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

Year	Coal	Natural gas <sup>a</sup>	Petroleum <sup>b</sup>	Total
1960	0.6	1.3	5.7	7.7
1965	0.5 0.5	1.4	6.1	8.0 9.3 10.9
1970	0.5	1.9	6.9	9.3
1975	2.3	1.7	6.8	10.9
1980	3.5	1.3	6.8	11.5
1985	3.3 3.3	1.3	6.4	11.0
1990	3.3	1.3	7.1	11./
1995	3.6 3.2	1.8	7.3 7.5	11.7 12.7 12.7
1996 1997	3.2 4.1	2.0 1.9	7.5 7.2	13.2
1997	3.9	1.8	7.2 7.1	13.2
1999	4.4	1.9	7.1	13.4
2000	4.8	2.0	7.4	14.2
2001	4.2	2.0	7.3	13.5
2002	3.8	2.2	7.7	13.7
2003	4.1	2.3	7.3	13.7
2004	4.2 3.5	2.3 2.2	7.4	13.7 13.3
2005	3.5	2.3	7.5	13.3
2006	3.8 3.2	2.2	7.4	13.3 13.8
2007	3.2	2.8	7.8	13.8
2008	4.1	3.4	7.4	14.9
2009	3.6	3.5	7.6	14.7
2010	3.7	3.8	7.5	15.1 14.6
2011	3.1	3.9	7.7	14.6
2012 2013	3.4	3.7	7.7	14.9
2013	3.3 3.2	4.4 4.4	7.6 7.8	15.3 15.3
2015	3.2 1.9	4.4	7.6 7.9	19.5
2016	2.5	4.4	7.8	14.7
2017	2.5	4.4	7.7	14.6
2018	2.6	4.9	7.9	15.4
2019	3.0	5.0	7.9	15.9
2020	2.1	4.7	8.1	14.9
2021 2022	2.1	5.0	8.0	15.1
2022	2.4	5.1	8.0	15.4 15.1
2023	2.1	5.2	7.7	15.1

<sup>&</sup>lt;sup>a</sup> Excludes supplemental gaseous fuels.

— = 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. 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://wwws.eia.gov/state/seds/

b Excludes biofuels.

 $<sup>\</sup>cdot$  Totals may not equal sum of components due to independent rounding.  $\cdot$  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See

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

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「 」 Year	r Coal <sup>a</sup>	Natural gas <sup>b</sup>	Petroleum <sup>c</sup>	Total
1	Coul	Hatarar gao	1 ottoloum	10141
1960	0.1	0.4	0.0	1 /
1965	0.1	0.5	0.9 0.8	1.4 1.4
1965 1970	(s)	0.4 0.5 0.7	0.8	1.6
1975	(s)	0.6	0.8 0.7	1.6 1.4
<b>*</b> 1980	(s)	0.6	0.6 0.5	1.2
1985 1990	(s)	0.6	0.5	1.1
1990	(s)	0.5	0.8	1.4
1995	(s)	0.7	0.5	1.2
1995 1996 1997	(S)	U.8	U.7	1.5
1008	(5)	0.7	0.0 0.5	1.0 1.1
1998	(s)	0.0	0.5	11
2000	(s)	0.7	0.6	1.2
2001	(s)	0.7	0.5	1.1
1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	0.1 0.1 (s)	0.6 0.6 0.5 0.7 0.8 0.7 0.6 0.6 0.7 0.7 0.7 0.7	0.8 0.5 0.7 0.6 0.5 0.5 0.6 0.5 0.5 0.5 0.4	1.2
2003	(s)	0.7	0.5	1.2
2004	(s)	0.7	0.4	1.1
2005	(S)	0.7	0.4	1.0
2006	(S)	0.6 0.7 0.7	0.4	1.0
2007	(S)	0.7 0.7	0.4 0.5	1.0
2000	<u> </u>	0.7	0.3	1.2
2010	_	0.7	0.4	1.1
2009 2010 2011 2012 2013 2014 2015 2016 2017	_	0.7 0.7 0.7 0.6 0.8 0.8 0.7 0.7	0.4 0.3 0.3 0.3	1.0
2012	_	0.6	0.3	0.9
2013	_	0.8	0.3	1.1
2014	_	0.8	0.3	1.1
2015	<del>-</del>	0.7	0.3	0.9
2016	_	U.7	U.3	1.U 1.0
2017	_	0.7 0.8	0.3 0.3 0.3 0.3	1.0
2010	_	0.0 0.8	0.3	1.2
2018 2019 2020 2021 2022 2023	_	0.8 0.8 0.8	0.3	1.2 1.1 1.4 1.2 1.5 1.3 1.1 1.1 1.1 1.2 1.1 1.2 1.1 1.2 1.1 1.2 1.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.1 1.1
2021	_	0.7	0.3	1.0
2022	_	0.7 0.8 0.7	0.3 0.3 0.3	1.0 1.1 1.0
2023	_	0.7	0.3	1.0

 $<sup>^{\</sup>rm a}$  Beginning in 2008, consumption data not collected and assumed to be zero.  $^{\rm b}$  Excludes supplemental gaseous fuels.

