

Table CT6. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2021, Iowa

Year	Coal Thousand Short Tons	Natural Gas ^a Billion Cubic Feet	Petroleum						Hydro-electric Power ^{e,i} Million kWh	Biomass		Geo-thermal ^f	Solar ^{f,i} Million kWh	Electricity ^j Million kWh	End Use ^{f,k}	Electrical System Energy Losses ^j	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 Barrels														
1960	2,193	43	5,536	1,098	5,797	573	3,011	16,016	2	---	---	---	NA	2,676	---	---	---
1965	2,464	68	5,807	1,815	5,373	354	3,471	16,620	2	---	---	---	NA	3,719	---	---	---
1970	1,955	99	5,884	2,993	5,391	261	3,913	18,398	1	---	---	---	NA	5,338	---	---	---
1975	1,333	121	4,670	5,593	3,791	279	3,130	17,463	1	---	---	---	NA	6,626	---	---	---
1980	1,505	115	4,698	6,557	2,612	273	3,047	17,187	1	---	---	---	NA	9,318	---	---	---
1985	1,572	87	4,971	4,893	1,703	179	2,729	14,475	1	---	---	---	NA	9,520	---	---	---
1990	2,353	90	4,807	3,087	1,072	94	2,046	11,105	0	---	---	---	0	11,392	---	---	---
1995	2,761	113	5,636	12,267	1,038	92	2,228	21,260	0	---	---	---	0	13,771	---	---	---
2000	2,902	100	6,027	13,368	784	140	3,232	23,551	0	---	---	---	0	17,127	---	---	---
2001	2,814	93	6,813	12,031	1,201	43	2,435	22,524	0	---	---	---	0	16,238	---	---	---
2002	2,860	92	6,209	13,111	1,265	60	2,922	23,567	0	---	---	---	0	16,548	---	---	---
2003	2,898	94	4,722	7,859	1,323	150	2,756	16,810	0	---	---	---	0	16,803	---	---	---
2004	2,925	94	4,571	14,128	1,698	282	3,426	24,105	0	---	---	---	0	17,437	---	---	---
2005	2,930	96	4,550	15,814	1,568	191	3,617	25,740	0	---	---	---	0	17,915	---	---	---
2006	3,067	101	4,418	16,355	1,702	44	3,061	25,580	0	---	---	---	0	18,331	---	---	---
2007	3,009	141	4,683	11,945	1,394	44	2,538	20,604	0	---	---	---	0	19,125	---	---	---
2008	2,904	122	2,904	13,871	1,102	170	2,531	23,407	0	---	---	---	0	19,237	---	---	---
2009	2,682	165	5,544	14,538	1,152	66	2,192	23,591	0	---	---	---	0	18,211	---	---	---
2010	3,348	167	6,119	14,586	1,320	20	1,733	23,778	0	---	---	---	(s)	18,865	---	---	---
2011	3,542	167	5,949	13,872	1,355	32	1,657	22,865	0	---	---	---	(s)	19,240	---	---	---
2012	3,345	169	6,290	11,246	985	8	1,935	20,464	0	---	---	---	(s)	19,512	---	---	---
2013	3,433	174	6,181	15,491	970	6	2,732	25,381	0	---	---	---	(s)	19,635	---	---	---
2014	3,094	172	6,643	15,606	772	6	2,690	25,717	0	---	---	---	1	20,436	---	---	---
2015	2,849	179	7,657	14,474	748	0	2,386	25,265	0	---	---	---	1	21,289	---	---	---
2016	2,485	190	7,912	14,527	875	0	2,505	25,818	0	---	---	---	3	22,046	---	---	---
2017	2,412	241	7,446	14,737	880	17	2,622	25,701	0	---	---	---	3	23,065	---	---	---
2018	2,399	256	7,374	14,766	870	11	2,414	25,435	0	---	---	---	4	23,953	---	---	---
2019	2,326	250	7,967	15,817	797	16	2,391	26,988	0	---	---	---	5	24,239	---	---	---
2020	2,121	235	7,861	14,599	811	0	3,043	26,314	0	---	---	---	8	24,467	---	---	---
2021	2,051	228	7,596	14,354	830	15	2,590	25,385	0	---	---	---	9	26,106	---	---	---

