

Table ET5. Industrial sector energy price and expenditure estimates, selected years, 1970-2022, Michigan

Year	Primary energy											Electricity ⁱ	Total energy ^{f,g,h}	
	Coal			Natural gas ^a	Petroleum					Biomass	Total ^{f,g,h}			
	Coking coal	Steam coal	Total		Distillate fuel oil	HGL ^b	Motor gasoline ^c	Residual fuel oil	Other ^d	Total				Wood and waste ^{e,f}
Prices in dollars per million Btu														
1970	0.55	0.53	0.54	0.53	0.68	1.44	2.71	0.54	1.81	1.35	1.44	0.71	3.74	1.02
1975	2.07	1.49	1.82	1.22	2.27	2.63	4.72	1.98	3.41	2.90	1.44	1.78	7.83	2.54
1980	2.27	1.82	2.04	2.87	5.56	5.38	10.09	3.23	7.97	6.67	1.43	3.35	13.18	4.81
1985	2.08	2.00	2.03	4.95	6.38	9.12	9.10	4.39	9.78	8.44	1.43	4.65	16.75	6.99
1990	1.80	1.77	1.78	3.72	5.54	10.24	8.78	3.15	8.02	7.71	1.00	4.02	17.15	6.40
1995	1.57	1.71	1.67	3.48	4.67	7.91	8.47	2.57	7.47	7.00	1.24	3.67	15.02	5.81
2000	1.66	1.61	1.64	3.76	9.30	11.76	11.90	3.70	8.75	9.20	1.42	4.41	14.93	6.58
2005	3.37	2.80	3.03	8.50	15.08	17.68	17.69	6.70	11.56	13.68	2.71	8.54	15.61	10.06
2006	3.76	2.87	3.26	9.72	17.22	19.59	19.99	7.89	16.69	17.24	2.65	9.85	17.72	11.64
2007	3.70	2.96	3.27	9.26	18.71	22.05	22.32	8.59	17.43	18.33	2.52	10.12	18.96	12.30
2008	4.56	3.47	4.02	10.02	25.37	26.36	25.57	12.41	22.38	22.92	2.84	11.08	19.71	13.24
2009	5.67	4.27	5.03	9.43	15.02	20.42	18.58	7.98	19.97	18.27	2.66	10.55	20.47	13.11
2010	6.18	3.92	5.24	9.10	18.88	R 25.18	22.04	11.66	17.11	R 18.93	2.69	R 9.90	20.75	R 12.66
2011	7.32	4.10	6.03	8.16	25.50	R 30.11	28.03	15.63	20.26	R 23.75	2.75	R 10.48	21.46	R 13.28
2012	6.96	4.24	5.85	7.26	25.70	R 22.84	28.62	16.91	20.40	R 22.88	2.63	R 9.81	22.34	R 13.02
2013	5.52	3.93	4.82	6.83	25.10	R 24.40	27.92	16.68	20.54	R 22.88	2.60	R 9.53	22.61	R 12.59
2014	5.10	3.83	4.56	7.70	23.42	R 26.27	26.69	15.95	19.63	R 21.83	3.13	R 9.76	22.50	R 12.80
2015	4.75	3.44	4.27	6.39	15.04	10.56	19.16	10.27	16.30	15.79	3.02	7.90	20.59	10.84
2016	3.94	3.17	3.60	5.51	12.10	9.71	17.04	7.32	R 12.91	R 12.85	2.88	6.93	20.25	10.16
2017	4.75	3.40	4.30	5.71	14.63	R 13.62	19.13	9.80	R 13.34	R 14.26	2.79	R 7.29	21.09	R 10.54
2018	5.14	3.48	4.66	5.71	17.76	R 15.04	21.21	11.12	R 16.77	R 17.42	2.52	R 7.89	20.81	R 10.90
2019	5.89	3.92	5.35	5.68	16.73	R 11.25	20.21	11.32	R 16.35	R 16.50	2.58	R 7.92	20.73	R 10.85
2020	5.13	4.03	4.90	5.52	12.33	R 10.42	16.59	8.38	R 14.24	R 13.75	2.16	R 7.30	21.23	R 10.44
2021	5.09	3.71	4.87	6.33	17.42	R 17.52	23.43	12.53	R 16.23	R 17.33	2.63	R 8.56	22.54	R 11.66
2022	7.63	4.88	7.19	8.61	28.51	18.58	30.85	20.03	21.84	24.16	2.86	11.82	24.41	14.63

