

2020

Corporate Responsibility & Sustainability



PEOPLE

HONESTY

CUSTOMER FOCUS

ACCOUNTABILITY

EXCELLENCE



About MTI: Who We Are

A technology-driven specialty minerals company

We are a leading global resource- and technology-based company that develops, produces and markets a broad range of specialty mineral, mineral based and synthetic mineral products and provides supporting systems and services.

As a leader in minerals-based application technology with world-class manufacturing capabilities, we are focused on delivering a comprehensive portfolio of value-added solutions to a diverse customer base across all sectors. We make it our priority to provide customers with differentiated products along with best-in-class customer service and technical expertise. Our company's success is driven by our people-focused culture, Operational Excellence Foundation, safety-first approach and commitment to living our core values in everything we do.

We continuously invest in sustainability throughout our operations, motivated in large part by the commitment and engagement of our global employee base. We recognize that being a responsible business and corporate citizen is critical to our ongoing success. For us, it is an ongoing journey where we continue to improve, adapt and strive to achieve ambitious objectives.



MTX
NYSE



3,500+
Employees



\$1.6B
in Sales



33
Countries



12
R&D Centers

People-Focused Culture

Living Our Core Values with Commitment to Safety, Operational Excellence and Innovation



MTI's Differentiated Value Proposition



Unique Mineral Reserve Positions



World-Class Manufacturing and Processing Capabilities

Global footprint strategically located to support customers



Leading Positions across Diverse End-Markets and Geographies



Leading Technology Platforms and Extensive Specialty Minerals-Based Application Expertise

Comprehensive portfolio of value-added solutions closely aligned with customer preferences

Vertically Integrated from Mine-to-Market:

Providing Improved Value & Performance for Customers

Attractive Financial Profile

Strong margins, cash flow and balance sheet

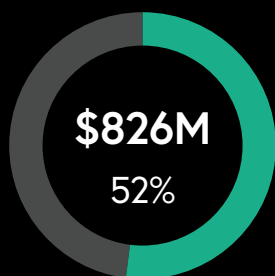
Multiple Growth Levers

Geographic expansion and penetration, new product development and M&A

Sustainability & Corporate Social Responsibility Principles

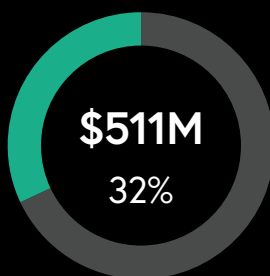
Deeply ingrained in all business areas

Business Segments: \$1.6B Sales in 2020



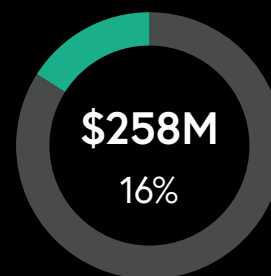
Performance Materials (Bentonite)

MTI's largest and most diverse business segment with extensive technical, sales and commercial capabilities. A leading global supplier of tailored bentonite-based solutions serving a broad range of consumer and industrial markets.



Specialty Minerals (Carbonates)

World's largest Precipitated Calcium Carbonate (PCC) producer with the most advanced technology portfolio serving paper and packaging, construction, transportation, and consumer sectors.



Refractories

Premier supplier of monolithic and shaped refractory products and services for high-temperature applications in the steel, non-ferrous metal, and glass industries.



▲ Mining land reclaimed by MTI in Wyoming, USA. MTI reclaims an average of ~700 acres per year.

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Sustainability is a core value at MTI and is integrated into our corporate governance and organizational structures. Our Environmental, Social and Governance (ESG) strategy has always been a focus at the highest levels of company leadership. We know that ESG is paramount to successful business outcomes, and it is also central to our discussions within the Board of Directors at MTI.

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“ Our achievements highlighted in this Report are a direct result of the hard work and dedication of all MTI employees, who work tirelessly to ensure we are making progress, achieving our goals and living our values. With our sustainability strategy as a guide, we will continue our relentless pursuit of opportunities to advance the way we operate — both responsibly and profitably. Our journey continues. We are focused on today and the future, and we are confident we will meet the ambitious objectives we set for our company. ”

— DOUGLAS T. DIETRICH | CEO AND CHAIRMAN

About this report

The 2020 Corporate Responsibility & Sustainability Report is MTI's 13th annual report. This Report covers performance and data from the period of January 1, 2020, to December 31, 2020, and is part of MTI's corporate story, allowing us to highlight our sustainability progress year-over-year. Some initiatives from 2021 have also been included. This is our third year following the Global Reporting Initiative (GRI)'s most recent framework as a guide for identifying, measuring, and reporting our non-financial impacts. We have started to disclose elements from the Sustainability Accounting Standards Board (SASB) and are evaluating the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). In connection with our sustainability policies, our 2020 Annual Report and Investor Presentations, 2021 Proxy Statement and our website, this report helps showcase MTI's broad sustainability initiatives and how they are deeply integrated with our strategy, our people, in our plants, and throughout our processes and products.

Minerals Technologies Values

People

We place the health and safety of people ahead of all else. We cultivate respect for individuals and for a diversity of cultures, beliefs and perspectives.

Customer Focus

We foster relationships with our customers based on trust and mutual benefit. We strive to enhance value to customers through improved product quality, customer service and innovation.

Accountability

We deliver profitable growth and higher returns for our shareholders. We manage our operations, our capital and our business opportunities in a sustainable manner. We serve as good stewards of natural resources, and we employ sound environmental practices to protect the communities in which we operate.

Excellence

We constantly seek new, innovative technologies and efficient business processes to remain a market leader. We drive for success by focusing on continuous improvement in all facets of the business—processes, systems, products, services and people.

Honesty

We value honest, open and ongoing communications with our employees, customers, shareholders, suppliers and the communities in which we do business. We uphold the spirit and intent of the law and conduct our affairs ethically.

Q&A with Our Chairman and CEO



DOUGLAS T. DIETRICH

2020 was a test of our company's strength and resolve. In the face of difficult circumstances, we approached each day guided by our core values with the top priority focused on protecting the health, safety, and well-being of every MTI employee. As the COVID-19 pandemic affected how we work and live, MTI persevered and took important steps to invest in our business for our long-term success. In our 13th Annual Sustainability Report, we share many highlights of how our employees delivered for each other, our company, our customers, our communities, and the environment to meaningfully advance our broad range of initiatives which will drive a more sustainable future.

Today there is heightened interest in a company's purpose, going beyond financial performance to assess how it delivers value for all stakeholders. How has MTI's sustainability strategy evolved over the past 13 years?

With their unique physical and chemical characteristics, minerals are ubiquitous in nearly all products that humans touch or use. At MTI, as we transform our minerals into valuable formulated solutions that are key components in a wide array of end-products, we recognize the important role we play in serving industries and communities around the globe. With our vertically integrated structure from mining to processing to innovating alongside customers, we understand the critical role we have in managing all aspects of this value chain in a sustainable manner. Under that framework, MTI always strives to operate where sustainability and economic benefits align, helping our customers do more with less and living up to our responsibilities in our own operations and the communities where we operate.

Sustainability is deeply embedded into MTI's core values and has always been integral to how we operate. It starts with our engaged employees — ensuring everyone arrives home safely at the end of each day, fostering a high-performance culture, and by being a responsible neighbor in our communities. It also involves continuously innovating to meet the needs of our customers, improving our manufacturing processes to reduce costs and our environmental footprint, operating ethically in all that we do, and managing our natural resources and capital in a sustainable manner.

Over the past few years, our approach to sustainability has evolved beyond a foundation of safety, health, and the environment to a more integrated business strategy focused on how our activities benefit a wide range of stakeholders. At MTI, we know that long-term success requires a commitment to sustainability in its broadest form as well as a balanced approach to stakeholder engagement. Our 2025 environmental targets demonstrate our steadfast approach to this definition.

These goals have driven our actions and investments on a wide range of sustainability themes that are most critical not only to MTI's success but to the world around us. In addition, through the oversight of our Sustainability Lead Team, which I chair, along with the engagement of every MTI employee, we have strengthened our focus around our overall sustainability strategy, implemented global projects to achieve our targets, and improved the quality and transparency of our external disclosures.

It has been two years since MTI set environmental targets in six focus areas. How is MTI progressing with these targets?

We have a track record of achieving the objectives we set for our company, and I am very encouraged with the meaningful progress we have made over the past two years to deliver significant improvements in our environmental performance. We are well on track to achieve or exceed all of our targets related to energy, water and waste, and as evidence of our strong performance, last year we increased our Direct CO₂ emissions target to a 20% reduction.

Some projects to highlight include:

- Several of our largest sites have converted to natural gas processes as the main energy source, and we have improved fuel usage efficiency across many of our operations.
- Progress with sourcing 50% of our electricity from renewable sources at our manufacturing facilities. Specifically, we signed a contract to source 50% of the electricity at our Wyoming facility from wind turbines, which will significantly reduce our Scope 2 Indirect Emissions.
- Continuing to convert our facilities to 100% LED lighting.
- Implementing comprehensive water management and recovery projects which saved over 300 million gallons of water in our operations in 2020.
- Initiatives focused on process waste reduction and increasing beneficial reuse for local businesses and communities.

You can read about our performance and specific projects for each of these six focus areas in more detail in the Environmental Section, starting on page 28.

How will MTI further drive its environmental performance after achieving its initial goals? What should we expect next in MTI's journey?

Our culture is grounded in continuous improvement, and we are always challenging ourselves on how to implement more innovative, efficient, and cost-effective projects. We are applying this same mindset to sustainability. As we sit here today, it is likely that we will establish new, ambitious goals that set the bar even higher before we reach 2025. Employee engagement around our sustainability initiatives has been phenomenal, and I have seen a clear step change over the past few years. Through our robust suggestion system and kaizen events, we are capturing ideas on how to pursue further reductions around our six focus areas — these projects will help MTI drive environmental performance that goes well beyond our current targets.

While we have been focused on Scope 1 and Scope 2 GHG emissions, we are starting to look outside of our organization at the impact our operations have across the entire value chain through monitoring and determining Scope 3 emissions. In addition, after enhancing our disclosures in this year's report around hazardous waste and sources of energy, we see the next area of monitoring and increasing our transparency to extend into reporting on metrics such as sources of water we consume and where it is discharged.

As you look ahead — 5, 10, 20 years down the road — what do you see as MTI's main sustainability challenges as well as areas of opportunity?

Sustainability requires an ongoing understanding of the world, the mega trends, and evolving customer needs. We are thinking bigger and more broadly — beyond the next five years. We want to drive transformational change with our sustainability

initiatives and know that is achievable. That is why we are starting to frame out what we can do today to achieve monumental reductions in our environmental footprint by 2035 and beyond.

We do face some obstacles that we are already addressing. As customer demand increases for our high-value products, there is a corresponding need for energy use at these locations as well as waste related to production. We recognize the importance of moving faster to balance growth with becoming more resource-efficient. With this at the forefront, we are adapting processes at existing plants and designing new plants or capacity expansions with innovative solutions that will allow us to become more energy efficient, lower water discharge and minimize our waste footprint going forward.

Supported by our focus areas, targets and results monitoring, we see MTI's future as a leader in our industry where sustainability is integrated into day-to-day activities and embedded in the culture — leading to transparency, openness and collaboration. To achieve this, we must further cement sustainability into development and capital project considerations, while continuing to engage employees to drive innovation. For each sustainability project we have implemented, we are finding that we can make these investments while also yielding cost savings and solid returns.

MTI has evolved its new product pipeline to deliver more sustainable solutions. Can you share details how MTI is driving new growth opportunities and solving important environmental issues for customers through its product portfolio?

New product development is essential to MTI — with the creation and commercialization of new technologies serving as a core part of our growth strategy. We are driven by an important ambition: to innovate alongside our customers and help them create value. More often, we are also closely working with our customers to help them achieve their sustainability goals. Our products enable our customers to be more productive and efficient — to

make more with less while reducing their impact on the environment. In recent years, we have transformed our comprehensive product offering to address our customers' desire for more sustainable, cost-effective solutions, which has allowed us to enter adjacent markets and strengthen leadership positions.

In 2020, we advanced and introduced a broad array of sustainable solutions focused on:

- Eco-friendly cat litter products
- Containment and removal of harmful pollutants in water, including per- and polyfluoroalkyl substances (PFAS)
- Mineral and fiber recycling to reduce our papermaking customers' consumption of fiber from trees and convert solid wastes into usable materials
- Purification of biodiesel fuels
- Improving animal health through new technologies that reduce ingested toxins in animal feed
- Emissions reduction during the foundry casting process

Over the past five years, we have reduced the time from development to market by half, and at the same time, we've increased our sales from new products by more than 50%. We have also incorporated sustainability indicators to ensure we are meeting both our own environmental goals as well as those of our customers. **Over the past three years, we have grown our product pipeline from 41% to 67% of solutions that deliver a sustainability benefit to our customers or our company. In addition, potential revenue from these new products is around \$800 million.** We have made tremendous progress in a short span and expect to accelerate this trend in the near future.

Has the COVID-19 pandemic changed MTI's focus on sustainability? What have you learned about your team's capabilities?

What the world has gone through over the past 18 months has adjusted everyone's perspective about how fragile it can be. It has also underscored the importance of interconnectedness, the power of our

culture of continuous improvement, and how quickly our employees can come together to solve problems.

Protecting the health and safety of our employees is our top priority, and this has been MTI's guiding philosophy while managing through the pandemic. We implemented a series of robust COVID safety protocols for MTI employees across our global locations. We recognized early on that we needed to educate our teams and their families about the risks of community spread and how our safe work practices could be extended to their homes. By doing so, our employees have not only had the resources to protect themselves and their colleagues, but also their families and local communities. While working in a frequently changing environment, our employees stayed focused on improving our safety performance, which resulted in 2020 having the lowest recordable injury rate in MTI's history.

MTI worked closely with our customers and local communities to effectively manage the challenges of the pandemic while operating in a sustainable manner. Our approach reflects our belief that a company can and must create both economic and social value, even in the most difficult situations.

We will build on the high levels of collaboration and information-sharing that we have seen to meet the challenges of the pandemic and apply that mindset to accelerate our sustainability initiatives.

Diversity and Inclusion (D&I) are part of MTI's core values. How is the company helping to promote a more diverse and inclusive work environment?

As a global company operating in 33 countries, fostering a company culture that unconditionally accepts all colleagues is paramount to developing the most engaged and effective workforce. The viewpoints that our employees from diverse

ethnicities, backgrounds and life experiences bring to MTI are immeasurable. By promoting and accepting our differences, we create an environment that supports better decision-making, drives mutual respect and inspires collaboration. While our employee base is diverse, we continue to take actions to ensure employees are seen, heard and have an equal opportunity to fulfill their potential. That is where our Global Inclusion Council, which I chair, along with the participation of every MTI employee, has been making a tangible difference with our D&I initiatives.

During 2020, we introduced a global training module, focused on unconscious bias, microinequities and reinforcing the importance of diversity and inclusion, which was completed by all MTI employees. We communicate frequently around the topic through many visible platforms to raise awareness and conduct listening sessions to understand how employees feel about their experience working at MTI. In addition, we have given employees a platform to share cultural spotlights, added specific questions to our company engagement survey, and embedded D&I practices further into our individual performance evaluations and onboarding, succession planning, leadership development and recruitment processes.

Creating a more diverse and inclusive environment makes us a stronger and more competitive company. I am personally committed to overseeing actions that will further drive a culture of inclusion and belonging at MTI.

