Table CT6. Industrial sector energy consumption estimates, selected years, 1960-2022, Minnesota

Year	Coal	Natural gas [a]	Petroleum						Hydro-electric power [e,f]	Biomass		Geo-thermal [f]	Solar [f,i]	Electricity [j]	End use [f,k]	Electrical system energy losses [l]	Total [f,k]
			Distillate fuel oil	HGL [b]	Motor gasoline [c]	Residual fuel oil	Other [d]	Total		Wood and waste [f,g]	Losses and co-products [h]						
	Thousand short tons	Billion cubic feet	Thousand barrels						Million kWh			Million kWh					
1960	2,555	49	6,062	841	4,266	5,690	5,024	21,884	156	– –	– –	– –	NA	3,095	– –	– –	– –
1965	2,776	83	7,651	988	3,947	4,213	6,593	23,392	178	– –	– –	– –	NA	4,677	– –	– –	– –
1970	2,020	98	7,784	1,275	3,608	3,894	7,919	24,480	168	– –	– –	– –	NA	8,506	– –	– –	– –
1975	2,292	101	7,991	1,985	3,132	2,675	9,183	24,965	189	– –	– –	– –	NA	11,280	– –	– –	– –
1980	1,057	101	5,708	4,183	1,336	1,818	7,527	20,573	145	– –	– –	– –	NA	15,525	– –	– –	– –
1985	1,027	66	4,985	2,406	1,718	481	8,206	17,796	145	– –	– –	– –	NA	17,934	– –	– –	– –
1990	1,283	88	5,483	2,459	1,117	700	11,122	20,880	172	– –	– –	– –	(s)	23,497	– –	– –	– –
1995	1,401	106	6,031	4,392	1,192	536	12,012	24,163	224	– –	– –	– –	(s)	26,577	– –	– –	– –
2000	2,092	106	4,857	3,442	996	570	13,206	23,070	248	– –	– –	– –	(s)	28,842	– –	– –	– –
2005	1,300	95	5,741	5,156	1,299	1,092	14,824	28,112	130	– –	– –	– –	(s)	22,266	– –	– –	– –
2006	1,271	103	5,296	4,702	1,228	396	14,717	26,339	96	– –	– –	– –	(s)	22,664	– –	– –	– –
2007	1,354	114	5,150	4,618	1,476	789	14,566	26,599	96	– –	– –	– –	(s)	23,041	– –	– –	– –
2008	1,359	144	6,017	3,265	924	1,203	12,364	23,773	118	– –	– –	– –	(s)	23,810	– –	– –	– –
2009	1,167	128	5,417	4,306	987	336	11,333	22,380	134	– –	– –	– –	(s)	19,637	– –	– –	– –
2010	1,305	158	6,722	2,384	1,302	198	11,755	22,362	127	– –	– –	– –	(s)	22,798	– –	– –	– –
2011	1,295	158	6,776	2,083	1,321	251	11,722	22,153	117	– –	– –	– –	(s)	23,619	– –	– –	– –
2012	1,131	160	6,814	2,242	1,332	42	11,895	22,325	74	– –	– –	– –	(s)	23,416	– –	– –	– –
2013	1,270	161	7,080	3,582	1,444	15	11,931	24,052	90	– –	– –	– –	(s)	22,734	– –	– –	– –
2014	1,236	174	7,215	4,083	1,214	11	11,126	23,649	19	– –	– –	– –	1	23,076	– –	– –	– –
2015	957	157	6,140	2,710	1,194	10	11,726	21,781	115	– –	– –	– –	2	21,453	– –	– –	– –
2016	1,055	163	5,971	2,583	1,305	5	R 12,000	R 21,863	130	– –	– –	– –	3	21,217	– –	– –	– –
2017	1,201	166	6,147	2,699	1,316	15	R 10,396	R 20,573	156	– –	– –	– –	5	22,281	– –	– –	– –
2018	1,076	162	6,840	2,897	1,330	9	R 10,953	R 22,029	92	– –	– –	– –	10	22,447	– –	– –	– –
2019	995	162	7,251	3,734	1,281	43	R 11,535	R 23,844	97	– –	– –	– –	12	21,748	– –	– –	– –
2020	734	141	6,922	3,323	1,295	23	R 11,942	R 23,505	68	– –	– –	– –	17	19,572	– –	– –	– –
2021	784	152	6,404	3,050	1,268	23	R 11,288	R 22,033	51	– –	– –	– –	21	21,227	– –	– –	– –
2022	880	153	6,473	2,410	1,328	23	11,078	21,312	73	– –	– –	– –	23	20,649	– –	– –	– –
			Trillion Btu														
1960	55.2	51.0	35.3	3.2	22.4	35.8	31.9	128.6	R 0.5	7.4	NA	NA	NA	10.6	R 253.2	R 21.3	R 274.5
1965	60.8	82.6	44.6	3.7	20.7	26.5	41.7	137.2	R 0.6	9.3	NA	NA	NA	16.0	R 306.5	R 31.4	R 337.9
1970	42.1	97.8	45.3	4.7	19.0	24.5	50.1	143.5	R 0.6	11.8	NA	NA	NA	29.0	R 324.8	R 59.4	R 384.2
1975	50.8	100.8	46.5	7.0	16.5	16.8	57.8	144.6	R 0.6	15.9	NA	NA	NA	38.5	R 351.2	R 78.6	R 429.7
1980	18.1	101.2	33.3	14.7	7.0	11.4	47.3	113.7	R 0.5	31.3	NA	NA	NA	53.0	R 317.7	R 112.7	R 430.4
1985	21.3	66.6	29.0	8.2	9.0	3.0	52.9	102.2	R 0.5	36.7	0.0	NA	NA	61.2	R 288.5	R 124.3	R 412.8
1990	23.8	88.7	31.9	8.5	5.9	4.4	70.5	121.2	R 0.6	28.0	0.7	0.0	(s)	80.2	R 343.2	R 190.6	R 533.8
1995	26.7	107.6	35.1	15.2	6.2	3.4	76.2	136.1	R 0.8	35.6	3.2	0.0	(s)	90.7	R 400.6	R 192.1	R 592.6
2000	40.4	107.5	28.3	11.8	5.2	3.6	84.1	132.9	R 0.8	35.7	13.4	0.0	(s)	98.4	R 429.0	R 195.2	R 624.3
2005	24.7	96.2	33.4	17.7	6.7	6.9	94.0	158.7	R 0.4	35.1	24.5	0.0	(s)	76.0	R 415.4	R 158.6	R 574.0
2006	24.1	104.7	30.7	16.1	6.4	2.5	92.8	148.5	R 0.3	33.0	31.6	0.0	(s)	77.3	R 419.6	R 157.5	R 577.1
2007	25.8	115.8	29.8	15.7	7.6	5.0	91.8	149.8	R 0.3	33.6	33.6	0.0	(s)	78.6	R 437.4	R 159.1	R 596.6
2008	26.1	147.2	34.8	11.0	4.7	7.6	77.8	135.8	R 0.4	32.9	40.1	0.0	(s)	81.2	R 463.7	R 155.6	R 619.3
2009	22.4	132.2	31.3	14.3	5.0	2.1	71.2	123.9	R 0.5	32.1	52.4	0.0	(s)	67.0	R 430.4	R 123.7	R 554.1
2010	24.9	160.0	38.8	9.2	6.6	1.2	73.8	129.7	R 0.4	37.6	60.2	0.0	(s)	77.8	R 490.6	R 145.3	R 636.0
2011	24.7	159.4	39.1	8.0	6.7	1.6	73.4	128.8	R 0.4	35.9	62.5	0.0	(s)	80.6	R 492.2	R 142.6	R 634.8
2012	21.4	163.0	39.3	8.6	6.7	0.3	74.5	129.5	R 0.3	34.6	56.8	0.0	(s)	79.9	R 485.4	R 138.8	R 624.1
2013	24.1	164.4	40.8	13.8	7.3	0.1	74.7	136.6	R 0.3	34.5	55.1	0.0	(s)	77.6	R 492.6	R 130.9	R 623.5
2014	23.2	179.2	41.6	15.7	6.1	0.1	69.7	133.2	R 0.1	37.3	60.2	0.0	(s)	78.7	R 511.9	R 134.7	R 646.6
2015	17.5	163.4	35.4	10.4	6.0	0.1	73.5	125.4	R 0.4	33.7	62.1	0.0	(s)	73.2	R 475.7	R 116.6	R 592.3
2016	19.6	168.5	34.4	9.9	6.6	(s)	76.6	127.5	R 0.4	34.3	62.4	0.0	(s)	72.4	R 485.2	R 113.3	R 598.5
2017	21.9	171.0	35.4	10.4	6.6	0.1	R 65.7	R 118.2	R 0.5	27.5	63.6	0.0	(s)	76.0	R 478.8	R 118.2	R 597.0
2018	19.6	169.0	39.4	11.1	6.7	0.1	R 69.5	R 126.8	R 0.3	27.9	65.0	0.0	R (s)	76.6	R 485.3	R 124.6	R 609.8
2019	18.4	170.6	41.8	14.3	6.5	0.3	R 73.1	R 135.9	R 0.3	28.1	66.8	0.0	R (s)	74.2	R 494.4	R 105.6	R 600.0
2020	13.7	147.8	39.8	12.8	6.5	0.1	R 75.7	R 135.0	R 0.2	27.2	60.3	0.0	0.1	66.8	R 451.0	R 99.2	R 550.2
2021	14.6	160.6	36.9	11.7	6.4	0.1	R 71.6	R 126.8	R 0.2	28.4	67.1	0.0	R 0.1	72.4	R 470.1	R 108.6	R 578.8
2022	16.4	161.3	37.3	9.3	6.7	0.1	70.4	123.8	0.2	27.2	69.0	0.0	0.1	70.5	468.5	99.1	567.7

