

Table CT8. Electric power sector consumption estimates, selected years, 1960-2022, Michigan

Year	Coal	Natural gas ^a	Petroleum				Nuclear electric power	Hydroelectric power ^d	Biomass	Geothermal ^f	Solar ^{f,g}	Wind ^f	Electricity net imports ^h	Total ^{f,i}
			Distillate fuel oil ^b	Petroleum coke	Residual fuel oil ^c	Total			Wood and waste ^{e,f}					
	Thousand short tons	Billion cubic feet	Thousand barrels				Million kilowatthours			Million kilowatthours				
1960	10,300	5	77	0	362	440	0	1,817	--	0	NA	NA	1,250	--
1965	16,123	3	68	0	316	384	181	1,667	--	0	NA	NA	-413	--
1970	20,124	64	965	0	4,514	5,479	375	1,581	--	0	NA	NA	-400	--
1975	20,914	57	1,538	0	14,136	15,674	7,176	989	--	0	NA	NA	320	--
1980	22,150	26	780	0	9,621	10,400	15,891	1,083	--	0	NA	NA	5,685	--
1985	25,896	10	646	0	522	1,168	13,452	881	--	0	0	0	391	--
1990	29,830	85	341	0	1,149	1,490	21,611	1,605	--	0	0	0	-10,918	--
1995	31,400	123	410	0	1,101	1,512	24,448	1,570	--	0	0	0	5,760	--
2000	33,277	135	374	9	1,683	2,066	18,882	1,401	--	0	0	0	-327	--
2005	36,273	131	372	170	1,099	1,641	32,872	1,433	--	0	0	2	-2,730	--
2006	34,926	109	302	218	231	751	29,066	1,488	--	0	0	2	-2,117	--
2007	36,574	124	295	252	529	1,076	31,517	1,244	--	0	0	3	-1,206	--
2008	36,476	93	287	236	214	738	31,484	1,339	--	0	0	141	2,305	--
2009	35,330	84	257	234	127	618	21,851	1,347	--	0	0	300	5,637	--
2010	34,976	113	255	220	117	593	29,625	1,222	--	0	0	360	3,564	--
2011	32,335	113	321	165	44	530	32,889	1,328	--	0	0	456	4,069	--
2012	29,669	181	223	178	50	451	28,020	1,181	--	0	0	1,132	4,270	--
2013	31,653	111	223	624	28	875	28,921	1,390	--	0	0	2,800	5,818	--
2014	29,401	112	261	1,862	16	2,139	31,246	1,571	--	0	0	3,868	5,844	--
2015	29,487	166	195	1,473	21	1,688	29,334	1,469	--	0	1	4,797	8,291	--
2016	23,126	243	214	1,421	28	1,662	31,552	1,539	--	0	9	4,696	7,807	--
2017	24,058	213	179	2,278	37	2,493	32,381	1,650	--	0	63	5,191	5,705	--
2018	24,238	254	211	2,565	17	2,793	30,479	1,559	--	0	116	5,457	6,487	--
2019	21,278	276	163	1,751	15	1,929	32,909	1,640	--	0	142	5,826	2,645	--
2020	15,919	301	172	1,812	18	2,002	30,333	1,704	--	0	154	6,735	1,707	--
2021	20,719	252	252	2,259	22	2,533	34,338	1,329	--	0	424	7,697	2,188	--
2022	19,861	320	187	3,443	14	3,644	26,013	1,376	--	0	859	9,151	1,745	--