Sincerely,



Douglas T. Dietrich
Chairman and CEO

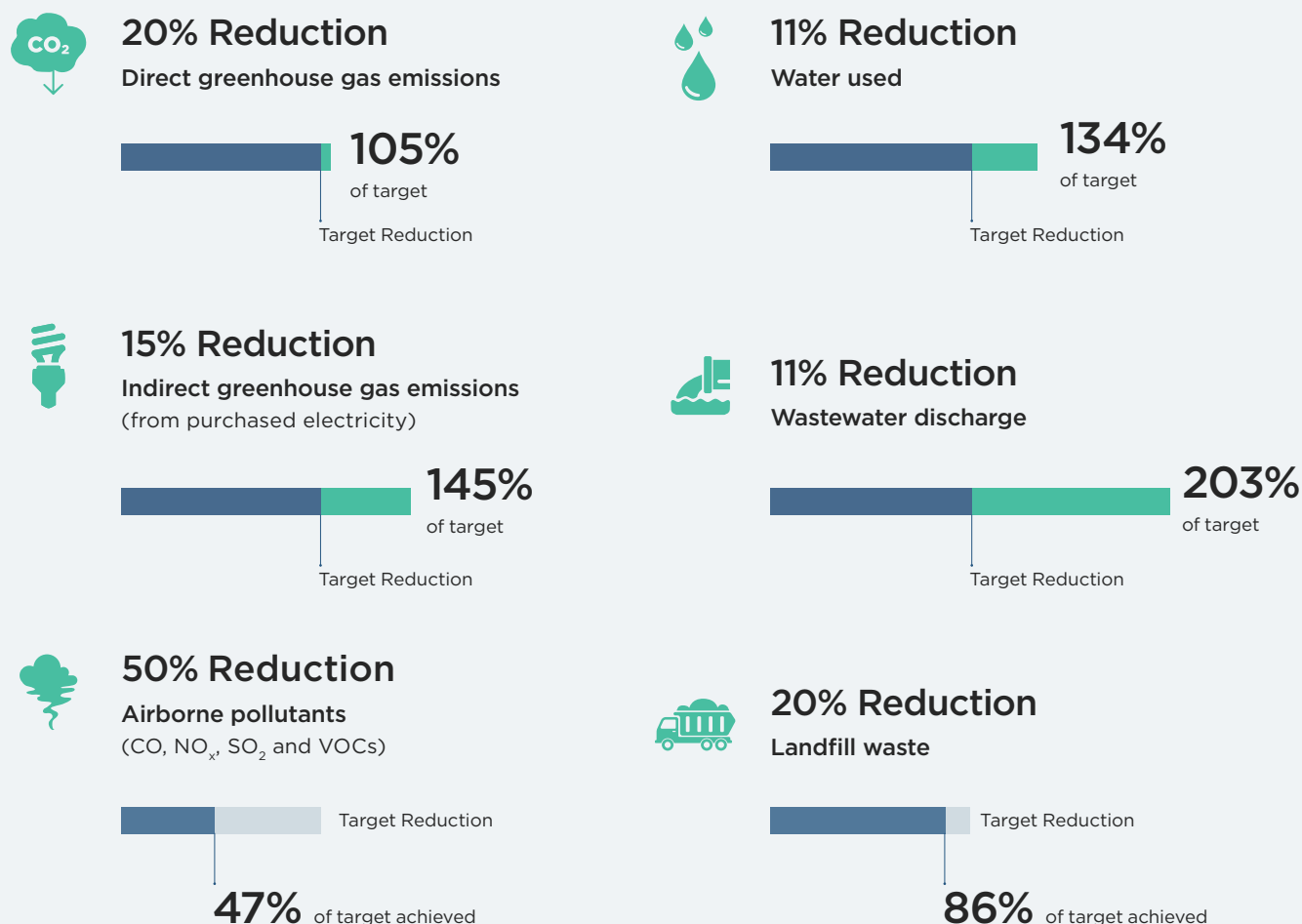
2025 Environmental Targets

Meaningful Progress in Year 2

MTI's environmental targets demonstrate our commitment to transparency, promoting innovative opportunities to improve performance, enhancing our ability to manage risks, and providing insight into our management of those areas that matter most to our stakeholders and business. Our goals also serve as a guide for our businesses and locations to embed sustainability into their day-to-day operations and measure their progress. We established these targets in 2018 and have publicly reported our progress in the subsequent years.

We are on track to meet or exceed all targets and have implemented company-wide projects that will drive significant improvements in the years ahead.

Progress to Achieve Targets Since 2018



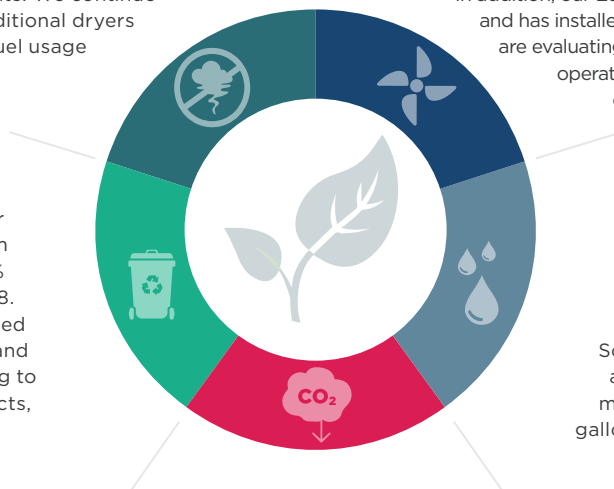
Targets established from 2018 baseline and year 2 performance references 2020 calendar year.

2020 Performance Highlights

We have switched to natural gas processes as the energy source for drying bentonite clay at one of our largest facilities. This has helped to significantly reduce Scope 1 Direct GHG emissions and airborne pollutants. We continue to implement projects to convert additional dryers to natural gas while also improving fuel usage efficiency at our sites.

We recently signed a contract to source 50% of the electricity at our Colony, Wyoming, location with green wind energy. This project should reduce MTI's Scope 2 Indirect GHG emissions by about 6% in 2021. In addition, our European Pet Care business is carbon-neutral and has installed over 1,300 solar panels at its facilities. We are evaluating additional opportunities across our global operations to achieve our goal of sourcing 50% of electricity from renewable sources by 2025.

Our Lifford, UK, facility has implemented an alternative outlet for their by-product precipitated calcium carbonate (PCC) and achieved a 70% reduction in process waste since 2018. Our Paper PCC business has developed a treatment process for agricultural and beneficial reuse applications equating to about 40,000 tons of PCC by-products, 45% of our total waste generation.



Our PCC plants consume and discharge a significant portion of our total water at MTI. At several of our sites, we have executed innovative closed-loop systems to recover water and waste in production. Some of these projects have led to nearly a 100% reduction in water discharged to municipalities and saved over 300 million gallons produced in our operations in 2020.

In 2020, we extracted over 1 million tons of waste carbon dioxide from our PCC customers' exhaust stacks as well as our own and sequestered those emissions in useful products, reducing harmful release to the atmosphere.

Our Mining Lead Team is ensuring we are achieving the highest standards in mining, exploration, reclamation, wildlife conservation, and reporting processes across our global operations. MTI has reclaimed an average of approximately 700 acres per year across all operations.

In 2020, we reduced our environmental releases by 32% through our focus on spill prevention, enhanced compliance tracking and more rigor around identifying the most likely release activities.

Sustainable Product Development

67% of products in pipeline aligned with sustainability

\$800M potential revenue from sustainably-advantaged products

Employee Safety

Record Safety Performance

0.60 recordable injury rate

90% of facilities injury-free

266K+ safety engagement activities completed

Employee Engagement

8,600 Kaizen events conducted
Highly focused problem-solving workshops to improve product and service processes

63,000 employee suggestions
Specific ideas implemented to remove waste and risk from processes and operations

100% employees completed comprehensive diversity and inclusion training module

Award Named to *Newsweek's* 2021 ranking of America's Most Responsible Companies

Sustainable & Clean Technology Products & Revenues

In 2020, we advanced and introduced sustainable innovations focused on:

- Eco-friendly packaging for products
- Purification of biodiesel fuels
- Improved animal health
- Mineral and fiber recycling for the paper industry
- Clean-up of contaminated water
- Containment and removal of harmful pollutants from waste sites
- Emissions reduction during foundry casting process
- Energy reduction in manufacturing production

We continue to accelerate the development of products with a sustainability benefit. In 2020, 60% of our total company revenue was derived from products and services that enhance both MTI's and our customers' sustainability objectives. Below is a summary of how we categorize our sustainability advantaged product pipeline:

Energy Efficiency: we have several businesses where our products improve our customers' operations by making them more sustainable, productive, and creates less waste/scrap. For example, our Additrol® greensand bonds significantly reduce our customer metalcasting scrap and emissions and decrease the

need for rework. Our Refractory products enhance the productivity of our steel making customers by increasing their safety, operational time, and efficiency.

Pollution Prevention: MTI has a broad product pipeline designed to prevent pollution from spreading in the environment, remove contaminants from air, water and soil, and to improve the quality of water for safe discharge.

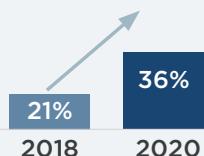
- Our Environmental Products business is a leading provider of geosynthetic clay liners that prevent pollution, including ensuring municipal, power plant, and mining wastes are contained and groundwater sources are clean. Our portfolio of geosynthetic liners can reduce the thickness of a typical compacted clay liner in a municipal landfill from three feet to only a few inches and achieve a tighter and longer-lasting seal to significantly enhance groundwater protection.
- Our FLUORO-SORB® adsorbents capture and remove Perfluorinated Alkylated substances (PFAS), including Perfluorooctane Sulfonic Acid (PFOS) contaminants from soil and water.
- Our water treatment technologies remove oil and grease, toxic metals, and other contaminants from water generated by industrial manufacturers and oil and gas producers. Our technologies enabled over 1.9 billion gallons of water to be safely discharged into regulatory compliant natural sources or municipal water treatment plants.

Growing Pipeline of Sustainable Solutions

Indicators to Track Viability of New Products

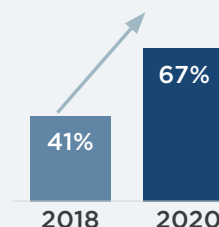
MTI Sustainability:

New products that benefit MTI's sustainability goals



Customer Sustainability:

Products that support customers' sustainability objectives



- Our Precipitated Calcium Carbonate (PCC) process extracts and captures carbon dioxide from our host paper mills' emission stacks and from some of our own emission stacks and converts to the geologically stable precipitated calcium carbonate mineral.
- Our PCC technology portfolio allows paper manufacturers to achieve their quality, cost, and sustainability goals. For example, our high-filler products reduce the requirement for wood fiber in paper, which decreases the amount of trees that need to be harvested. In addition, ENVIROFIL® PCC and NewYield® technology help address paper recycling challenges by recovering waste from the papermaking process and converting the material into valuable pigments for production.
- Our high quality bentonite clays are used for long term storage of nuclear waste in underground repositories.
- We also sell bentonite and talc formulations that are used to manufacture ceramic pollution control equipment in automobile and heavy truck engines.

Green Building: Our Building Materials business offers several product groups designed to protect the health of occupants by improving the performance of the building envelope. We manufacture and sell a line of spray-applied vapor barriers that safeguard indoor air quality from vapor intrusion by soil and groundwater contaminants.

We also sell a series of products designed for green roofs that combine the performance of proven waterproofing systems with modern green roof technology to decrease the heat island effect, manage rainwater, and enable plants to convert carbon dioxide to oxygen. Our products are routinely submitted for project calculations to qualify construction projects for Leadership in Energy and Environmental Design (LEED) certification.

Sustainable Agriculture: MTI mines leonardite and produces a line of agricultural crop yield improvement formulations. Our humic acid and nutrient formulations are used by our customers for application to agricultural crops to enhance plant health and improve yields. MTI has an extensive portfolio of toxin binders for animal feed applications that improve animal health and enable productive weight gain. Our edible oil, including soybean and palm oil, and biodiesel purification agents remove toxins and contaminants to improve purity and shelf life.

Alternative Energy: in our drilling products business, we manufacture and sell a complete line of bentonite and additive grouting solutions for the geothermal heat loop installation industry. Our grouts are mixed with sand or graphite at the job site to grout geothermal heat loops for household and commercial building heating and cooling.

~\$1 Billion

Revenue from Sustainable Products (~60%)

Pollution Prevention

Environmental products including water treatment, PCC which reduces CO₂ emissions and talc for ceramic filters

Sustainable Agriculture

We develop leonardite-based formulations for agricultural crop yield; toxin binders for improved animal health and weight gain; and clarification agents to reduce contaminants and improve the quality of edible oils and biodiesel.

Green Building

Our building-materials products improve the performance of the building envelope with waterproofing, vapor barriers and adhesives additives that enhance indoor air quality and energy efficiency. Our green roof products combine proven waterproofing systems with reducing the heat island effect, managing rainwater and enabling plants to convert carbon dioxide to oxygen.

Energy Efficiency

Our refractory and metalcasting green sand bond formulations and services promote sustainability by enhancing quality and productivity, extending throughput and reducing scrap and waste.

Alternate Energy

Geothermal grouts enable efficient ground heat exchange and are one of the critical components in geothermal energy applications.

Our Innovation and New Product Development Process

We are a technology and innovation-driven company that strives to provide the highest value and most efficient solutions for our customers and the natural environment.

We are constantly evaluating opportunities to improve our existing products, technologies, production processes, or creating new ones, to help reduce MTI's and our customers' impact on the environment. Our innovation process is aligned with our Lean philosophy for continuous improvement and demands the ongoing development of our products and technologies in response to customer needs.

Key Objectives



Accelerate the speed of development with goal to reduce development time by half



Increase products commercialized



Enhance the impact of our solutions with goal to double percent of revenue from new products



Grow portfolio of sustainability-focused products

Progress Advancing Key New-Product Development Objectives in 2020

\$800M+

Potential revenue pipeline value from development to commercialization

44

Commercialized 44 new value-added products; conducted many successful trials virtually

20

Month timeline from idea to commercialization (50%+ reduction from 40 month timeline in 2016) and progressing toward goal of 10 month timeline

11%

Of total sales from new products progress toward goal of 20% and higher

+50%

Sales increase from new products since 2016

163

New product/process ideas submitted by employees

83%

Of Projects developed with customers

A Message from Alison A. Deans



Chair of the Corporate Governance
and Nominating Committee

Sustainability is a core value at MTI and is integrated into our corporate governance and organizational structures. Our Environmental, Social and Governance (ESG) strategy has always been a focus at the highest levels of company leadership. We know that ESG is paramount to successful business outcomes, and it is also central to our discussions within the Board of Directors at MTI.

The Board provides oversight and guidance with regard to how management and the company evaluate and integrate corporate responsibility and sustainability into MTI's business strategy, decision-making and stakeholder communication. This includes evaluating our environmental footprint, climate trends, sustainable solutions, employee safety and well-being, human rights, compliance, and diversity and inclusion. MTI has made considerable advancements across a broad range of sustainability initiatives since publishing its first report 12 years ago. We are encouraged with the noticeable progress since implementing environmental targets and the many important contributions MTI continues to make to support its employees, customers, and communities.

Our 2020 Report reflects the central role sustainability plays in MTI's business strategy and governance and its importance to all stakeholders. The report highlights how broadly MTI evaluates sustainability and our specific approaches to advancing each facet of our framework to ensure a sustainable future. The report also details our commitment to transparency when we communicate about sustainability, especially when we discuss the progress against our targets.

