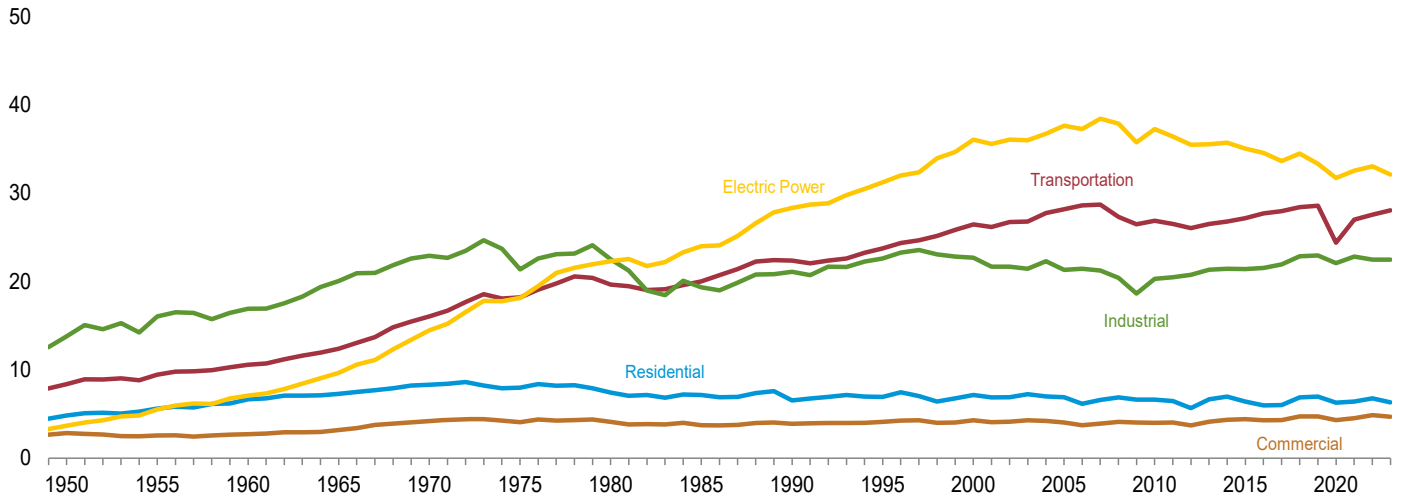


2. Energy Consumption By Sector

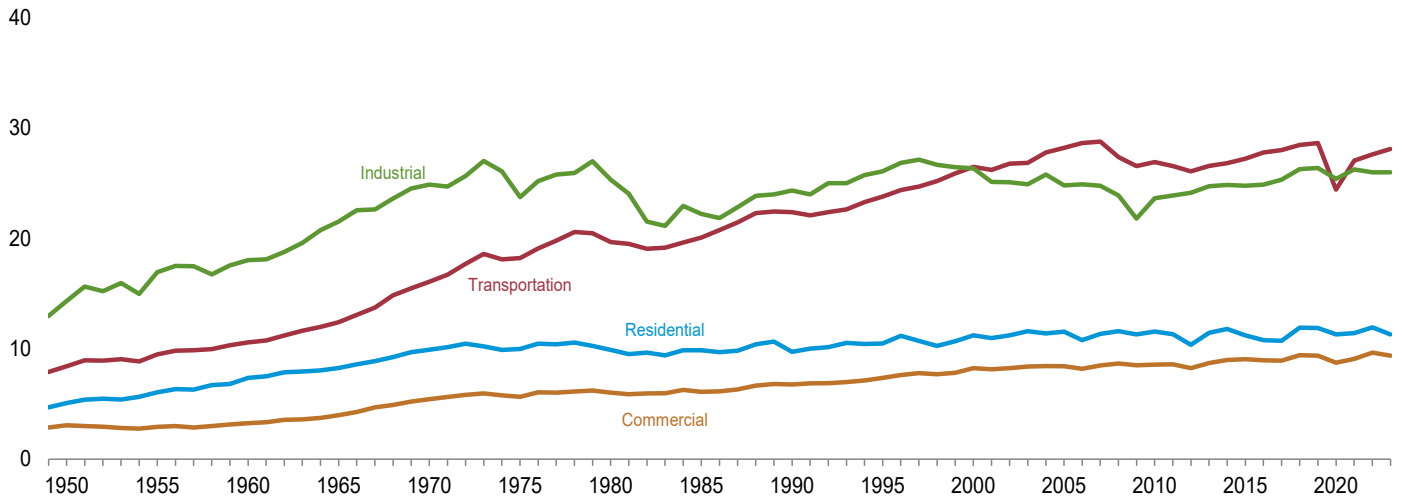
Figure 2.1a Energy Consumption by Sector, 1949–2023

(Quadrillion Btu)

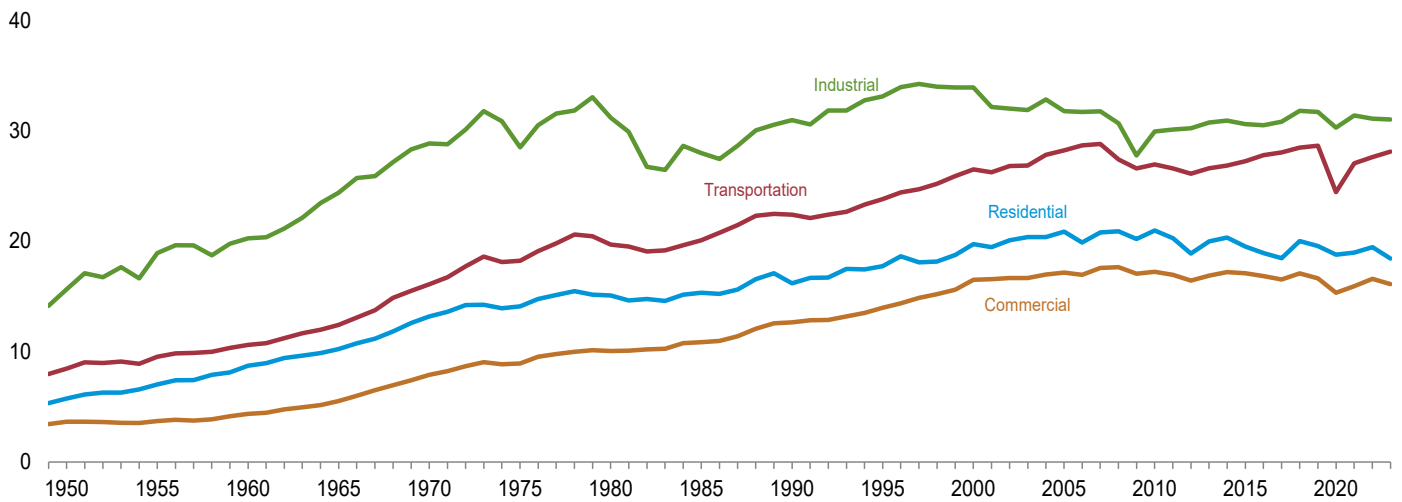
Primary Consumption by Sector



End-Use Consumption by End-Use Sector



Total Consumption by End-Use Sector



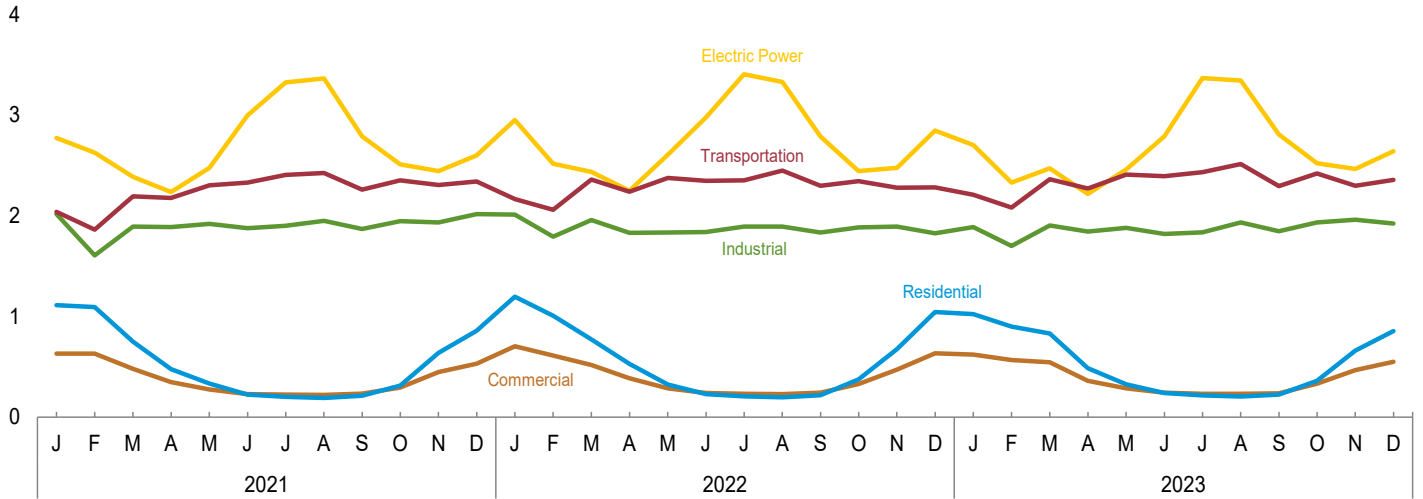
Web Page: <http://www.eia.gov/totalenergy/data/monthly/#consumption>.

Source: Tables 2.1a–2.1b.

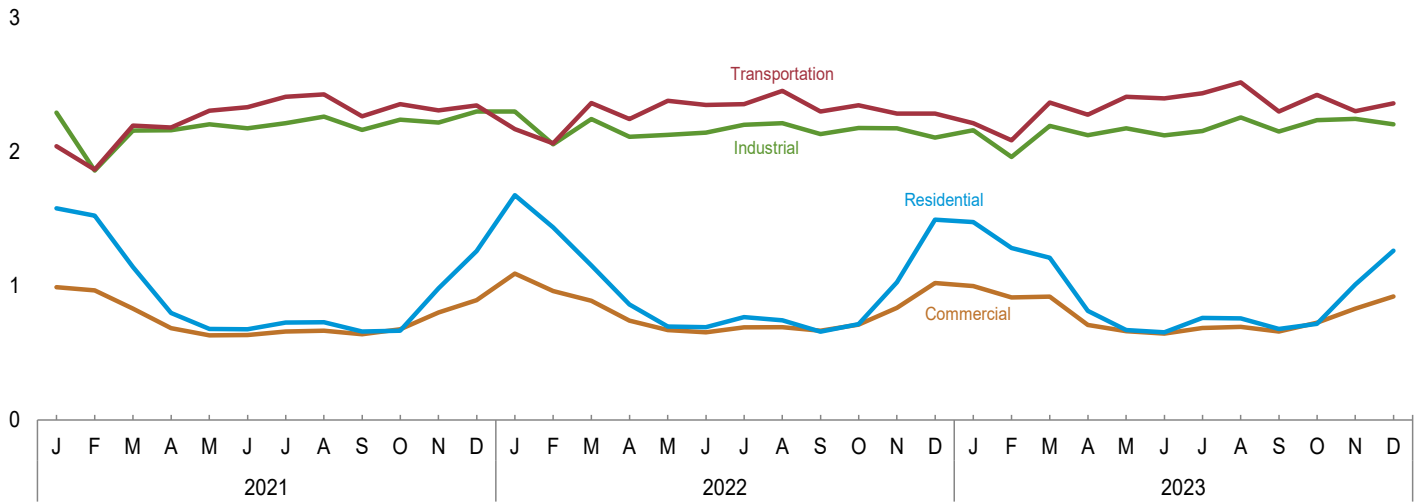
Figure 2.1b Energy Consumption by Sector, Monthly

(Quadrillion Btu)

