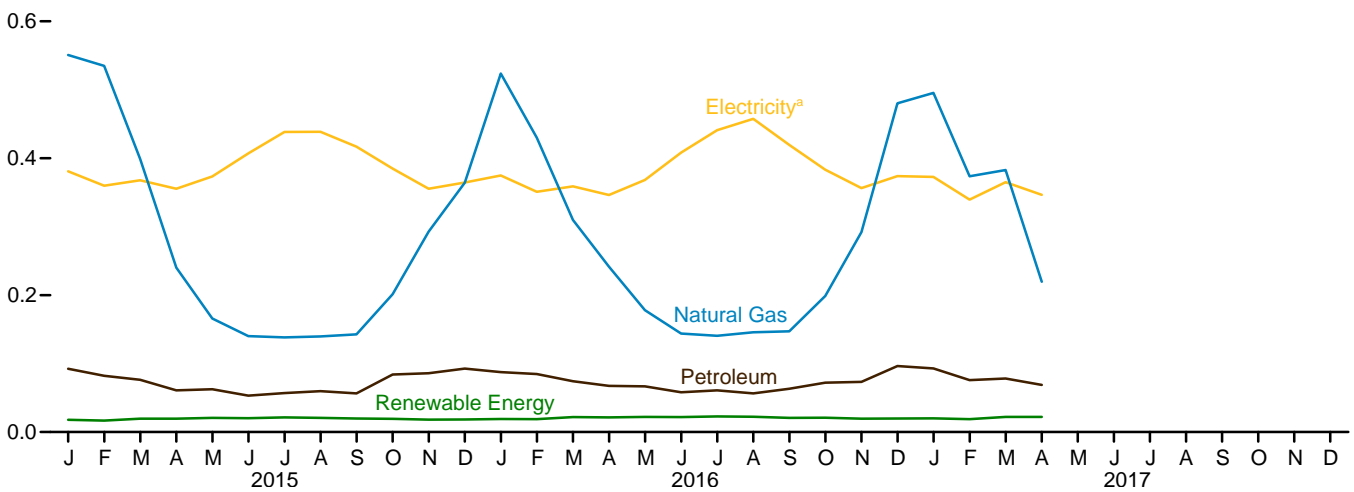
R=Revised. NA=Not available.
Notes: • Data are estimates, except for electricity retail sales. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.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

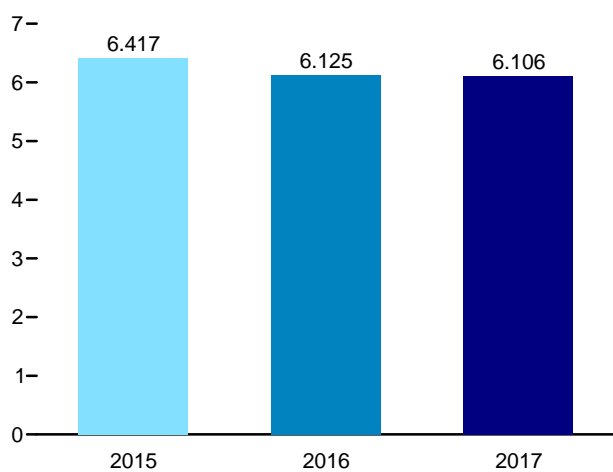
By Major Source, 1949–2016



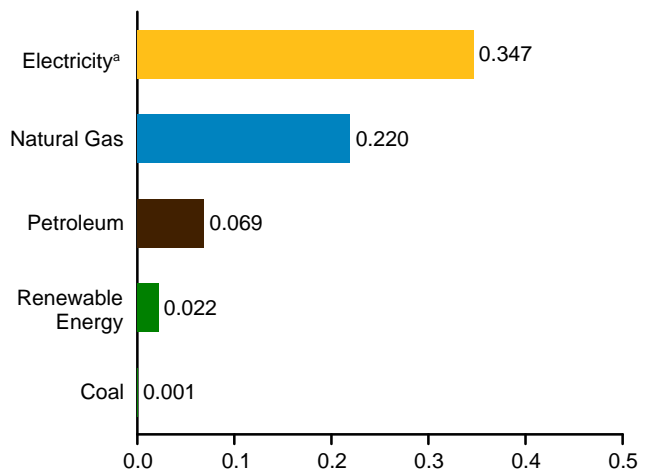
By Major Source, Monthly



Total, January–April



By Major Source, April 2017



^a 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)