MTI has set a strong foundation that we will continue to build upon for years to come. We will continue our dialogue about advancing MTI's ESG strategy through regular meetings with our Chairman and CEO Douglas Dietrich, other members of the Leadership Council, and the Company's Sustainability Lead Team.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alison A. Deans'.

Alison A. Deans

Sustainability Governance at MTI

Board Oversight of ESG and Sustainability

The MTI Board of Directors has primary responsibility for oversight of risk and strategy for the company, which includes our sustainability efforts as well as climate-related risks and opportunities. The Corporate Governance and Nominating Committee is directly responsible for reviewing and evaluating MTI's programs, policies and practices relating to social, environmental and governance issues which could impact the long-term sustainability of our business. This includes strategy and risk, environmental performance and 2025 targets, diversity and inclusion, talent and leadership development, safety, ethics and compliance, and human rights. The Corporate Governance and Nominating Committee, along with the Chairman of the Board and CEO, formally review and approve each publication of MTI's Corporate Responsibility and Sustainability Report on an annual basis. In addition, the entire Board follows a formal, monthly schedule for consideration of environmental, health and safety, and social matters, which are reviewed at each regularly scheduled board meeting. Overall corporate responsibility and sustainability matters and progress, including social topics, are periodically reviewed with the Committee as well as the full Board at regularly scheduled board meetings. Additional information about our Board's structure, composition and oversight can be found in [MTI's 2021 Proxy Statement](#).

Leadership Commitment to ESG and Sustainability

Our Leadership Council (LC), under the direction of Chairman and CEO Douglas Dietrich, oversees our businesses, functional areas and culture-based lead teams — all of which integrate sustainable processes and practices into their strategies and identify and manage risks. The entire LC, which is composed of our senior business unit and resource unit executives, is actively engaged in the management of MTI's broad sustainability practices. Mr. Dietrich champions sustainability at an organizational level and each business unit leader helps drive sustainability practices and initiatives as part of their overall business strategy.

Sustainability Lead Team

The Sustainability Lead Team comprises senior leaders with functional expertise across our organization, including within the areas of Environmental, Health, and Safety, Legal and Compliance, Investor Relations, Finance, Corporate Communications, Human Resources, Global Supply Chain, Research and Development, Manufacturing, and Commercial. The Lead Team reports directly to our Chairman and CEO, meets regularly, and reports on progress to the Leadership Council and provides periodic updates to the Corporate Governance and Nominating Committee and the full Board. The Lead Team seeks to ensure a holistic approach to developing and progressing our company-wide ESG and sustainability strategies and initiatives and drives alignment across the organization to address emerging ESG risks and opportunities. In addition, other focus areas include managing progress toward achieving our 2025 environmental targets; providing guidance and support across the company for implementing new projects, policies and practices; and improving our disclosures to better align with external reporting trends.

In 2020, the Sustainability Lead Team activities included:

- Launching a Sustainability Intranet Hub to facilitate engagement and best practice sharing for MTI employees and provide platform so employees can act as connective tissue across the corporation on this topic.
- Communicating to management and all employees a framework for implementing best practices for reducing Scope 1 and Scope 2 emissions.
- Designing a company-wide, locally driven employee engagement and awareness initiative to drive a more sustainable culture, enhance the data collection process, and encourage site-level leadership on environmental sustainability.
- Planning additional ESG disclosures to better reflect our company's initiatives and publishing a SASB and TCFD framework index.
- Aligning more closely with our other Lead Teams on topics related to environmental, social and governance and leveraging these initiatives to deeply integrate developments into our overall sustainability strategy.
- Analyzing long-term climate policy trends and policies and identifying how our company can be best positioned to address them going forward.

MTI has seven culture-based Lead Teams. These cross-functional Lead Teams, comprising employees from across geographies and subject areas, report directly to our Chief Executive Officer and are sponsored and led by a senior executive appointed to provide guidance and expertise. Each of these Lead Teams develops goals, standards and systems; tracks metrics; and shares best practices to ensure that we are making tangible progress in these key areas.

Lead Teams Report to CEO:

1 Environmental, Health and Safety: Continuously improve health and safety programs, training and compliance. Develop risk reduction systems and initiatives.

2 Operational Excellence: Continuous improvement and lead lean practices to enhance our business performance and drive people-focused culture.

3 Technology and Innovation: At the forefront of innovation and developing practices to accelerate the speed and success rate of new product introductions.

4 Mining: Develop goals and tactics to ensure the universal use of best practices for mining, exploration, and reclamation to minimize impact.

5 Expense Optimization: Drive cost avoidance and reduction through improvement in processes and implementation of employees suggestions and best practices.

6 Diversity and Inclusion: Cultivate a diverse and inclusive work environment for all employees.

7 Sustainability: Advance sustainability strategy, manage environmental progress towards reduction targets, benchmark trends and communicate best practices across company.

How Sustainability Is Integrated in Our Strategy and Purpose

MTI has a longstanding commitment to operate ethically and responsibly while creating value for our customers, employees, communities and other stakeholders. We look at sustainability holistically, understanding that addressing the continuum of environmental, social, governance and ethics issues is critical to the success of our business. Sustainability is a vital driver to our long-term growth, and through continued learning and improvement, we are making progress in addressing the biggest challenges of today, while capturing opportunities for the future.



Our four focus areas:

ENVIRONMENTAL	SOCIAL	GOVERNANCE	ECONOMIC
Conserving and Protecting	Caring for Our People and Communities	Operating Ethically	Responsible Growth
<p>Minimize Impact</p> <p>Seeking to reduce the environmental impact of our activities through more efficient manufacturing processes and best practice adoption. Our 2025 environmental targets provide a clear path to improve our performance.</p> <p>Sustainable Innovation</p> <p>Evolving our new-product development processes and pipeline to meet MTI's environmental goals and address customers' most pressing sustainability challenges. We are accelerating the speed with which we bring products to market and increasing the percentage of new products with a sustainability benefit.</p>	<p>Health and Safety</p> <p>Nothing is more important than the health and safety of our employees — a 100% injury-free workplace is achievable. We continue to enhance our strong safety culture through hazard identification, fatality risk prevention initiatives, and comprehensive training.</p> <p>People-Focused Culture</p> <p>Our engaged global team is our greatest strength and drives our high-performance culture, including our commitment to sustainability. We are fostering a diverse and inclusive culture where differences are welcomed, celebrated and appreciated, and everyone has an equal opportunity to succeed. We provide the resources to empower, engage and develop our employees while attracting new talent to help us achieve long-term success.</p> <p>Community Engagement</p> <p>Supporting local communities through education, fundraising and sponsorship opportunities.</p>	<p>Legal Compliance</p> <p>Understanding that honest, ethical and transparent conduct is vital to our success and reputation. Every employee plays a key role in complying with local and national laws and regulations. We have a comprehensive framework of codes, conducts and principles that all employees are trained in and are expected to demonstrate in all activities.</p>	<p>Financial Performance</p> <p>Generating sustained economic benefits for our employees, shareholders, local communities, and broader society.</p> <p>Investing for Sustainable Growth</p> <p>Enhancing our competitive positioning by advancing customer-driven innovation in new product development, investing in high return projects and our core infrastructure, including maintaining and improving the performance, safety and environmental standards at our facilities.</p>

Stakeholder Engagement

Listening to, engaging and collaborating with our stakeholders — employees, customers, suppliers, investors, regulators and members of the communities where we live and work — makes us a stronger company.

Stakeholder engagement not only makes us a better company, it also plays a critical role in our ability to be a more responsible corporate citizen. Transparent, authentic dialogue helps us focus on where we can strengthen our people-first culture. Because of this, we regularly interact with our stakeholders to better understand their unique perspectives and share important information about our key focus areas and initiatives. Moving forward, we will continue to expand and enhance our multi-faceted approach to engaging with stakeholders.

STAKEHOLDERS	METHOD OF ENGAGEMENT	KEY TOPICS OF DISCUSSION
Employees 	<ul style="list-style-type: none"> • Quarterly all-employee CEO-led Town Halls • Direct communications from management (email, CEO updates, podcasts and team meetings) • Frequent news updates on corporate intranet • Company-wide engagement surveys • Management plant visits • Regular safety meetings • Annual performance reviews • Extensive safety and Operational Excellence (OE) training and development: over 50,000 cumulative hours of training annually • Employee-led webinars on Environmental, Health and Safety (EHS) and OE • Robust suggestion system to capture employee ideas • Safety and Operational Excellence recognition letters • Bravo Chip to recognize noteworthy behavior • Annual Operational Excellence Achievement Awards • Code of Conduct and Compliance Hotline 	<ul style="list-style-type: none"> • Health and safety initiatives and performance plans • COVID-19 response plan • Company performance and strategy updates • Innovation and new product development • Investments in operations • Culture-based lead teams • Compensation and benefits • Talent management and career development • Recruiting process • High-performance culture and core values • Training and performance feedback • Corporate social responsibility and 2025 environmental targets • Diversity and inclusion • Rewards and recognition • Best practice sharing • Company policies and protocols • Establishing self-directed work teams and high-performance systems
Customers 	<ul style="list-style-type: none"> • Regular meetings with customers • Customer satisfaction surveys • Industry tradeshows • Social media • Targeted newsletters • Technical brochures • Voice of Customer processes • R&D portfolio with customer engagement at key stages and technology roadmaps • “House of Quality” process ensures customer requirements are driven in four areas through product development 	<ul style="list-style-type: none"> • Product quality, service, costs and performance • Market trends and innovative new products • Environmental benefits of products and sustainability • Key customer performance metrics • Ecovadis or similar surveys • Incorporating Voice of Customer for new product ideas • “House of Quality” metrics

STAKEHOLDERS	METHOD OF ENGAGEMENT	KEY TOPICS OF DISCUSSION
Investors and Analysts 	<ul style="list-style-type: none"> • Quarterly earnings calls • Press releases and SEC filings • Regular one-on-one or group meetings; management met with shareholders representing approximately 60% of actively traded shares outstanding in 2020 • Management presentations at financial and industry conferences • Annual Meeting • Outreach on governance and sustainability topics, including our top 60 shareholders who held approximately 90% of our shares in 2020 • Annual Report and Sustainability Report • Company website 	<ul style="list-style-type: none"> • Financial and operating performance • Outlook and market conditions • Mergers and acquisitions • Value proposition • Sustainability targets and initiatives • Environmental, health, safety and social performance • Capital allocation • Corporate governance • Board succession, composition and diversity • Diversity and inclusion • Disclosure and transparency • COVID-19 response
Communities 	<ul style="list-style-type: none"> • Volunteer activities and donations • Local employment opportunities • Career fairs and plant tours • Local government and associations participation • Emergency preparedness training • Family and community days 	<ul style="list-style-type: none"> • Jobs and local business opportunities • Environmental impact and protection • Community involvement and charitable giving • Plant operations • Safety and emergency/disaster planning • COVID-19 response • Local sourcing of supplies and raw materials
Suppliers 	<ul style="list-style-type: none"> • Supplier Code of Conduct and Conflict Minerals Policy • Performance assessments • Quality audits • Supplier qualification, documentation and selection • Identifying smaller and local suppliers 	<ul style="list-style-type: none"> • Performance criteria and expectations • Safety and regulatory issues • Sustainability • Lowest total cost discussions
Regulatory Agencies/ Elected Officials 	<ul style="list-style-type: none"> • Meetings and engagement on legislative and regulatory issues • Discussions regarding evolving legislation and impact on new products • Compliance with various permits 	<ul style="list-style-type: none"> • Policies that impact business, including environment, permitting, incentives and regulatory framework • Regulatory developments • Job market and skilled workforce

COVID-19 Response

Protecting our people, serving our customers and supporting our communities

The COVID-19 pandemic has led to unprecedented challenges on a global scale. For MTI, 2020 was a demonstration of how our people-first approach allowed us to manage our business effectively regardless of circumstances or market conditions and deliver essential products to our customers. It is also a clear demonstration of our commitment to the health and safety of our employees, their families, and the communities we serve. Given our presence in Asia and learnings in the beginning of 2020, MTI recognized early on the risks associated with the COVID-19 pandemic. And we acted quickly — with the top priority focused on protecting the health and safety of our employees, families, customers, and communities. Through much of 2020 and into 2021, we enacted the following protocols and measures to manage our company in this new environment.

Enhanced Protocols to Keep Employees Healthy and Safe

- Established a global COVID-19 task force to guide all key activities in a coordinated manner and ensure business continuity.
- Implemented a series of robust, standardized protocols for MTI employees across all locations aligned with local government requirements as well as WHO and CDC guidelines.
 - Measures implemented include: social distancing, mask wearing at all facilities, increased and regular sanitization, pre-shift wellness assessments, on-site temperature checks, touchless equipment and remote work where possible.
- Provided employees with personal protective equipment (PPE) and masks needed to operate safely.
- Suspended all non-essential business travel to minimize exposure for our employees, customers and general public.
- Initiated comprehensive incident reporting and contact tracing procedures, including self-quarantine if suspected exposure.
- Weekly program/tracker in place for auditing facilities on their performance against COVID-19 protocols which was shared with our Leadership Council.
- Engaged an external occupational health service to provide medical advice, testing and quarantining requirements for employees exposed to a positive COVID-19 case.

- We provided ongoing communications to our employees about steps they could take to protect themselves and their families outside of work. This included providing PPE, masks, and hand sanitizer to all employees for use at home with their families.

Provided Workplace Flexibility

- Implemented alternative work arrangements, such as working remotely and staggering shifts and breaks for essential employees who remained onsite at manufacturing and mining facilities.
- Adjusted operations to comply with evolving government guidelines in various regions and jurisdictions.

Increased Employee Education, Engagement and Recognition

- Delivered special bonus payment to recognize our frontline employees for their outstanding efforts throughout 2020.
- Committed to pay continuity for employees unable to work due to COVID-19 and government mandated shutdowns.
- Provided continuous COVID-19 awareness training and education for all employees in local languages.
- Established a global COVID-19 employee resource website on company intranet.
- Cascaded frequent and open communications via our leaders.

- Shared success stories, solicited ideas for engagement, and provided tools and resources for managers.
- Provided a wide array of communications via our intranet, employee resource website, emails, CEO podcasts, and virtual town halls meetings that provided an update on case counts, answered frequently asked questions, and encouraged safe operating and hygiene practices within and outside of the workplace.
- Accelerated the introduction of digital tools to connect and engage employees and support a collaborative work environment.
- Extended leadership and individual training programs into virtual and interactive formats and deployed them globally.
- Expanded our Employee Assistance Program which offers services from financial counseling to mental health support.
- Once vaccines became more widely available, we have assisted employees with obtaining access and are providing paid-time off up to four hours for hourly workers who receive a vaccine.

Serving Valued-Added Products to our Customers as Essential Business

MTI employees provided critical products and services globally to a broad range of sectors during the pandemic, including food, pharmaceutical, water treatment, waste containment, energy, construction, automotive and paper and packaging. The pandemic has proven to be a time when our customers have needed us the most, and we transformed our processes and capabilities. Examples include:

- Performing specialized maintenance assessments without engineers physically present at the plant.
- Supporting trialing and commercializing of new products and applications while staying closely connected to customers.

- Remote commissioning of new Precipitated Calcium Carbonate (PCC) satellites and customer interactions through virtual methods.
- Developed a virtual webinar series in our Metalcasting Technical Sales group that allows our technical teams to interact with a broader group of customers and more quickly provide them with our value-added solutions.