— = 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

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/

<sup>&</sup>lt;sup>c</sup> Excludes biofuels.

data series estimates may be affected by changing data sources and estimation methodologies. See

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

Year	Coal	Natural gas <sup>a</sup>	Petroleum <sup>b</sup>	Total
	<u> </u>			
1960	0.1	0.4	0.2	0.7
1965	0.1	0.5	0.2	0.7
1970 1975	(s)	0.6	0.2 0.2 0.2	0.9
1975	(s) (s)	0.6	0.2 0.2 0.2 0.2 0.2 0.2	0.7 0.7 0.9 0.9 0.7 0.8 0.8 0.8 0.8 0.7 0.7 0.7 0.7 0.7 0.7
1980 1985	(s)	0.5 0.5 0.5 0.5	0.2	0.7
1985	(s) (s) (s)	0.5	0.2	0.8
1990 1995		0.5	0.2	0.7
1995	(S)	0.6	0.2	0.8
1996 1997	(S)	0.6	0.2	0.8
1997	(s) (s) (s)	0.6 0.5	0.2 0.2	0.8
1999		0.5 0.5	0.2	0.7 0.7
2000	(3)	0.5 0.5	0.2	0.7 0.7
2001	(8)	0.5	0.2 0.2	0.7
2002	(s) (s) (s) (s)	0.5	0.2 0.2 0.2 0.1 0.1	0.7
2003 2004	(s)	0.6	0.2	0.7
2004	(s)	0.5	0.1	0.7
2005	(s)	0.5	0.1	0.7
2006	(s)	0.5 0.5	0.1 0.2 0.2 0.2 0.2 0.2	0.6
2007	(s)	0.5	0.2	0.7
2008	(s)	0.6	0.2	0.8
2009	(s)	0.6	0.2	0.8
2010	(s) (s)	0.6	0.2	0.8
2011		0.6 0.5	0.2	0.8
2010 2011 2012 2013	(s)	0.5	0.1 0.1	0.0
2013		0.7	0.1	0.6 0.7 0.8 0.8 0.8 0.8 0.6 0.8 0.8 0.7
2015		0.6	0.1	0.0 0.7
2016	_	0.6	0.1	0.7
2017	_	0.6	0.2	0.8
2018	_	0.7	0.2	0.9
2019	<del>-</del>	0.8	0.2 0.2	0.8 0.9 0.9 0.9 0.8 0.9
2020 2021 2022	_	0.7	0.2 0.2 0.2	0.9
2021	_	0.7	0.2	0.8
2022	_	0.7	0.2	0.9
2023	<del>-</del>	0.7	0.2	0.9

<sup>&</sup>lt;sup>a</sup> Excludes supplemental gaseous fuels.

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.

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/

b Excludes biofuels.

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

<sup>•</sup> 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.