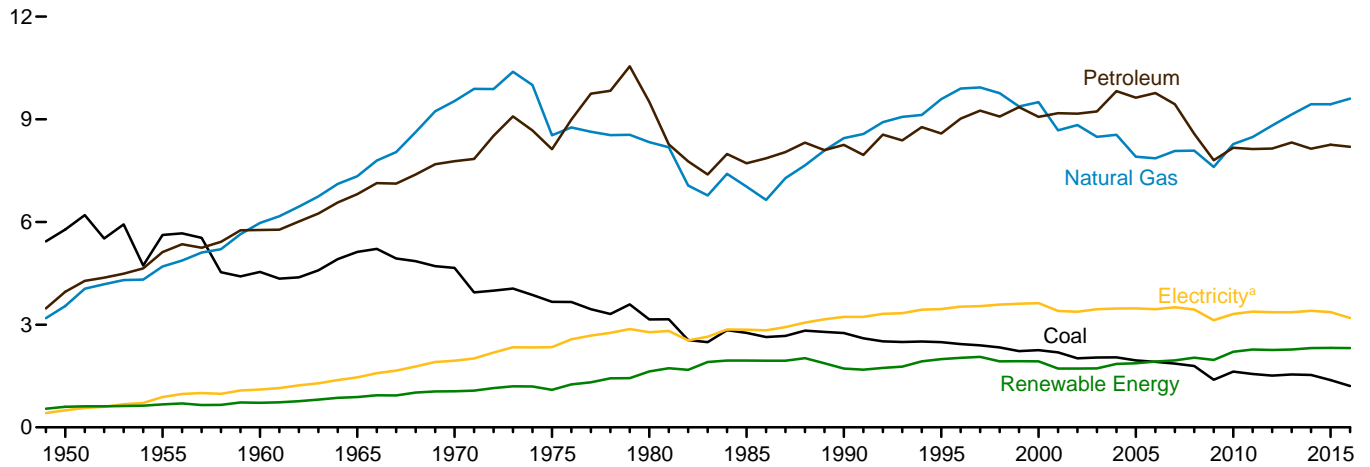
	Primary Consumption ^a										Electricity Retail Sales ^g	Electrical System Energy Losses ^h	Total	
	Fossil Fuels				Renewable Energy ^b									
	Coal	Natural Gas ^c	Petroleum ^d	Total	Hydroelectric Power ^e	Geothermal	Solar ^f	Wind	Bio-mass	Total				Total Primary
1950 Total	1,542	401	872	2,815	NA	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	841	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	647	3,881	1	19	11	(s)	111	142	4,023	4,539	9,497	18,058
2011 Total	62	3,216	630	3,908	(s)	20	19	(s)	115	154	4,063	4,531	9,385	17,979
2012 Total	44	2,960	562	3,565	(s)	20	32	1	108	161	3,725	4,528	9,168	17,422
2013 Total	41	3,380	560	3,982	(s)	20	41	1	120	182	4,164	4,562	9,206	17,932
2014 Total	40	3,572	569	4,181	(s)	20	52	1	126	199	4,380	4,614	9,261	18,255
2015 January	4	551	92	647	(s)	2	3	(s)	13	18	665	381	756	1,802
February	4	535	82	621	(s)	2	4	(s)	12	17	638	360	707	1,705
March	4	399	76	479	(s)	2	5	(s)	13	20	498	368	692	1,558
April	2	240	61	303	(s)	2	5	(s)	13	20	323	355	674	1,352
May	2	166	62	230	(s)	2	6	(s)	13	21	251	373	767	1,391
June	2	140	53	196	(s)	2	6	(s)	13	20	216	407	829	1,452
July	2	138	57	197	(s)	2	6	(s)	14	21	219	438	886	1,543
August	2	140	60	201	(s)	2	6	(s)	13	21	222	439	859	1,520
September	2	143	57	201	(s)	2	5	(s)	13	20	221	417	776	1,414
October	2	201	84	288	(s)	2	5	(s)	13	19	307	385	715	1,407
November	2	293	86	381	(s)	2	4	(s)	13	18	399	355	698	1,453
December	3	364	93	460	(s)	2	3	(s)	13	18	478	365	711	1,554
Total	31	3,309	863	4,204	(s)	20	57	1	154	232	4,436	4,643	9,073	18,152
2016 January	3	524	88	^R 614	(s)	2	4	(s)	13	19	634	375	757	1,766
February	3	430	85	518	(s)	2	5	(s)	12	19	537	351	663	1,551
March	3	310	74	387	(s)	2	6	(s)	14	22	409	359	684	1,452
April	2	242	67	311	(s)	2	7	(s)	13	21	332	346	678	^R 1,356
May	1	178	67	246	(s)	2	7	(s)	13	22	268	368	756	1,392
June	1	144	58	203	(s)	2	7	(s)	13	22	225	408	847	^R 1,480
July	1	141	61	203	(s)	2	8	(s)	13	23	226	441	911	1,578
August	1	146	57	204	(s)	2	7	(s)	13	22	226	457	900	1,584
September	1	147	63	212	(s)	2	7	(s)	13	21	233	420	785	1,437
October	2	199	72	273	(s)	2	6	(s)	13	21	294	383	737	1,414
November	2	292	73	368	(s)	2	5	(s)	13	19	387	356	700	1,444
December	3	^R 480	96	^R 579	(s)	2	4	(s)	14	20	^R 599	374	782	1,755
Total	24	^R 3,231	861	^R 4,117	1	20	72	1	157	251	^R 4,368	4,639	9,205	^R 18,212
2017 January	3	495	93	591	(s)	2	5	(s)	14	20	611	373	743	1,726
February	2	374	76	452	(s)	2	5	(s)	12	19	471	339	645	1,455
March	^R 3	383	78	^R 464	(s)	2	7	(s)	13	22	^R 486	365	735	^R 1,586
April	1	220	69	290	(s)	2	8	(s)	13	22	312	347	680	1,339
4-Month Total	9	1,471	316	1,796	(s)	6	24	(s)	51	83	1,879	1,424	2,804	6,106
2016 4-Month Total	11	1,505	314	1,830	(s)	7	21	(s)	53	81	1,911	1,431	2,783	6,125
2015 4-Month Total	14	1,725	312	2,050	(s)	6	17	(s)	50	74	2,124	1,464	2,829	6,417

^a See "Primary Energy Consumption" in Glossary.
^b See Table 10.2a for notes on series components and estimation.
^c Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
^d Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."
^e Conventional hydroelectric power.
^f Solar photovoltaic (PV) electricity net generation in the commercial sector, both utility-scale and distributed (small-scale). See Tables 10.2a and 10.5.
^g Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
^h 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

