

OUR ENVIRONMENT 2018





Global Environmental, Health, and Safety Manager Stephanie Reese stands near one of the many walking trails that weave throughout the 325-acre Cranberry Woods Office Park, site of MSA Safety's global headquarters.

For more than a century, MSA Safety has pursued just one mission: — that men and women may work in safety and that they, their families, and their communities may live in health throughout the world. Achieving health throughout the world is a monumental task. But all of us at MSA are committed to doing our part, and that includes finding ways to measure and ultimately reduce our global carbon footprint. Through our environmental management programs, we are capturing key data, setting measurable goals and evaluating our processes in ways that we expect to lessen our environmental impact. In 2019, MSA also joined the Carbon Disclosure Project, making a commitment to reduce greenhouse gas emissions. Through these collective efforts, we are living our mission, and we look forward to sharing with you our future and continued progress.

Stephanie Reese

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Global EHS and Product Stewardship Manager



Office Park Jewel for Western Pennsylvania

What was once the exclusive home to MSA, Cranberry Woods came about from a \$2 million MSA investment in 1998. Today, Cranberry Woods is the region's first and only office park to incorporate a state-of-the-art business environment with a natural setting of jogging trails, lakes and mature woods. In 2003, MSA went a step further and donated 21 additional acres of land to help establish the 12-university non-profit higher learning institution known as the Regional Learning Alliance, which serves as one of the park's primary occupants.

MSA Safety is committed to conducting our business in a manner that is environmentally sustainable, ensures the protection of natural resources, and complies with all applicable environmental, health, and safety obligations. In this endeavor, MSA strives to be transparent concerning the global impact of our operations as well as with objectives to reduce those impacts.

This 2018 Environmental Metrics Report provides a summary of MSA's global environmental impact spanning 11 EHS significant facilities across North America, South America, Europe, and Asia. This report includes data and insight into our operations' environmental impact and future goals that support our objective to conduct our business in an environmentally sustainable manner.

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ENERGY

MSA tracks energy consumption on a facility by facility basis to regularly monitor our global activities and to identify the highest impact reduction opportunities. These 2018 energy metrics represent the baseline for the 2020 – 2025 period as we set MSA's future sustainability objectives.

Electric Consumption

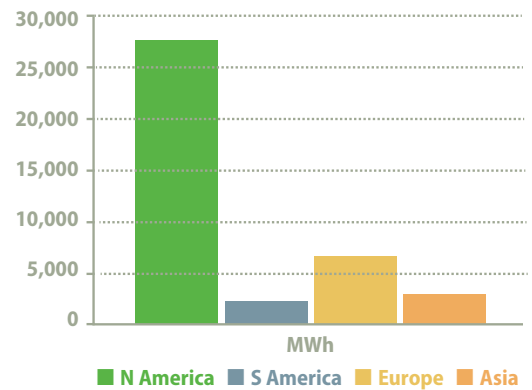
MSA's global electric consumption in 2018 equaled 38,460 megawatt hours across North and South America, Europe, and Asia.

Natural Gas Consumption

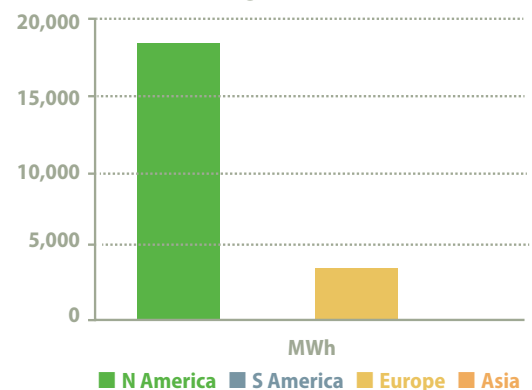
Through our Environmental Sustainability Teams across MSA's global operations, MSA is striving to reduce absolute energy consumption and the Company's overall environmental footprint while increasing our usage of renewable energy.

MSA's global natural gas consumption in 2018 equaled 19,684 megawatt hours across North and South America, Europe, and Asia.

