

Table CO2.T1. Total CO2 emissions estimates from energy consumption by source, 1960-2023, Iowa
(million metric tons of carbon dioxide (CO2))

Year	Coal	Natural gas ^a	Petroleum ^b	Total
1960	11.0	10.2	18.8	40.0
1965	12.0	13.1	19.3	44.4
1970	12.4	18.5	22.6	53.5
1975	12.5	18.3	24.4	55.2
1980	22.3	14.1	22.8	59.2
1985	25.6	10.0	20.6	56.2
1990	31.8	9.0	20.4	61.3
1995	35.4	11.0	22.8	69.1
1996	36.4	11.7	24.1	72.2
1997	37.2	10.9	23.7	71.8
1998	40.4	9.6	24.6	74.6
1999	41.1	10.5	24.8	76.4
2000	42.4	10.6	24.7	77.8
2001	42.2	10.1	24.2	76.6
2002	42.1	10.2	24.9	77.1
2003	42.4	10.4	24.4	77.2
2004	42.3	10.4	25.8	78.5
2005	41.0	11.1	26.3	78.4
2006	41.5	10.9	27.1	79.5
2007	44.3	13.8	27.2	85.3
2008	46.3	15.6	26.8	88.6
2009	42.4	14.9	26.3	83.5
2010	47.1	14.6	26.8	88.5
2011	44.2	14.5	26.8	85.5
2012	40.3	13.9	25.3	79.5
2013	38.4	16.0	26.2	80.7
2014	38.3	16.3	27.0	81.6
2015	33.3	15.7	26.4	75.3
2016	28.5	16.4	27.0	71.9
2017	28.7	19.4	25.7	73.8
2018	31.2	22.3	26.4	79.8
2019	25.5	22.4	27.1	75.0
2020	17.5	20.5	25.2	63.3
2021	25.3	19.8	25.9	71.1
2022	21.8	22.5	27.2	71.5
2023	19.3	23.1	25.7	68.0

^a Excludes supplemental gaseous fuels.

^b Excludes biofuels.

— = No consumption. Where shown, R = Revised data and (s) = Value less than 0.05.

Notes: • Data are carbon dioxide (CO2) emissions estimates from fossil fuels primary energy consumption for all sectors, excluding renewable energy. The state data do not account for interstate flow of electricity and represent CO2 emissions in the state where fossil fuels are burned to generate electricity, although the electricity might be sold to ultimate customers in other states and 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: Table by the U.S. Energy Information Administration, State Energy Data System. See technical notes. <http://www.eia.gov/state/seds/>

Table CO2.T2. Residential sector CO2 emissions estimates from energy consumption, 1960-2023, Iowa
(million metric tons of carbon dioxide (CO2))

Year	Coal ^a	Natural gas ^b	Petroleum ^c	Total
1960	1.1	3.2	2.9	7.2
1965	0.6	4.1	2.8	7.5
1970	0.2	5.1	2.8	8.2
1975	0.1	5.0	2.6	7.7
1980	(s)	4.5	2.0	6.6
1985	0.1	3.5	1.5	5.1
1990	0.1	2.9	1.1	4.2
1995	(s)	3.5	1.4	4.9
1996	0.1	3.8	1.7	5.6
1997	0.1	3.5	1.6	5.2
1998	0.1	2.9	1.3	4.3
1999	0.1	3.3	1.6	5.0
2000	0.1	3.4	1.6	5.1
2001	0.1	3.2	1.1	4.4
2002	0.1	3.2	1.4	4.7
2003	0.1	3.3	1.4	4.8
2004	(s)	3.1	1.2	4.4
2005	(s)	3.1	1.2	4.4
2006	0.1	2.8	1.1	4.0
2007	0.1	3.2	1.2	4.4
2008	—	3.6	1.5	5.1
2009	—	3.3	1.4	4.8
2010	—	3.2	1.2	4.4
2011	—	3.2	1.2	4.4
2012	—	2.7	1.0	3.6
2013	—	3.6	1.2	4.8
2014	—	3.8	1.2	5.0
2015	—	3.2	1.0	4.2
2016	—	3.1	1.0	4.1
2017	—	3.1	1.0	4.1
2018	—	3.6	1.5	5.1
2019	—	3.7	1.6	5.4
2020	—	3.3	1.5	4.9
2021	—	3.2	1.4	4.6
2022	—	3.7	1.7	5.4
2023	—	3.2	1.4	4.6

^a Beginning in 2008, consumption data not collected and assumed to be zero.

^b Excludes supplemental gaseous fuels.

^c Excludes biofuels.

— = No consumption. Where shown, R = Revised data and (s) = Value less than 0.05.