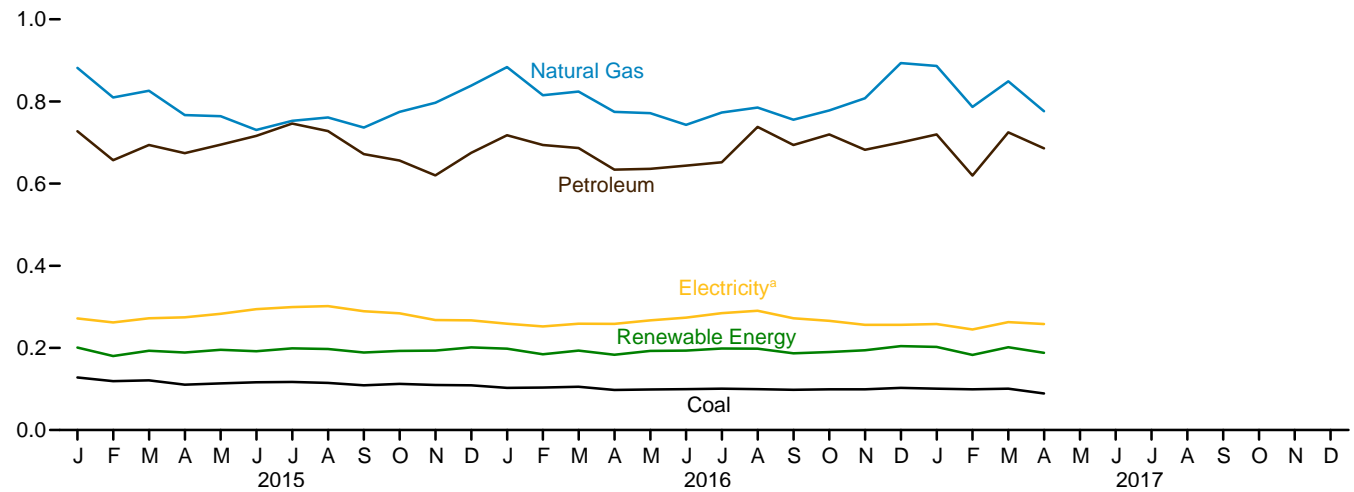
section.
^R=Revised. NA=Not available. —=No data reported. (s)=Less than 0.5 trillion Btu.
Notes: • Data are estimates, except for coal totals beginning in 2008; hydroelectric power; solar; wind; and electricity retail sales beginning in 1979.
• The commercial sector includes commercial combined-heat-and-power (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)

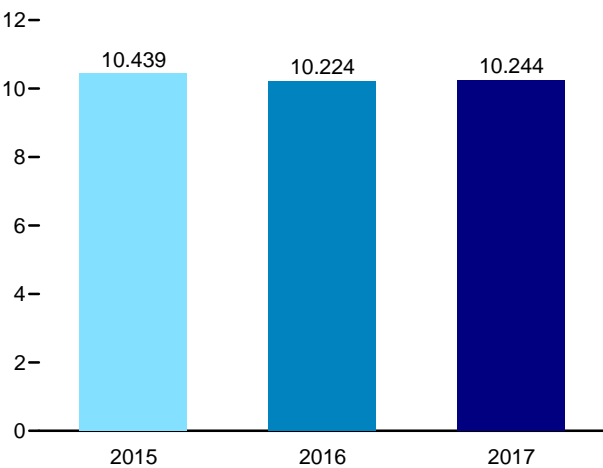
By Major Source, 1949–2016



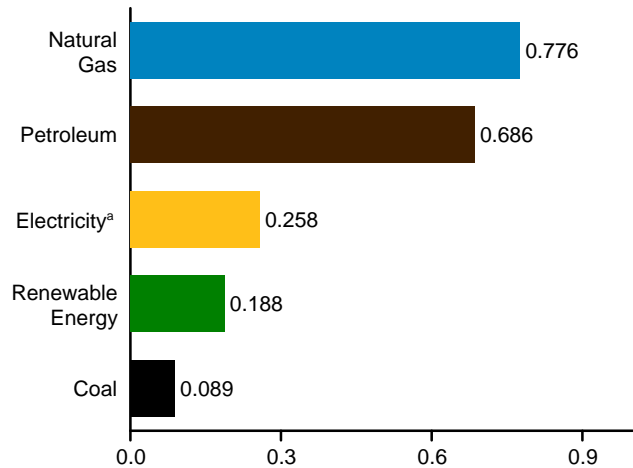
By Major Source, Monthly



Total, January–April



By Major Source, April 2017



^a 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)

