

SIMAP Fiscal Year 2023 Annual Report for Michigan State University

Scope	Source	CO2 (kg)	CO2 (MTCDE)	CH4 (kg)	CH4 (MTCDE)	N2O (kg)	N2O (MTCDE)	GHG MTCDE
1	Co-gen Electricity	138,365,290	138,365.29	13,795	386.27	277	73.46	138,825.02
1	Co-gen Steam	150,949,236	150,949.24	15,050	421.4	302	80.14	151,450.78
1	Other On-Campus Stationary	22,453,512	22,453.51	2,239	62.68	45	11.92	22,528.12
1	Direct Transportation	15,252,088	15,252.09	127	3.55	85	22.54	15,278.17
1	Refrigerants & Chemicals	0	0	0	0	0	0	2,719.57
1	Fertilizer & Animals	0	0	138,777	3,885.76	3,699	980.27	4,866.03
2	Purchased Electricity	36,051,047	36,051.05	2871	80.38	398	105.44	36,236.87
Total Scope 1 and 2 emissions (MTCDE)								371,904.56

Scope	Source	CO2 (kg)	CO2 (MTCDE)	CH4 (kg)	CH4 (MTCDE)	N2O (kg)	N2O (MTCDE)	GHG MTCDE
3	Faculty Commuting	4,891,435	4,891.43	269	7.52	171	45.41	4,944.37
3	Staff Commuting	13,478,899	13,478.90	740	20.73	472	125.14	13,624.77
3	Student Commuting	13,433,726	13,433.73	718	20.1	466	123.36	13,577.19
3	Directly Financed Air Travel	15,017,031	15,017.03	0	0	174	46.07	15,063.10
3	Other Directly Financed Travel	861,925	861.93	47	1.32	31	8.08	871.33
3	Study Abroad Air Travel	7,324,188	7,324.19	0	0	85	22.47	7,346.66
3	Solid Waste	0	0	38,304	1,072.51	0	0	1,072.51
3	Wastewater	0	0	19,190	537.31	5,536	1,467.00	2,004.31
3	Paper Purchasing	318,285	318.28	0	0	0	0	318.28
3	T&D Losses	2,430,664	2,430.66	194	5.42	27	7.11	2,443.19
Total Scope 3 emissions (MTCDE)								61,265.71

Gross MTCDE (Scope 1, 2, 3) 433,170.26

Offsets (MTCDE) 0

Compost (MTCDE) -297.85

Non-Additional Sequestration (MTCDE) 0

Biogenic (MTCO2) 28.15

Net MTCDE (Scope 1, 2, 3) 432,872.41

Terms

CO2	carbon dioxide	kg	kilogram
CH4	methane	MTCDE	metric tons of carbon dioxide equivalents
GHG	greenhouse gas	N2O	nitrous oxide