Communities

MTI employees continued to donate their time, talents and resources to bring relief to their local communities impacted by COVID-19. This included donations of masks, gloves, hand sanitizer, food and other PPE, especially at a time when these materials were hard to locate. Examples to highlight:

- Several of our facilities globally were recognized by their local government for financially supporting the community during the pandemic and for implementing protocols that could be leveraged across other industries and facilities. Specifically, our facility in Unye, Turkey received recognition from the Governor of the Ordu province for implementing best practices to protect employees, continuing to deliver critical products to support the local economy and infrastructure, and supplying needed masks to keep residents safe during the COVID-19 pandemic.
 - Our PCC facilities in Thailand were recognized by the Thailand Health Department for exemplary practices to safeguard employees and the community against COVID-19.
- Many of our sites in India donated supplies, including hand sanitizer, masks, and other PPE, during the height of the spread to assist local communities during a time of need.
- Our Connecticut location donated 250 gallons of hand sanitizer to Town Hall for the local community.
- Our Massachusetts facility donated a large supply of N-95 masks, gloves, and hand sanitizer to the Northern Berkshire Emergency Medical Services when supplies were difficult to obtain.





Safety

We Place the Health and Safety of Our
People Above All Else — A 100% Injury-Free
Workplace Is Achievable at MTI



Our Philosophy

Our number-one priority is the health and safety of our employees, contractors, customers, and members of the communities in which we operate. Our “safety first” culture has been built through dedication, continuous improvement and active employee engagement. We strive to continuously improve our world-class safety program at MTI.

Key aspects of our principles to drive an injury-free workplace:

- Nothing comes before safety: our top priority is for all employees and contractors to return home in the same condition they arrived to work.
- We require all employees and sites to strictly follow our [Environmental, Health and Safety \(EHS\) Policy](#).
- Management is responsible for providing employees with the tools, training and resources to operate safely. All employees receive a rigorous continuous safety training commensurate with their level of exposure.
- It is every employee’s responsibility to correct unsafe procedures, practices, and conditions wherever they exist. Each employee is empowered and encouraged to exercise “Stop Work Authority” to prevent an incident.
- We promote accountability and responsibility for ourselves and our colleagues.
- We engage and educate employees to measure and use safety leading indicators.
- We demand a strong focus on anticipating, recognizing and removing hazards and integrating layers of protection into our work systems and processes.
- We maintain an active safety mindset at work and at home and foster a culture where we learn from events and near misses.
- Audits are an important part of assessing safety performance and areas for improvement and are required at every location.

Targets: While we believe zero injuries across all our operations is an achievable target, we have set interim goals for MTI employees and contractors under our oversight to achieve World Class Safety performance globally: at or below 1.00 for Total Recordable Incident Rate (TRIR) and at or below 0.10 for Lost Workday Injury Rate (LWIR) as defined by the U.S. Occupational Safety and Health Administration (OSHA). Through our continuous improvement activities, training, risk assessments, and tracking of leading indicators, we continue to focus on our journey to zero.

We continue to
focus on our journey
to zero injuries



Our Safety Foundation

Management oversight and involvement of all employees

Our EHS Management System program is aligned to the ISO14001 and OHSAS 18001/ISO45001 system. More than 65% of our facilities are certified to ISO Standards or Food Safety Certification. About 10% of our facilities are certified to ISO14001 and about 7% to OHSAS 18001/ISO45001.

Key elements are:

Program Management & Accountability	Legal & Other Requirements	Supervisory EHS Incident Investigation
EHS Program Administration & Communications	EHS Training & Certification	Contractor & Visitor Management
Risk Assessments & Hazard Control — Aspect Identification & Control	Emergency Preparedness & Response	Compliance & Management System Audit

- All members of our Board of Directors and Leadership Council, and each of our Business Unit leaders receive comprehensive health and safety briefings and review detailed health and safety performance and related metrics, including injury/illness rates, lost workday rates, types of injury, and environmental releases monthly. In addition, all MTI employees receive weekly EHS metrics and injury/illness reports for global and business-specific performance via email and company intranet postings.
- Leaders at all levels in the organization are actively engaged in setting safety performance expectations and holding themselves and the rest of their organization/location accountable.
- The MTI Environmental, Health and Safety Lead Team (EHS LT), which includes senior safety leaders from each business unit, reports directly to the Chief Executive Officer. The Team develops and reviews global environmental, health and safety goals, policies and standards and promotes our EHS management systems to assist all Business Units, Resource Units, sites and employees. Our EHS LT further develops annual safety goals and objectives which are communicated directly to all employees. Our operating procedures and standards are tailored for our mining and processing facilities.
- Our Business Units develop and implement cascading goals aligned with MTI's global EHS Goals. They monitor progress across each location and report the latest metrics through the EHS LT and the Leadership Council. Business Units further collaborate through global EHS meetings to facilitate benchmarking and exchange key learnings and trends for EHS programs. Each MTI site is required to conform with our EHS policies and procedures, and compliance is ensured via self-review and corporate auditing.
- Our EHS Lead Team reviews and distributes Safety Alerts to all employees by email and company postings when an injury occurs so that learnings are widely communicated. The alerts describe the injury, illness or near miss, and provide causal factors, root cause and corrective actions which allow us to quickly convey learnings from incidents and near misses to all locations and, when appropriate, take specific actions to mitigate similar potential risks in their operations.

- We solicit and engage employee feedback through site safety committees, routine global employee EHS meetings and webinars, EHS Kaizens and FMEA (Failure Mode and Effects Analysis) events, Risk Reduction evaluations, suggestion systems, job observations, hazard hunts, town halls, and open-door-policy interactions.
- Through Risk Reduction and FMEA techniques, health and safety hazards are proactively identified and mitigated. Reporting near misses, unsafe acts and unsafe conditions by all employees is also a mechanism to identify and address issues before they cause injuries. Comprehensive assessment campaigns by multi-disciplined teams also support PDCA (Plan-Do-Check-Act) and help identify new safety improvement opportunities.
- Our Operational Excellence (OE) culture is inextricably linked to safety. We have experienced significant improvements in plant working conditions through deeply integrating our OE and Lean practices with safety. Our sites identify and address the risks present at our sites using our risk reduction and Operational Excellence processes, including 5S, Visual Management and Standard Work. The worldwide implementation of Lean principles improves communication and engagement and reduces waste and inefficiencies in our workplace that could result in incidents.

Our Approach to Safety

Our approach to safety is embedded in our culture of continuous improvement, is reinforced by our management systems, and is a key aspect in driving employee engagement.



Key Focus Areas in 2020



Implementing and evolving stringent COVID-19 protocols to keep employees safe and healthy. We also adapted many of our practices to operate in a socially distanced, remote environment, such as implementing virtual GEMBA (walk and see activities) and using virtual tools to identify potential risks.



Expanding safety leadership principles and engagement indicators to empower and protect all employees



Sustaining progress in our comprehensive fatality risk-reduction program



Improving training programs for newer employees



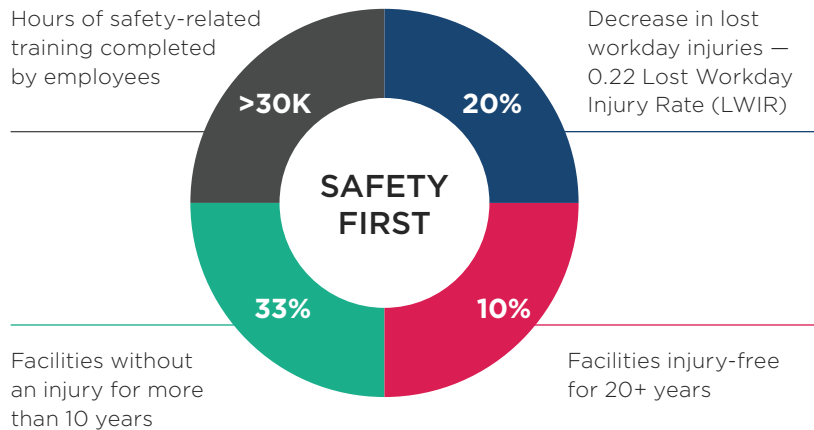
Enhancing safety and environmental facility audits, including through virtual audits



Fatality Risk–Reduction Programs

Since 2018, we have made considerable progress with our fatality risk-reduction programs, which have been a key driver in achieving world-class safety performance. These comprehensive programs align EHS efforts across MTI's operations and actively engage employees to reduce the most severe injuries. This includes continuous assessment of the inherently high-risk situations at our locations, investment of time and resources to improve the safety of these activities, development and management of mitigation plans, and leadership oversight in status reviews.

2020 Safety Performance Highlights



RECORD SAFETY PERFORMANCE

0 Fatalities

0.60 Lowest Total Recordable Rate (TRIR) in MTI history and below target of 1.00

90% of facilities injury-free

266K+ Engagement activities completed by employees: job observations, unsafe act reporting, GEMBA's and non-routine task and hazard evaluation



KEY PROGRAMS:

- 1 **Forklift/Pedestrian Separation:** We have reduced 99% of the risk associated with pedestrians interacting with forklifts inside our facilities.
- 2 **Mobile Equipment/Pedestrian Separation:** We have reduced 92% of the risk associated with pedestrians interacting with mobile equipment outside of our buildings.
- 3 **Lockout, Tagout, Tryout (LOTOTO):** We are 92% complete on plant improvements and upgrading system designs to strengthen the safe isolation of energy sources.
- 4 **Fall From Heights:** We are 88% complete on structural improvements with a focus on applying hierarchy of controls and implementing industry best practices.
- 5 **Confined Space Entry:** We are 98% complete with over 3,000 permit-required confined spaces identified.

Lowest TRIR Rate in Our Company's History

Safety Performance

Injuries/100 Employees



Injury Performance by Region in 2020

MTI	Recordable Injury Rate	Lost Workday Injury Rate
Total Americas	0.69	0.16
Total Asia	0.38	0.25
Total Europe	0.61	0.30
Total MTI	0.60	0.22

Reducing Finger and Hand Injuries

As finger and hand injuries have been our most common type of injury for the past few years, many of our training modules and awareness activities have focused on identifying the causes and implementing a series of corrective actions to reduce these injuries. Activities include webinars on Hazard Recognition and Controls, Hand and Finger Safety Best Practices and Non-Routine Task Review and GEMBA in 2020. Additionally, we have implemented a glove policy for all work with tools, machinery or equipment and conducted online training on Hand Safety and Power Tool Safety.

Our Leading Indicators to Assess Employee Engagement

We assess and manage the strength of our employee engagement safety performance through a set of leading indicators focused on every employee at MTI. We conduct GEMBA's (walk and see activities throughout the facility), identify Hazards/Near Misses and Job Observations that lead to changes, and Non-Routine Task Reviews (NRTR) for jobs that do not yet have a standard work due to their infrequent occurrence. These leading indicators help us monitor our health and safety performance and provide critical insight for identifying initiatives, short-term or long-term, to effectively remove risk and avoid safety incidents.

266,000+ safety engagement activities occurred in 2020 or an average of 729 daily, including:

8,600	GEMBA's Conducted	45,000	Job Observations Reported
24,000	Near Miss/Unsafe Act Reported	70,000	Non-Routine Tasks Reviewed

Comprehensive Health and Safety Training for All Employees

Training is an essential part of improving our safety performance and every employee is required to complete comprehensive safety training each year. Each site designates certain safety-critical topics for in-person training as part of its training program. Historical incident trends, lessons learned, or regulatory changes can all prompt safety-critical topics. New employees also complete a series of mandatory safety training modules on all critical topics during their first year. Training is provided in both classroom and online-based formats and in the local language of the employee. **In total, MTI employees cumulatively complete over 30,000 hours of safety-related training on an annual basis.**

We also hold monthly safety webinars, which focus on a wide range of critical safety themes and are sponsored by our Leadership Council. In 2020, we held 12 webinars, which included new topics on Working from Home and How to Stay Safe Around a Pandemic to proactively communicate best practices and address any concerns related to COVID-19. The two webinars along with the MTI COVID-19 Protocols guidelines have been developed to protect our people and safely operate our facilities.



Audits & Self-Assessments

Through our EHS Lead Team and site-specific personnel, we conduct safety assessments and reviews at every location using our daily GEMBA and NRTR procedures as well as customer and regulatory audits. In addition, each manufacturing facility is formally audited at least every three years by MTI or external auditors. These assessments take a “fresh eyes” approach by engaging experts from outside of the business unit and MTI to help observe and report any improvement opportunities. The assessments confirm MTI’s commitment to best safety management practices and principles. We continually increase the rigor and level of scrutiny to drive continuous improvement in our operations.

Each site is also responsible for conducting self-assessments as part of our Plan-Do-Check-Act (PDCA) program. These assessments help recognize non-conformances and gaps between our policies and our actions. Our goal is to identify and correct issues before they become problems that could impact the health and safety of our employees. Identifying an issue, a root cause assessment is completed, and corrective actions are developed and implemented.

Contractor Safety Requirements

Contractors are required to follow all MTI EHS procedures, policies, and regulations when working on MTI sites. MTI has strict requirements for contractors to comply with our safety policies and assess our contractors to ensure they implement the requirements and train all their employee’s before they are allowed to do any work at an MTI site. Training includes specific site safety rules and protocols, equipment precautions, and all Personal Protective Equipment (PPE) requirements. MTI requires all contractors to participate in all Non-Routine Task Reviews (NRTRs) & Risk Reviews for joint projects. Safety metrics for contractors are tracked in our data management system, including Observations, Incidents and Near Misses. We treat all contractor incidents with Root Cause Analysis as if, they were our employees to help protect others in the future.

To extend the focus of our safety emphasis to all employees, contractors, and visitors to our site, we track contractor incidents. In recent years, we have increased our focus and awareness on contractor safety, which includes investigating all near misses and incidents and applying corrective actions. Additionally, we have constructed several new manufacturing facilities and this expansion brings an increase in contractor activities.

Contractor Safety Metrics 2018–2020

	RECORDABLE INJURY	EHS NEAR MISS REPORTS
2018	4	154
2019	2	123
2020	5	170

Emergency Preparedness & Response Drills

It is our responsibility to identify the types of emergency situations that may pose a threat to our employees.

Our EHS teams are responsible for developing thorough Emergency Response Procedures to safely respond to emergency situations, to train employees in these protocols, and to continually evaluate the Emergency Action Plans. We have a Corporate Crisis team in place to support any emergency situation, and all sites are aware of the protocols for alerting this team.

All facilities have a site-specific Emergency Response Preparedness Plan, conduct annual reviews of the plans, and engage in mock drills with various local agencies to assess readiness for a variety of potential situations. All drills involve a documented critique that notes any gaps or improvement opportunities. The procedures are intended to ensure the safety of our employees and communities, protect our assets, and restore our businesses should an emergency occur. Examples may include Automated External Defibrillator (AED) and CPR training, fires, natural disasters, utility outages, cybersecurity attacks, acts of violence or threats

outside of our control, and pandemic preparedness. Our robust emergency-response planning at each site was a critical reason why we were able to quickly implement global protocols to protect the health and safety of our employees while continuing to serve our customers as the COVID-19 pandemic began to spread.

We enhance the safety of host locations where we operate. The host sites where our PCC business operates our satellite plants have implemented mobile separation initiatives, such as use of physical barriers, to protect all employees. We also collaborate with the host sites on crisis management plans and participate in regular drills to ensure effectiveness of response measures. We are audited by our host sites for effective safety measures and regularly receive very positive feedback regarding our high standards and best-in-class safety practices, including how we implemented COVID-19 protocols measures most recently in 2020.