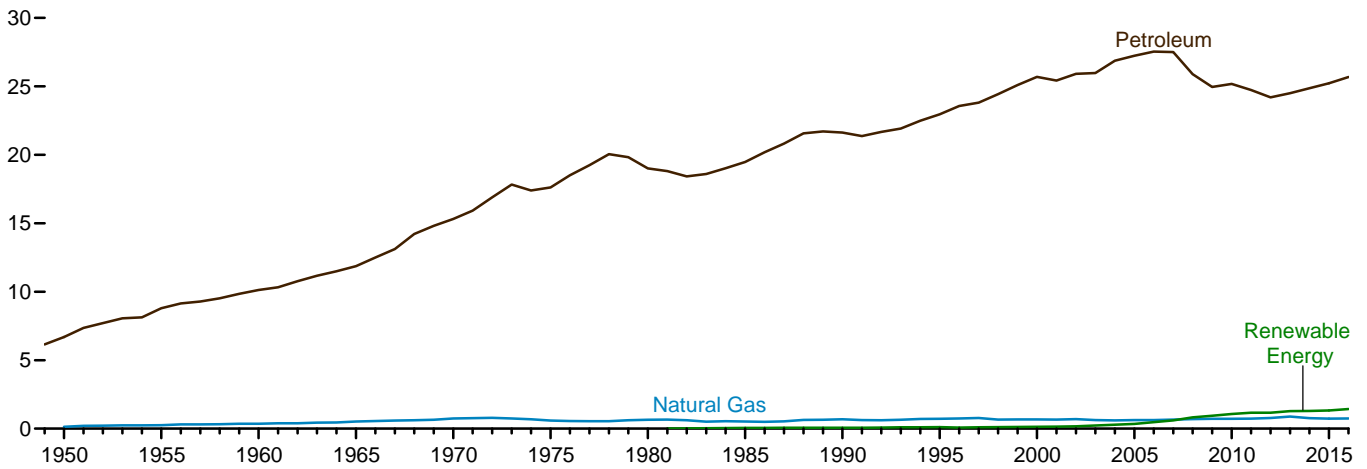
	Primary Consumption ^a											Total Primary	Electricity Retail Sales ^h	Electrical System Energy Losses ⁱ	Total ^e
	Fossil Fuels				Renewable Energy ^b										
	Coal	Natural Gas ^c	Petroleum ^d	Total ^e	Hydroelectric Power ^f	Geothermal	Solar ^g	Wind	Bio-mass	Total					
1950 Total	5,781	3,546	3,960	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	8,632	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	8,167	18,070	16	4	3	-	2,185	2,208	20,278	3,314	6,934	30,526	
2011 Total	1,561	8,481	8,131	18,184	17	4	4	(s)	2,246	2,272	20,456	3,382	7,005	30,843	
2012 Total	1,513	8,819	8,147	18,482	12	4	7	(s)	2,226	2,259	20,742	3,363	6,810	30,915	
2013 Total	1,546	9,140	8,321	18,991	33	4	9	(s)	2,226	2,272	21,263	3,362	6,785	31,409	
2014 Total	1,530	9,441	8,143	19,093	12	4	11	1	2,286	2,314	21,407	3,404	6,832	31,643	
2015 January	128	882	728	1,735	1	(s)	1	(s)	199	201	1,936	272	539	2,747	
February	119	810	657	1,585	1	(s)	1	(s)	178	180	1,765	262	515	2,541	
March	121	826	694	1,640	1	(s)	1	(s)	190	193	1,833	272	512	2,617	
April	110	767	674	1,549	1	(s)	1	(s)	186	189	1,738	275	521	2,534	
May	114	764	695	1,570	1	(s)	1	(s)	192	195	1,765	283	581	2,629	
June	116	731	716	1,560	1	(s)	1	(s)	189	192	1,752	294	599	2,646	
July	117	753	746	1,615	1	(s)	1	(s)	196	199	1,814	299	605	2,719	
August	115	761	728	1,602	1	(s)	1	(s)	195	197	1,800	302	591	2,692	
September	109	736	672	1,517	1	(s)	1	(s)	186	189	1,706	289	538	2,533	
October	112	775	656	1,542	1	(s)	1	(s)	190	193	1,734	284	528	2,546	
November	110	797	620	1,524	1	(s)	1	(s)	191	193	1,717	268	526	2,511	
December	109	839	675	1,622	1	(s)	1	(s)	198	201	1,823	267	520	2,610	
Total	1,380	9,440	8,260	19,062	13	4	14	(s)	2,290	2,321	21,383	3,366	6,578	31,327	
2016 January	R 103	884	718	1,703	1	(s)	1	(s)	196	198	1,901	259	523	2,683	
February	103	815	694	1,612	1	(s)	1	(s)	182	184	1,797	252	477	2,526	
March	R 106	824	687	1,616	1	(s)	1	(s)	190	194	1,809	259	494	2,562	
April	R 98	775	634	1,505	1	(s)	2	(s)	180	183	1,688	259	507	2,453	
May	99	R 771	636	1,505	1	(s)	2	(s)	189	193	1,698	267	548	2,513	
June	100	743	644	1,487	1	(s)	2	(s)	190	193	1,680	274	568	2,522	
July	101	773	652	1,525	1	(s)	2	(s)	195	199	1,723	284	588	2,595	
August	99	R 785	738	1,620	1	(s)	2	(s)	195	198	1,818	290	571	2,680	
September	98	R 755	694	1,546	1	(s)	2	(s)	184	187	1,732	272	509	2,513	
October	99	778	720	1,594	1	(s)	1	(s)	187	190	1,784	266	512	2,561	
November	99	808	682	R 1,584	1	(s)	1	(s)	192	194	1,779	256	503	2,538	
December	R 103	893	700	1,694	1	(s)	1	(s)	202	205	1,898	256	536	2,691	
Total	R 1,207	R 9,605	8,198	18,991	12	4	17	1	2,283	2,318	21,308	3,195	6,339	30,841	
2017 January	R 101	887	720	R 1,704	1	(s)	1	(s)	200	203	R 1,906	258	514	R 2,678	
February	R 99	R 787	620	R 1,504	1	(s)	1	(s)	180	183	1,687	245	465	2,397	
March	101	R 849	725	R 1,673	1	(s)	2	(s)	198	202	R 1,874	263	529	R 2,667	
April	89	776	686	1,550	1	(s)	2	(s)	184	188	1,737	258	507	2,502	
4-Month Total	389	3,299	2,750	6,430	5	1	7	(s)	762	775	7,205	1,024	2,015	10,244	
2016 4-Month Total	409	3,298	2,732	6,436	5	1	5	(s)	748	759	7,196	1,029	2,000	10,224	
2015 4-Month Total	478	3,284	2,752	6,509	5	1	4	(s)	753	763	7,272	1,080	2,086	10,439	