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

Year	Coal	Natural gas <sup>a</sup>	Petroleum <sup>b</sup>	Total
1960	(s)	0.3 0.2	1.8 1.9	2.1
1965	(S)	0.2	1.9	2.1
1970	(s) (s) (s) 0.1 0.2 0.5	0.4 0.3	1.9 1.4	2.2
1975 1980	0.1 0.2	0.3 0.2	1.4	1.0 1.0
1985	0.5	0.2 0.2	1.0	1.7
1985 1990 1995	0.4	0.3	1.4 1.2 1.3 1.2	2.0
1995	0.4 0.6 0.6 0.7 0.7	0.3 0.4	1.2	2.2
1996 1997	0.6	0.4	1.3	2.3
1997	0.7	0.4	1.2	2.3
1998	0.7	0.3	1.0	2.1
1999	0.8	0.3	1.1	2.2
1998 1999 2000 2001	1.2 0.6	0.3 0.2	1.1 1.1 1.2	2.3 2.0
2007	0.8 1.2 0.6 0.5 0.6 0.4 0.4	0.4 0.3 0.3 0.3 0.2 0.6 0.6 0.6 0.6	11	2.0
2002 2003 2004 2005 2006 2007 2008	0.6	0.6	1.1 1.1 1.2	2.3
2004	0.4	0.6	1.2	2.1
2005		0.6	1.1	2.2
2006	0.4	0.6	1.1 1.2 1.0	2.1
2007	0.4	1.1 1.7	1.2	2.7
2008	0.3	1./	1.0	3.0
2009	0.2 0.2	1.9 2.1	1.0 0.9 1.1 1.0	ა. I ა ა
2010	0.3 0.3	2.1	0.9	3.3 3.6
2012	0.3	2.2	1.0	3.5
2013	0.3	1.9 2.1 2.1 2.2 2.4 2.4	1.1	3.8
2009 2010 2011 2012 2013 2014 2015 2016 2017	0.3	2.4	1.1 1.0	3.7
2015	0.3	2.4	1.0	3.7
2016	0.3	2.4	1.0	3.7
2017	0.4	2.4	0.9	3.7
2018	0.4 0.4 0.3 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	2.5	0.9 0.9	3.8 2.0
2018 2019 2020	0.4	2.4 2.4 2.4 2.5 2.5 2.5	1.3	2.1 2.2 1.8 1.9 1.7 2.0 2.2 2.3 2.1 2.2 2.5 2.0 2.2 2.3 2.1 2.2 2.3 2.1 2.2 3.3 3.1 3.0 3.1 3.3 3.6 3.5 3.8 3.7 3.7 3.7 3.7 3.8 4.1 4.0 4.0 3.9 3.8
2020	0.3	2.3	1.0	4.1 4.0
2022	0.3 0.4	2.5	1.0	3.9
2021 2022 2023	0.4	2.7 2.5 2.4	0.9	3.8

<sup>&</sup>lt;sup>a</sup> Excludes supplemental gaseous fuels.

— = 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.

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/

b Excludes biofuels.

 $<sup>\</sup>cdot$  Totals may not equal sum of components due to independent rounding.  $\cdot$  The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants.  $\cdot$  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.

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

Year	Coal a	Natural gas <sup>b</sup>	Petroleum <sup>c</sup>	Total
		-		
1960 1965	(s)	(s)	2.9 3.2 3.8	2.9
1965	(s)	(s)	3.2	3.2
1970	(s)	(s)	3.8	3.8
1975	(s) (s)	(s)	4.4 4.5 4.6 4.7	4.4
1980		(S)	4.5	4.5
1985	_	(s) (s) 0.1 0.2 0.2 0.2	4.6	4.6
1990	_	(s)	4.7	4.7
1995	_	0.1	5.4 5.4 5.2 5.4	5.5
1996	_	0.2	5.4	5.5
1997 1998	_	0.2	5.2	5.4
1000	_	0.2 0.2	5.4 5.4	5.5 5.7
1999 2000	_	0.3 0.3 0.3 0.3 0.3 0.3	5.4 5.5 5.4 5.9 5.6 5.6 5.8 5.8 6.0	5.7 5.8
2000	_	0.0	5.5 5.1	5.0 5.7
2001 2002 2003 2004	<u> </u>	0.0	5. <del>4</del> 5.9	6.3
2002	_	0.3	5.6	5.9
2004	_	0.3	5.6	6.0
2005	_	0.3	5.8	6.1
2006	_	0.3 0.3	5.8	6.1
2007	_	0.3	6.0	6.3
2008 2009	_	0.2 0.2	5.7	5.9
2009	_	0.2	6.0	6.1
2010 2011	_	0.3 0.4	6.1	6.4
2011	_	0.4	6.0 6.3	6.4
2012	_	0.3	6.3	6.7
2012 2013 2014 2015 2016 2017	<del>-</del>	0.4 0.3	6.1 6.4 6.5 6.3 6.3	6.4
2014	_	0.3	6.4	6.7
2015	_	0.3 0.4	6.5	6.8
2016	_	0.4	6.3	6. <i>l</i>
2017	_	0.4	0.3	b./
2018	<del>-</del>	0.4 0.4	6.4	2.9 3.2 3.8 4.4 4.5 4.6 4.7 5.5 5.5 5.7 5.8 5.7 6.3 5.9 6.0 6.1 6.1 6.1 6.3 5.9 6.1 6.4 6.7 6.8 6.7 6.8 6.7 6.8 6.7 6.8 6.7 6.8 6.7 6.9 6.9 6.9
2019 2020 2021 2022		0.4	6.3 6.2 6.5 6.5 6.3	0.7 6.5
2020	_	0.3	0.2 6.5	6.5 6.0
2021	_	0.3	0.5 6.5	0.9 6.0
2023	_	0.4	6.3	6.7
LULU		0.0	0.0	0.1

<sup>&</sup>lt;sup>a</sup> Beginning in 1978, consumption data not collected and assumed to be zero.