Safety Recognition



Our PCC plant in Wuzhi, China, was recognized for outstanding safety performance in 2020 by the Wuzhi County Authority. The location was identified as a top 20 enterprise out of 1,000 companies in the region.



Our Changshu PCC plant was awarded a certificate from the Changshu Economic Development Zone for world-class safety performance in 2020.



Top: Our plant in Lovell, WY, received an award from the Wyoming state agency for a perfect safety record in 2020: 97,103 hours worked without a Lost Workday Injury.

Bottom: Our Colony, WY, sites received an award from the Wyoming state agency for a perfect safety record in 2020: over 120,000 hours worked without a Lost Workday Injury.



Several of our sites in the U.S. have earned Safety and Health Achievement Recognition Program (SHARP) designations in the states where they operate. SHARP awards are given by OSHA and represent the highest level of safety standards and engagement.



Environmental

As a global resource- and technology-based manufacturing company, we recognize the significance of climate change and responsible consumption and production, as well as our role in addressing our stakeholders' interest in these issues. We have a responsibility to ensure compliance with all environmental regulations in the locations where we operate, which includes reducing the impact of our operations on people, communities and the planet. Throughout our history, we have been working to address our environmental footprint and are proud of the progress we have made. We also know there is more to be done with further opportunities to reduce our footprint and help our customers and other stakeholders do the same. We continue to implement innovative, cost-effective solutions to reduce our environmental impact while remaining competitive within our industries. This is a continuous improvement journey, and we will continue to drive our performance further, and faster. We are advancing our efforts with forward thinking, additional tools and our environmental targets that provide the framework for tangible progress.

Environmental Journey at MTI

In this year's report, we highlight specific initiatives implemented to lower our environmental footprint and detail future actions planned to meet or exceed our 2025 targets.

Progress in 2020

Throughout MTI, we have substantially enhanced the reporting and verification of fuel, emissions, water, and waste metrics. We have improved our internal data management system and increased the number of topics we disclose as we take steps to drive transparency and provide more ways to measure progress.

New areas include:

- Total energy consumed, including total direct and indirect energy
- Percent of electricity consumed purchased from the grid, as well as fuel sources to generate that electricity in several of our major countries
- Hazardous waste generation
- Actions to manage and reduce our small tailings and settling ponds
- Locations we source water from and discharge water to

Looking Forward

We continue to set the bar higher with our environmental performance, and we are in the process of identifying new, more ambitious targets. In addition, we have started to further evaluate our climate-related risks and opportunities by reporting our findings using the Task Force on Climate-related Financial Disclosures (TCFD) framework.

Our Environmental Priorities:

Managing All Facilities to Global Standards

- Adhering to our global [Environmental Health and Safety \(EHS\) Policy](#)
- Applying our global EHS Management System to all operations, which contains environmental standards and procedures and is modeled after ISO14001 and OHSAS 18001/ISO45001
- Educating and empowering all employees to engage in activities to achieve 2025 reduction targets
- Complying with all applicable laws and regulations
- Working to minimize environmental impact and emissions
- Increasing energy efficiency, promoting the responsible use of water and reducing waste to landfills
- Conducting regular training and awareness programs for appropriate personnel
- Auditing our operations internally every year and externally at least every three years
- Sharing of best practices in a streamlined process so all employees know the actions that can be implemented on a site-by-site basis
- Reporting performance internally monthly
- Oversight and review of performance by our Board of Directors, Leadership Council, Sustainability Lead Teams, and Business Units
- Management engagement with key shareholders on sustainability
- Continuous improvement and Operational Excellence activities are integrated in all environmental activities

In 2020, we maintained our continuous improvement journey in sustainability performance towards our 2025 environmental goals, focused on reductions in the following categories from our 2018 baseline.



Scope 1 Direct greenhouse gas emissions CO₂



Water used



Scope 2 Indirect greenhouse gas emissions CO₂
(from purchased electricity)



Wastewater discharge



Airborne pollutants



Landfill waste

Environmental Performance and Significant Progress Towards Achieving and Exceeding 2025 Targets

	REDUCTION TARGET (%)	2018 BASELINE	2019	2020	2025 TARGETS ^{1,4}	% REDUCTION 2018 TO 2020
Scope 1 Direct GHG CO ₂ (tons)	20	441,881	390,782	349,091 ²	353,000	21.0
Airborne Pollutants (1,000 tons) ⁵	50	6.87	4.96	5.28 ²	3.44	23.3
Electricity (MWh)	15	639,467	640,623	585,210	543,000	8.5
Scope 2 Indirect GHG CO ₂ (tons)	15	154,573	158,578	120,850	131,387	21.8
Process Water Used (billion gallons)	11	7.41	7.60	6.32 ³	6.60	14.7
Process Water Discharged (billion gallons)	11	4.13	4.14	3.26 ³	3.70	21.1
Landfill Waste Disposed (tons)	20	208,946	213,360	172,021	166,000	17.7

1. Due to COVID impact in 2020 and expected volume increase in 2021, MTI is not lowering our 2025 targets

2. For 2020, we reclassified a fuel coal used by two of our facilities from anthracite to bituminous coal. This reduced Scope 1 emissions and increased airborne pollutants slightly.

3. Water used/discharge volumes decreased due to COVID related slowdowns and enhanced practices for reporting water volumes.

4. MTI utilizes the GHG Protocol methodology and utilized USA 2019 Egrid data, 2020 UK DEFRA, and 2019 International Energy Agency database estimates for the Scope 2 emission factors

5. Emissions of Particulate matter (PM), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur hexafluoride (SF6), and Nitrogen trifluoride (NF3) are not material for MTI

6. All references to tons in this report are short tons

Emissions

Scope 1, Scope 2 Greenhouse Gas Emissions (GHG) & Airborne Pollutants

MTI recognizes the health and environmental issues associated with CO₂ emissions and related air pollutants, and we are diligently working to reduce our GHG emissions. By providing the resources, tools, and protocols our facilities need to reduce energy use and invest in renewable energy, we aim to lower our Scope 1 and 2 GHG emissions and airborne pollutants by reducing energy use from non-renewable sources.

We are making significant progress — from identifying our highest-emitting activities and implementing corresponding energy efficiency programs and energy management systems (EnMS) to engaging employees across our company to adopt a more energy-efficient mindset.

Although 2020 was significantly impacted by COVID-19 and the resulting global manufacturing volume slowdown, MTI delivered a strong Scope 1 Direct Emission and Airborne Pollutants reduction. This was primarily driven by several of our large manufacturing and processing sites implementing operating changes that maximize the use of lower carbon fuels.

Scope 1 Direct Emissions 2025 goal: 20% reduction
Airborne Pollutants 2025 goal: 50% reduction

Key 2020 Emissions Reductions Achievements:

- Our Colony West, Wyoming, plant, one of our largest manufacturing facilities, eliminated coal usage by switching completely to natural gas as the energy source for drying bentonite clay. This also led to reduced maintenance and operational costs for an overall cost savings. We are in the process of identifying opportunities to apply this learning across our global operations.
- Our Adams, Massachusetts; Colony East and Lovell, Wyoming; Lifford, UK; and Sandy Ridge, Alabama, facilities maximized natural gas usage and reduced coal and fuel oil by at least 40% in 2020, which significantly reduced our airborne pollutant emissions at neutral cost. We have a clear path for further reductions as we continue to upgrade equipment.
- We have started purchasing electric forklifts with a goal of 100% implementation across all our operations in the next ten years. Currently, about 15% of our forklifts are electric.

Plan to Achieve Target

MTI is leveraging best practices from implemented projects to convert additional dryers and calciners to natural gas processes, while improving fuel usage efficiency across our global operations. Our planned timeline to reduce Scope 1 emissions and airborne pollutants is:

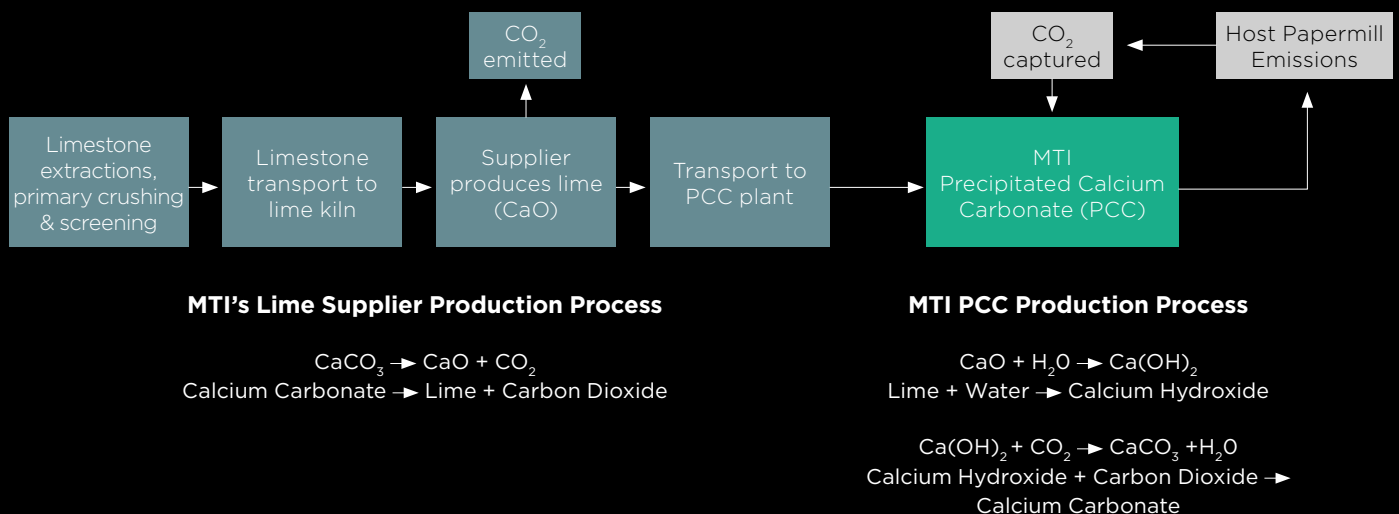
- 2022: Convert burners from coal fired to natural gas at our Colony and Lovell locations for an approximate 30,000-ton CO₂ reduction.
- 2025: Convert our Sandy Ridge, Alabama, facility to natural gas fueled; explore feasibility of converting our Gascoyne, North Dakota, operation to electric drying as natural gas is not currently available in the area.
- 2032: Convert our Dongming, China, and Adams, Massachusetts, facility to natural gas when sufficient natural gas is available in these regions.
- 2032: Finish converting all forklifts to electricity and all company cars to hybrid/electric.
- We are also evaluating additional methods to reduce Scope 1 Direct emissions and airborne pollutants by converting from fossil fuel fired to electrical driven equipment. For example, we are investigating switching from diesel generators of electricity in our mines to sourcing electricity from the grid. Operational changes such as these will increase our overall electricity usage while significantly reducing our total carbon dioxide emissions.

MTI Enables Carbon Capture and Emissions Reductions for Our Customers

In 2020, we extracted and used about 1.1 million tons of carbon dioxide from our Precipitated Calcium Carbonate (PCC) customers' exhaust stacks, as well as some of our own, and sequestered those emissions into about 2.4 million tons of MTI high quality PCC. Our specialty engineered PCC products help improve the quality of paper and reduces costs for our customers. An additional benefit is our satellite model and related processes absorb CO₂ during production which reduces the harmful release of these emissions to the atmosphere.

This approach to making PCC starts with our satellite facility being located at the customer's production site, which removes the need to dry or ship the PCC slurry product and avoids those energy intensive steps. The approximately 1.1 million tons of carbon dioxide captured and used has not been included in our 2020 Scope 1 emissions. We plan to include this carbon capture when we start reporting Scope 3 calculations in the future.

MTI PCC Production Process Carbon Footprint



Scope 2 Indirect CO₂ Emissions from Purchased Electricity

MTI is committed to the efficient use of energy throughout our operations, with a focus on reducing energy use, as well as expanding our use of renewable energy. Each year, we evaluate opportunities to improve our energy efficiency by evaluating new technology, optimizing current processes, and implementing programs that focus on improvements in safety, quality, people, service and cost.

In 2020, MTI significantly reduced our Scope 2 Indirect Carbon Emissions through a broad range of energy savings activities. Our electricity volume consumed was impacted by the 2020 COVID-19 related reductions in manufacturing volume and associated electricity use.

Scope 2 Indirect Emissions 2025 Goal: 15% Reduction

- Our success in reducing our Scope 2 carbon emissions approximately 22% since 2018 is primarily due to implementation of LED lighting, upgrading electrical equipment and lower carbon intensity purchased electricity from the greening of the electrical grid in several key countries.

Electricity Usage 2025 Goal: 15% Reduction

- MTI's success in reducing electricity usage about 8.5% since 2018 is driven by increased efficiency in lighting and equipment. MTI is converting our facilities to 100% LED lights and upgrading our electrical equipment to reduce electricity usage.

Plan to Achieve Targets

- 2021: MTI is developing a near-term timeline for converting all lighting to LEDs to reduce overall electricity demand over next 5 years.
- We will upgrade agitators, air compressors, pumps and motors as part of replacement cycle to reduce electricity demand.
- Where applicable globally, we will leverage the carbon-neutral playbook at our facilities in the Netherlands and Austria. These sites are audited

by the Climate Neutral Group to calculate their CO₂ emissions, which are partially offset with on-site solar panels in the Netherlands.

MTI measures our consumption of electricity from the grid, host paper mills and onsite solar panels as shown below.

Focusing on Renewable Energy

MTI has a goal to increase renewable energy to 50% of total electricity usage by 2025, and we currently source about 31% green electricity from the grid. To help us achieve this goal and our Scope 2 Indirect Emissions goals, we are exploring a variety of renewable energy mechanisms and tools.

- MTI signed a 2020 contract with Black Hills Energy to source windfarm generated electricity and supply about 50% of our Colony, Wyoming, plants electricity at neutral cost for the next 15 years. This supply started in December of 2020 and will reduce MTI Scope 2 emissions by about 6% overall in 2021.
- MTI's supply chain is investigating additional green electricity sourcing contracts. We are currently examining third-party wind and solar panel installations at several Specialty Minerals facilities and our Performance Materials Thailand facility.

MTI Source of Electricity 2018-2020 and Percentage Purchased from Electrical Grid

SOURCE OF ELECTRICITY	2018 ELECTRICITY (MWH)	PERCENTAGE (%)	2019 ELECTRICITY (MWH)	PERCENTAGE (%)	2020 ELECTRICITY (MWH)	PERCENTAGE (%)
Total Electricity (MWh)	639,467	100	640,623	100	585,210	100
Sourced From Electrical Grid	385,359	60.3	391,698	61.1	359,362	61.4
MTI PCC Plants Electricity Sourced from Host Paper Mills	252,886	39.5	246,878	38.5	223,983	38.3
Sourced from Onsite Solar Panels	1,222	0.2	2,048	0.3	1,865	0.3

RENEWABLE ELECTRICITY SOURCES (%)	
Wind	12.5
Hydro	11.1
Solar	3.6
Biomass	3.1
Geothermal	0.6

NON-RENEWABLE ELECTRICITY SOURCES (%)	
Natural Gas	36.3
Coal	18.2
Nuclear	14.9
Oil	0.1

31% of our electricity purchased from the grid was generated from renewable sources using USA 2019 Egrid data, 2020 UK DEFRA, and 2019 International Energy Agency database estimates.