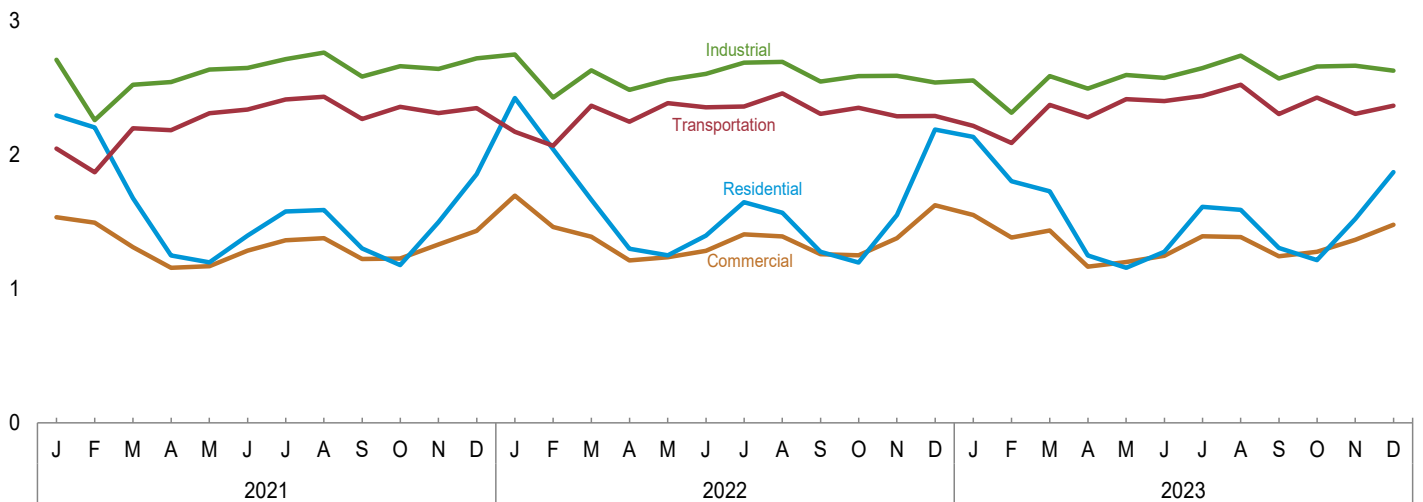
Primary Consumption by Sector



End-Use Consumption by End-Use Sector



Total Consumption by End-Use Sector



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

Source: Tables 2.1a—2.1b.

Table 2.1b Energy Consumption: Transportation Sector, Total End-Use Sectors, and Electric Power Sector (Trillion Btu)

	End-Use Sectors										Electric Power Sector ^a	Primary Total ^h
	Transportation					Total						
	Primary ^b	Electricity ^c	End Use ^d	Electrical System Energy Losses ^e	Total ^f	Primary ^b	Electricity ^c	End Use ^d	Electrical System Energy Losses ^e	Total ^g		
1950 Total	8,383	23	8,407	62	8,469	29,867	994	30,861	2,666	33,527	3,661	33,527
1955 Total	9,474	20	9,494	45	9,539	33,690	1,695	35,385	3,830	39,215	5,525	39,215
1960 Total	10,560	10	10,570	21	10,591	36,856	2,348	39,204	4,738	43,942	7,086	43,942
1965 Total	12,399	10	12,409	20	12,428	42,919	3,254	46,173	6,392	52,565	9,646	52,565
1970 Total	16,062	11	16,073	22	16,094	51,540	4,751	56,291	9,745	66,036	14,495	66,036
1975 Total	18,211	10	18,221	21	18,241	51,638	5,961	57,599	12,188	69,787	18,149	69,788
1980 Total	19,659	11	19,670	23	19,694	53,731	7,146	60,878	15,162	76,040	22,309	76,038
1985 Total	20,042	14	20,056	29	20,084	50,285	7,929	58,214	16,059	74,273	23,988	74,268
1990 Total	22,366	16	22,382	33	22,415	53,910	9,255	63,165	19,084	82,250	28,340	82,256
1995 Total	23,757	17	23,774	35	23,808	57,412	10,281	67,694	20,973	88,666	31,254	88,668
2000 Total	26,456	18	26,474	38	26,512	60,610	11,674	72,284	24,409	96,693	36,083	96,694
2005 Total	28,179	26	28,205	52	28,257	60,452	12,491	72,944	25,158	98,101	37,649	98,101
2006 Total	28,618	25	28,643	50	28,693	59,953	12,522	72,474	24,761	97,235	37,283	97,235
2007 Total	28,727	28	28,755	56	28,811	60,508	12,845	73,353	25,613	98,966	38,458	98,965
2008 Total	27,339	26	27,366	52	27,417	58,765	12,740	71,505	25,141	96,646	37,881	96,647
2009 Total	26,510	27	26,536	51	26,587	55,851	12,272	68,123	23,503	91,626	35,775	91,626
2010 Total	26,894	26	26,920	50	26,970	57,860	12,812	70,672	24,463	95,135	37,275	95,142
2011 Total	26,523	26	26,549	48	26,598	57,533	12,794	70,327	23,632	93,959	36,426	93,966
2012 Total	26,057	25	26,082	45	26,127	56,195	12,606	68,801	22,874	91,675	35,480	91,677
2013 Total	26,541	26	26,567	47	26,614	58,701	12,709	71,410	22,845	94,255	35,554	94,253
2014 Total	26,802	26	26,828	47	26,875	59,583	12,845	72,428	22,902	95,329	35,747	95,335
2015 Total	27,182	26	27,208	45	27,253	59,420	12,826	72,246	22,237	94,483	35,063	94,484
2016 Total	27,741	26	27,767	43	27,810	59,539	12,838	72,376	21,720	94,097	34,558	94,092
2017 Total	27,979	26	28,005	42	28,047	60,265	12,704	72,969	20,932	93,901	33,636	93,902
2018 Total	28,435	26	28,461	42	28,504	62,898	13,168	76,066	21,346	97,412	34,514	97,405
2019 Total	28,602	26	28,628	41	28,669	63,255	13,004	76,259	20,339	96,598	33,343	96,603
2020 Total	24,394	22	24,417	34	24,450	57,128	12,685	69,813	19,043	88,856	31,728	88,852
2021 January	2,040	2	2,042	3	2,045	5,806	1,097	6,903	1,678	8,581	2,775	8,579
February	1,865	2	1,867	3	1,869	5,196	1,023	6,219	1,607	7,825	2,629	7,827
March	2,194	2	2,196	3	2,198	5,318	1,008	6,325	1,382	7,708	2,390	7,703
April	2,179	2	2,181	2	2,183	4,893	931	5,824	1,306	7,130	2,237	7,124
May	2,305	2	2,307	2	2,309	4,835	990	5,825	1,488	7,313	2,478	7,310
June	2,332	2	2,334	3	2,337	4,665	1,155	5,819	1,846	7,666	3,001	7,669
July	2,408	2	2,410	3	2,413	4,736	1,276	6,011	2,052	8,063	3,328	8,070
August	2,427	2	2,428	3	2,432	4,788	1,300	6,088	2,068	8,156	3,368	8,163
September	2,262	2	2,264	3	2,267	4,580	1,148	5,728	1,645	7,373	2,793	7,375
October	2,353	2	2,355	3	2,357	4,907	1,031	5,938	1,483	7,421	2,514	7,419
November	2,307	2	2,308	3	2,311	5,332	980	6,311	1,467	7,778	2,447	7,774
December	2,343	2	2,345	3	2,348	5,750	1,049	6,799	1,554	8,354	2,603	8,349
Total	27,015	22	27,037	33	27,070	60,804	12,986	73,790	19,578	93,368	32,564	93,363
2022 January	R 2,166	2	R 2,168	3	R 2,171	6,080	1,155	7,235	1,800	9,035	2,955	9,036
February	R 2,062	2	R 2,064	3	R 2,067	5,476	1,044	6,520	1,477	7,996	2,520	7,995
March	R 2,361	2	R 2,363	3	R 2,366	5,612	1,038	6,650	1,399	8,049	2,437	8,044
April	R 2,241	2	R 2,243	2	R 2,245	4,987	972	5,960	1,280	7,239	2,252	7,235
May	R 2,379	2	R 2,380	3	R 2,383	4,820	1,057	5,877	1,552	7,429	2,609	7,427
June	R 2,348	2	R 2,350	3	R 2,353	4,658	1,184	5,842	1,793	7,635	2,977	7,637
July	R 2,354	2	R 2,356	3	R 2,359	4,688	1,328	6,016	2,081	8,097	3,409	8,103
August	R 2,452	2	R 2,454	3	R 2,457	4,773	1,329	6,102	2,003	8,105	3,333	8,111
September	R 2,299	2	R 2,301	3	R 2,304	4,596	1,162	5,758	1,627	7,385	2,789	7,386
October	R 2,345	2	R 2,347	3	R 2,350	4,938	1,014	5,952	1,431	7,383	2,445	7,380
November	R 2,282	2	R 2,284	3	R 2,287	5,325	997	6,323	1,480	7,803	2,478	7,800
December	R 2,283	2	R 2,285	3	R 2,289	5,789	1,118	6,907	1,730	8,637	2,848	8,636
Total	R 27,574	23	R 27,596	33	R 27,629	61,741	13,400	75,140	19,653	94,794	33,053	94,791
2023 January	R 2,206	2	R 2,208	3	R 2,211	R 5,749	1,099	R 6,848	R 1,605	R 8,452	R 2,704	R 8,449
February	R 2,075	2	R 2,077	3	R 2,080	R 5,254	991	R 6,245	R 1,340	R 7,585	R 2,331	R 7,579
March	R 2,362	2	R 2,364	3	R 2,367	R 5,646	R 1,044	R 6,690	R 1,429	R 8,119	R 2,472	R 8,113
April	R 2,272	2	R 2,274	2	R 2,276	R 4,967	R 957	R 5,924	1,264	R 7,187	2,220	R 7,182
May	R 2,405	2	R 2,407	3	R 2,410	R 4,902	1,016	R 5,918	R 1,447	R 7,366	R 2,463	R 7,362
June	R 2,389	2	R 2,391	3	R 2,394	R 4,701	1,119	R 5,820	R 1,673	R 7,493	R 2,792	R 7,493
July	R 2,427	2	R 2,429	3	R 2,432	R 4,719	R 1,319	R 6,038	R 2,051	R 8,089	R 3,370	R 8,094
August	R 2,509	2	R 2,511	3	R 2,514	R 4,888	R 1,337	R 6,225	R 2,010	R 8,235	3,347	R 8,240
September	R 2,294	2	R 2,296	3	R 2,299	R 4,608	R 1,181	R 5,789	R 1,629	R 7,418	R 2,810	R 7,418
October	R 2,417	2	R 2,419	3	R 2,422	R 5,052	R 1,050	R 6,103	R 1,472	R 7,575	R 2,523	R 7,571
November	R 2,292	2	R 2,294	3	R 2,297	R 5,388	R 1,001	R 6,390	R 1,467	R 7,857	R 2,468	7,853
December	2,351	2	2,353	3	2,356	5,692	1,061	6,753	1,583	8,336	2,644	8,333
Total	28,001	23	28,024	33	28,057	61,568	13,175	74,743	18,970	93,713	32,145	93,686

^a Includes NAICS 22 electricity-only and CHP plants whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only. For 1989 forward, data are for electric utilities and independent power producers.

^b Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

^c Electricity sold to the sector. See "Electricity Sales to Ultimate Customers" in Glossary.

^d Sum of "Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

^e Calculated as the difference between primary energy consumed by the electric power sector and the energy content of electricity sales to ultimate customers sent to the end-use sectors. Allocated proportionally to the electricity sales to ultimate customers in each end-use sector. See Note 1, "Electrical System Energy Losses," at end of section.

^f Equal to end-use energy consumption plus electrical system energy losses.

^g Equal to the sum of total energy consumption in the four end-use sectors, which does not equal total primary energy consumption due to the use of sector-specific conversion factors for coal and natural gas.

^h Total primary energy consumption. See Table 1.3.

R=Revised.

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, "Other Energy Losses," at end of section. • See Note 3, "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.