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

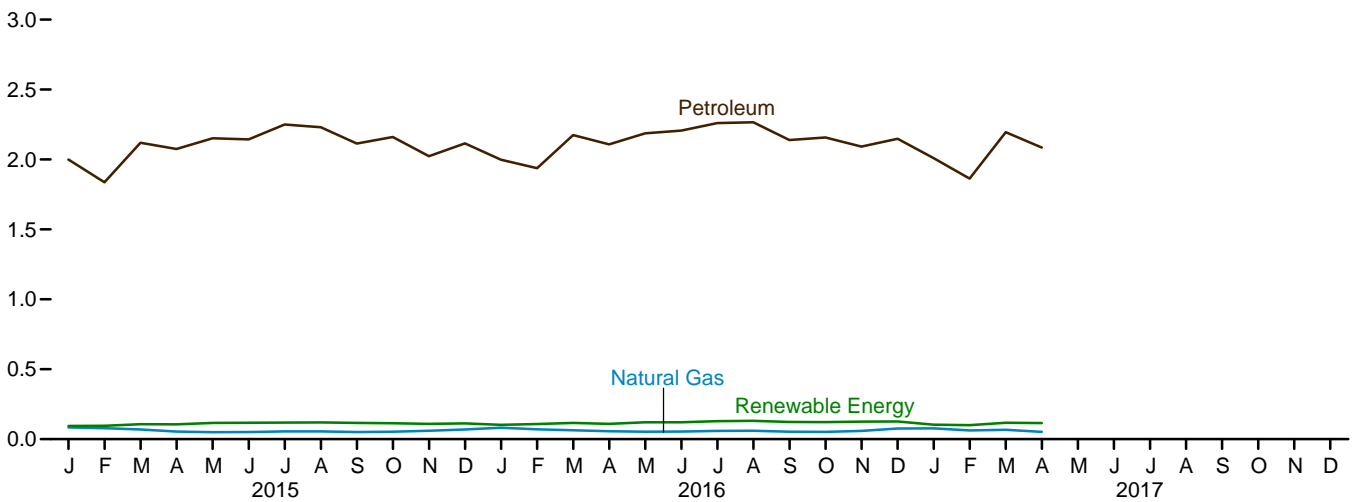
electricity retail sales. See Note 1, "Electrical System Energy Losses," at end of section.
R=Revised. NA=Not available. - =No data reported. (s)=Less than 0.5 trillion Btu.
Notes: • Data are estimates, except for coal totals; hydroelectric power in 1949-1978 and 1989 forward; solar; wind; and electricity 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)