Notes: • Data are carbon dioxide (CO2) emissions estimates from fossil fuels primary energy consumption, excluding renewable energy. The state data do not account for interstate flow of electricity and represent CO2 emissions in the state where fossil fuels are burned to generate

electricity, although the electricity might be sold to ultimate customers in other states and 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: Table by the U.S. Energy Information Administration, State Energy Data System. See technical notes. <https://www.eia.gov/state/seds/>

Table CO2.T3. Commercial sector CO2 emissions estimates from energy consumption, 1960-2023, Iowa
(million metric tons of carbon dioxide (CO2))

Year	Coal	Natural gas ^a	Petroleum ^b	Total
1960	0.8	1.5	0.8	3.1
1965	0.4	2.1	0.7	3.2
1970	0.2	3.1	0.7	3.9
1975	0.2	3.6	0.7	4.4
1980	0.1	2.7	0.6	3.4
1985	0.4	2.1	0.7	3.2
1990	0.5	1.8	0.4	2.7
1995	0.2	2.1	0.3	2.6
1996	0.5	2.3	0.4	3.2
1997	0.7	2.2	0.5	3.4
1998	0.6	1.8	0.5	2.9
1999	0.8	2.1	0.5	3.4
2000	0.6	2.1	0.6	3.2
2001	0.6	2.1	0.6	3.2
2002	0.6	2.1	0.6	3.3
2003	0.6	2.2	0.7	3.4
2004	0.4	2.1	0.7	3.2
2005	0.6	2.1	0.5	3.2
2006	0.6	2.0	0.9	3.5
2007	0.6	2.2	0.9	3.7
2008	0.6	2.7	0.9	4.1
2009	0.6	2.7	1.1	4.4
2010	0.6	2.4	1.2	4.2
2011	0.5	2.5	1.2	4.2
2012	0.5	2.1	1.3	3.9
2013	0.5	2.8	1.3	4.6
2014	0.5	2.9	1.3	4.6
2015	0.4	2.5	1.4	4.3
2016	0.3	2.5	0.7	3.5
2017	0.3	2.5	0.8	3.6
2018	0.2	2.9	0.9	4.0
2019	0.2	3.0	1.0	4.2
2020	0.2	2.6	1.0	3.8
2021	0.2	2.6	0.8	3.6
2022	0.2	3.0	1.5	4.8
2023	(s)	2.8	0.7	3.6

^a Excludes supplemental gaseous fuels.

^b Excludes biofuels.

— = No consumption. Where shown, R = Revised data and (s) = Value less than 0.05.

Notes: • Data are carbon dioxide (CO2) emissions estimates from fossil fuels primary energy consumption, excluding renewable energy. The state data do not account for interstate flow of electricity and represent CO2 emissions in the state where fossil fuels are burned to generate electricity, although the electricity might be sold to ultimate customers in other states and sectors.

• Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • 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>.

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Table CO2.T4. Industrial sector CO2 emissions estimates from energy consumption, 1960-2023, Iowa
(million metric tons of carbon dioxide (CO2))

Year	Coal	Natural gas ^a	Petroleum ^b	Total
1960	4.9	2.3	5.0	12.2
1965	5.4	3.5	5.1	14.0
1970	4.1	5.1	5.3	14.4
1975	2.7	6.3	4.3	13.2
1980	3.1	5.9	4.0	13.0
1985	3.4	3.8	3.5	10.6
1990	5.0	3.6	2.9	11.5
1995	5.5	4.6	3.9	14.0
1996	6.2	4.7	3.7	14.6
1997	6.1	4.4	3.7	14.3
1998	5.7	4.2	4.1	14.0
1999	6.0	4.5	4.0	14.5
2000	5.7	4.5	4.1	14.3
2001	5.6	4.1	4.4	14.0
2002	5.5	4.0	4.2	13.7
2003	5.6	4.1	3.2	13.0
2004	5.5	4.2	3.8	13.6
2005	5.6	4.3	3.9	13.8
2006	5.8	4.5	3.8	14.1
2007	5.8	6.5	3.5	15.7
2008	5.4	7.6	3.9	16.9
2009	5.0	7.6	3.8	16.4
2010	6.3	7.7	4.1	18.0
2011	6.7	7.8	3.9	18.4
2012	6.0	7.8	3.7	17.6
2013	6.1	8.4	4.3	18.8
2014	5.6	8.4	4.7	18.6
2015	5.0	8.6	4.7	18.3
2016	4.3	9.2	4.8	18.4
2017	4.3	11.7	4.6	20.7
2018	4.2	12.6	4.6	21.4
2019	4.1	12.5	5.1	21.7
2020	3.7	11.7	5.0	20.4
2021	3.6	11.3	4.7	19.6
2022	4.1	12.3	4.6	21.0
2023	3.6	13.0	4.5	21.1

^a Excludes supplemental gaseous fuels.

^b Excludes biofuels.

— = No consumption. Where shown, R = Revised data and (s) = Value less than 0.05.

Notes: • Data are carbon dioxide (CO2) emissions estimates from fossil fuels primary energy consumption, excluding renewable energy. The state data do not account for interstate flow of electricity and represent CO2 emissions in the state where fossil fuels are burned to generate electricity, although the electricity might be sold to ultimate customers in other states and sectors.

