

Table CT3. Total end-use sector energy consumption estimates, selected years, 1960-2023, Minnesota

Year	Coal Thousand short tons	Natural gas ^a Billion cubic feet	Petroleum							Hydro-electric power ^{g,h} Million kilowatt-hours	Biomass		Geo-thermal ^h	Solar ^{h,k}	Electricity ^l Million kilowatt-hours	End use ^{h,m}	Electrical system energy losses ⁿ	Total ^{h,m}
			Distillate fuel oil ^b	HGL ^c	Jet fuel ^d	Motor gasoline ^e	Residual fuel oil	Other ^f	Total		Wood and waste ^{h,i}	Losses and co-products ^j						
1960	3,543	131	15,994	4,525	472	32,583	6,419	9,046	69,040	156	--	--	--	--	8,821	--	--	--
1970	2,595	283	21,805	8,887	3,491	44,122	4,316	10,277	92,898	168	--	--	--	--	20,715	--	--	--
1980	1,200	278	21,215	7,697	5,142	46,211	2,821	8,630	91,716	145	--	--	--	--	32,998	--	--	--
1990	1,462	285	19,485	5,966	5,099	47,760	959	12,185	91,455	172	--	--	--	--	47,167	--	--	--
2000	2,097	352	24,599	9,844	13,301	61,120	929	14,258	124,051	248	--	--	--	--	59,782	--	--	--
2005	1,372	342	26,207	11,161	12,656	64,697	1,631	15,668	132,020	130	--	--	--	--	66,019	--	--	--
2006	1,362	328	25,886	10,363	11,773	64,432	829	15,516	128,798	96	--	--	--	--	66,770	--	--	--
2007	1,417	354	26,937	10,401	11,275	64,627	1,278	15,379	129,898	96	--	--	--	--	68,231	--	--	--
2008	1,419	400	26,405	9,701	10,238	62,903	2,026	13,111	124,385	118	--	--	--	--	68,794	--	--	--
2009	1,221	370	23,040	10,587	9,200	61,240	686	12,083	116,836	134	--	--	--	--	64,004	--	--	--
2010	1,347	387	25,161	8,133	8,372	61,587	585	R 12,353	R 116,190	127	--	--	--	--	67,800	--	--	--
2011	1,331	393	26,412	7,955	8,129	58,738	520	R 12,295	R 114,049	117	--	--	--	--	68,533	--	--	--
2012	1,134	365	26,575	7,345	7,954	60,715	128	R 12,439	R 115,155	74	--	--	--	--	67,989	--	--	--
2013	1,276	418	27,149	9,688	9,091	60,569	95	R 12,488	R 119,081	90	--	--	--	--	68,644	--	--	--
2014	1,247	444	27,691	11,296	8,495	60,631	67	R 11,696	R 119,877	19	--	--	--	--	68,719	--	--	--
2015	966	378	25,616	9,046	8,919	62,346	92	R 12,362	R 118,382	115	--	--	--	--	66,579	--	--	--
2016	1,065	385	27,730	9,028	9,203	63,993	121	R 12,643	R 122,718	130	--	--	--	--	66,546	--	--	--
2017	1,209	403	27,825	10,572	9,495	63,511	20	10,905	122,328	156	--	--	--	--	67,153	--	--	--
2018	1,082	427	29,896	11,852	R 9,213	62,071	14	11,449	R 124,495	92	--	--	--	--	68,708	--	--	--
2019	1,000	434	30,915	13,310	R 9,606	61,762	44	12,024	R 127,661	97	--	--	--	--	66,966	--	--	--
2020	738	383	26,299	12,194	R 6,629	53,610	23	R 12,357	R 109,111	68	--	--	--	--	64,055	--	--	--
2021	790	401	26,071	11,534	R 6,462	56,840	27	R 13,409	R 114,344	51	--	--	--	--	66,589	--	--	--
2022	884	R 441	R 26,445	11,940	R 7,334	56,902	27	R 13,306	R 115,953	73	--	--	--	--	66,635	--	--	--
2023	916	405	25,742	10,716	8,429	57,322	23	13,039	115,271	58	--	--	--	--	66,216	--	--	--