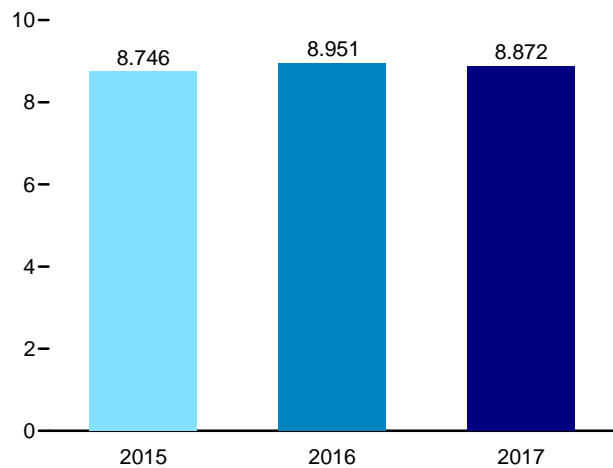
By Major Source, 1949–2016



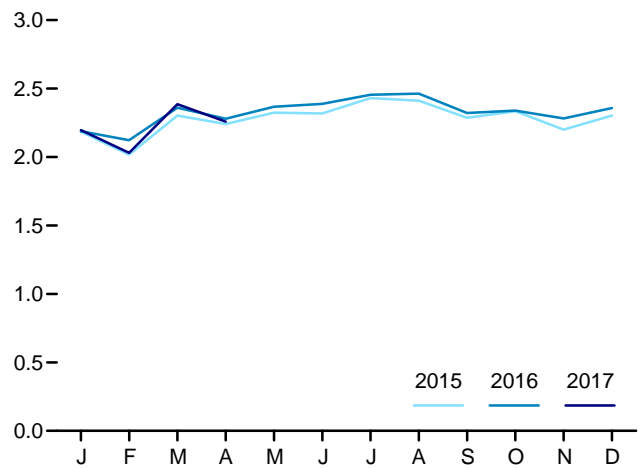
By Major Source, Monthly



Total, January–April



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 ^a						Electricity Retail Sales ^e	Electrical System Energy Losses ^f	Total
	Fossil Fuels				Renewable Energy ^b	Total Primary			
	Coal	Natural Gas ^c	Petroleum ^d	Total	Biomass				
1950 Total	1,564	130	6,690	8,383	NA	8,383	23	86	8,492
1955 Total	421	254	8,799	9,474	NA	9,474	20	56	9,550
1960 Total	75	359	10,125	10,560	NA	10,560	10	26	10,596
1965 Total	16	517	11,866	12,399	NA	12,399	10	24	12,432
1970 Total	7	745	15,310	16,062	NA	16,062	11	26	16,098
1975 Total	1	595	17,615	18,210	NA	18,210	10	24	18,245
1980 Total	(g)	650	19,009	19,659	NA	19,659	11	27	19,697
1985 Total	(g)	519	19,472	19,992	50	20,041	14	32	20,088
1990 Total	(g)	680	21,626	22,306	60	22,366	16	37	22,420
1995 Total	(g)	724	22,959	23,683	112	23,796	17	38	23,851
2000 Total	(g)	672	25,689	26,361	135	26,495	18	42	26,555
2001 Total	(g)	658	25,419	26,077	142	26,219	20	43	26,282
2002 Total	(g)	699	25,917	26,616	170	26,785	19	42	26,846
2003 Total	(g)	627	25,969	26,596	230	26,826	23	51	26,900
2004 Total	(g)	602	26,872	27,474	290	27,764	25	54	27,843
2005 Total	(g)	624	27,236	27,860	339	28,199	26	56	28,280
2006 Total	(g)	625	27,538	28,163	475	28,638	25	54	28,717
2007 Total	(g)	663	27,505	28,169	602	28,771	28	60	28,858
2008 Total	(g)	692	25,888	26,580	825	27,404	26	56	27,486
2009 Total	(g)	715	24,955	25,670	935	26,605	27	56	26,687
2010 Total	(g)	719	25,184	25,903	1,075	26,978	26	55	27,059
2011 Total	(g)	734	24,740	25,474	1,158	26,632	26	54	26,712
2012 Total	(g)	780	24,202	24,982	1,162	26,144	25	51	26,219
2013 Total	(g)	887	24,506	25,394	1,278	26,671	26	53	26,750
2014 Total	(g)	760	24,865	25,625	1,292	26,917	26	53	26,996
2015 January	(g)	84	2,000	2,084	94	2,178	2	5	2,185
February	(g)	78	1,837	1,916	95	2,011	2	5	2,018
March	(g)	69	2,120	2,189	107	2,296	2	4	2,303
April	(g)	54	2,075	2,129	105	2,235	2	4	2,241
May	(g)	50	2,152	2,202	116	2,318	2	4	2,324
June	(g)	51	2,144	2,195	117	2,312	2	4	2,318
July	(g)	56	2,250	2,306	118	2,424	2	4	2,431
August	(g)	55	2,231	2,286	120	2,405	2	4	2,412
September	(g)	51	2,113	2,164	116	2,280	2	4	2,286
October	(g)	53	2,161	2,214	114	2,329	2	4	2,335
November	(g)	60	2,024	2,084	110	2,194	2	4	2,200
December	(g)	69	2,115	2,184	113	2,297	2	4	2,303
Total	(g)	732	25,221	25,953	1,325	27,278	26	51	27,355
2016 January	(g)	82	1,998	2,080	102	2,182	2	5	2,189
February	(g)	70	1,938	2,008	108	2,116	2	4	2,122
March	(g)	63	2,175	2,238	117	2,355	2	4	2,361
April	(g)	56	2,108	2,165	109	2,273	2	4	2,279
May	(g)	53	2,187	2,240	121	2,361	2	4	2,367
June	(g)	54	2,206	2,260	121	2,381	2	4	2,388
July	(g)	59	2,261	2,320	129	2,448	2	5	2,455
August	(g)	60	2,266	2,326	131	2,457	2	4	2,463
September	(g)	53	2,139	2,192	123	2,315	2	4	2,321
October	(g)	53	2,158	2,210	122	2,333	2	4	2,339
November	(g)	59	2,093	2,151	125	2,276	2	4	2,282
December	(g)	76	2,149	2,225	126	2,351	2	5	2,358
Total	(g)	738	25,677	26,415	1,434	27,849	26	51	27,925
2017 January	(g)	77	2,009	2,086	104	2,190	2	5	2,197
February	(g)	62	1,863	1,925	100	2,025	2	4	2,031
March	(g)	67	2,195	2,262	117	2,379	2	4	2,386
April	(g)	52	2,085	2,137	115	2,253	2	4	2,259
4-Month Total	(g)	258	8,153	8,411	436	8,846	9	17	8,872
2016 4-Month Total	(g)	271	8,218	8,490	436	8,926	9	17	8,951
2015 4-Month Total	(g)	285	8,032	8,318	402	8,720	9	18	8,746

^a See "Primary Energy Consumption" in Glossary.

^b See Table 10.2b for notes on series components.

^c Natural gas only; does not include supplemental gaseous fuels—see Note 3, "Supplemental Gaseous Fuels," at end of Section 4. 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.

^d Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."

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

^f 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.

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

NA=Not available.