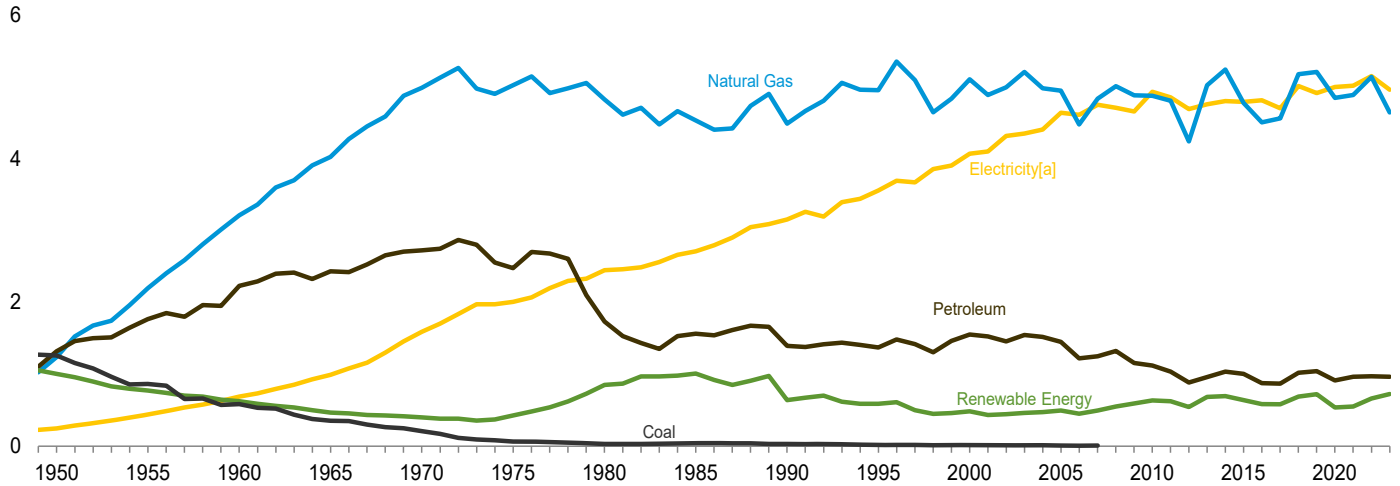
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • End-Use Sectors: Tables 2.2–2.5. • Electric Power Sector: Table 2.6. • Primary Total: Table 1.3.

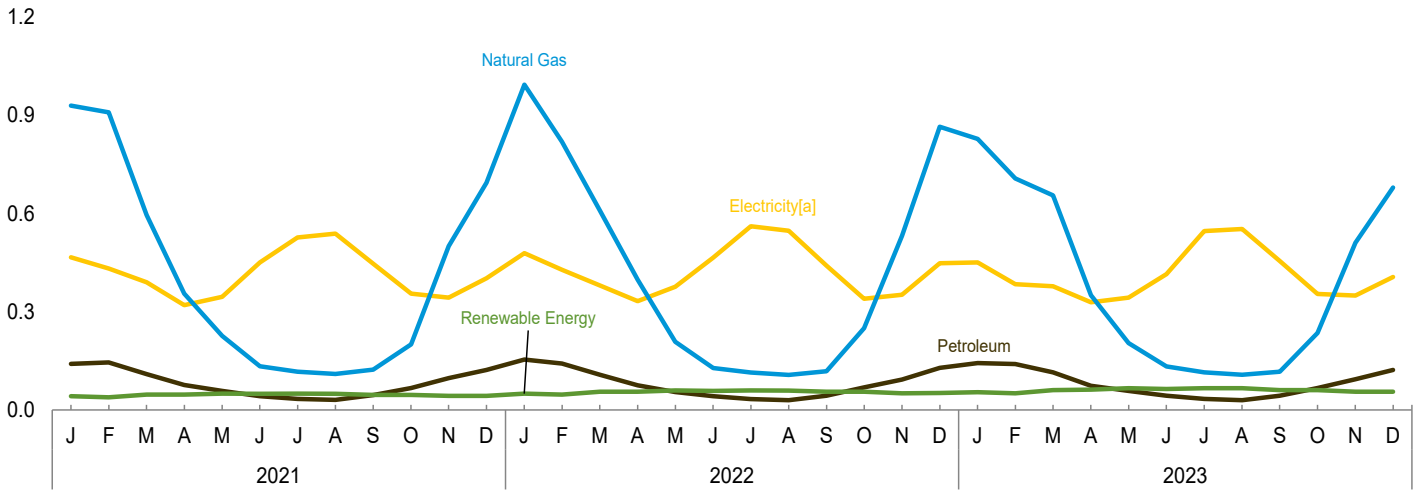
Figure 2.2 Residential Sector Energy Consumption

(Quadrillion Btu)

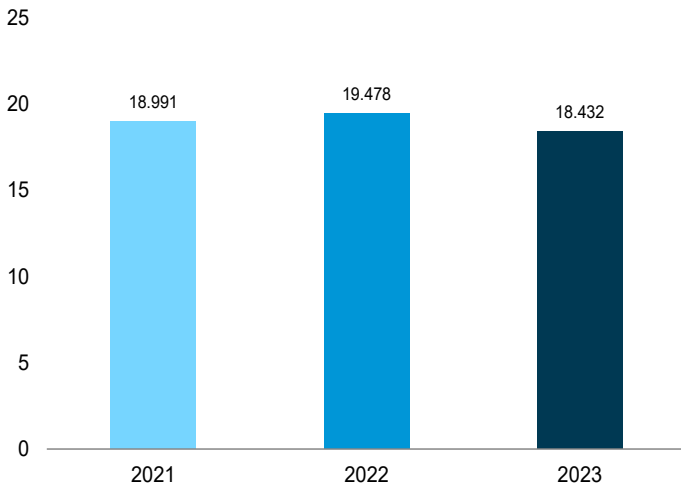
By Major Source, 1949–2023



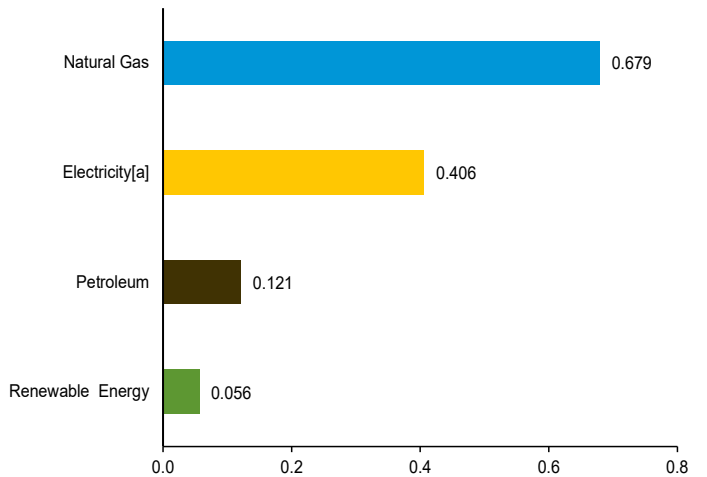
By Major Source, Monthly



Total, January–December



By Major Source, December 2023



[a] Electricity sales to ultimate customers.

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

Source: Table 2.2.

Table 2.2 Residential Sector Energy Consumption
(Trillion Btu)

	End-Use Energy Consumption ^a											Electrical System Energy Losses ^g	Total
	Primary Consumption ^b								Total Primary	Electricity ^f	Total End Use		
	Fossil Fuels				Renewable Energy ^c								
	Coal	Natural Gas ^d	Petroleum	Total	Geothermal	Solar ^e	Bio-mass	Total					
1950 Total	1,261	1,240	1,322	3,824	NA	NA	1,006	1,006	4,830	246	5,076	661	5,736
1955 Total	867	2,198	1,767	4,833	NA	NA	775	775	5,608	438	6,046	990	7,036
1960 Total	585	3,212	2,228	6,025	NA	NA	627	627	6,651	687	7,339	1,387	8,726
1965 Total	352	4,028	2,432	6,812	NA	NA	468	468	7,280	993	8,273	1,950	10,223
1970 Total	209	4,987	2,726	7,922	NA	NA	401	401	8,323	1,591	9,914	3,264	13,178
1975 Total	63	5,023	2,479	7,565	NA	NA	425	425	7,990	2,007	9,997	4,103	14,100
1980 Total	31	4,825	1,734	6,590	NA	NA	850	850	7,440	2,448	9,888	5,194	15,082
1985 Total	39	4,534	1,566	6,139	NA	NA	1,010	1,010	7,149	2,709	9,858	5,486	15,344
1990 Total	31	4,487	1,395	5,912	6	55	580	640	6,552	3,153	9,705	6,501	16,206
1995 Total	17	4,954	1,374	6,345	7	63	520	589	6,934	3,557	10,491	7,256	17,747
2000 Total	11	5,105	1,554	6,670	9	57	420	486	7,156	4,069	11,225	8,507	19,732
2005 Total	8	4,946	1,450	6,405	16	49	430	495	6,901	4,638	11,538	9,340	20,879
2006 Total	6	4,476	1,222	5,704	18	51	380	450	6,154	4,611	10,765	9,119	19,884
2007 Total	8	4,835	1,249	6,092	22	53	420	495	6,588	4,750	11,338	9,472	20,811
2008 Total	NA	5,010	1,325	6,335	26	56	470	552	6,887	4,711	11,598	9,296	20,894
2009 Total	NA	4,883	1,158	6,041	33	56	504	593	6,634	4,657	11,291	8,918	20,208
2010 Total	NA	4,878	1,120	5,999	37	59	541	636	6,635	4,933	11,568	9,419	20,987
2011 Total	NA	4,805	1,034	5,838	40	62	524	626	6,465	4,855	11,319	8,967	20,286
2012 Total	NA	4,242	886	5,128	40	66	438	544	5,672	4,690	10,362	8,510	18,871
2013 Total	NA	5,023	963	5,986	40	72	572	683	6,669	4,759	11,428	8,554	19,983
2014 Total	NA	5,242	1,036	6,279	40	79	579	697	6,976	4,801	11,778	8,560	20,338
2015 Total	NA	4,777	1,007	5,784	40	87	513	639	6,423	4,791	11,214	8,306	19,520
2016 Total	NA	4,506	878	5,384	40	100	445	584	5,968	4,815	10,783	8,146	18,929
2017 Total	NA	4,563	871	5,435	40	113	430	582	6,017	4,704	10,721	7,751	18,471
2018 Total	NA	5,174	1,022	6,197	40	123	525	688	6,885	5,013	11,897	8,126	20,023
2019 Total	NA	5,208	1,045	6,253	40	136	546	721	6,974	4,914	11,889	7,686	19,575
2020 Total	NA	4,846	914	5,760	40	151	345	536	6,296	4,997	11,293	7,502	18,795
2021 January	NA	929	141	1,070	3	9	29	42	1,112	466	1,578	713	2,292
February	NA	909	145	1,054	3	10	26	39	1,093	432	1,525	678	2,204
March	NA	595	109	704	3	14	29	47	751	390	1,141	535	1,677
April	NA	355	76	430	3	16	28	47	478	320	798	450	1,248
May	NA	226	58	284	3	17	29	50	334	345	679	519	1,198
June	NA	134	42	176	3	18	28	49	225	451	676	721	1,397
July	NA	117	34	151	3	18	29	50	201	527	728	848	1,576
August	NA	110	31	142	3	17	29	49	191	538	729	856	1,586
September	NA	123	45	167	3	15	28	46	214	447	661	641	1,302
October	NA	200	67	267	3	13	29	46	312	355	667	511	1,178
November	NA	500	97	597	3	11	28	43	640	343	983	514	1,497
December	NA	694	122	815	3	10	29	43	858	402	1,260	595	1,855
Total	NA	4,889	967	5,856	40	169	344	553	6,409	5,017	11,426	7,564	18,991
2022 January	NA	993	154	1,147	3	11	36	50	1,197	479	1,676	747	2,423
February	NA	819	142	961	3	12	32	47	1,009	428	1,437	605	2,042
March	NA	609	108	717	3	17	36	56	773	380	1,153	512	1,665
April	NA	398	75	473	3	18	35	56	529	332	862	438	1,299
May	NA	208	55	263	3	20	36	60	323	376	698	552	1,250
June	NA	128	42	170	3	20	35	58	228	465	693	704	1,397
July	NA	114	33	147	3	21	36	60	207	561	768	878	1,646
August	NA	107	30	137	3	20	36	59	196	547	743	824	1,567
September	NA	118	44	162	3	18	35	56	218	441	659	618	1,276
October	NA	250	69	319	3	17	36	56	375	340	716	480	1,196
November	NA	532	93	625	3	13	35	51	676	352	1,028	523	1,551
December	NA	865	129	994	3	12	36	52	1,045	448	1,494	693	2,187
Total	NA	5,140	974	6,114	40	200	422	662	6,776	5,150	11,926	7,553	19,478
2023 January	NA	828	141	969	3	13	38	54	1,023	451	1,474	658	2,132
February	NA	707	139	846	3	14	35	51	898	384	1,282	519	1,800
March	NA	655	114	769	3	19	38	61	830	378	1,208	518	1,726
April	NA	350	73	423	3	21	37	62	484	329	814	435	1,249
May	NA	204	57	261	3	24	38	66	327	343	669	488	1,158
June	NA	133	43	176	3	24	37	64	240	415	655	620	1,275
July	NA	115	34	149	3	25	38	66	215	546	761	850	1,611
August	NA	108	30	138	3	24	38	66	204	553	757	831	1,588
September	NA	117	43	161	3	21	37	61	222	455	677	627	1,304
October	NA	235	66	301	3	20	38	61	362	354	716	496	1,212
November	NA	511	93	604	3	16	37	56	660	349	1,010	512	1,522
December	NA	679	121	800	3	15	38	56	856	406	1,262	606	1,868
Total	NA	4,643	955	5,597	40	235	450	725	6,322	4,963	11,285	7,146	18,432

^a Sum of "Total Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

^b Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

^c See Table 10.2a for notes on series components.