Trillion Btu

1960	256.3	5.4	0.5	0.0	2.3	2.7	0.0	R 6.2	0.0	0.0	NA	NA	4.3	R 274.9
1965	399.9	3.0	0.4	0.0	2.0	2.4	2.1	R 5.7	0.0	0.0	NA	NA	-1.4	R 411.7
1970	487.0	65.2	5.6	0.0	28.4	34.0	4.1	R 5.4	0.0	0.0	NA	NA	-1.4	R 594.4
1975	494.9	47.3	8.9	0.0	88.9	97.8	79.0	R 3.4	0.0	0.0	NA	NA	1.1	R 723.5
1980	532.2	19.4	4.5	0.0	60.5	65.0	173.3	R 3.7	0.0	0.0	NA	NA	19.4	R 813.0
1985	605.8	4.7	3.8	0.0	3.3	7.0	142.9	R 3.0	0.0	0.0	0.0	0.0	1.3	R 764.7
1990	663.5	69.1	2.0	0.0	7.2	9.2	228.7	R 5.5	9.0	0.0	0.0	0.0	-37.3	R 946.2
1995	671.2	105.1	2.4	0.0	6.9	9.3	256.9	R 5.4	19.7	0.0	0.0	0.0	19.7	R 1,084.8
2000	694.7	126.0	2.2	0.1	10.6	12.8	196.9	R 4.8	25.6	0.0	0.0	0.0	-1.1	R 1,058.0
2005	718.2	132.6	2.2	1.0	6.9	10.0	343.0	R 4.9	23.2	0.0	0.0	(s)	-9.3	R 1,222.7
2006	693.4	110.4	1.8	1.2	1.5	4.5	303.3	R 5.1	23.2	0.0	0.0	(s)	-7.2	R 1,132.6
2007	721.3	125.5	1.7	1.4	3.3	6.5	330.6	R 4.2	22.1	0.0	0.0	(s)	-4.1	R 1,206.1
2008	712.4	94.8	1.7	1.4	1.3	4.4	329.1	R 4.6	22.7	0.0	0.0	R 0.5	7.9	R 1,176.3
2009	682.5	85.1	1.5	1.3	0.8	3.6	228.5	R 4.6	22.0	0.0	0.0	R 1.0	19.2	R 1,046.6
2010	677.6	114.8	1.5	1.3	0.7	3.5	309.6	R 4.2	21.9	0.0	0.0	R 1.2	12.2	R 1,145.0
2011	620.4	114.5	1.9	0.9	0.3	3.1	344.2	R 4.5	22.9	0.0	0.0	R 1.6	13.9	R 1,125.0
2012	559.7	184.4	1.3	1.0	0.3	2.6	293.6	R 4.0	22.3	0.0	0.0	R 3.9	14.6	R 1,085.2
2013	588.9	113.0	1.3	3.6	0.2	5.0	302.2	R 4.7	23.2	0.0	0.0	R 9.6	19.9	R 1,066.5
2014	554.2	114.3	1.5	10.7	0.1	12.3	326.8	R 5.4	24.7	0.0	0.0	R 13.2	19.9	R 1,070.7
2015	555.0	170.7	1.1	8.4	0.1	9.7	306.8	R 5.0	21.2	0.0	0.0	(s)	28.3	R 1,113.1
2016	432.2	251.6	1.2	8.1	0.2	9.5	330.0	R 5.3	21.8	0.0	0.0	R (s)	26.6	R 1,093.1
2017	446.0	220.9	1.0	13.0	0.2	14.3	338.7	R 5.6	22.7	0.0	0.0	R 0.2	19.5	R 1,085.6
2018	452.4	266.0	1.2	14.7	0.1	16.0	318.7	R 5.3	22.5	0.0	0.0	R 0.4	22.1	R 1,122.0
2019	397.8	291.6	0.9	10.0	0.1	11.0	343.6	R 5.6	21.9	0.0	0.0	R 0.5	9.0	R 1,101.0
2020	303.0	317.7	1.0	10.4	0.1	11.5	316.9	R 5.8	20.1	0.0	0.0	R 0.5	5.8	R 1,004.2
2021	390.7	265.4	1.5	12.9	0.1	14.5	R 358.1	R 4.5	22.6	0.0	0.0	R 1.4	7.5	R 1,091.0
2022	376.4	337.7	1.1	19.7	0.1	20.9	271.3	4.7	22.1	0.0	2.9	31.2	6.0	1,073.0

^a Includes supplemental gaseous fuels that are commingled with natural gas.

^b Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil Nos. 1 and 2, and small amounts of kerosene and jet fuel.

^c Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil Nos. 4, 5, and 6.

^d Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

^e Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.

^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 Solar thermal and photovoltaic energy.

^h Electricity traded with Canada and Mexico. Btu value calculated by converting net imports in kilowatthours by 3,412 Btu per kilowatthour.

ⁱ 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 the total.

-- = Not applicable. NA = Not available.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: · Totals may not equal sum of components due to independent rounding. · The electric power sector consists of 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. · Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. · 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/>