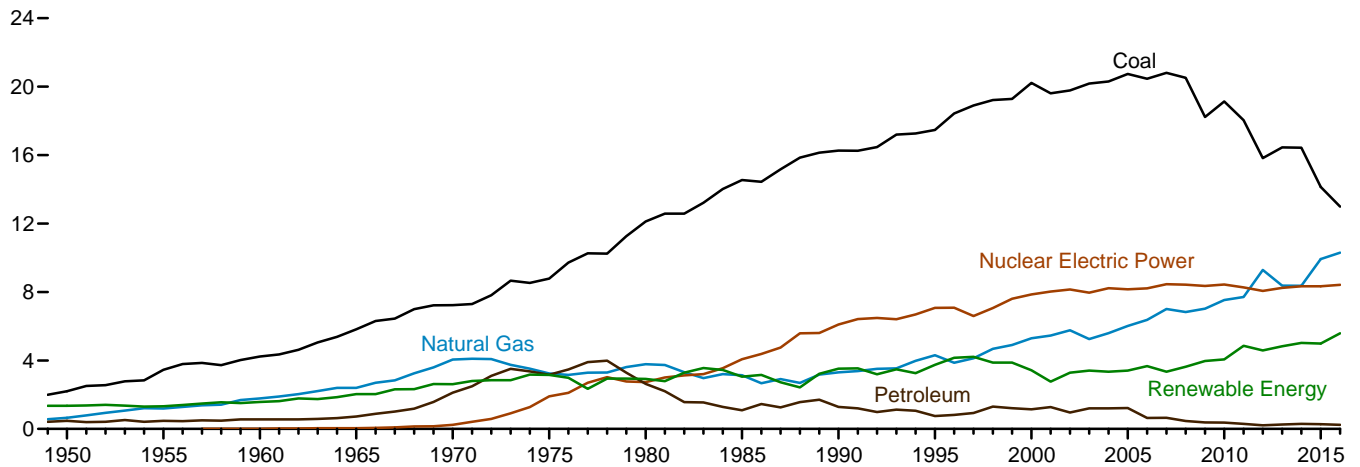
Notes: • Data are estimates, except for coal totals through 1977; and electricity retail sales beginning in 1979. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the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

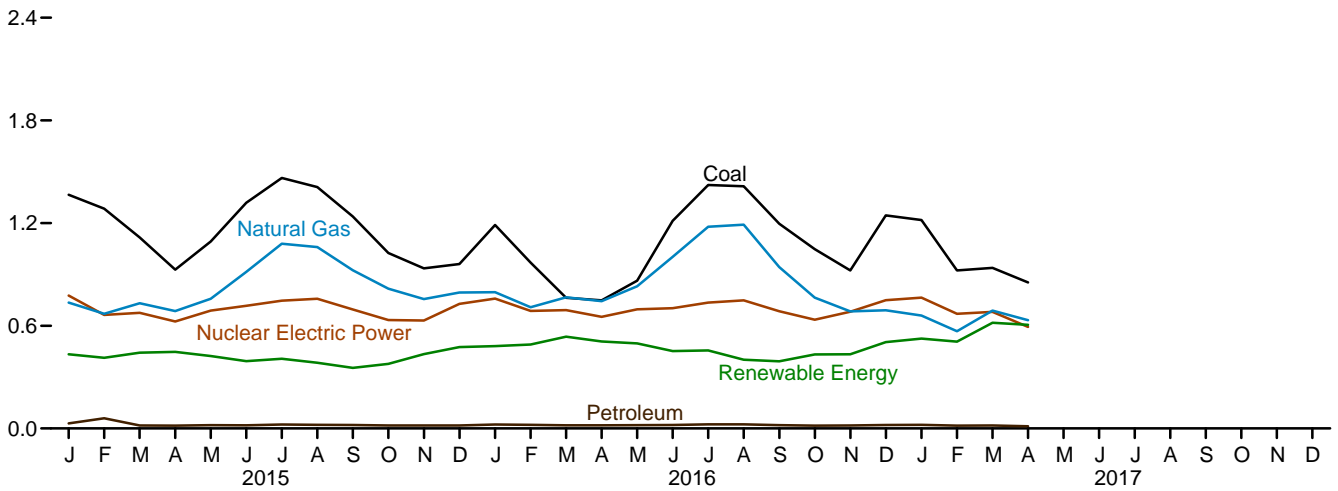
Sources: See end of section.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