Trillion Btu

1960	76.8	135.9	93.2	17.3	2.6	171.2	40.4	54.3	378.9	0.5	25.3	NA	NA	NA	30.1	647.5	60.7	708.1
1970	54.2	283.9	127.0	33.9	19.7	231.8	27.1	63.6	503.1	0.6	23.2	NA	NA	NA	70.7	935.7	144.8	1,080.5
1980	21.0	277.0	123.6	28.2	29.1	242.7	17.7	53.7	495.1	0.5	46.6	NA	NA	NA	112.6	952.7	239.5	1,192.3
1990	27.0	286.4	113.5	21.9	28.9	250.9	6.0	76.7	498.0	0.6	41.1	0.7	0.1	0.3	160.9	1,017.2	382.5	1,399.7
2000	40.5	357.4	143.1	36.4	75.4	317.9	5.8	90.3	668.9	0.8	45.6	13.4	0.2	0.3	204.0	1,331.1	404.7	1,735.8
2005	26.1	346.0	152.5	40.8	71.8	335.9	10.3	99.0	710.1	0.4	47.8	24.5	0.4	0.1	225.3	1,381.3	470.1	1,851.4
2006	25.7	333.1	150.2	37.8	66.8	334.1	5.2	97.6	691.6	0.3	44.7	31.6	0.5	0.1	227.8	1,357.5	464.0	1,821.5
2007	27.0	360.6	155.8	37.9	63.9	332.3	8.0	96.6	694.6	0.3	46.3	33.6	0.6	0.1	232.8	1,398.5	471.3	1,869.8
2008	27.2	409.9	152.6	35.7	58.1	321.2	12.7	82.2	662.5	0.4	46.9	40.1	0.7	0.2	234.7	1,424.8	449.5	1,874.4
2009	23.4	381.6	R 132.9	38.4	52.2	311.7	4.3	75.6	R 615.1	0.5	48.6	52.4	0.9	0.2	218.4	R 1,341.0	403.2	R 1,744.2
2010	25.7	390.7	R 145.2	31.2	47.5	312.1	3.7	R 77.4	R 617.0	0.4	55.2	60.2	1.0	0.2	231.3	R 1,381.8	432.2	R 1,814.0
2011	25.4	396.5	R 152.0	30.6	46.1	297.4	3.3	R 76.8	R 606.1	0.4	52.9	62.5	1.0	0.2	233.8	R 1,378.9	413.8	R 1,792.7
2012	21.4	372.0	R 152.9	28.2	45.1	307.3	0.8	R 77.7	R 612.1	0.3	49.1	56.8	1.1	0.2	232.0	R 1,345.0	402.9	R 1,747.9
2013	24.2	427.7	R 156.2	37.2	51.5	306.5	0.6	R 78.0	R 630.0	0.3	53.0	55.1	1.1	0.2	234.2	R 1,425.8	395.2	R 1,821.1
2014	23.4	458.5	R 159.1	43.4	48.2	306.7	0.4	R 73.1	R 630.9	0.1	R 58.5	60.2	1.1	0.3	234.5	R 1,467.4	401.2	R 1,868.6
2015	17.6	392.7	R 147.1	34.7	50.6	315.3	0.6	R 77.2	625.5	0.4	R 56.7	62.1	1.1	0.3	227.2	R 1,383.6	361.9	R 1,745.5
2016	19.8	398.0	R 159.2	34.7	52.2	323.5	0.8	R 80.4	R 650.7	0.4	R 54.9	62.4	1.1	0.3	227.1	R 1,414.7	355.4	R 1,770.1
2017	22.1	415.3	R 159.7	40.6	53.8	320.9	0.1	68.7	R 643.9	0.5	R 47.5	63.6	1.1	0.4	229.1	R 1,423.6	356.2	R 1,779.7
2018	19.7	446.6	R 171.3	45.5	52.2	313.7	0.1	72.5	R 655.3	0.3	R 53.3	65.0	1.1	0.5	234.4	R 1,476.3	381.2	R 1,857.6
2019	18.5	455.5	R 176.8	51.1	R 54.5	312.0	0.3	76.0	R 670.7	0.3	R 55.4	66.8	1.1	0.6	228.5	R 1,497.4	325.2	R 1,822.7
2020	13.7	403.0	R 150.4	46.8	26.2	270.8	0.1	78.1	R 572.6	0.2	R 46.1	60.3	1.1	0.7	218.6	R 1,316.3	324.6	R 1,640.9
2021	14.7	422.2	R 149.9	44.3	36.6	287.0	0.2	83.2	R 601.2	0.2	R 47.2	67.1	1.1	0.8	227.2	R 1,381.9	340.8	R 1,722.7
2022	16.4	R 464.2	R 152.0	45.9	R 41.6	287.3	0.2	R 82.6	R 609.5	0.2	R 47.3	69.0	1.1	1.0	227.4	R 1,436.3	R 320.2	R 1,756.5
2023	17.0	428.7	148.0	41.2	47.8	289.4	0.1	80.8	607.4	0.2	42.6	70.8	1.1	1.3	225.9	1,394.8	294.5	1,689.4

^a Includes supplemental gaseous fuels that are commingled with natural gas.
^b Beginning in 2009, includes biodiesel blended into distillate fuel oil. Beginning in 2011, includes renewable diesel blended into distillate fuel oil. Excludes biofuels product supplied.
^c Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.
^d Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other petroleum."
^e Beginning in 1993, includes fuel ethanol blended into motor gasoline.
^f Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See technical notes, Section 4.
^g Conventional hydroelectric power. For 1960 through 1989, includes hydroelectric pumped-storage, which cannot be separately identified.
^h There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
ⁱ Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.
^j Losses and co-products from the production of biodiesel and fuel ethanol.
^k Solar thermal and photovoltaic energy.

^l Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
^m 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 the commercial and industrial sectors. Beginning in 2021, adjusted for the double-counting of biofuels product supplied.
ⁿ 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.
 -- = 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: Total end-use sector consumption estimates are the sum of the consumption estimates for the residential, commercial, industrial, and transportation sectors. Totals may not equal sum of components due to independent rounding. The continuity of these data series estimates may be affected by 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. <https://www.eia.gov/state/seds/>