[a] Includes supplemental gaseous fuels that are commingled with natural gas.
[b] Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.
[c] Beginning in 1993, includes fuel ethanol blended into motor gasoline. There is a discontinuity in this time series between 2014 and 2015 because of coverage. See Technical Notes, Section 4.
[d] Includes asphalt and road oil, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See Technical Notes, Section 4.
[e] Conventional hydroelectric power. For 1960 through 1989, includes hydroelectric pumped-storage, which cannot be separately identified.
[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
[g] Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.
[h] Losses and co-products from the production of biodiesel and fuel ethanol.
[i] Solar thermal and photovoltaic energy. Excludes a small amount of solar thermal energy consumed as heat that is included in the residential sector.
[j] Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
[k] Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in End Use and Total. For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 2009, includes a small amount of wind energy consumed by industrial utility-scale facilities.
[l] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of Technical Notes for an explanation of changes in methodology.

kWh = Kilowatthours. – – = Not applicable. NA = Not available.
Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.
Notes: · Totals may not equal sum of components due to independent rounding. · The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. · The continuity of these data series estimates may be affected by the changing data sources and estimation methodologies. See the Technical Notes for each type of energy.
Web Page: All data are available at https://www.eia.gov/state/seds/seds-data-complete.php.
Data Source: U.S. Energy Information Administration, State Energy Data System. See Technical Notes. http://www.eia.gov/state/seds/