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

^e Includes small-scale solar photovoltaic (PV) electricity and solar thermal energy in the residential sector. See Tables 10.2a and 10.5.

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

^g Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity sales to ultimate customers.

Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers. See Note 1, "Electrical System Energy Losses," at end of section.

R=Revised. NA=Not available.

Notes: • Data are estimates, except for electricity sales to ultimate customers. • See Note 2, "Other Energy Losses," at end of section. • See Note 3, "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.

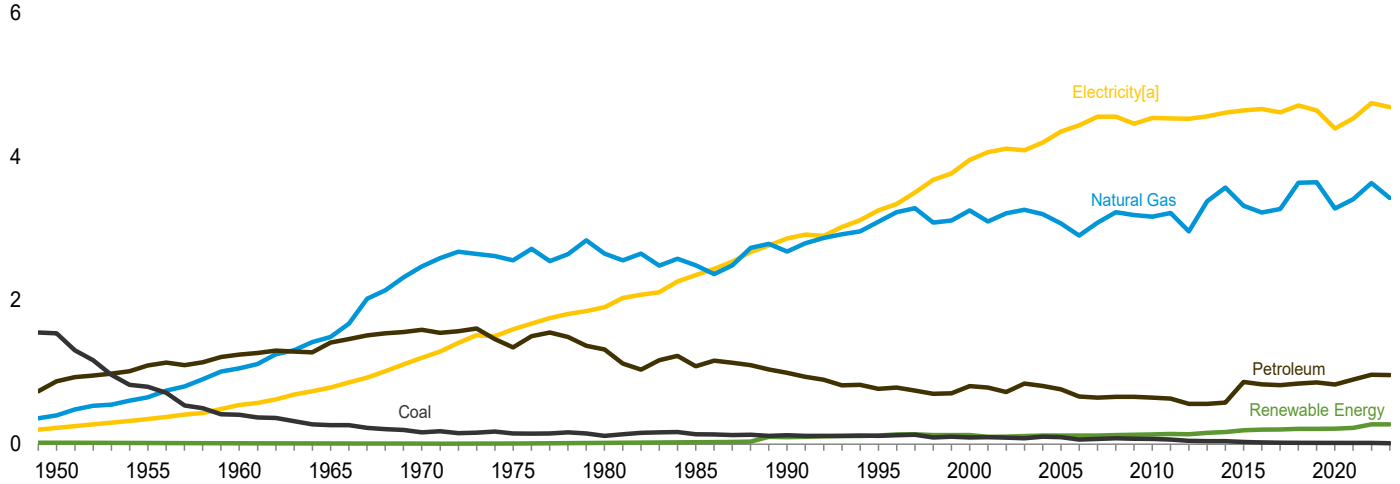
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

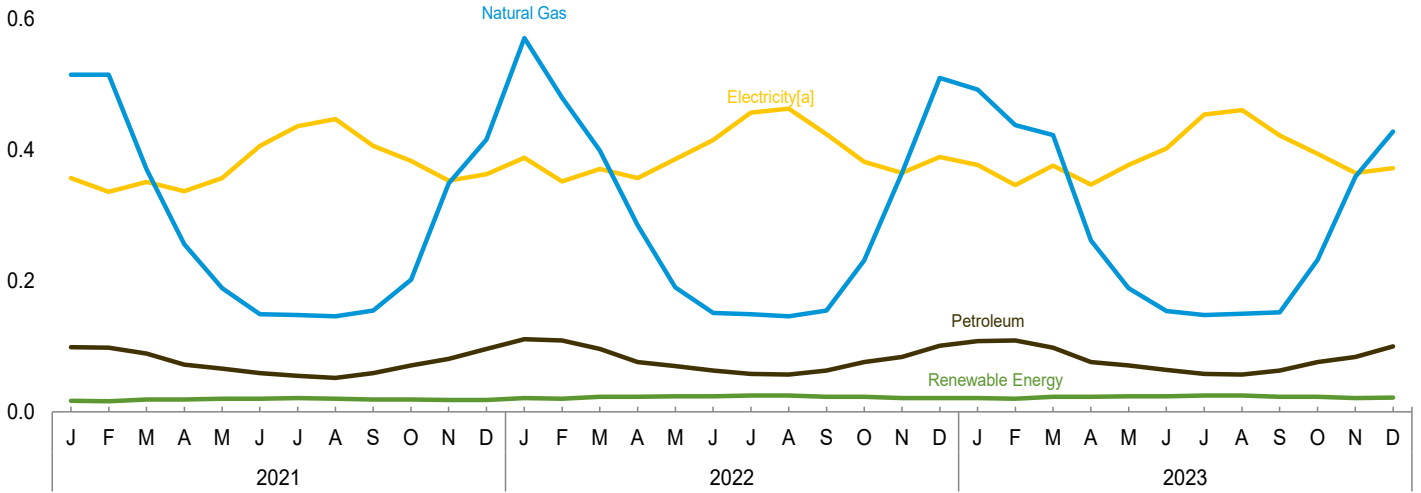
Figure 2.3 Commercial Sector Energy Consumption

(Quadrillion Btu)

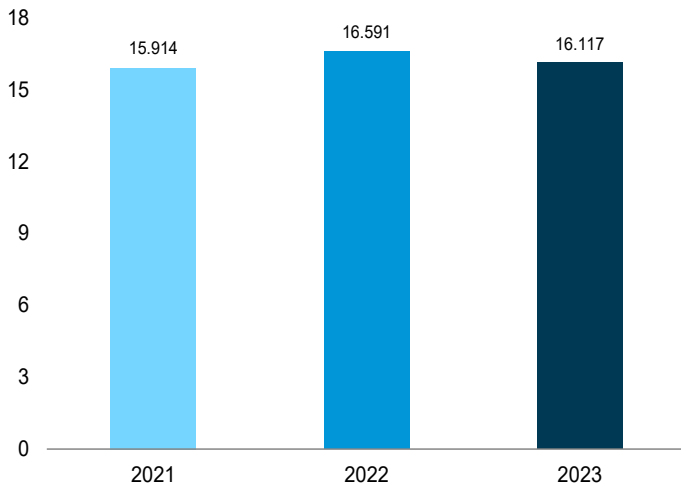
By Major Source, 1949–2023



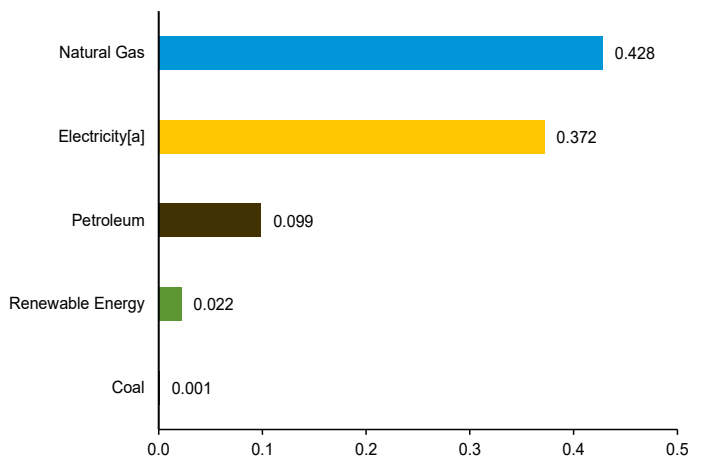
By Major Source, Monthly



Total, January–December



By Major Source, December 2023



[a] Electricity sales to ultimate customers.

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

Source: Table 2.3.

Table 2.3 Commercial Sector Energy Consumption
(Trillion Btu)