Trillion Btu																	
1960	51.7	44.9	32.2	4.2	30.5	3.6	19.6	90.1	(s)	2.8	NA	NA	NA	9.1	198.6	22.6	221.2
1965	57.5	68.9	32.7	6.9	28.2	2.2	22.0	92.0	(s)	2.9	NA	NA	NA	12.7	234.1	30.3	264.4
1970	43.0	99.9	34.3	10.8	28.3	1.6	24.8	99.8	(s)	3.9	NA	NA	NA	18.2	264.7	44.1	308.8
1975	28.4	122.5	27.2	19.8	19.9	1.8	19.9	88.5	(s)	5.1	NA	NA	NA	22.6	267.1	54.2	321.3
1980	32.4	114.9	27.4	23.1	13.7	1.7	18.9	84.8	(s)	37.8	NA	NA	NA	31.8	301.7	76.4	378.1
1985	35.6	88.0	29.0	16.7	8.9	1.1	17.4	73.2	(s)	44.3	4.6	NA	NA	32.5	263.5	74.4	337.9
1990	53.1	90.9	28.0	10.6	5.6	0.6	13.1	57.9	0.0	39.9	14.0	0.0	0.0	38.9	274.1	97.6	371.7
1995	57.9	113.5	32.8	42.5	5.4	0.6	14.2	95.4	0.0	33.1	26.7	0.0	0.0	47.0	350.2	117.2	467.4
2000	60.9	100.6	35.1	45.7	4.1	0.9	20.7	106.4	0.0	24.9	26.9	0.0	0.0	58.4	364.4	147.5	511.9
2001	59.1	92.9	39.6	41.2	6.2	0.3	15.7	103.1	0.0	20.9	26.8	0.0	0.0	55.4	344.5	138.7	483.2
2002	58.5	92.5	36.1	45.0	6.6	0.4	19.9	107.0	0.0	23.8	26.7	0.0	0.0	56.5	350.8	138.0	488.8
2003	60.2	94.1	27.5	27.1	8.9	0.9	17.9	80.3	0.0	23.0	35.8	0.0	0.0	57.3	336.6	139.6	476.2
2004	59.2	94.2	26.6	48.5	8.8	1.8	22.4	108.1	0.0	22.8	50.7	0.0	0.0	59.5	381.7	149.1	530.8
2005	59.1	96.6	26.5	54.3	8.1	1.2	23.6	113.7	0.0	24.1	64.0	0.0	0.0	61.1	405.3	146.8	552.1
2006	60.8	102.3	25.6	55.9	8.8	0.3	19.9	110.6	0.0	14.4	86.1	0.0	0.0	62.5	421.4	149.8	571.2
2007	60.8	142.3	27.1	40.5	7.2	0.3	16.4	91.5	0.0	16.3	110.5	0.0	0.0	65.3	470.6	151.8	622.4
2008	57.5	164.1	32.6	47.1	5.6	1.1	16.4	102.7	0.0	16.3	131.3	0.0	0.0	65.6	520.9	150.9	671.8
2009	52.6	165.7	32.0	48.5	5.9	0.4	14.2	101.0	0.0	18.4	171.1	0.0	0.0	62.1	552.7	143.6	696.3
2010	66.0	168.4	35.3	46.6	6.7	0.1	11.1	99.9	0.0	19.5	192.9	0.0	(s)	64.4	591.9	146.5	738.4
2011	70.3	168.7	34.3	43.8	6.9	0.2	10.7	95.9	0.0	11.2	203.4	0.0	(s)	65.6	597.0	149.1	746.1
2012	63.6	171.2	36.3	36.1	5.0	0.1	12.5	90.0	0.0	10.2	194.7	0.0	(s)	66.6	576.7	147.4	724.1
2013	64.3	178.6	35.6	49.9	4.9	(s)	17.0	107.5	0.0	10.7	196.4	0.0	(s)	67.0	608.4	147.9	756.4
2014	58.7	179.0	38.3	50.4	3.9	(s)	16.6	109.2	0.0	13.5	200.4	0.0	(s)	69.7	613.5	151.6	765.1
2015	52.5	188.2	44.1	46.2	3.8	0.0	14.9	108.8	0.0	12.8	210.7	0.0	(s)	72.6	627.2	152.1	779.4
2016	48.4	204.2	45.5	46.2	4.4	0.0	15.6	111.8	0.0	12.5	214.5	0.0	(s)	75.2	641.1	156.6	797.8
2017	44.6	254.6	42.9	R 47.0	4.4	0.1	16.4	R 110.8	0.0	10.4	224.3	0.0	(s)	78.7	R 700.1	160.1	R 860.2
2018	43.9	271.1	42.5	R 47.2	4.4	0.1	14.9	R 109.0	0.0	81.7	232.0	0.0	(s)	81.7	R 725.2	R 158.5	R 883.7
2019	42.8	265.6	45.9	R 51.2	4.0	0.1	14.7	R 115.9	0.0	10.9	231.2	0.0	(s)	82.7	R 729.6	R 156.8	R 886.5
2020	38.6	250.5	45.2	46.5	4.1	0.0	19.0	114.8	0.0	10.8	203.8	0.0	0.1	83.5	681.4	152.4	833.8
2021	37.3	243.4	43.8	45.6	4.2	0.1	16.3	109.9	0.0	11.2	214.9	0.0	0.1	89.1	685.5	166.6	852.1

^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/>