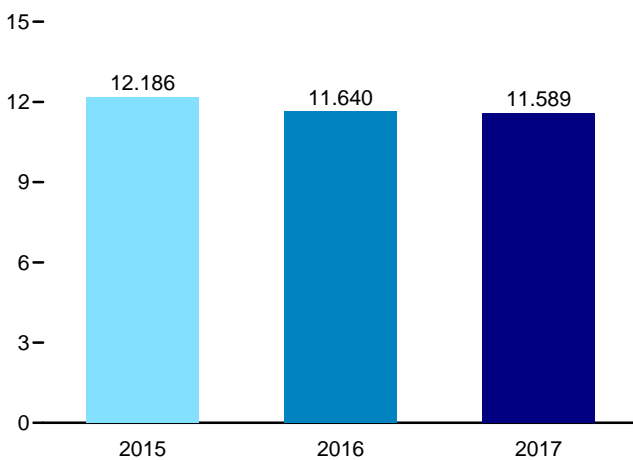
By Major Source, 1949–2016



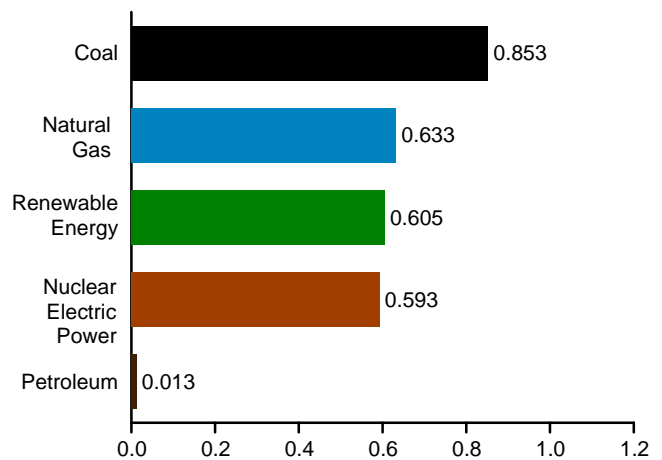
By Major Source, Monthly



Total, January–April



By Major Source, April 2017



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 ^a												Electricity Net Imports ^f	Total Primary
	Fossil Fuels				Nuclear Electric Power	Renewable Energy ^b								
	Coal	Natural Gas ^c	Petroleum	Total		Hydro-electric Power ^d	Geo-thermal	Solar ^e	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 ^g	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 January	1,366	735	29	2,130	777	224	13	11	141	45	433	18	3,357	
February	1,284	670	59	2,013	664	207	12	14	139	41	412	14	3,103	
March	1,116	732	18	1,865	675	225	13	19	143	43	443	19	3,002	
April	928	686	17	1,630	625	208	12	22	166	40	448	20	2,723	
May	1,092	758	19	1,869	688	186	13	23	160	41	423	20	3,002	
June	1,319	915	19	2,252	717	189	12	23	125	44	393	21	3,383	
July	1,464	1,079	23	2,566	747	195	13	24	127	48	407	21	3,741	
August	1,411	1,060	21	2,492	757	177	13	25	122	48	384	22	3,655	
September	1,238	924	20	2,182	695	149	11	20	130	43	354	20	3,251	
October	1,025	817	17	1,860	633	154	12	17	152	41	378	16	2,886	
November	936	756	18	1,710	630	179	12	16	183	44	434	18	2,792	
December	960	794	17	1,771	728	214	13	14	187	47	476	17	2,993	
Total	14,138	9,926	276	24,341	8,337	2,308	148	228	1,776	525	4,985	227	37,890	
2016 January	1,189	796	23	2,007	758	236	14	14	173	45	481	21	3,268	
February	969	708	21	1,698	686	224	13	22	188	43	490	17	2,892	
March	763	766	18	1,548	692	250	14	25	205	43	536	18	2,794	
April	748	744	18	1,510	652	236	12	27	193	40	508	15	2,685	
May	863	831	19	1,713	696	235	14	33	175	40	496	19	2,925	
June	1,213	1,003	20	2,236	703	212	13	33	152	42	452	23	3,414	
July	1,422	1,178	24	2,625	736	197	13	38	164	45	456	25	3,842	
August	1,415	1,191	24	2,630	748	180	13	36	126	46	401	24	3,803	
September	1,197	943	20	2,159	684	151	14	34	153	41	393	20	3,256	
October	1,048	764	16	1,828	635	160	14	29	190	39	432	18	2,913	
November	923	684	17	1,625	682	175	14	25	180	40	433	21	2,761	
December	1,244	690	20	1,954	749	209	15	21	214	46	505	22	3,231	
Total	12,995	10,299	240	23,534	8,422	2,465	162	337	2,112	509	5,585	242	37,784	
2017 January	1,218	660	21	1,899	765	257	14	20	189	44	525	23	3,211	
February	923	568	16	1,507	670	228	13	24	202	41	507	18	2,702	
March	938	688	17	1,644	681	280	14	41	238	44	618	18	2,961	
April	853	633	13	1,499	593	271	14	44	237	39	605	18	2,716	
4-Month Total	3,932	2,549	68	6,548	2,709	1,036	55	130	866	168	2,255	77	11,589	
2016 4-Month Total	3,669	3,014	80	6,763	2,789	946	53	88	758	171	2,016	72	11,640	
2015 4-Month Total	4,693	2,823	123	7,638	2,741	864	49	65	589	169	1,736	72	12,186	

a See "Primary Energy Consumption" in Glossary.
b See Table 10.2c for notes on series components.
c Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
d Conventional hydroelectric power.
e Solar photovoltaic (PV) and solar thermal electricity net generation in the electric power sector. See Tables 10.2c and 10.5.
f Net imports equal imports minus exports.
g 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 ^a	Agri-culture	Defense	Energy	GSA ^b	HHS ^c	Interior	Justice	NASA ^d	Postal Service	Trans- portation	Veterans Affairs	Other ^e	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	R 44.1	R 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	R 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	R 6.2	R 734.5	R 30.1	R 16.9	R 9.0	R 6.8	R 16.2	R 8.4	R 44.0	R 6.0	R 30.7	R 37.8	R 946.5
2016	R 6.2	R 709.2	R 28.9	R 15.8	R 8.7	R 6.4	R 15.6	R 8.5	R 43.9	R 6.0	R 30.3	R 37.6	R 917.2

^a 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).

^b General Services Administration.

^c Health and Human Services.

^d National Aeronautics and Space Administration.

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

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 ^a	Coal	Natural Gas ^b	Petroleum					Other Mobility Fuels ^f	Electricity	Purchased Steam and Other ^g	Total	
			Aviation Gasoline	Fuel Oil ^c	Jet Fuel	LPG ^d	Motor Gasoline ^e					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	^R 129.6	.4	198.4	^R 525.4	2.3	^R 49.0	^R 775.4	3.6	^R 196.1	17.7	^R 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	^R 134.4	418.9	1.8	46.8	^R 602.2	3.7	^R 184.4	^R 20.3	^R 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

^a 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).

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

^c Distillate fuel oil, including diesel fuel; and residual fuel oil, including Navy Special.

^d Liquefied petroleum gases, primarily propane.

^e Includes E10 (a mixture of 10% ethanol and 90% motor gasoline) and E15 (a mixture of 15% ethanol and 85% motor gasoline).

^f 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.

^g 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. R=Revised.

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-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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