	End-Use Energy Consumption ^a											Total End Use	Electrical System Energy Losses ⁱ	Total	
	Primary Consumption ^b														
	Fossil Fuels				Renewable Energy ^c										
Coal	Natural Gas ^d	Petroleum ^e	Total	Hydroelectric Power ^f	Geo-thermal	Solar ^g	Wind	Bio-mass	Total	Total Primary	Electricity ^h				
1950 Total	1,542	401	872	2,815	NA	NA	NA	NA	19	19	2,834	225	3,059	604	3,663
1955 Total	801	651	1,095	2,547	NA	NA	NA	NA	15	15	2,561	350	2,911	791	3,702
1960 Total	407	1,056	1,248	2,711	NA	NA	NA	NA	12	12	2,723	543	3,266	1,096	4,362
1965 Total	265	1,490	1,413	3,168	NA	NA	NA	NA	9	9	3,177	789	3,966	1,549	5,514
1970 Total	165	2,473	1,592	4,229	NA	NA	NA	NA	8	8	4,237	1,201	5,438	2,464	7,902
1975 Total	147	2,558	1,346	4,051	NA	NA	NA	NA	8	8	4,059	1,598	5,657	3,267	8,924
1980 Total	115	2,651	1,318	4,084	NA	NA	NA	NA	21	21	4,105	1,906	6,011	4,044	10,055
1985 Total	137	2,488	1,083	3,708	NA	NA	NA	NA	24	24	3,732	2,351	6,084	4,762	10,845
1990 Total	124	2,680	991	3,795	(s)	3	(s)	-	94	97	3,892	2,860	6,753	5,898	12,650
1995 Total	117	3,096	769	3,982	(s)	5	(s)	-	113	118	4,099	3,252	7,352	6,634	13,985
2000 Total	92	3,252	807	4,150	(s)	8	(s)	-	119	127	4,277	3,956	8,233	8,271	16,504
2005 Total	97	3,073	761	3,931	(s)	14	1	-	105	120	4,051	4,351	8,401	8,762	17,163
2006 Total	65	2,902	661	3,627	(s)	14	1	-	103	118	3,745	4,435	8,180	8,769	16,949
2007 Total	70	3,085	646	3,801	(s)	14	1	-	103	119	3,920	4,560	8,479	9,092	17,571
2008 Total	81	3,228	660	3,970	(s)	15	2	-	109	126	4,096	4,559	8,655	8,996	17,651
2009 Total	73	3,187	659	3,919	(s)	17	3	(s)	112	131	4,050	4,459	8,509	8,540	17,049
2010 Total	70	3,165	647	3,881	(s)	19	4	(s)	111	134	4,014	4,539	8,553	8,666	17,219
2011 Total	62	3,216	632	3,910	(s)	20	7	(s)	115	141	4,051	4,531	8,583	8,370	16,952
2012 Total	44	2,960	560	3,563	(s)	20	11	(s)	108	139	3,702	4,528	8,230	8,216	16,446
2013 Total	41	3,380	558	3,979	(s)	20	15	(s)	120	155	4,134	4,562	8,696	8,200	16,897
2014 Total	40	3,572	578	4,190	(s)	20	19	(s)	127	166	4,356	4,614	8,969	8,226	17,195
2015 Total	31	3,316	864	4,211	(s)	20	21	(s)	152	193	4,404	4,643	9,047	8,050	17,097
2016 Total	24	3,224	832	4,079	1	20	23	(s)	158	201	4,281	4,665	8,945	7,893	16,838
2017 Total	21	3,273	820	4,113	1	20	28	(s)	156	205	4,318	4,616	8,934	7,606	16,540
2018 Total	19	3,638	845	4,502	1	20	35	1	156	213	4,715	4,715	9,429	7,643	17,072
2019 Total	17	3,647	857	4,521	1	21	40	1	149	211	4,732	4,643	9,375	7,263	16,638
2020 Total	15	3,279	827	4,120	1	21	46	1	147	215	4,335	4,393	8,728	6,595	15,322
2021 January	2	515	99	616	(s)	2	3	(s)	12	17	633	357	990	545	1,535
February	2	515	98	615	(s)	2	3	(s)	11	16	631	336	967	527	1,494
March	1	370	89	461	(s)	2	5	(s)	13	19	480	351	831	482	1,312
April	1	256	72	329	(s)	2	5	(s)	12	19	348	337	685	473	1,158
May	1	189	66	256	(s)	2	5	(s)	12	20	276	357	633	537	1,170
June	1	149	59	209	(s)	2	6	(s)	12	20	229	406	635	650	1,284
July	1	148	55	203	(s)	2	6	(s)	13	21	224	436	660	702	1,362
August	1	146	52	199	(s)	2	5	(s)	13	20	220	447	667	712	1,379
September	1	155	59	215	(s)	2	5	(s)	12	19	234	406	640	582	1,222
October	1	202	71	275	(s)	2	4	(s)	13	19	293	383	676	551	1,227
November	1	349	81	431	(s)	2	3	(s)	12	18	449	353	802	529	1,331
December	1	416	96	513	(s)	2	3	(s)	13	18	531	363	894	539	1,433
Total	15	3,409	898	4,322	1	21	54	1	149	225	4,547	4,533	9,080	6,834	15,914
2022 January	2	571	R 111	R 683	(s)	2	4	(s)	R 16	21	R 704	388	R 1,092	604	R 1,695
February	2	480	R 109	R 592	(s)	2	4	(s)	R 15	20	R 612	352	R 963	498	R 1,461
March	1	399	R 96	R 496	(s)	2	5	(s)	R 15	23	R 519	371	R 889	499	R 1,389
April	1	285	R 76	R 362	(s)	2	6	(s)	15	23	R 385	357	R 742	470	R 1,212
May	1	190	R 70	R 261	(s)	2	6	(s)	15	24	R 285	386	R 671	566	R 1,237
June	1	151	R 63	R 216	(s)	2	6	(s)	16	24	R 240	415	R 655	628	R 1,283
July	1	149	R 58	R 208	(s)	2	7	(s)	16	R 25	R 233	457	R 690	716	R 1,406
August	1	146	R 57	R 205	(s)	2	6	(s)	16	R 25	R 229	463	R 692	698	R 1,390
September	1	155	R 63	R 219	(s)	2	6	(s)	15	23	R 242	424	R 666	593	R 1,259
October	1	231	R 76	R 308	(s)	2	5	(s)	16	R 23	R 330	382	R 712	539	R 1,251
November	1	365	R 84	R 450	(s)	2	4	(s)	R 16	21	R 472	365	R 836	541	R 1,378
December	2	510	R 101	R 613	(s)	2	4	(s)	R 16	21	R 634	389	R 1,022	601	R 1,624
Total	14	3,633	R 964	R 4,611	1	20	63	1	R 190	R 274	R 4,885	4,746	R 9,631	6,961	R 16,591
2023 January	1	492	R 107	R 600	(s)	2	4	(s)	R 16	21	R 621	377	R 998	R 550	R 1,549
February	1	438	R 108	R 547	(s)	2	4	(s)	R 15	20	R 567	346	R 913	R 468	R 1,381
March	1	423	R 97	R 521	NM	2	6	(s)	15	23	R 544	R 376	R 920	R 514	R 1,434
April	1	262	R 76	R 339	NM	2	6	(s)	R 15	23	R 362	R 347	R 708	458	R 1,166
May	1	189	R 70	R 261	NM	2	7	(s)	15	24	R 285	377	R 662	537	R 1,198
June	1	154	R 64	R 219	NM	2	7	(s)	15	24	R 243	402	R 645	R 601	R 1,246
July	1	148	R 58	R 207	NM	2	7	(s)	R 16	25	R 232	R 454	R 686	R 707	R 1,393
August	1	150	R 57	R 208	NM	2	7	(s)	16	R 25	R 233	R 461	R 694	R 693	R 1,387
September	1	152	R 62	R 215	NM	2	6	(s)	15	23	R 238	R 422	R 660	R 582	1,242
October	1	232	R 75	R 308	NM	2	5	(s)	R 16	R 23	R 331	R 394	R 725	R 552	R 1,276
November	1	359	R 83	R 444	(s)	2	4	(s)	15	21	R 465	R 365	R 830	R 535	R 1,365
December	1	428	99	528	NM	2	4	(s)	16	22	550	372	922	554	1,476
Total	13	3,428	956	4,396	1	20	69	1	185	275	4,671	4,691	9,362	6,755	16,117

^a Sum of "Total Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

^b Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

^c See Table 10.2a for notes on series components.

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

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

^f Conventional hydroelectric power.

^g Includes small-scale solar photovoltaic (PV) electricity and solar thermal energy in the commercial sector. See Tables 10.2a and 10.5.

^h Electricity 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 sales to ultimate customers. Total losses are allocated to the end-use sectors in proportion to each sector's

share of total electricity sales to ultimate customers. See Note 1, "Electrical System Energy Losses," at end of section.

R=Revised. NA=Not available. NM=Not meaningful. --=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 sales to ultimate customers 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, "Other Energy Losses," at end of section. • See Note 3, "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.

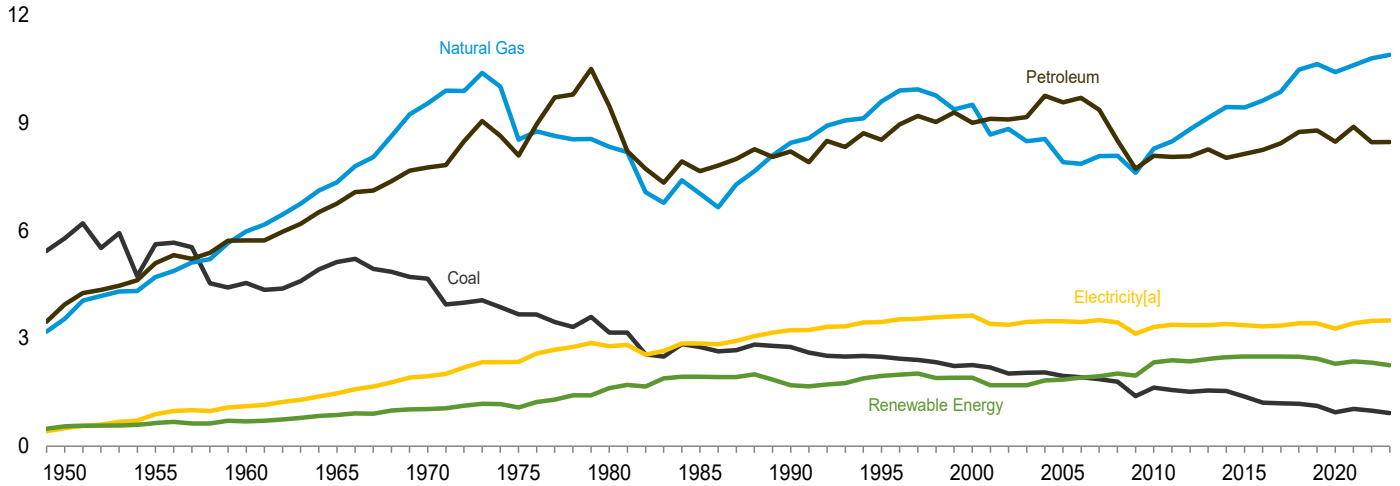
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

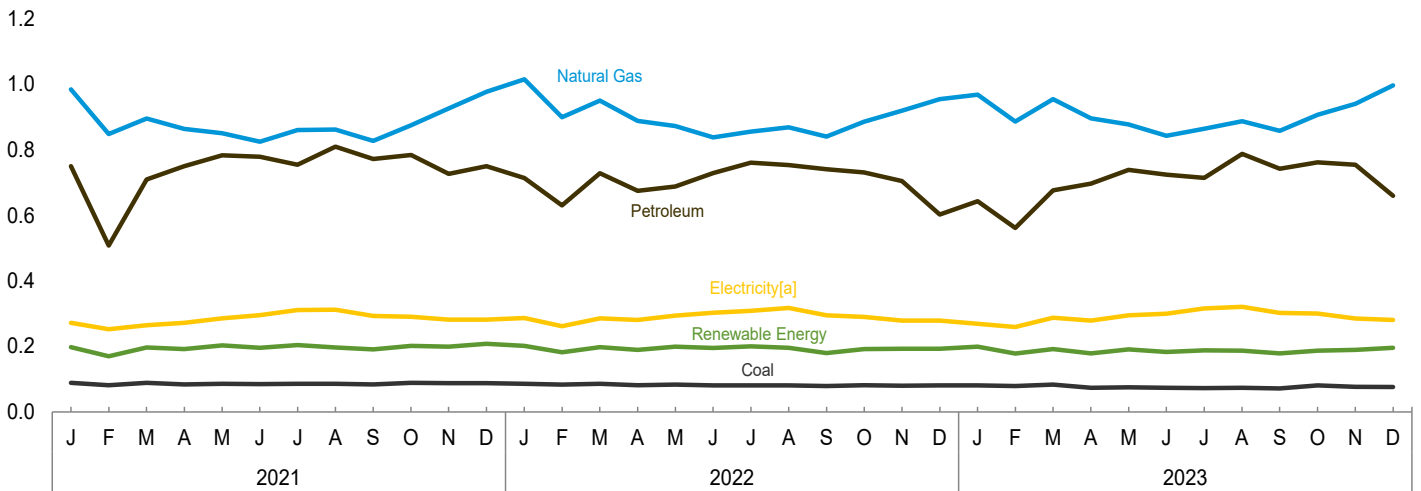
Figure 2.4 Industrial Sector Energy Consumption

(Quadrillion Btu)

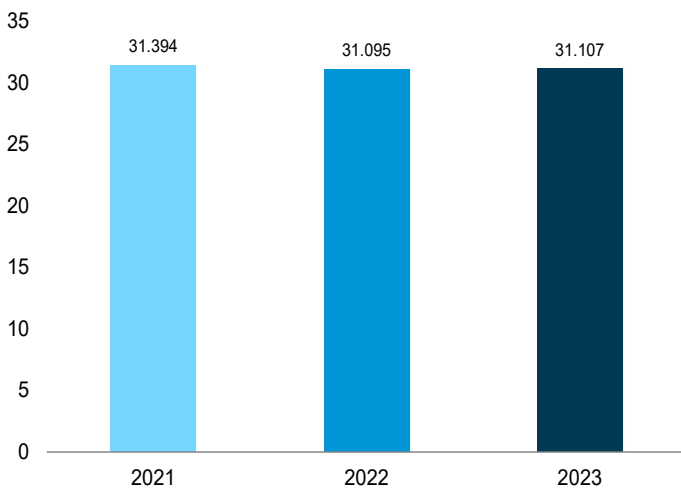
By Major Source, 1949–2023



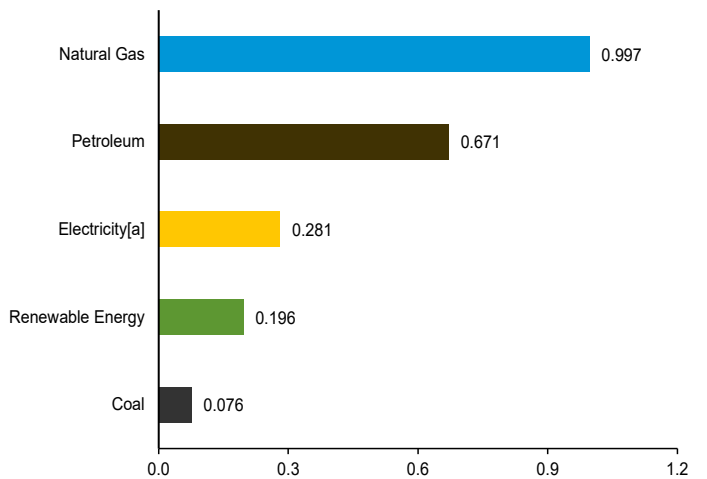
By Major Source, Monthly



Total, January–December



By Major Source, December 2023



[a] Electricity sales to ultimate customers.