Energy Use

In order to reduce our total energy usage, MTI is investigating energy efficient equipment and implementing procedures that increase efficiency and conserve energy. As we broaden our disclosures, we have initiated reporting of Total Energy Consumption, Direct and Indirect Energy for MTI and our business units.

TOTAL ENERGY USAGE (GJ)	2018	2019	2020	PERCENT REDUCTION 2020 FROM 2018
MTI	7,483,888	7,664,145	6,918,591	7.6%
Performance Materials	3,579,484	3,944,733	3,411,546	
Specialty Minerals	3,418,096	3,300,458	3,112,088	
Refractories	486,308	418,954	394,958	
TOTAL DIRECT ENERGY USAGE (GJ)	2018	2019	2020	PERCENT REDUCTION 2020 FROM 2018
MTI	5,143,051	5,357,902	4,811,833	6.4%
Performance Materials	3,135,365	3,466,880	2,975,482	
Specialty Minerals	1,605,655	1,548,409	1,512,486	
Refractories	402,031	342,613	323,866	
TOTAL INDIRECT ENERGY USAGE (GJ)	2018	2019	2020	PERCENT REDUCTION 2020 FROM 2018
MTI	2,340,836	2,306,243	2,106,758	10%
Performance Materials	444,119	477,853	436,063	
Specialty Minerals	1,812,441	1,752,051	1,599,602	
Refractories	84,277	76,341	71,092	

The appendixes on [pages 83 – 84](#) give MTI and subsidiary energy usage information.



Our facilities also conduct site-specific energy-efficiency assessments as part of our continuous improvement efforts. In 2020, two of our major facilities conducted site energy audits with their local power company and implemented LED lighting installation and fitted energy measurement and saving equipment to reduce electricity usage by more than 10%. In 2021, we plan to formalize and expand our ability to conduct site-specific energy-efficiency assessments, using this information to develop new energy-saving projects that leverage best practices across the organization and geographies.

Water Use

At MTI, we are focused not only using water judiciously but also on discharging wastewater in a safe and responsible manner. Several of our products require water for processing and manufacturing, and we recognize our responsibility to use this natural resource efficiently across our global footprint while ensuring we do not compete with the local community for water resources. At all of our facilities that use water, we discharge under strict compliance with permits, regulations and internal policies. Our guiding principle is to measure, monitor, conserve, recycle, and discharge water responsibly.

In our Specialty Minerals facilities, which use about 98% of our overall water consumption, it has been our longstanding practice to conserve and recycle as much water as possible while providing an economic benefit to the local community. In areas where there is ample water available, our water use is associated with the purification processes to produce specific grades of Specialty Precipitated Calcium Carbonate (SPCC) products. The wastewater from these operations initially has high calcium carbonate solids, which are discharged to onsite settling ponds that we closely monitor. The water is processed through a series of treatment ponds and ultimately reused in our products or processes or discharged safely under regulatory permit.

For our Paper PCC satellites, typically we are located on-site at the customer's paper mill and receive non-potable process water from the paper mill. The host paper mill requires significantly more water, typically 10 times more than our satellites plants, and around 60% of our water usage is returned to the

host mill in the form of our PCC product slurry. In a few sites where water availability is limited, the local communities have established separate discharge criteria for excess water. The host paper mill and our satellite plants are important to the community well-being, and we recognize the human right to water as we work with the community to ensure conservation of water. As a result, we track not only the volumes of water used and discharged, but we also closely track specific water quality criteria to ensure we are compliant with our local discharge permits.

Water Used 2025 Goal: 11% Reduction

- In 2020, MTI's water use was approximately 6.3 billion gallons and 15% percent lower than our 2018 baseline. On an intensity basis, our water reduction efforts have resulted in an approximate 11% decrease in water used per MTI ton produced. Our success in reducing water consumed is primarily due to implementation of closed-loop reduction projects at our Chillicothe, Ohio, and Cloquet, Minnesota, facilities as well as applying these learnings across our network of satellite plants.

Water Discharged 2025 Goal: 11% Reduction

- In 2020, MTI's water used was approximately 3.2 billion gallons and approximately 21% percent lower than our 2018 baseline. On an intensity basis, our water reduction efforts have resulted in an approximate 18% decrease in water discharged per MTI ton produced. Our success in reducing water discharged is primarily due to the implementation of reuse/recycling projects, and water usage reduction projects at several facilities. We are applying this best practice to our more than 50 satellite plants.



Key 2020 Achievements

In 2020, many of our PCC satellite plants, which consume the highest quantity of water, successfully contributed to our water conservation, recycling, and reduction programs. Since 2018, we have reduced our water usage by about 1.2 billion gallons and our water discharged by about 0.9 billion gallons.

Plan to Achieve Targets

- Our PCC Plants are focused on two specific projects (cooling tower blow down system and material recovery system) that can be applied to approximately 40 PCC satellites with a potential of about 600 million gallons of water savings, which is about 15% of the water used by the overall business. In addition, we anticipate about 1.3 million KWh of electricity reduction and 530 tons of solid waste reduction from these projects. We plan to complete these projects by 2024.
- Our Adams, Massachusetts, plant is implementing a wide range of water reduction projects with the potential to reduce about 150 million gallons, which is about 10% of the water used and plans to complete these by 2023.
- In several of our PCC facilities, we are conducting trials with captured rainwater and our host paper mill's grey water to develop our products. After our trials have concluded, we will apply these practices to our network of satellite facilities.

The appendixes on [pages 85 – 86](#) give subsidiary water used and discharge metrics

Focus on Water Source and Discharge Location

According to the World Resource Institute (WRI), water scarcity, floods, droughts, and other water risks can cause operational and supplier disruptions, higher operational costs, brand damage and heightened regulatory uncertainty. Using the WRI Aqueduct Tool, MTI has completed a water risk assessment of all facilities in 2020, evaluating water withdrawals, consumption, quality, and site-specific regulatory risks. We have also expanded our reporting to disclose our sources of water used and discharged. We are creating a comprehensive water risk management strategy on a region- and site-specific basis to further advance our strategy.

In 2020, our Paper PCC satellite plants obtained most of the water from our host paper mill facilities, whereas our Performance Minerals business depended on Ground Water resources primarily. Overall, about 50% of the water we use is derived from alternative (non-potable) sources with the majority of the non-potable water coming from our host paper mills' process water. We essentially have a recycle loop in which we receive the process water from the paper mill, make our PCC product and recycle a majority of the water back to the paper mill in the form of our product slurry.

Water Use Classified by Fresh and Alternative Sources

MILLION GALLONS	FRESH WATER			ALTERNATIVE WATER (NON-POTABLE)		TOTAL
	Surface Sources (Lakes/Ponds, Rivers/Creeks)	Well Water	Municipal/City Water	Host Paper Mill Process Water	Rainwater	
Americas	1,035	1,509	26	1,312	0	3,882
Europe	0	226	14	1,005	1	1,246
Asia & Australia	341	0	3	844	0	1,188
MTI Total	1,376	1,735	43	3,161	1	6,316
MTI Source (%)	22	27	1	50	0	100

Our Waste & Spills

Improvement of process safety and mitigation of waste in form of spills, releases and landfill wastes is closely linked to the optimization of processes and continuous improvement in our production. Limiting waste generation and reducing volumes of off-quality product result from improving our process controls.

We strive to understand our waste generation, fully characterize the components, and determine the best beneficial reuse or disposal method for the waste. A primary example of this is the auxiliary minerals (“grit”) separated from the calcium carbonate at almost all of our PCC plants. The undesired grit is produced during the process as a quality step to remove particles not appropriate for direct use in the PCC product as part of the paper making process. To minimize the amount of grit formed in our process, MTI has developed and installed proprietary treatment processes in about half of our satellite plants that enable a portion of the grit material to be reused as a valuable addition to PCC products.

For the remaining grit material, MTI strives to utilize lime like solids in other applications, such as agricultural soil conditioning or construction products, and we typically see over 40% of total available grit directed into beneficial reuse applications.

Landfill Waste 2025 Goal: 20% Reduction

In 2020, MTI’s Landfill Waste was approximately 172,000, which is about 18% below our 2018 baseline. Our success in reducing waste is primarily due to finding new beneficial reuse applications of our PCC grit byproduct and elimination of landfill disposal. Paper PCC found agricultural and beneficial reuse applications for about 45,000 tons of grit, which is more than half of our grit production.

Plan to Achieve Target

We plan to reach our landfill waste target by increasing the beneficial reuse of our waste stream. Waste minimization and recycling efforts are in progress at many of our locations and will continue to be a key focus area going forward.

The Appendix on [page 78](#) gives Landfill Waste by business segment.



Case Study: Favorably Impacting Landfill Waste

MTI has 53 active PCC satellites globally with Calcium Recovery (CaRec) processes in place at nearly half the sites. These CaRec systems allow us to reprocess PCC byproducts with about 80% recovery of usable minerals that would have previously been disposed in landfill. To maximize this reclamation benefit, MTI continues to invest in additional CaRec units to reduce our PCC landfill waste and enable increased reuse of raw materials in our manufacturing process.

MTI also has 30 sites that have found alternatives to landfilling of our process grit byproduct. These alternatives include the grit being introduced into concrete and brick manufacturing processes as filler. An additional benefit is our byproduct is also environmentally friendly, with calcium nutritional benefits, that allow it to be utilized in fertilizer and soil supplements to support plant growth, such as our paper customer’s renewable forest growth.

In 2018, our total PCC satellite landfill waste was about 40,000 tons. With our process improvements and a 10% increase in recycling, we have been able to reduce our total landfill waste by over 8,000 tons in the last two years.

Hazardous Waste

In the United States, the treatment, storage, and disposal of hazardous waste are regulated under the Resource Conservation and Recovery Act (RCRA), which is a public law that creates the framework for the proper management of hazardous and non-hazardous solid waste. Hazardous wastes are defined under RCRA in two major categories: characteristic wastes and listed wastes. MTI is aligned with the goals of RCRA with our policies to:

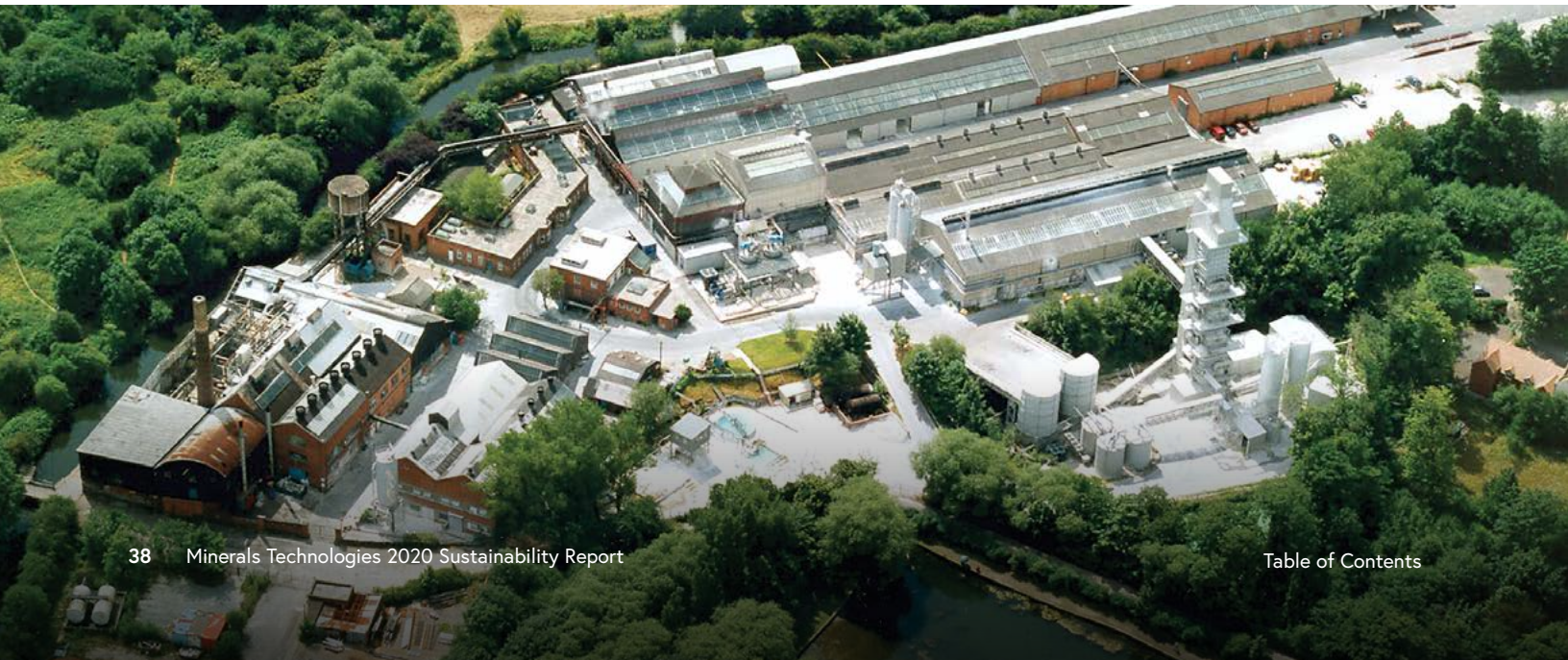
- Protect human health and the environment from the potential hazards of waste disposal.
- Conserve energy and natural resources.
- Reduce the amount of waste generated.
- Ensure that wastes are managed in an environmentally sound manner.

MTI has applied the RCRA hazardous waste definitions to our global locations and determined that we generated and properly disposed of about 60 tons of hazardous wastes in 2020, which is about 0.001% of our finished product production volume. MTI disposes of our hazardous waste with certified disposal companies, and about 60% is incinerated with energy recovery and 40% is landfilled.

MTI is developing plans to reduce our hazardous waste generation, which includes substituting lower hazard chemicals in our processes and laboratories and minimizing the volume of waste generated during equipment maintenance.

Settling & Tailings Ponds

MTI operates and maintains small settling and tailings ponds at our U.S. facilities of Aberdeen, Mississippi; Adams, Massachusetts; and Dillon, Montana, associated with the storage of mineral impurities removed during processing of our purified bentonite, calcium carbonate, and talc products. The removal of the auxiliary minerals is a necessary step to provide customers with the high purity grade products. We maintain the settling and tailings ponds according to regulatory permit and all are monitored by MTI and the appropriate regulatory agency. Our largest facility is our Dillon facility where our tailings consist of the naturally occurring auxiliary minerals present in our talc ore. A rigorous inspection schedule has been implemented, which includes daily inspection via MSHA workplace examination rules and annual compliance inspection via the Montana Department of Environmental Quality (MDEQ). The settling/tailings pond closure plan is included in the site's overall reclamation and closure plan as part of our MDEQ Operating Permit. Typical post closure monitoring is 10 years.



MTI Environmental Release Data

30

2020
Total Releases

5

2020
Reportable Releases

43

2019
Total Releases

8

2019
Reportable Releases

Environmental Releases

In 2020, MTI had 30% fewer process safety incidents in the form of environmental releases than 2019 as a result of our emphasis on root-cause reduction and more rigor around identifying the most likely release activities. Our total number of releases in 2020 were 30, compared to 43 in 2019. We internally track every type of release, regardless of the amount, and define releases as anything that leaves its intended area of containment. Our reportable releases are defined by local regulations, and in 2020 we had 5 reportable occurrences as compared to 8 in 2019. Every spill was classified as small and all of the spills were contained and captured in our comprehensive spill response.