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/

<sup>&</sup>lt;sup>b</sup> Transportation use of natural gas to operate pipelines and as vehicle fuel. Excludes supplemental gaseous fuels.

<sup>&</sup>lt;sup>'c'</sup> Excludes biofuels.

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

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

, —				
•				
Year	Coal	Natural gas <sup>a</sup>	Petroleum <sup>b</sup>	Total
1000	•		4.5	
1960	0.4	0.2 0.2 0.2 0.2 (s) (s) (s) 0.1 (s)	(s) (s) 0.1	0.7
1965 1970	0.4 0.5	0.2 0.2	(S)	0.0 0.0
1970	2.2	0.2	0.1	2.4
1975 1980	3.2	(s)	(s)	3.3
1985	2.8	(s)	0.1 (s) (s)	2.8
1985 1990	2.9	(s)	(s)	3.0
1995	2.9	0.1	(s) (s)	3.0
1995 1996 1997	2.5	(s)	(s)	2.6
1997	3.4	0.1	(s)	3.5
1996	১.। ও ৪	0.2 0.1	(S)	ა.ა ვ გ
2000	3.6	0.1	(s) (s) 0.1	3.9
2001	3.6	0.2	(s)	3.9
2002	3.3	0.2 0.2 0.1 0.1 0.1 0.2 0.2 0.2 0.2	(s) (s)	3.4
2003	3.5	0.1	(S)	3.7
2004	3.8	0.1	(s)	3.9
2005	3.1	0.2	(s) (s) 0.1	3.3
2006	3.3	0.2	(S)	3.5
2007	2./ 2.0	0.2 0.1	0.1 (s)	3.U 2.0
2000	3.4	(s)	(s)	3.4
2010	3.5	(s) 0.1	(s)	3.6
2011	2.8	0.1	(s)	2.9
2012	3.1	0.1	(s)	3.2
2013	2.9	0.2	(s) (s)	3.2
2014	2.8	0.1 0.2 0.2 0.3 0.4 0.3 0.5 0.5	(s)	3.0
2015	1.0	0.3	(s)	1.9
2010	2.2	0.4 0.3	(s) (s)	2.0 2.5
2018	2.4	0.5	(s)	2.9
2019	2.7	0.5	(s)	3.2
1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023	0.4 0.4 0.5 2.2 3.2 2.8 2.9 2.9 2.5 3.4 3.1 3.6 3.6 3.6 3.3 3.5 3.8 3.1 3.3 2.7 3.8 3.1 3.3 2.7 3.8 3.1 3.2 2.8 3.1 3.2 3.1 3.2 3.2 3.3 3.5 3.8 3.1 3.1 3.2 3.2 3.3 3.5 3.8 3.1 3.1 3.2 3.2 3.3 3.5 3.8 3.1 3.1 3.2 3.2 3.3 3.5 3.8 3.1 3.1 3.2 3.2 3.3 3.5 3.8 3.1 3.1 3.2 3.2 3.3 3.5 3.8 3.1 3.1 3.2 3.2 3.3 3.5 3.8 3.1 3.1 3.2 3.5 3.8 3.1 3.1 3.2 3.5 3.8 3.1 3.1 3.2 3.5 3.8 3.1 3.1 3.2 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1	0.5	(s) (s)	0.7 0.6 0.9 2.4 3.3 2.8 3.0 3.0 2.6 3.5 3.3 3.8 3.9 3.9 3.4 3.7 3.9 3.3 3.5 3.0 3.9 3.4 3.7 3.9 3.2 3.0 1.9 2.6 2.5 2.9 3.2 2.3 2.4 2.7 2.7
2021	1.7	0.6 0.7 1.0	(s)	2.4
2022	2.0	0.7	(s) (s)	2.7
2023	1.7	1.0	(s)	2.7

<sup>&</sup>lt;sup>a</sup> Excludes supplemental gaseous fuels.

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.

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

b Excludes biofuels.

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

<sup>·</sup> Totals may not equal sum of components due to independent rounding. · The electric power sector