GREENHOUSE GAS EMISSIONS

We acknowledge and accept our responsibility to manage our operations to minimize the generation of greenhouse gas (GHG) emissions and the associated impacts on climate change, public health, and the environment. This is evidenced by our being listing as one of America's Climate Leaders by USA Today for both 2024 and 2025 based on prior emissions performance. Our concerns for these potential impacts will drive our plans and activities to reduce our emissions to sustainable levels. We also consider GHG emission reductions a sign of improved operational efficiency at our manufacturing facilities and a potential business advantage. We diligently monitor our processes in compliance with applicable regulatory requirements and work to minimize our global environmental footprint.

We have determined that over 80% of our greenhouse gas (GHG) emissions are attributable to energy consumption, specifically from electricity (49%) and natural gas (31%). The remaining emissions are primarily associated with process-related emissions and other fuel usage. Accordingly, Materion has embarked on an ambitious energy reduction initiative focusing on electricity and natural gas usage reduction as described in more detail in the Energy section. Materion estimates that its proactive energy reduction initiatives led to a reduction of 1,000 metric tons of carbon dioxide equivalents (MTCO2e) in 2024.

Additionally, in 2024 we expanded our 100% procured renewable electricity portfolio to now include five of our manufacturing facilities (Leesport, Lincoln, Stuttgart, Jena, and Elmhurst). The Jena facility further decreased its reliance on procured electricity through onsite solar generation which was first deployed in 2023. As a result of our renewable electricity efforts, total greenhouse gas (GHG) emissions were reduced by approximately 6,850 MTCO2e in 2024, a significant increase from the 1,850 MTCO2e reduction achieved in 2023. Materion is continuing to assess our emissions profile and the results will be used to focus our planning and implementation to those operations and activities that provide the greatest potential for reductions in GHG emissions.

The 2019 - 2024 company-wide GHG Emission data is provided in the table below. For 2024, approximately 67% of our combined Scope 1+2 emissions are associated with our Performance Materials business; with Electronics Materials and Precision Optics representing 24% and 9%, respectively. Approximately 92% of our emissions are associated with operations in the United States, 1% in Europe, and 7% in Asia/Pacific locations.

Since 2022 our Total Absolute Emissions have trended downward; primarily driven by increased use of renewable electricity at the sites noted above, reduced natural gas consumption at our Elmore facility, and general energy efficiency improvements globally. These

reductions were partially offset by volume-related process related emission increases at our Milwaukee facility and ore grade-related increased natural gas consumption at our Delta Mining/Milling facility.

Our long-term emissions intensity has declined significantly, from 207 metric tons of CO_2 equivalent per million dollars of value-added sales (MTCO2e/$M) in 2020 to 135 MTCO2e/$M in 2024—representing a 34% overall reduction. Since 2023, emissions intensity has remained about the same.

Emissions (Absolute)	Unit	2019	2020	2021	2022	2023	2024
Total	**MTCO2e**	**133,892**	**137,420**	**152,743**	**155,781**	**151,453**	**148,587**
Scope 1	MTCO2e	56,400	64,100	67,905	68,650	72,732	74,876
Scope 2	MTCO2e	77,492	73,320	84,838	87,131	78,720	73,711

Emissions (Intensity)	Unit	2019	2020	2021	2022	2023	2024
Total	**MTCO2e/$M**	**184**	**207**	**178**	**140**	**134**	**135**
Scope 1	MTCO2e/$M	78	96	79	62	65	68
Scope 2	MTCO2e/$M	107	110	99	78	70	67

Emissions Source Details		2019	2020	2021	2022	2023	2024
Electricity	%	58%	53%	55%	56%	52%	49%
Natural Gas (Stationary Sources)	%	31%	28%	29%	28%	29%	31%
Process Emissions	%	10%	9%	15%	14%	17%	19%
Other Fuels (Mobile Sources)	%	0.9%	0.6%	0.9%	0.7%	2.1%	0.8%
Fugitive Emissions	%	0.4%	8.6%	0.2%	0.4%	0.4%	0.4%
Other Fuels (Stationary Sources)	%	0.2%	0.2%	0.2%	0.3%	0.2%	0.2%
Purchased Steam and Heat	%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%

Notes:
1: Previously reported data has been updated to incorporate improvements in our data collection and reporting methodology. These changes enhance the accuracy and comparability of reported figures over time.
2: MTCO2e = Metric Tons Carbon Dioxide Equivalents
3: MTCO2e/$M = MTCO2e per Million Dollars in Value-Added Sales

Energy

Many of our manufacturing processes are energy-intensive, and we recognize that improving energy efficiency and reducing consumption deliver both economic and environmental advantages, including lower greenhouse gas (GHG) emissions. We are committed to reducing overall energy consumption and intensity while increasing our use of renewable energy sources.