MTI's goal is to have zero compliance violations, and we operate with a "zero release" mindset. However, when incidents do happen, we have procedures designed to ensure consistent and prompt reporting of all situations that may have significant impact. On environmental release issues, we require sites to

internally report these events to leadership. This is reflective of our continuous efforts to improve our processes and prevent future releases. All release events that may have the potential to impact the environment (also referred to as "near misses"), are analyzed using root-cause processes and key learnings are shared throughout our company. When a release occurs at a facility, a root-cause analysis investigation is conducted, with a target completion within one week of the event to ensure that the information and circumstances are quickly captured. Further, the facility documents the investigation and develops corrective actions based on the root cause(s) identified. The facilities employ several root cause analysis techniques, including Fishbone diagrams, 5 Whys and Cause-Mapping Improvement. We record and report all environmental releases in our internal management system regardless of agency reportability status. Teams are empowered through training and communication to complete mitigation steps and address any noted gaps expeditiously, including implementation of preventive measures to eliminate reoccurrences.

Some limited MTI environmental data are not included in this report, as detailed below:

MTI is unable to determine the greenhouse gas emissions impact of the electrical use at our Paper PCC satellite facilities which are located on or adjacent to the host paper mills that receive the PCC product from our satellite facilities. Typically, the host paper mills supply electricity to the MTI satellite plants. Almost all of the paper mills generate this electricity from onsite cogeneration systems that use a variety of fuels, including biomass waste from the paper plant operations. The fuel usage (and the related emissions of greenhouse gases) changes each year, depending on the availability of the fuels and the operations at the mill. Due to this, it is difficult for MTI to estimate the indirect greenhouse gas impact from the use of electricity at our Paper PCC operations. The KWh's used by each satellite facility are recorded and included in the energy data section.

Environmental data is not available for our Refractories Segment Steel Mill Service locations, which are located within customers' steel mills. The Steel Mill Service crews rely upon our customers to provide energy, water and waste management at the application site within the steel mills. These activities are a small fraction of the overall impacts associated with the operations of the steel mill.

We do not include the activities of our office locations in this report. These activities are a small fraction of the total MTI activities.

The report also does not cover the activities of suppliers or contractors who perform work on our behalf, nor the activities of tolling (outsourced) manufacturers.

Strong Commitment to Mining Sustainably

MTI's global mining operations span Australia, China, Mexico, Turkey, and United States, and we recognize our responsibility to operate in an environmentally respectful manner.

We mine Bentonite, Hectorite, Leonardite and Bleaching Earth minerals in our Performance Materials business and Calcium Carbonate, Dolomite and Talc in Performance Minerals. Our approach to mining and land reclamation is guided by our Operational Excellence principles and continuous improvement culture as well as strict adherence to applicable regulations — we are always looking for ways to continuously improve above and beyond what is required from a compliance perspective. MTI does not mine in high-conservation-value areas (HCVAs).

In 2018, we created a Mining Lead Team comprised of individuals in senior-level mining positions to ensure we are achieving the highest standards in mining, exploration, reclamation, biodiversity, and reporting processes across our operations. In 2020, with the guidance of the Mining Lead Team, we are deploying a focused approach to our overall mining activities from exploration through closure as we minimize our impact on local communities and ensure we are strong stewards of the land we operate.

After we reclaim the land, we have at least 100% of animal and plant biodiversity compared to before we started the mining process.

Industry Leading Mining & Reclamation Practices

Mine Reclamation at Dillon, Montana

The State of Montana strictly regulates mining activity and prior to any mining site preparation, MTI is required to obtain a permit from the Montana Department of Environmental Quality (MDEQ). The MDEQ conducts an Environmental Assessment (EA) or Environmental Impact Statement (EIS) as part of their review process. At the conclusion of mining a site, MTI is required to reclaim all mining sites in Montana under the Montana Metals Reclamation Act (MMRA). MTI has mined talc at the site since the 1950's and from our Treasure and Regal Mines for over 28 years at the 1,425 acre site. In addition, we are currently developing the Imperial Mine, along with a Reclamation and Closure Plan to reflect input from MDEQ that incorporates an improved post-



mine reclamation landscape design. As part of our reclamation process, MTI will use about 450,000 cubic yards of soil and overburden as cover and fill material. Additional aspects of the reclamation include removal of all facilities, installation of talus slopes on upper pit walls to allow habitat for birds, sloping and shaping of all pit slopes into shallow angles to allow placement of topsoil, and placement of 12–24 inches of topsoil that is seeded with native grass mixes to accelerate vegetative growth. MTI and MDEQ will jointly monitor the site to ensure site and soil stabilization.

Industry Leading Bentonite Mining Practices

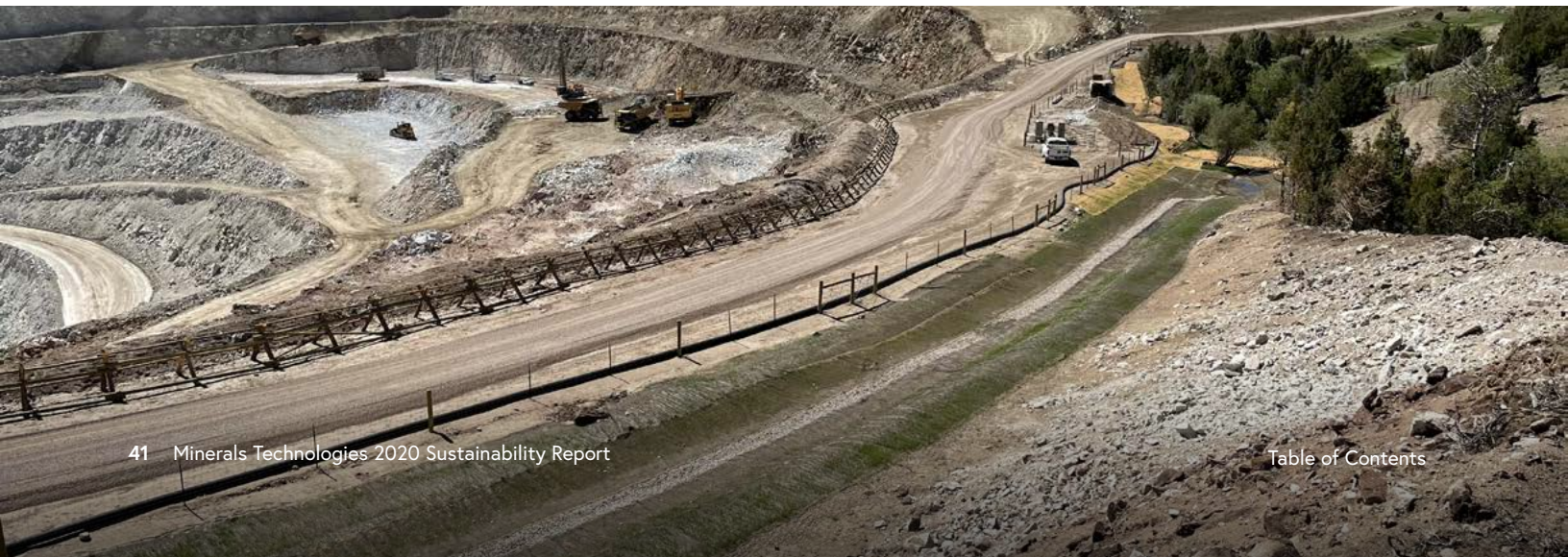
MTI is the world's leading miner and processor of bentonite clay. Based on past mining experience and geologic data of surrounding underground formations, exploration crews continually locate and evaluate bentonite deposits through a test drilling program. When a future mine site is selected for bentonite quality and volume, MTI's environmental specialists conduct vegetation, hydrology, soils and wildlife studies as well as detailed pre-mine surface topography and aerial imagery for planning and designing post-mine topography and surface water drainage patterns. Our initial studies and development of mining plans enable our reclamation team to start planning with area farmers and ranchers in advance on plans to enhance their lands after mining has been completed. For example, by proactively working with farmers and ranchers, MTI has added new ponds for grazing livestock, drainage patterns have improved, and vegetation has grown

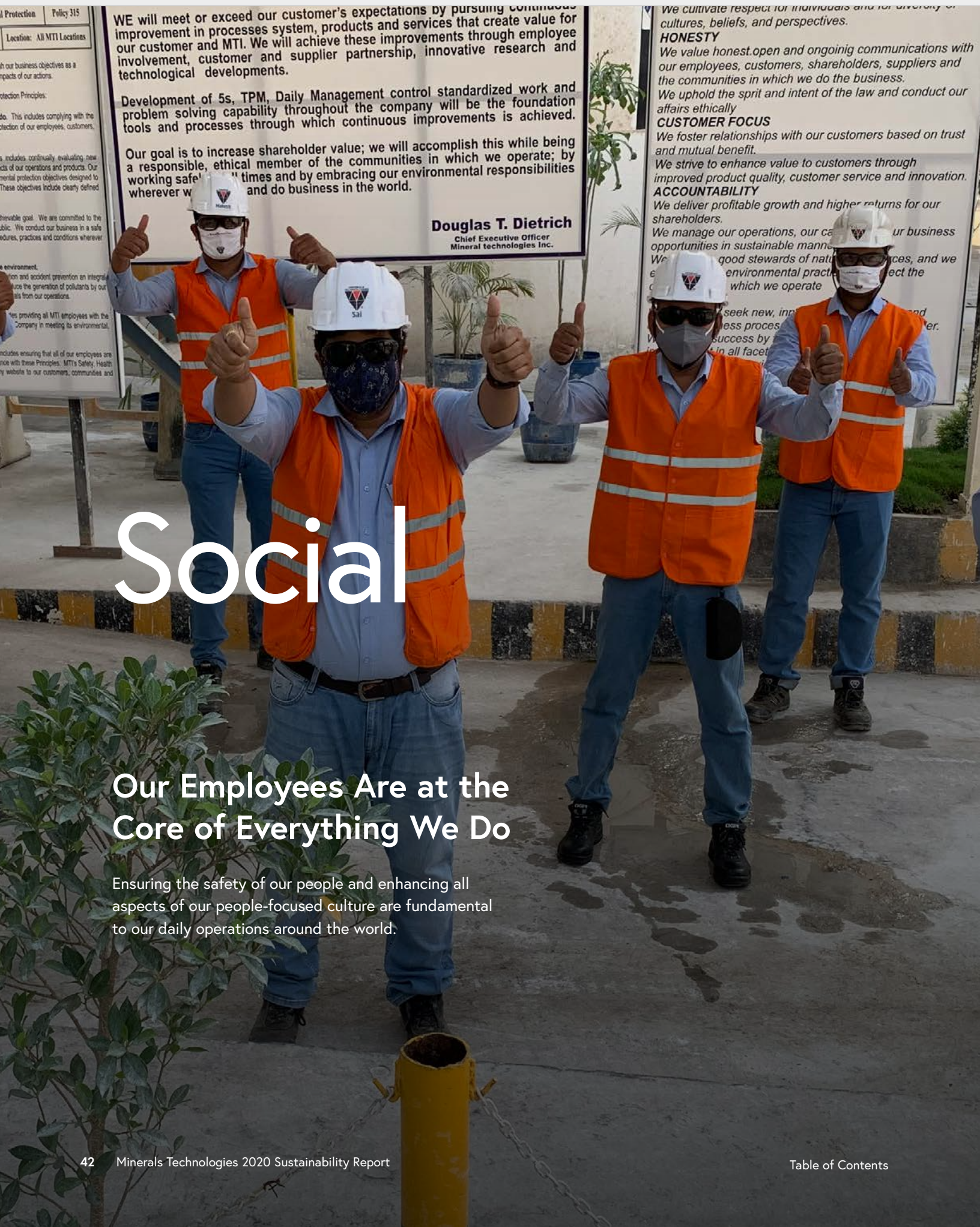
where little had grown before. The new ponds also help enhance the local wildlife by providing food and drinking water during more arid times.

The information obtained is formulated into a mining and reclamation plan and submitted to the regulatory agency in a mining permit application. After permit issuance and as mining progresses, the bentonite is extracted, and topsoil and subsoil are replaced to create a suitable bed for reclamation grass seeding. Backfilled areas are contoured to match surrounding topography and provide a natural landscape. Our goal is to restore the land back to an even more valuable habitat or as an economic resource for stakeholders. Typically, the mining process from start to replacement of the topsoil takes three months and the full regulatory review from application to completion of reclamation monitoring takes approximately 10 years. In 2020, MTI reclaimed about 700 acres of land at our global mining locations.

MTI devotes a significant amount of time and resources to establishing reclaimed land that benefits a wide range of species of plants and animals, including:

- We conduct winter aerial surveys of big game mule (deer and pronghorn) and monitor known raptor nesting locations and develop potential mitigation plans to minimize impacts
- We continue our high activity in the study of sage-grouse migratory and mating behavior and habitat. MTI continues to be a leading participant in a long-term University of Wyoming study on sage-grouse and is proactively working to minimize the effect of mining on the sage-grouse habitat. More information on the study is available [here](#).





Social

Our Employees Are at the Core of Everything We Do

Ensuring the safety of our people and enhancing all aspects of our people-focused culture are fundamental to our daily operations around the world.

Social

We are a dynamic global team of more than 3,500 employees and our core values — people, excellence, honesty, customer focus and accountability — guide our actions.

Our employees are at the heart of our people-focused culture and key to our ability to execute on our sustainability agenda. Our commitment to providing the safest possible working conditions and actively engaging all our employees in our safety efforts has been core to our company's values. This safety-first mindset helps us attract and retain top talent from around the world and drives continuous improvement in our manufacturing operations. We also provide extensive training and professional development opportunities, competitive compensation and benefits for our employees. We aim to increase employee engagement by leveraging the diversity of our global workforce and developing their talents by fostering an inclusive environment throughout our workplace. To remain a competitive employer, we acknowledge the importance of our company values, vision and

sustainability program to our employees as we aim to continuously demonstrate our commitments, enhance our performance, and support our local communities.

MTI operates globally in many different cultural and economic regions, and we are dedicated to strengthening our high-performance culture and fostering a diverse and inclusive workplace environment that operates with integrity, respect, and accountability aligned with our core values. MTI's Board of Directors, in conjunction with our Chief Executive Officer and our Leadership Council, has direct review and oversight responsibility for our safety practices, diversity and inclusion and human rights policies, talent management, and succession planning.