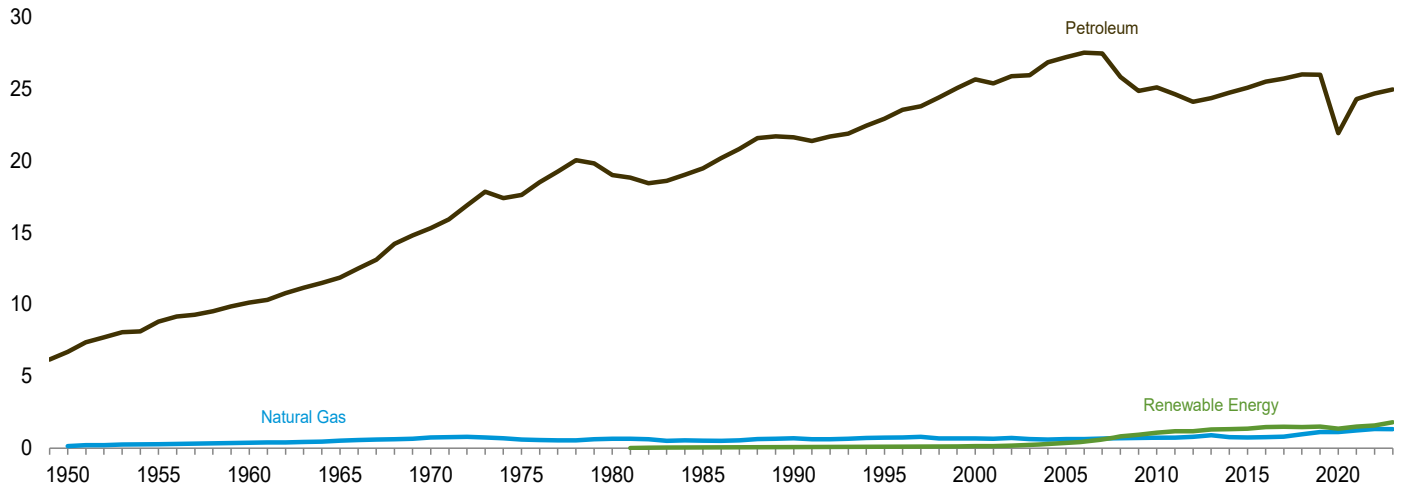
Web Page: <http://www.eia.gov/totalenergy/data/monthly/#consumption>.

Source: Table 2.4.

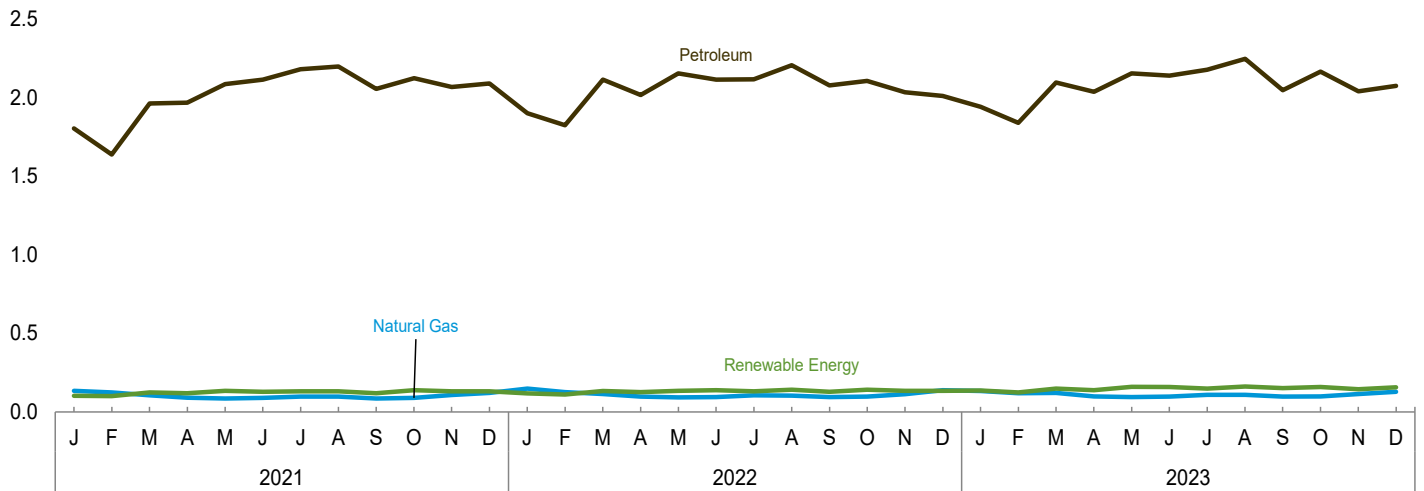
Figure 2.5 Transportation Sector Energy Consumption

(Quadrillion Btu)

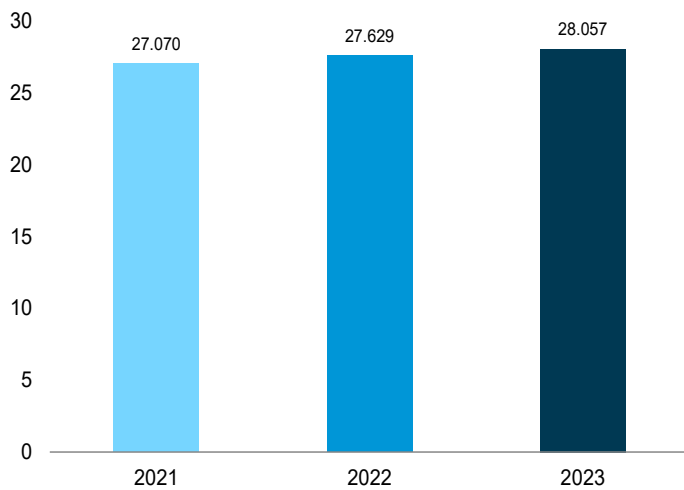
By Major Source, 1949–2023



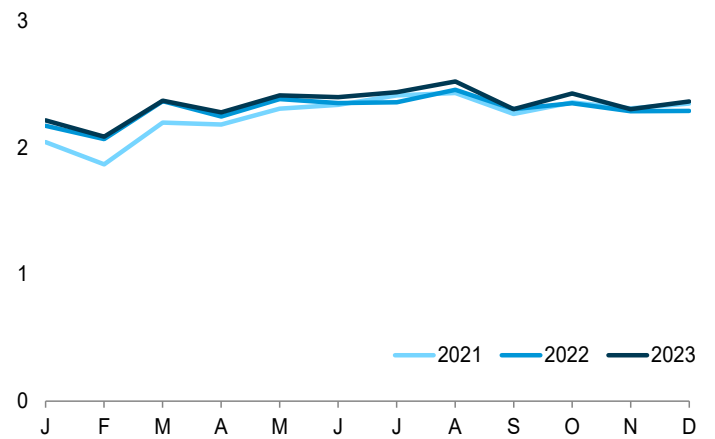
By Major Source, Monthly



Total, January–December



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)

	End-Use Energy Consumption ^a								Electrical System Energy Losses ^g	Total
	Primary Consumption ^b					Electricity ^f	Total End Use			
	Fossil Fuels				Renewable Energy ^c					
	Coal	Natural Gas ^d	Petroleum ^e	Total	Biomass					
1950 Total	1,564	130	6,690	8,383	NA	8,383	23	8,407	62	8,469
1955 Total	421	254	8,799	9,474	NA	9,474	20	9,494	45	9,539
1960 Total	75	359	10,125	10,560	NA	10,560	10	10,570	21	10,591
1965 Total	16	517	11,866	12,399	NA	12,399	10	12,409	20	12,428
1970 Total	7	745	15,311	16,062	NA	16,062	11	16,073	22	16,094
1975 Total	1	595	17,615	18,211	NA	18,211	10	18,221	21	18,241
1980 Total	(h)	650	19,009	19,659	NA	19,659	11	19,670	23	19,694
1985 Total	(h)	519	19,472	19,992	50	20,042	14	20,056	29	20,084
1990 Total	(h)	679	21,626	22,305	60	22,366	16	22,382	33	22,415
1995 Total	(h)	724	22,920	23,644	112	23,757	17	23,774	35	23,808
2000 Total	(h)	672	25,649	26,321	135	26,456	18	26,474	38	26,512
2005 Total	(h)	624	27,217	27,840	339	28,179	26	28,205	52	28,257
2006 Total	(h)	625	27,518	28,143	475	28,618	25	28,643	50	28,693
2007 Total	(h)	663	27,462	28,126	602	28,727	28	28,755	56	28,811
2008 Total	(h)	692	25,823	26,515	825	27,339	26	27,366	52	27,417
2009 Total	(h)	715	24,860	25,575	935	26,510	27	26,536	51	26,587
2010 Total	(h)	719	25,100	25,819	1,075	26,894	26	26,920	50	26,970
2011 Total	(h)	734	24,623	25,357	1,166	26,523	26	26,549	48	26,598
2012 Total	(h)	780	24,108	24,888	1,169	26,057	25	26,082	45	26,127
2013 Total	(h)	887	24,361	25,248	1,292	26,541	26	26,567	47	26,614
2014 Total	(h)	760	24,728	25,487	1,314	26,802	26	26,828	47	26,875
2015 Total	(h)	745	25,086	25,831	1,351	27,182	26	27,208	45	27,253
2016 Total	(h)	757	25,515	26,272	1,469	27,741	26	27,767	43	27,810
2017 Total	(h)	799	25,707	26,506	1,474	27,979	26	28,005	42	28,047
2018 Total	(h)	962	26,017	26,979	1,456	28,435	26	28,461	42	28,504
2019 Total	(h)	1,114	25,992	27,106	1,497	28,602	26	28,628	41	28,669
2020 Total	(h)	1,109	21,930	23,039	1,355	24,394	22	24,417	34	24,450
2021 January	(h)	135	1,804	1,938	102	2,040	2	2,042	3	2,045
February	(h)	125	1,638	1,764	101	1,865	2	1,867	3	1,869
March	(h)	106	1,962	2,068	125	2,194	2	2,196	3	2,198
April	(h)	91	1,968	2,059	120	2,179	2	2,181	2	2,183
May	(h)	85	2,086	2,171	134	2,305	2	2,307	2	2,309
June	(h)	90	2,114	2,204	128	2,332	2	2,334	3	2,337
July	(h)	97	2,181	2,278	131	2,408	2	2,410	3	2,413
August	(h)	98	2,197	2,295	132	2,427	2	2,428	3	2,432
September	(h)	86	2,056	2,142	120	2,262	2	2,264	3	2,267
October	(h)	90	2,124	2,214	139	2,353	2	2,355	3	2,357
November	(h)	108	2,067	2,175	132	2,307	2	2,308	3	2,311
December	(h)	121	2,090	2,211	132	2,343	2	2,345	3	2,348
Total	(h)	1,232	24,287	25,519	1,496	27,015	22	27,037	33	27,070
2022 January	(h)	148	R 1,900	R 2,048	118	R 2,166	2	R 2,168	3	R 2,171
February	(h)	126	R 1,825	R 1,951	R 111	R 2,062	2	R 2,064	3	R 2,067
March	(h)	114	R 2,114	R 2,228	133	R 2,361	2	R 2,363	3	R 2,366
April	(h)	97	R 2,017	R 2,114	R 127	R 2,241	2	R 2,243	2	R 2,245
May	(h)	92	R 2,153	R 2,245	R 134	R 2,379	2	R 2,380	3	R 2,383
June	(h)	95	R 2,114	R 2,209	R 139	R 2,348	2	R 2,350	3	R 2,353
July	(h)	106	R 2,117	R 2,223	132	R 2,354	2	R 2,356	3	R 2,359
August	(h)	105	R 2,206	R 2,311	141	R 2,452	2	R 2,454	3	R 2,457
September	(h)	94	R 2,078	R 2,171	R 128	R 2,299	2	R 2,301	3	R 2,304
October	(h)	97	R 2,107	R 2,204	142	R 2,345	2	R 2,347	3	R 2,350
November	(h)	113	R 2,034	R 2,147	135	R 2,282	2	R 2,284	3	R 2,287
December	(h)	139	R 2,010	R 2,149	R 134	R 2,283	2	R 2,285	3	R 2,289
Total	(h)	1,326	R 24,675	R 26,001	R 1,573	R 27,574	23	R 27,596	33	R 27,629
2023 January	(h)	133	R 1,935	R 2,069	R 137	R 2,206	2	R 2,208	3	R 2,211
February	(h)	119	R 1,832	R 1,951	R 124	R 2,075	2	R 2,077	3	R 2,080
March	(h)	122	R 2,092	R 2,214	R 148	R 2,362	2	R 2,364	3	R 2,367
April	(h)	99	R 2,035	R 2,134	R 138	R 2,272	2	R 2,274	2	R 2,276
May	(h)	95	R 2,149	R 2,244	R 161	R 2,405	2	R 2,407	3	R 2,410
June	(h)	R 97	R 2,134	R 2,231	R 158	R 2,389	2	R 2,391	3	R 2,394
July	(h)	109	R 2,170	R 2,279	R 148	R 2,427	2	R 2,429	3	R 2,432
August	(h)	109	R 2,238	R 2,347	162	R 2,509	2	R 2,511	3	R 2,514
September	(h)	97	R 2,045	R 2,142	R 152	R 2,294	2	R 2,296	3	R 2,299
October	(h)	100	R 2,160	R 2,260	158	R 2,417	2	R 2,419	3	R 2,422
November	(h)	115	R 2,033	R 2,147	145	R 2,292	2	R 2,294	3	R 2,297
December	(h)	128	2,067	2,195	156	2,351	2	2,353	3	2,356
Total	(h)	1,322	24,890	26,212	1,788	28,001	23	28,024	33	28,057