Year	Expenditures in million dollars													
	Coking coal	Steam coal	Total	Natural gas ^a	Distillate fuel oil	HGL ^b	Motor gasoline ^c	Residual fuel oil	Other ^d	Total	Wood and waste ^{e,f}	Total ^{f,g,h}	Electricity ⁱ	Total energy ^{f,g,h}
1970	73.4	99.3	172.7	136.5	33.3	4.3	39.2	12.0	121.7	210.6	4.5	524.3	317.2	841.5
1975	290.3	158.8	449.1	362.3	115.9	11.2	46.9	32.6	198.7	405.3	4.6	1,221.3	764.8	1,986.1
1980	250.1	198.2	448.3	700.3	155.7	49.7	51.3	56.3	525.9	838.9	10.8	1,998.3	1,367.4	3,365.7
1985	149.7	195.2	344.9	884.9	163.4	264.8	57.0	30.5	418.4	934.1	12.7	2,177.0	1,880.0	4,057.0
1990	51.3	158.6	209.9	1,041.2	127.7	232.9	45.0	20.1	418.8	844.4	18.8	2,114.8	1,999.1	4,113.9
1995	59.1	122.8	181.9	841.7	93.6	128.3	57.8	3.3	434.1	717.1	39.1	1,779.8	1,695.7	3,475.4
2000	91.0	80.8	171.8	875.1	219.3	118.9	65.6	8.4	601.7	1,014.0	42.1	2,102.9	1,850.1	3,953.0
2005	106.9	128.0	234.9	1,713.7	304.6	375.8	205.5	37.3	660.8	1,584.1	73.9	3,606.7	1,796.7	5,403.4
2006	133.2	127.9	261.1	1,741.0	301.6	292.4	246.5	35.1	834.5	1,710.2	67.4	3,779.6	1,997.7	5,777.3
2007	116.9	130.0	246.9	1,291.0	341.0	303.0	254.5	50.1	908.8	1,857.5	64.5	3,459.9	2,125.0	5,584.9
2008	188.6	143.7	332.3	1,335.3	500.4	86.7	245.8	74.3	920.3	1,827.5	75.1	3,570.2	2,117.1	5,687.3
2009	144.7	92.0	236.6	1,132.2	267.9	64.3	136.4	16.2	820.2	1,305.0	53.2	2,727.0	1,844.8	4,571.9
2010	243.3	108.8	352.0	1,223.1	351.3	R 204.0	140.0	10.8	588.8	R 1,294.9	73.8	R 2,943.8	2,109.9	R 5,053.8
2011	291.7	110.1	401.8	1,154.9	472.1	R 274.2	171.1	20.9	611.5	R 1,549.8	85.4	R 3,192.0	2,235.9	R 5,427.9
2012	246.4	103.3	349.8	1,081.0	418.1	R 214.1	190.6	19.8	633.9	R 1,476.4	82.9	R 2,990.1	2,340.0	R 5,330.1
2013	209.9	116.1	326.0	1,158.9	480.2	R 250.8	195.6	14.3	774.0	R 1,714.9	84.6	R 3,284.5	2,386.9	R 5,671.4
2014	183.1	102.8	286.0	1,378.8	428.2	R 252.2	129.5	7.2	823.5	R 1,640.6	99.9	R 3,405.3	2,457.3	R 5,862.6
2015	183.1	77.6	260.7	1,099.9	329.3	60.8	151.0	4.6	710.3	1,256.0	90.0	2,706.6	2,123.7	4,830.3
2016	84.4	54.9	139.3	963.4	272.5	57.6	137.6	1.1	R 604.5	R 1,073.4	83.3	R 2,259.4	2,107.2	R 4,366.6
2017	169.0	60.8	229.8	985.8	294.7	R 68.2	155.8	1.1	R 619.9	R 1,139.6	77.4	R 2,432.6	2,166.6	R 4,599.2
2018	196.2	54.0	250.1	1,023.7	383.9	R 66.1	176.1	1.8	R 707.7	R 1,335.6	78.1	R 2,687.5	2,154.6	R 4,842.1
2019	213.5	54.0	267.5	1,012.1	359.9	R 60.5	166.0	1.6	R 736.8	R 1,324.9	78.5	R 2,683.0	2,083.3	R 4,766.4
2020	127.3	26.9	154.1	869.6	236.0	R 55.2	136.8	1.3	R 648.0	R 1,077.3	61.7	R 2,162.7	1,827.7	R 3,990.4
2021	195.0	26.7	221.6	1,026.8	371.8	R 93.1	185.5	1.8	R 745.7	R 1,398.0	79.6	R 2,725.9	2,049.1	R 4,775.1
2022	302.0	36.5	338.5	1,476.3	615.1	135.3	257.9	2.9	1,019.2	2,030.5	85.8	3,931.1	2,335.9	6,266.9

^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 the expenditure series between 2014 and 2015 because of changes in consumption estimates from the source. See Consumption 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 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 the use of wood and biomass waste beginning in 1989.
^g There are no direct fuel costs for hydroelectric, geothermal, solar, or wind energy.

^h For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column.
ⁱ Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers. Where shown, R = Revised data and (s) = Value less than 0.05 million dollars.
Where shown, — = No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of the Technical Notes.
Notes: · Expenditure 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.
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/>