Our strategy focuses on comprehensive energy management, including monitoring energy consumption, establishing key performance indicators and internal targets, sharing energy metrics across operations, training teams, identifying and tracking reduction opportunities, enhancing process technologies, and increasing procurement of renewable energy. We also continue to explore and implement innovative solutions to drive energy efficiency and minimize environmental impact across our operations.

In 2024, our company expanded upon on our Energy Metrics program which spans all our global manufacturing locations. This program focuses on the measurement, aggregation, and reporting of electricity and natural gas usage data, which together constitutes over 98% of our total energy consumption and accounts for 80% of our greenhouse gas emissions. Each of our locations receives monthly energy reports that include detailed data, analytics, and trending, thereby offering our teams comprehensive insights of energy consumption patterns across our organization. The information is used to help establish priorities for reduction and to monitor progress. This data initiative is foundational to our energy program and underscores our commitment to transparency and efficiency, driving continuous improvement in our sustainability efforts.

The company further enhanced its energy reduction training programs in 2024, building on the foundational concepts first introduced to our operations in 2023. The expanded sessions were delivered across all sites, focusing on core energy efficiency principles and tailored to our industry sector. The program highlighted common energy-saving opportunities and provided practical and actionable strategies to improve efficiency and reduce consumption. Examples of energy reduction activities undertaken by our sites in 2024 include optimizing the idling/power-down of equipment, scrubber efficiency improvements, cleanroom ventilation efficiency improvements, boiler efficiency savings, deployment of air destratification fans, and other energy saving measures, resulting in approximately 11,500 GJ of total energy savings.

For 2024, Materion has established that over 47% of its total energy originates from local and regional energy grids. In 2024 Materion expanded its use of procured 100% renewable grid electricity to include our Jena facility (supplementing existing Leesport, Lincoln, Elmhurst, and Stuttgart facilities). In 2024 our total procured renewable electricity accounts for 92,192 GJ versus 25,765 GJ in 2023. For

2024, approximately 13% of total energy originated from renewable sources; which is an increase from 9.5% in 2023 (this includes procured renewable electricity, onsite solar, and the renewable energy content from regional electrical grids).

Total Energy consumption trended upward from 2019 to 2022 but has remained generally stable from 2022 through 2024. Since 2019, we have generally experienced a long-term favorable decrease in energy intensity from 2,096 GJ/$M to 1,596 GJ/$M; and we expect this trend to continue as our energy reduction initiatives take root in our operational culture.

Energy Consumption	Unit	2019	2020	2021	2022	2023	2024
Total Consumption (Absolute)	GJ	1,523,182	1,489,289	1,660,828	1,731,320	1,732,002	1,752,089
Energy Intensity	GJ/$M	2,096	2,239	1,932	1,554	1,537	1,596

Energy Consumption Details	Unit	2019	2020	2021	2022	2023	2024
Total Fuels (non-Renewable)	**GJ**	**836,118**	**793,453**	**891,153**	**897,315**	**908,313**	**920,252**
Natural Gas	GJ	815,278	777,273	866,697	874,314	857,337	900,290
Other Fuels	GJ	20,840	16,179	24,456	23,001	50,976	19,963
Other	**GJ**	**687,064**	**695,836**	**769,675**	**834,005**	**823,689**	**831,836**
Total Electricity	GJ	684,440	693,081	766,537	831,033	820,883	829,181
Purchased Heating	GJ	-	346	943	839	734	1,045
Purchased Cooling	GJ	-	-	-	-	-	-
Purchased Steam	GJ	2,624	2,410	2,195	2,133	2,071	1,610

Renewable Energy Details	Unit	2019	2020	2021	2022	2023	2024
% of Total Energy from Electrical Grid	%	45%	47%	46%	48%	47%	47%
Grid Mix of Renewable Electricity	%	15%	16%	17%	17%	17%	18%
Procured Renewable Electricity	GJ	-	-	-	290	25,765	92,192
Onsite Solar	GJ	-	-	-	-	54	176
Renewable Fuels	GJ	-	-	-	-	-	-
% of Total Consumption from Renewables	%	6.5%	7.6%	7.7%	8.0%	9.3%	13.0%

Notes:
1: Previously reported data has been updated to incorporate improvements in our data collection and reporting methodology. These changes enhance the accuracy and comparability of reported figures over time.
2: GJ = Gigajoules of energy
3: GJ/$M = GJ per Million Dollars of Value Added Sales