^a Sum of "Total Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

^b Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

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

^d Natural gas consumed in the operation of pipelines and smaller amounts consumed as vehicle fuel. Does not include supplemental gaseous fuels—see Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

^e Does not include biofuels. Biofuels are included in "Biomass." Includes non-combustion use of lubricants.

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

^g Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity sales to ultimate customers. Total losses are allocated to the end-use sectors in proportion to each sector's

share of total electricity sales to ultimate customers. See Note 1, "Electrical System Energy Losses," at end of section.

^h 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 sales to ultimate customers beginning in 1979. • See Note 2, "Other Energy Losses," at end of section. • See Note 3, "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.

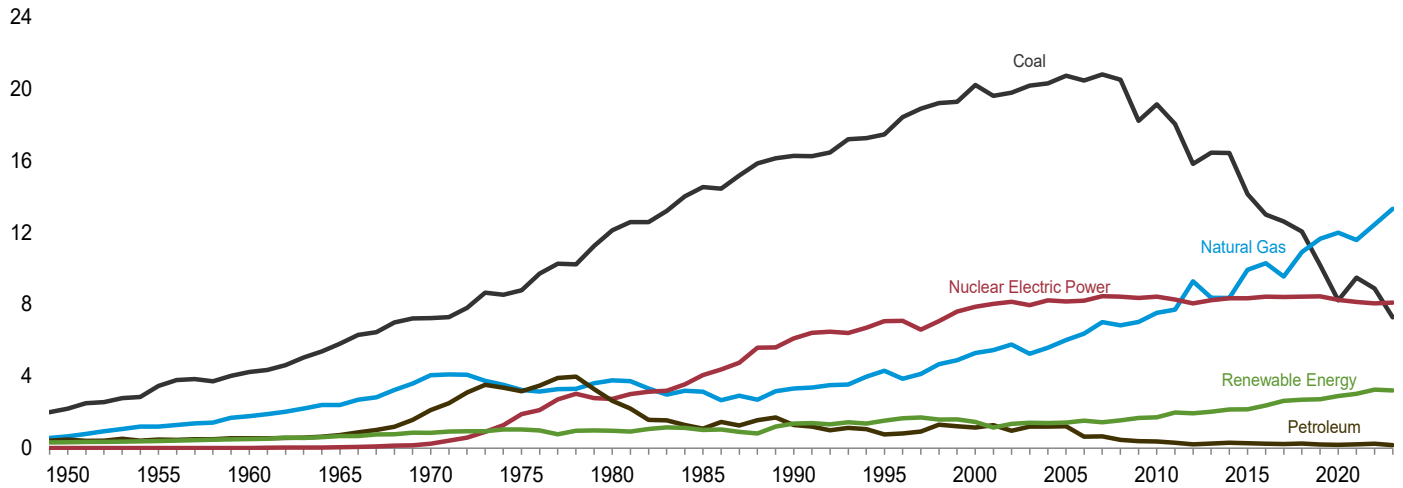
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#consumption> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

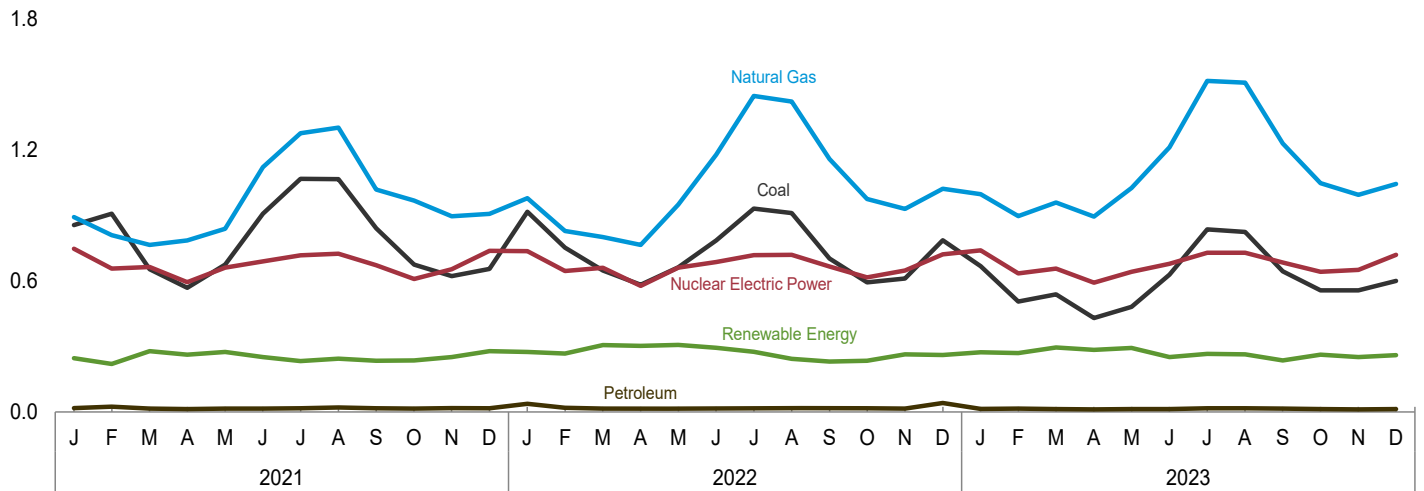
Figure 2.6 Electric Power Sector Energy Consumption

(Quadrillion Btu)