Electricity Consumption
Megawatt Hours



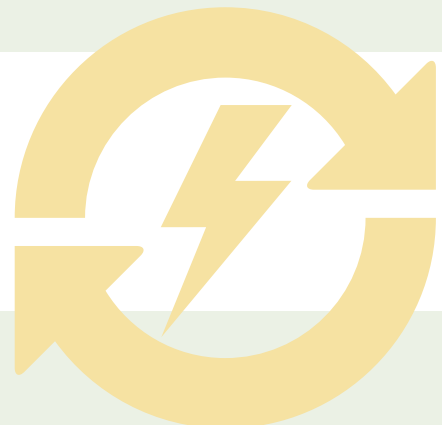
Natural Gas Consumption
Megawatt Hours



Through our Environmental Sustainability Teams across MSA's global operations, MSA is striving to reduce absolute energy consumption and the Company's overall environmental footprint while increasing our usage of renewable energy.

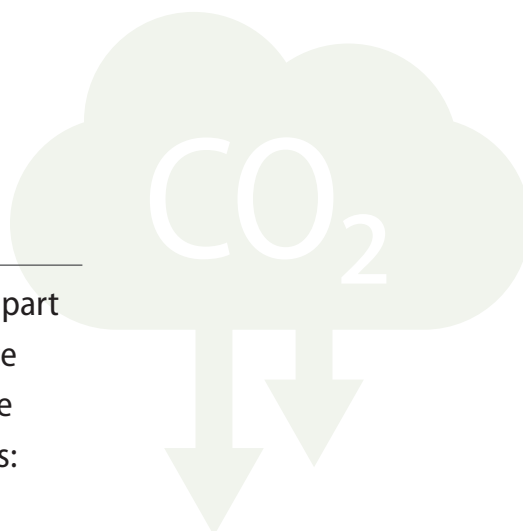
Renewable Energy

MSA is committed to identifying and utilizing opportunities to supply our facilities with renewable sources of energy. In 2018, the MSA Devizes, UK facility utilized solar panels to generate 90,194 kWh of electricity. Currently, all other MSA facilities operate on 100% non-renewable energy (0.17% renewable energy usage globally).



CARBON FOOTPRINT

The tracking of greenhouse gas emissions is an integral part of MSA's environmental management systems. To reduce MSA's global carbon footprint and establish goals for the future, we track the following greenhouse gas emissions:



Scope 1 Emissions

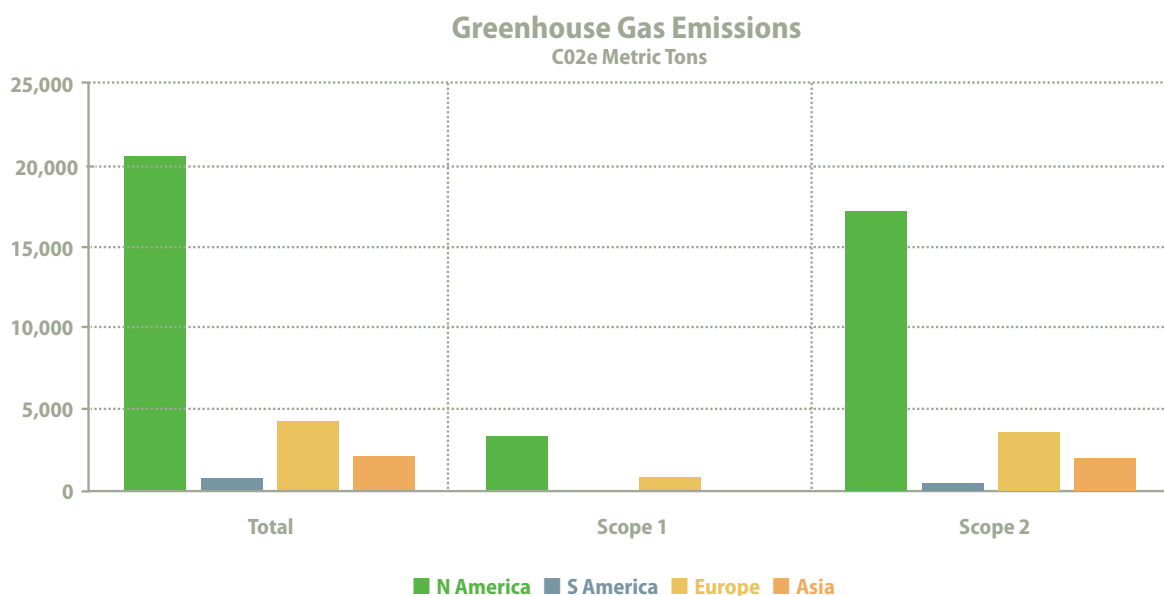
Carbon dioxide equivalent emissions from fuel combustion totaled 4,004 metric tons across MSA's global operations in 2018. Fuels included natural gas and liquid petroleum gas, with comfort heating representing the primary use for these fuels

Scope 2 Emissions

Global carbon dioxide equivalent emissions from purchased electricity totaled 23,653 metric tons across MSA's global operations in 2018. Electricity usage spans infrastructure and production operations.

