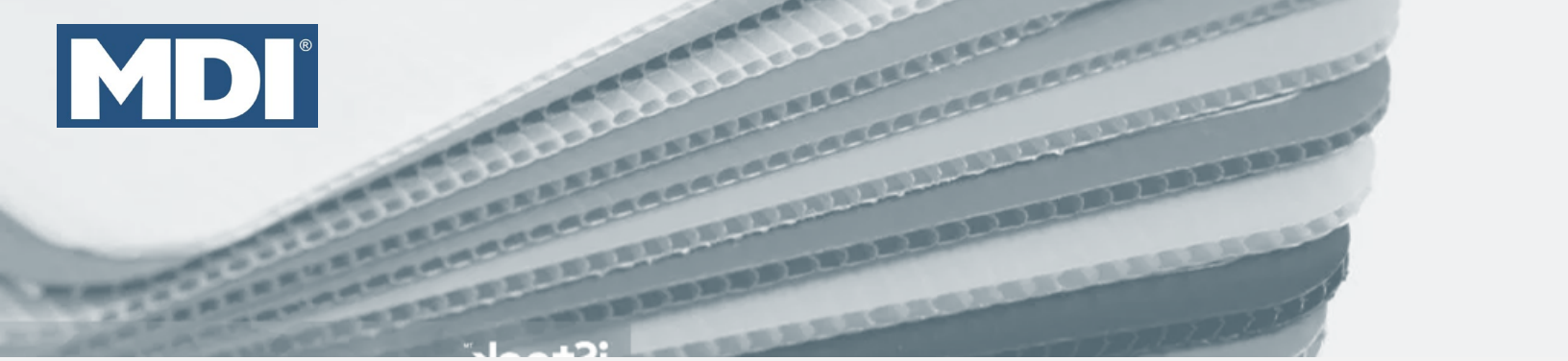


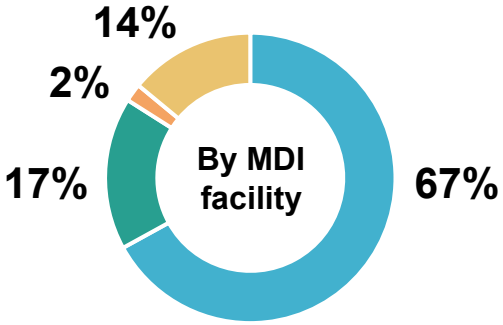
2023 Greenhouse Gas Inventory (Scope 1 & 2)

MDI is a nonprofit enterprise offering high-quality packaging, assembly, and production solutions to businesses nationwide. In 2023, MDI emitted approximately 1,241 tons of carbon dioxide equivalent (CO2e) GHG emissions across all facilities in 2023. Approximately 13% of the overall emissions are indirect emissions associated with electricity and steam consumption (Scope 2), versus direct emissions from the facilities (Scope 1).

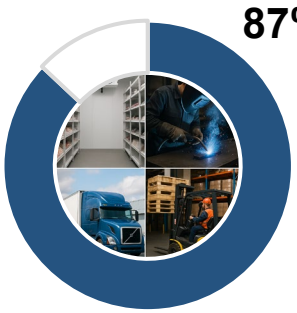
MDI completed its GHG assessment in accordance with the World Resource Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) GHG Protocol Corporate Accounting and Reporting Standard[1]. Scope 3 (indirect supply chain emissions) category were not included as a part of the assessment. Barr Engineering Co. completed the calculations based on data provided by MDI without independently verifying its accuracy.

CO2e (ton/yr)

Facility	Grand Rapids	Cohasset	Minneapolis	Hibbing	Total
Scope 1	**741**	**205**	**26**	**111**	**1,083**
Scope 2	**87**	**8**	**3**	**61**	**159**
Total	828	213	29	172	1,241

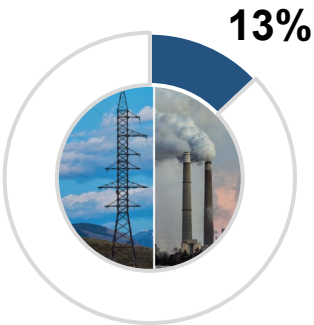


% Total of SCOPE 1 & 2



SCOPE 1

Direct emissions from MDI's operational control (e.g., refrigeration leaks, welding, trucks, forklifts).



SCOPE 2

Indirect emissions from the generation of purchased energy (e.g., electricity and steam).

Notes:

Scope 1 calculation methodology includes: 40 CFR Part 98 Tables C-1 and C-2 (fuel combustion emission factors from), emission factors from the United States Environmental Protection Agency (EPA) Center for Corporate Climate Leadership (CCCL) GHG Emission Factor Hub[2], and guidance from the Intergovernmental Panel on Climate Change (IPCC)[3]. CO_2e calculated using global warming potential (GWP) values from 40 CFR Part 98 Table A-1.

Scope 2 calculation methodology includes: EPA Emissions and Generation Resource Integrated Database (eGRID)[4] & EPA CCCL GHG Emission Factor Hub. CO2e calculated using GWP values from 40 CFR Part 98 Table A-1 (location-based emission factors).

1) WRI and the WBCSD GHG Protocol Corporate Accounting and Reporting Standard. 2005. https://ghgprotocol.org/corporate-standard.
2) EPA CCCL GHG Emission Factor Hub. 2025. https://www.epa.gov/climateleadership/ghg-emission-factors-hub
3) IPCC Good Practice Guidelines from the GHG Protocol Calculating HFC and PFC Emissions from the Manufacturing, Installation, Operation and Disposal of Refrigeration & Airconditioning Equipment (Version 1.0) Guide to calculation worksheets (January 2005).
4) EPA eGRID. 2025. https://www.epa.gov/egrid.