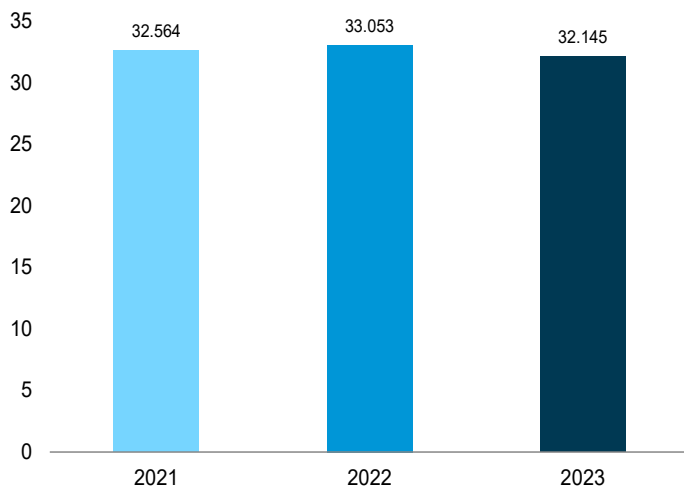
By Major Source, 1949–2023



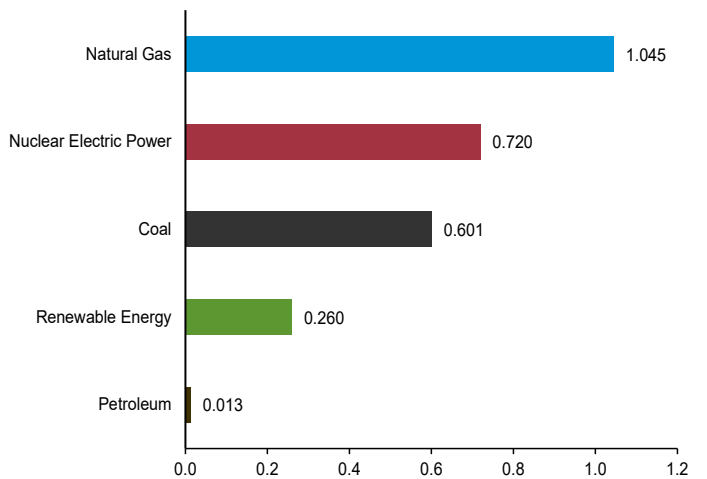
By Major Source, Monthly



Total, January–December



By Major Source, December 2023



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												Elec- tricity Net Imports ^f	Total Primary
	Fossil Fuels				Nuclear Electric Power	Renewable Energy ^b								
	Coal	Natural Gas ^c	Petro- leum	Total		Hydro- electric Power ^d	Geo- thermal	Solar ^e	Wind	Bio- mass	Total			
1950 Total	2,199	651	472	3,322	0	327	NA	NA	NA	5	333	6	3,661	
1955 Total	3,458	1,194	471	5,123	0	385	NA	NA	NA	3	389	14	5,525	
1960 Total	4,228	1,785	553	6,565	6	498	(s)	NA	NA	2	499	15	7,086	
1965 Total	5,821	2,395	722	8,938	43	661	1	NA	NA	3	665	(s)	9,646	
1970 Total	7,227	4,054	2,117	13,399	239	845	2	NA	NA	4	851	7	14,495	
1975 Total	8,786	3,240	3,166	15,191	1,900	1,024	11	NA	NA	2	1,037	21	18,149	
1980 Total	12,123	3,778	2,634	18,534	2,739	942	17	NA	NA	4	964	71	22,309	
1985 Total	14,542	3,135	1,090	18,767	4,076	959	32	(s)	(s)	14	1,006	140	23,988	
1990 Total	16,261	3,309	1,289	20,859	6,104	989	53	1	10	317	1,369	8	28,340	
1995 Total	17,466	4,302	755	22,523	7,075	1,042	46	2	11	422	1,522	134	31,254	
2000 Total	20,220	5,293	1,144	26,658	7,862	926	48	2	19	453	1,447	115	36,083	
2005 Total	20,737	6,015	1,222	27,974	8,161	911	50	2	61	406	1,430	85	37,649	
2006 Total	20,462	6,375	637	27,474	8,215	977	50	2	91	412	1,531	63	37,283	
2007 Total	20,808	7,005	648	28,461	8,459	839	50	2	118	423	1,432	107	38,458	
2008 Total	20,513	6,829	459	27,801	8,426	864	51	3	189	435	1,541	112	37,881	
2009 Total	18,225	7,022	382	25,630	8,355	926	51	3	252	441	1,674	116	35,775	
2010 Total	19,133	7,528	370	27,031	8,434	882	52	4	323	459	1,720	89	37,275	
2011 Total	18,035	7,712	295	26,042	8,269	1,083	52	6	410	437	1,988	127	36,426	
2012 Total	15,821	9,287	214	25,322	8,062	934	53	14	480	453	1,935	161	35,480	
2013 Total	16,451	8,376	255	25,082	8,244	904	54	30	572	470	2,030	197	35,554	
2014 Total	16,427	8,362	295	25,085	8,338	880	54	59	619	530	2,143	182	35,747	
2015 Total	14,138	9,926	276	24,341	8,337	845	54	83	650	525	2,158	227	35,063	
2016 Total	12,996	10,301	244	23,542	8,427	909	54	121	774	505	2,363	227	34,558	
2017 Total	12,622	9,555	218	22,395	8,419	1,019	54	180	867	510	2,630	192	33,636	
2018 Total	12,053	10,922	260	23,235	8,438	993	54	216	929	496	2,689	152	34,514	
2019 Total	10,181	11,658	189	22,028	8,452	978	51	243	1,009	448	2,729	133	33,343	
2020 Total	8,229	12,000	184	20,413	8,251	969	53	302	1,150	428	2,902	161	31,728	
2021 January	856	892	18	1,765	748	83	4	19	102	38	247	14	2,775	
February	908	810	24	1,742	657	68	4	21	91	35	220	10	2,629	
March	654	765	15	1,435	664	72	4	32	134	37	278	13	2,390	
April	569	785	13	1,367	595	66	4	37	123	32	263	11	2,237	
May	675	839	15	1,529	661	79	4	42	115	34	275	13	2,478	
June	909	1,121	15	2,045	689	80	4	41	91	36	252	15	3,001	
July	1,068	1,277	17	2,362	718	75	4	41	74	38	233	15	3,328	
August	1,066	1,302	21	2,388	725	69	4	41	92	38	244	12	3,368	
September	841	1,019	17	1,877	673	58	4	38	99	35	234	9	2,793	
October	675	968	16	1,659	609	58	4	31	110	33	236	10	2,514	
November	622	896	18	1,536	654	66	5	26	122	34	252	4	2,447	
December	655	907	17	1,579	738	80	5	21	136	37	278	8	2,603	
Total	9,498	11,583	205	21,285	8,131	854	53	391	1,289	426	3,014	134	32,564	
2022 January	917	979	37	1,933	737	82	5	27	128	34	275	10	2,955	
February	753	829	19	1,600	646	72	4	31	128	32	267	6	2,520	
March	648	801	16	1,464	660	83	4	40	147	32	306	7	2,437	
April	583	765	14	1,362	578	68	4	45	157	28	303	9	2,252	
May	663	950	16	1,629	662	79	5	51	144	29	308	9	2,609	
June	786	1,179	17	1,982	687	88	4	54	115	31	294	15	2,977	
July	931	1,447	17	2,396	719	84	5	53	101	34	276	19	3,409	
August	911	1,422	17	2,350	720	72	5	49	84	33	243	20	3,333	
September	703	1,159	17	1,879	666	58	5	45	93	30	231	13	2,789	
October	593	975	17	1,585	616	49	4	40	112	29	234	10	2,445	
November	611	930	16	1,556	648	61	5	28	140	30	264	9	2,478	
December	787	1,023	41	1,851	722	69	5	23	132	32	261	14	2,848	
Total	8,885	12,459	244	21,589	8,061	865	55	487	1,481	374	3,263	141	33,053	
2023 January	668	R 997	14	R 1,679	740	76	5	27	134	31	273	11	R 2,704	
February	506	897	16	1,419	635	63	4	31	R 144	27	270	7	2,331	
March	539	R 960	13	R 1,512	656	69	5	41	152	29	295	9	R 2,472	
April	430	895	12	1,337	592	59	5	50	147	24	285	7	2,220	
May	481	R 1,026	R 13	R 1,519	642	93	5	57	109	28	293	9	R 2,463	
June	629	R 1,213	13	R 1,855	679	66	4	60	94	28	252	6	R 2,792	
July	R 837	1,516	17	R 2,370	730	72	4	64	95	30	266	4	R 3,370	
August	825	1,508	17	2,350	729	72	5	60	97	R 30	R 264	5	3,347	
September	644	R 1,229	16	R 1,888	685	56	5	53	96	27	236	(s)	R 2,810	
October	557	1,048	13	R 1,619	642	61	5	48	124	23	262	R 1	R 2,523	
November	557	995	12	1,564	650	61	5	35	126	24	R 252	R 2	R 2,468	
December	601	1,045	13	1,660	720	66	5	31	131	27	260	5	2,644	
Total	7,276	13,328	168	20,771	8,101	814	56	558	1,450	329	3,207	65	32,145	

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

Notes: • Data are for fuels consumed to produce electricity and useful thermal output.
• The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.
• See Note 3, "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	DHS ^b	Energy	GSA ^c	HHS ^d	Interior	Justice	NASA ^e	Postal Service	Trans- portation	Veterans Affairs	Other ^f	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	18.3	31.9	18.5	10.1	7.3	22.7	10.8	50.9	5.5	30.6	22.7	1,132.3
2004	7.0	960.7	23.5	31.4	18.3	8.8	8.7	17.5	9.9	50.5	5.2	29.9	20.4	1,191.7
2005	7.5	933.2	18.9	29.6	18.4	9.6	8.6	18.8	10.3	53.5	5.0	30.0	23.2	1,166.4
2006	6.8	843.7	17.1	32.9	18.2	9.3	8.1	23.5	10.2	51.8	4.6	29.3	20.9	1,076.4
2007	6.8	864.6	17.1	31.5	19.1	9.9	7.5	20.7	10.6	45.8	5.6	30.0	21.0	1,090.2
2008	6.5	910.8	22.0	32.1	18.8	10.3	7.1	19.0	10.8	47.1	7.7	29.0	22.4	1,143.4
2009	6.6	874.3	18.6	31.1	18.6	10.8	7.9	16.5	10.2	44.2	4.3	29.9	21.8	1,094.8
2010	6.8	889.9	21.2	31.7	18.8	10.4	7.3	15.7	10.1	43.3	5.7	30.2	21.8	1,112.7
2011	8.3	890.3	20.3	33.1	18.5	10.5	7.3	13.9	10.1	43.0	6.7	30.6	21.4	1,114.1
2012	6.7	828.5	20.1	30.3	16.3	10.0	6.7	15.1	8.9	40.8	5.6	29.7	20.5	1,039.3
2013	7.3	749.5	18.9	28.9	16.4	10.5	6.2	15.3	8.7	41.9	5.3	29.9	20.4	959.3
2014	6.3	730.6	18.5	29.4	17.0	9.5	6.2	15.6	8.3	43.0	5.2	31.4	20.6	941.5
2015	6.2	734.5	17.9	30.1	16.3	9.0	6.8	16.2	8.4	44.0	6.0	30.7	19.8	945.9
2016	6.2	709.2	18.1	28.9	15.8	8.7	6.4	15.6	8.5	43.9	6.0	30.3	19.5	917.2
2017	6.3	707.9	19.2	28.8	15.0	8.8	5.9	15.5	8.6	43.7	6.6	29.1	19.7	915.1
2018	6.1	690.6	16.8	27.3	15.6	10.0	6.1	16.2	8.4	45.5	5.8	29.7	18.8	897.0
2019	5.9	682.1	16.2	27.2	15.4	9.8	6.2	15.8	8.5	46.0	5.9	31.9	19.1	890.0
2020	5.4	648.8	17.1	26.4	14.4	9.5	5.5	14.6	8.1	46.1	5.5	30.6	17.0	849.0
2021	6.4	650.7	15.9	27.5	14.4	9.1	5.4	14.5	8.1	45.5	5.6	30.3	18.1	851.5
2022	8.0	622.5	16.5	26.3	13.4	9.6	6.3	14.5	8.4	48.3	5.5	30.8	17.3	827.2

^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 U.S. Department of Homeland Security.

^c General Services Administration.

^d U.S. Department of Health and Human Services.

^e National Aeronautics and Space Administration.

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

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.

Sources: 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)".

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	Elec- tricity	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	129.6	.4	198.4	525.4	2.3	49.0	775.4	3.6	196.2	17.9	1,143.4
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	122.2	.3	134.4	418.9	1.8	46.8	602.2	3.7	184.3	20.9	945.9
2016	10.2	115.4	.3	129.7	403.9	1.7	46.5	582.2	3.6	184.5	21.4	917.2
2017	9.1	115.1	.3	135.1	400.1	1.5	46.4	583.5	2.7	181.7	23.0	915.1
2018	6.2	125.8	.3	127.8	383.2	1.7	45.5	558.5	3.0	180.0	23.6	897.0
2019	5.0	131.7	.3	125.4	376.8	1.9	46.6	551.0	2.7	178.2	21.5	890.0
2020	5.2	128.3	.2	129.6	345.0	1.7	43.3	520.0	1.6	173.7	20.3	849.0
2021	5.3	129.6	.4	122.2	352.0	1.7	44.9	521.2	1.9	173.1	20.5	851.5
2022	3.5	128.8	.2	126.4	326.9	1.6	44.4	499.5	1.8	171.8	21.8	827.2

^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.

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.

Sources: 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)".

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 sales to ultimate customers (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. 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. Other Energy Losses. Similar to electrical system energy losses, there are also other energy losses from energy consumption not separately identified. There are losses in the production of energy, the transformation of one form of energy to another form of energy, and the distribution and use of energy. For example, there are transformation losses in the process of refining crude oil into usable petroleum products, processing natural gas into marketable dry gas, and in the process of converting energy from the sun into usable energy with solar panels. All uses of primary energy have efficiency losses, usually in the form of heat, when energy is converted to do useful work. Examples include when motor gasoline is burned to move vehicles, when natural gas is burned to heat homes, or in any household appliance that uses electricity. The Lawrence Livermore National Laboratory estimates primary energy losses by end-use sector by applying an end-use efficiency factor to EIA's *Monthly Energy Review* consumption data. <https://flowcharts.llnl.gov/>.

Note 3. 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 Sales to Ultimate Customers

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

End-Use Energy Consumption

1949 forward: Residential sector end-use energy consumption is the sum of residential sector total primary energy consumption and residential sector electricity sales to ultimate customers.

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 sales to ultimate customers 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 sales to ultimate customers 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 sales to ultimate customers, 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 Sales to Ultimate Customers

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

End-Use Energy Consumption

1949 forward: Commercial sector end-use energy consumption is the sum of commercial sector total primary energy consumption and commercial sector electricity sales to ultimate customers.

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 sales to ultimate customers 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 sales to ultimate customers 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 sales to ultimate customers, 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 Sales to Ultimate Customers

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

End-Use Energy Consumption

1949 forward: Industrial sector end-use energy consumption is the sum of industrial sector total primary energy consumption and residential sector electricity sales to ultimate customers.

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 sales to ultimate customers 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 sales to ultimate customers 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 sales to ultimate customers, 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.

2009–2011: 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 biodiesel consumption, calculated using biodiesel data from U.S. Energy Information Administration (EIA), EIA-22M, "Monthly Biodiesel Production Survey"; and biomass-based diesel fuel data from EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," and EIA-815, "Monthly Bulk Terminal and Blender Report" (the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1); minus renewable diesel fuel and other biofuels refinery and blender net inputs, calculated using "other renewable diesel fuel" and "other renewable fuels" data from EIA-810, "Monthly Refinery Report," and EIA-815, "Monthly Bulk Terminal and Blender Report" (the data are converted to Btu by multiplying by the heat content factors for renewable diesel fuel and other biofuels in Table A1).

2012–2020: 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 biodiesel consumption from Table 10.4; minus renewable diesel fuel and other biofuels refinery and blender net inputs, calculated using "other renewable diesel fuel" and "other renewable fuels" data from EIA-810, "Monthly Refinery Report," and EIA-815, "Monthly Bulk Terminal and Blender Report" (the data are converted to Btu by multiplying by the heat content factors for renewable diesel fuel and other biofuels in Table A1).

2021 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 biodiesel, renewable diesel fuel, and other biofuels refinery and

blender net inputs and products supplied, calculated using “biofuels except fuel ethanol” refinery and blender net inputs and products supplied from U.S. Energy Information Administration (EIA), *Petroleum Supply Annual* and *Petroleum Supply Monthly* (data are converted to Btu by multiplying by the appropriate heat content factors 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 Sales to Ultimate Customers

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

End-Use Energy Consumption

1949 forward: Transportation sector end-use energy consumption is the sum of transportation sector total primary energy consumption and residential sector electricity sales to ultimate customers.

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 sales to ultimate customers 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 sales to ultimate customers 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 sales to ultimate customers, 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.