Total CO₂e Emissions

Total global carbon dioxide equivalent emissions (Scope 1 and Scope 2) equaled 27,657 metric tons across MSA's operations in North and South America, Europe, and Asia.

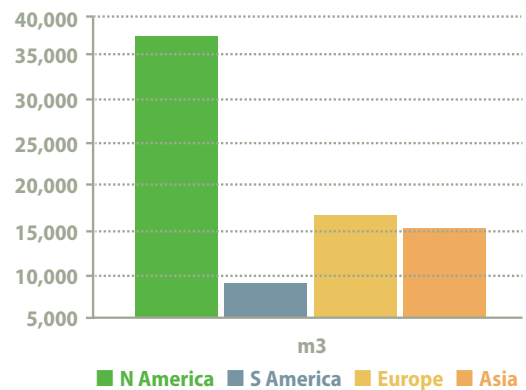


WATER

Water Consumption

MSA believes access to clean water is a fundamental human right and considers the responsible use of water to be a fundamental element of the MSA global environmental management system. MSA's global water consumption in 2018 was 79,666 m³. To further support MSA's commitment to water sustainability, MSA strives for continuous improvement and seeks to identify opportunities to reduce our global water impact.

Water Consumption
m³



In 2018, MSA's Murrysville, Pa facility recycled approximately 200 tons of high-density polyethylene (HDPE) in the hard hat manufacturing process. This reduced landfill waste and generated 164 metric tons of CO₂ offsets.

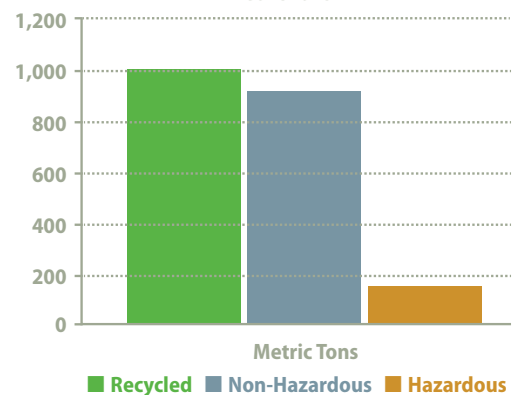
WASTE

Disposal and Recycling

In 2018, global waste generation totaled 2,064 metric tons with 1,001 metric tons recycled, 912 metric tons disposed of as non-hazardous waste, and 151 metric tons managed as hazardous waste. In total 48% of all waste generated globally was recycled in 2018.

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Waste Consumption
Metric Tons



REDUCING OUR FOOTPRINT

Reporting

As part of our environmental sustainability programs, in 2019 MSA submitted greenhouse gas data, energy data, and reduction goals to the Carbon Disclosure Project for the reporting year 2018. Consistent with our global environmental policy, MSA approaches environmental matters beyond mere compliance and is committed to the Carbon Disclosure Project. In addition, MSA will use information generated through this annual reporting process to assist in the identification of risk, opportunity, and trends associated with our global environmental footprint.

Management

MSA uses environmental management systems globally to reduce environmental risks and impacts across its operations. Examples of these systems include refrigerant management, waste management, and the tracking and analysis of natural resource usage, waste generation, and compliance obligations. The MSA Devizes, UK and Suzhou, China facilities are currently certified to the ISO 14001:2015 standard. MSA is presently investigating the possible certification of additional facilities.

2020 Environmental Management Program Objectives

Based on analysis of current risk and opportunity, MSA has set goals to reduce global Scope 2 greenhouse gas emissions by 1% annually (2018 baseline) for the next five years beginning in 2020. In addition, MSA expects to identify global opportunities that will increase recycled materials across the organization by 3% in 2020 (2018 baseline).

By setting forward-thinking goals, MSA expects to reduce the overall environmental impact of our global operations while ensuring our associates maintain awareness of the Company's commitment to sustainability. MSA will continue to analyze environmental data, risk, and opportunity and expects to establish future goals based on these assessments.