• 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 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: Table by the U.S. Energy Information Administration, State Energy Data System. See technical notes. <https://www.eia.gov/state/seds/>

Table CO2.T5. Transportation sector CO2 emissions estimates from energy consumption, 1960-2023, Iowa
(million metric tons of carbon dioxide (CO2))

Year	Coal ^a	Natural gas ^b	Petroleum ^c	Total
1960	0.1	0.5	10.0	10.5
1965	(s)	0.6	10.6	11.2
1970	(s)	1.0	13.6	14.6
1975	(s)	0.9	16.5	17.4
1980	—	0.7	16.1	16.7
1985	—	0.6	14.9	15.5
1990	—	0.5	15.9	16.4
1995	—	0.6	17.1	17.7
1996	—	0.7	18.3	19.0
1997	—	0.6	17.9	18.5
1998	—	0.5	18.6	19.1
1999	—	0.4	18.5	18.9
2000	—	0.4	18.3	18.8
2001	—	0.5	18.1	18.6
2002	—	0.6	18.6	19.2
2003	—	0.5	19.0	19.6
2004	—	0.5	20.0	20.5
2005	—	0.6	20.5	21.1
2006	—	0.7	21.0	21.7
2007	—	0.7	21.4	22.0
2008	—	0.8	20.3	21.1
2009	—	0.7	19.9	20.6
2010	—	0.6	20.2	20.8
2011	—	0.6	20.3	20.8
2012	—	0.5	19.1	19.7
2013	—	0.6	19.3	19.9
2014	—	0.7	19.8	20.6
2015	—	0.6	19.2	19.8
2016	—	0.5	20.4	20.9
2017	—	0.6	19.2	19.8
2018	—	0.7	19.3	20.0
2019	—	0.7	19.3	20.0
2020	—	0.6	17.6	18.2
2021	—	0.4	19.0	19.5
2022	—	0.5	19.2	19.7
2023	—	0.5	19.0	19.5

^a Beginning in 1978, consumption data not collected and assumed to be zero.

^b Transportation use of natural gas to operate pipelines and as vehicle fuel. Excludes supplemental gaseous fuels.

^c Excludes biofuels.

— = No consumption. Where shown, R = Revised data and (s) = Value less than 0.05.

Notes: • Data are carbon dioxide (CO2) emissions estimates from fossil fuels primary energy consumption, excluding renewable energy. The state data do not account for interstate flow of electricity and represent CO2 emissions in the state where fossil fuels are burned to generate

electricity, although the electricity might be sold to ultimate customers in other states and 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.

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Table CO2.T6. Electric power sector CO2 emissions estimates from energy consumption, 1960-2023, Iowa
(million metric tons of carbon dioxide (CO2))

Year	Coal	Natural gas ^a	Petroleum ^b	Total
1960	4.2	2.7	0.1	7.0
1965	5.6	2.8	0.1	8.5
1970	8.0	4.2	0.2	12.3
1975	9.6	2.5	0.3	12.4
1980	19.0	0.4	0.1	19.5
1985	21.6	0.1	(s)	21.8
1990	26.2	0.2	0.1	26.5
1995	29.7	0.2	0.1	29.9
1996	29.7	0.1	0.1	29.9
1997	30.2	0.2	0.1	30.5
1998	34.0	0.2	0.1	34.4
1999	34.1	0.2	0.1	34.5
2000	36.0	0.2	0.1	36.3
2001	36.0	0.3	0.1	36.4
2002	35.8	0.2	0.1	36.1
2003	36.1	0.2	0.1	36.4
2004	36.3	0.4	0.1	36.8
2005	34.8	1.0	0.2	36.0
2006	35.1	0.9	0.2	36.2
2007	37.9	1.2	0.3	39.4
2008	40.3	0.9	0.2	41.3
2009	36.8	0.5	0.1	37.4
2010	40.3	0.6	0.2	41.0
2011	37.0	0.5	0.1	37.6
2012	33.8	0.8	0.1	34.7
2013	31.8	0.6	0.1	32.5
2014	32.2	0.5	0.1	32.8
2015	27.9	0.8	(s)	28.8
2016	23.9	1.1	0.1	25.0
2017	24.2	1.5	0.1	25.7
2018	26.7	2.5	0.1	29.2
2019	21.2	2.5	0.1	23.7
2020	13.7	2.3	0.1	16.0
2021	21.6	2.2	0.1	23.9
2022	17.6	2.9	0.1	20.6
2023	15.6	3.6	0.1	19.3

^a Excludes supplemental gaseous fuels.

^b Excludes biofuels.

— = No consumption. Where shown, R = Revised data and (s) = Value less than 0.05.

Notes: • Data are carbon dioxide (CO2) emissions estimates from fossil fuels primary energy consumption, excluding renewable energy. The state data do not account for interstate flow of electricity and represent CO2 emissions in the state where fossil fuels are burned to generate electricity, although the electricity might be sold to ultimate customers in other states and sectors.

• 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. • 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>.

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