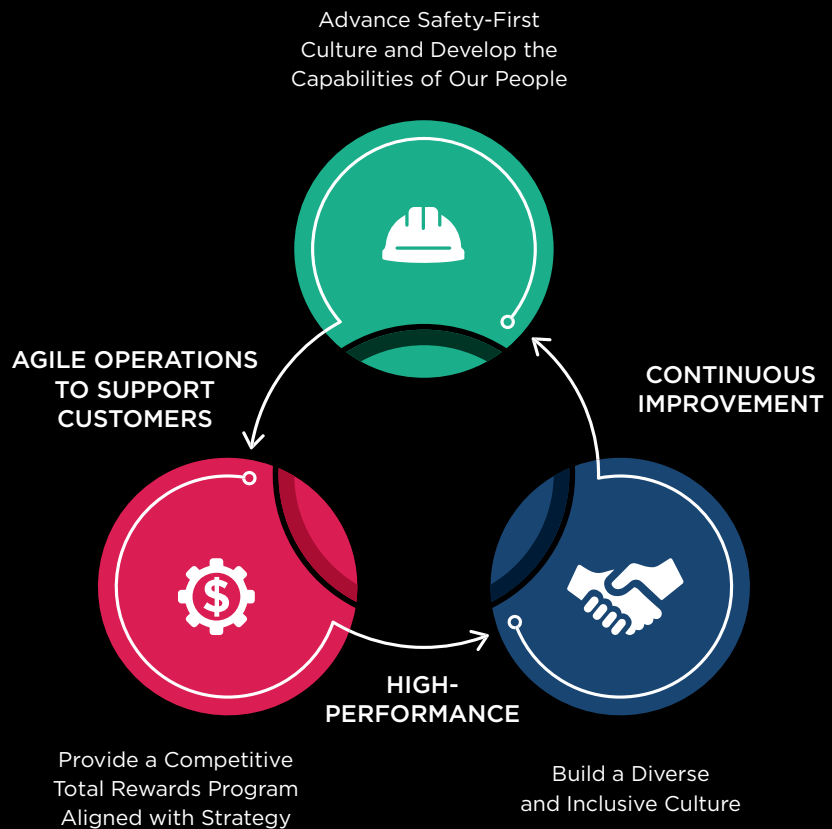


Our Philosophy

Strategy

Create a safe workplace where employees can thrive and deliver high performing, sustainable organizational success.

We are committed to attracting, developing and retaining diverse people with the requisite skills to shape a stronger MTI and foster employees' engagement and motivation.



Culture Strength During Pandemic

In 2020, the world faced a global health crisis that affected nearly every person in every part of the globe. As we have done during other challenging times, we enhanced our support to employees. Our employees at MTI demonstrated our values in every possible way by coming together and forging ahead to ensure that we could serve our customers while protecting the health and safety of our employees. While we remained open for business, our employees demonstrated their resiliency, ingenuity and agility. They developed new ways to work effectively as we navigated the challenges of operating and staying connected while following new COVID-19 safety protocols, including social distancing, advanced cleaning and hygiene practices, and mask-wearing. We were able to quickly pivot in our approach to employee learning and development, and trainings, workshops and internal activities were transformed to allow for virtual facilitation. In addition to keeping MTI and our customers running smoothly, our teams made significant contributions of sanitizers and protective supplies to organizations in their local communities. MTI leaders assisted employees and their families to understand COVID-19 protocols by providing training, supplies, and PPE to aid in protecting the communities in which we operate.

People-Focused Culture Starts with Operational Excellence and the Engagement of All Employees

Our Operational Excellence (OE) journey, rooted in the active engagement of our employees, began nearly 15 years ago when we developed a highly structured business system of lean principles. Since then, OE has become the foundation of how we operate. We've significantly advanced OE principles across our company, building a culture of continuous improvement where each employee is empowered to apply these people-focused values and tools to solve challenges, constantly refine our processes, identify and remove risk and waste, and deliver value to our customers. Every day, MTI employees show their engagement and agility by applying their skills in ways that deliver measurable outcomes and create both business and social value.

In 2020, we saw firsthand the power of our culture as we quickly adapted to the many challenges we faced and implemented new tools and processes to operate efficiently, collaborate effectively and deliver value to our customers.



8,887

Kaizen Events

On average, more than 30 highly focused, problem-solving events occurred each day in 2020 across the organization. These events include several employees and, in many cases, an employee that is not familiar with the process in order to question current practices and processes and offer a fresh perspective. These problem-solving activities result in thousands of incremental enhancements to our processes, products and operations every year, and they provide a significant competitive advantage to our company.

63,426

Suggestions

On average, each employee within the organization provided MTI with 18 suggestions in 2020. These suggestions help remove waste and risk from our processes and improve how we operate.

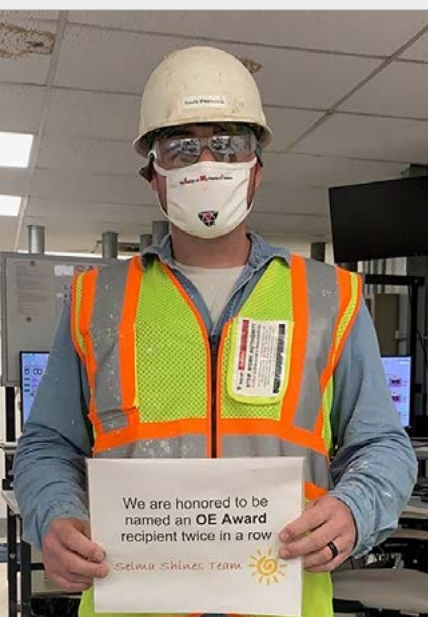
8,836

Bravo Chips

These were awarded to our employees with an approximate value of \$550,000 based on December 31, 2020 stock price. Bravo chips are a key element of our employment recognition program for accomplishments related to process improvements, customer service and cost reduction.

OPERATIONAL EXCELLENCE

is a strategic differentiator for our company, and has solidified our high-performance culture by making MTI a more disciplined, agile and sustainable organization. The deep integration of OE goes beyond cost savings and productivity. It provides MTI with a common language and collective mindset to address a problem or challenge anywhere in the world.



The Operational Excellence Achievement Award

The Operational Excellence Award is presented annually to MTI organizational units that have demonstrated superior application of the principles of OE. While the Award process is modeled after leading external operational excellence frameworks, it is based on the important elements of the OE process as practiced at MTI. The Award is not only used for recognition purposes, but it is also a valuable tool for educating applicants on the many important facets of the OE system. A rigorous scoring template is followed for each application and locations are evaluated based on work culture, continuous improvement, quality and customer service, business results and environmental health and safety. In 2020, we had a record number of award recipients (11), as well as applications (49). It is a testament to our company-wide focus on OE deployment that we reached these record numbers in a year filled with many difficulties managing through the pandemic.

Employee Rewards and Recognition

A key element of our recognition activities is through a custom designed token chip called the Bravo Chip. The Bravo Chip is awarded to employees for noteworthy accomplishments across a variety of areas, including but not limited to process improvements, customer service, cost reduction, and safety and environmental excellence. Each Bravo Chip represents an amount of cash based on the equivalent value of MTI shares. Since its inception as an important vehicle for recognizing employees, the number of Bravo Chips granted each year has significantly increased. Recognition of employee efforts in advancing Operational Excellence has helped to increase the level of engagement in our continuous improvement process. Safety letters are sent from our CEO to recognize sites that operate injury-free as well as those that achieve the OE Achievement Award each year. We also recognize suggestions that help reduce costs or identify an improved way of working and have best practice sharing forums for OE, sustainability and safety which are disseminated to all employees.

Diversity and Inclusion (D&I)

We strive to promote a culture of inclusion where individuals feel respected, are treated fairly, encouraged to share their ideas and have an opportunity to contribute their full selves every day at work. Diversity and inclusion are integrated in our core values and a key part of our sustainability strategy. We believe that a diverse workforce and inclusive culture is instrumental in helping us drive long-term value at MTI. True ingenuity comes from every employee feeling empowered to bring their most authentic selves to work, and we continuously invest in our people to support the success of MTI colleagues around the globe.

Our commitment to a diverse and inclusive workplace is embodied in numerous policies and procedures including our [Diversity Policy and Mission Statement](#), [Equal Opportunity Policy](#), our [Employee Code of Conduct](#) and our [Human Rights Policy](#). We expect all employees to build and sustain a work environment that embraces individuality and collaboration to drive strong results. We are committed to providing a workplace free of discrimination, harassment, and retaliation regardless of race, ethnicity, color, religion, sex, sexual orientation, marital status, age, disability, gender identity, national origin or any other classification.

Our Global Inclusion Council, which is chaired by our CEO, was formed in 2019 with the directive to examine how we promote and support diversity in all its forms and to develop a strategy to drive meaningful programs to achieve our objectives. The Council, which comprises a cross section of business leaders from across our company's regions and business areas, oversees progress to achieve our strategic imperatives, facilitates focus areas, and provides the resources needed to execute initiatives.

We have made strong progress with D&I over the past several years, reshaping policies and benefits, training our leaders and engaging our employees in meaningful dialogue to build, understanding and a culture of inclusion. We are driving and reinforcing the importance of D&I through all levels of the organization so every employee is knowledgeable and comfortable engaging with the topic.



We take a broad view of diversity and inclusion by going beyond racial and gender diversity. Culture, background, experience, religion, thoughts, sexual orientation, personality and communication represent the diversity of our workforce. We are a company with an extensive global footprint. Creating a diverse and inclusive culture is essential because it:

- Enables our employees to contribute their best
- Drives our high-performance and people-focused culture
- Harnesses different thoughts, skills, talents, and experiences to produce innovative solutions
- Helps make MTI a better company for our employees, customers, communities, and shareholders
- Promotes innovation, increased team dynamics, engagement and productivity
- Encourages sharing of ideas and more widespread communication and awareness

Key Diversity and Inclusion Initiatives

Training for All Employees

MTI completed its first company-wide, online diversity and inclusion training with instruction available in 9 different languages. The module provided foundational content and exercises for how each of our employees can recognize the importance of diversity and inclusion in their daily activities and focused on topics such as unconscious biases and microaggressions. 100% of our employees completed this training and all new hires will receive this training as part of the Onboarding process.

Additionally, more than 250 leaders across MTI participated in virtual leadership training sessions focused on regional diversity and inclusion. We will continue advancing D&I education at MTI in 2021 through a second phase of online training for all employees and continued leadership training on special topics.

Enhancements to Talent Management & Performance Evaluations

It is important that as part of our people-centered culture we are cultivating an inclusive environment for all employees. That is why we have defined “Inclusive” as one of our cultural competencies that will be used in our performance evaluations and talent management processes starting in 2021. All performance and talent management tools have been enhanced to embed inclusiveness. Leaders across the organization are explicitly evaluated on this competency and are expected to drive D&I principles in their daily activities.

We have evolved our succession planning and recruitment practices to further embed D&I principles,

which includes incorporating metrics and strategies to retain and develop minorities rather than only evaluating based on gender.

MTI requires a diverse candidate pool for every role within the Company. We are continuously looking for opportunities to diversify both our new hires and who we promote.

Communication and Awareness

We created an internal hub on our company intranet that offers D&I related resources, cultural spotlights, training links and an employee feedback process to ask questions or share areas for improvement.

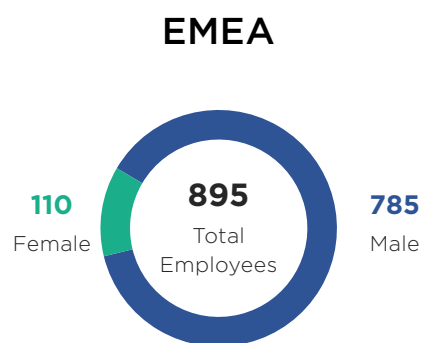
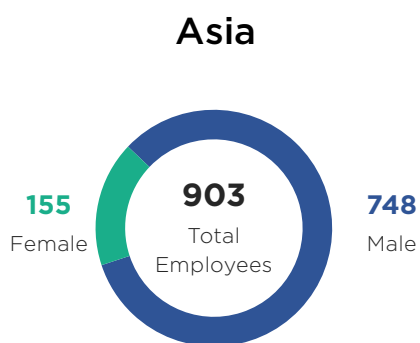
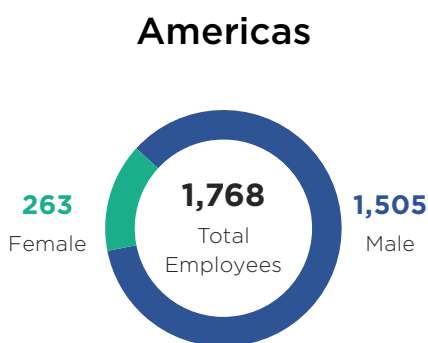
We regularly communicate to all employees on D&I awareness and current initiatives through CEO-led podcasts, company announcements and global and local Town Halls. Company-wide activities led by employees include: recognition for International Women’s Day, celebrating Chinese New Year, people spotlights to highlight our diverse employee base, and awareness around LGBTQ Pride Month.

Compensation Philosophy Promotes Equality

MTI is committed to pay equality, and we have a transparent compensation system with objective metrics around recruitment, performance, advancement and compensation. We conduct an annual gender pay-equity study and are proud to report that pay is equitable, fair and consistent without discrimination on the basis of gender or another category throughout our company. We also plan to conduct a racial pay analysis in 2021.



Our People



Board of Director Diversity

30%

diverse from ethnicity/
gender perspective

Employee Average Age

44

Employee Average Years of Service

12

All employee data is as of December 31, 2020

New Hires and Turnover in 2020

2020 New Hires by Age

	Total
Under 30	101
30-50	165
Over 50	41
Total	307

2020 New Hires by Region

	Total
Asia	64
EMEA	46
Americas	197
Total	307

2020 Turnover Rate

	Male	Female	Total
Voluntary	3.8%	0.7%	4.5%
Retirement	1.8%	0.2%	2.0%
Involuntary	3.7%	0.3%	4.0%
Overall	9.3%	1.2%	10.5%

MTI Employee Surveys and Engagement

As a critical component of our continuous improvement philosophy, advancing our people-centric culture is a top priority within MTI. We provide several forums for employees to share candid feedback and assess areas of strength and opportunities for improvement. We do this through formal company-wide engagement surveys on key topics. For the second time since 2018, we conducted a worldwide employee survey that focused on MTI's culture and work environment. The engagement survey allows us to measure important factors that affect engagement — how employees feel about their work environment, the people they work with and the company's vision. It was available in 15 languages through multiple media devices to ensure easy

access. Responses were anonymous and confidential. The survey was completed by over 2,000 employees who shared their experiences at MTI. We received 4,000 comments which is reflective of a high level of engagement and passion that our employees bring to work each day. Overall, survey responses were favorable across all categories with positive responses far outweighing negative responses.

Sharing what we think and feel about working at MTI is just the first step. The second and equally important step is acting on the feedback we receive. Across the world, leaders review survey results and work with their teams to develop actions plans that focus on specific feedback. The survey results provide all employees the opportunity to make a positive impact on safety, operations, OE, sustainability and financial performance while building a strong sense of community.

In addition to the Global MTI Survey, multiple other surveys and feedback mechanisms occur throughout the year. Several of our resource units conducted Voice of the Customer surveys in order to improve processes and ensure that our internal customers' needs are being met. This drives continuous improvement to advance our processes and strengthen our culture.

Advancing Our People-Focused Culture Through Training

New Learning Management System (LMS) to Enhance Employee Training: All employees receive extensive continuing education training, both on the job and online/classroom learning. MTI is launching our "MTI Academy," a comprehensive global platform available to all employees at our company. This platform further aligns all MTI employees, customers and stakeholders to core curriculum, which will drive business competency in key areas and significantly enhances our ability to develop employees' skills and capabilities. This intuitive interface allows learners to accelerate their development, which also includes advanced reporting and analytics. It also provides improved integration of new acquisition employees through standardized and streamlined learning.

We offer extensive education related to the principles of Lean Manufacturing (Lean), which is closely aligned

with Operational Excellence (OE), to prepare our workforce to become highly proficient problem-solvers. Each new employee entering the organization undergoes 25 hours of OE focused training within their first year of employment.

Clarity Net Safety Training: All employees receive a level of continuous safety training commensurate with their job function and in their local language. Safety training will be further advanced with the implementation of the LMS. In 2020, MTI employees completed over 25,000 courses and approximately 20,000 hours of training courses.

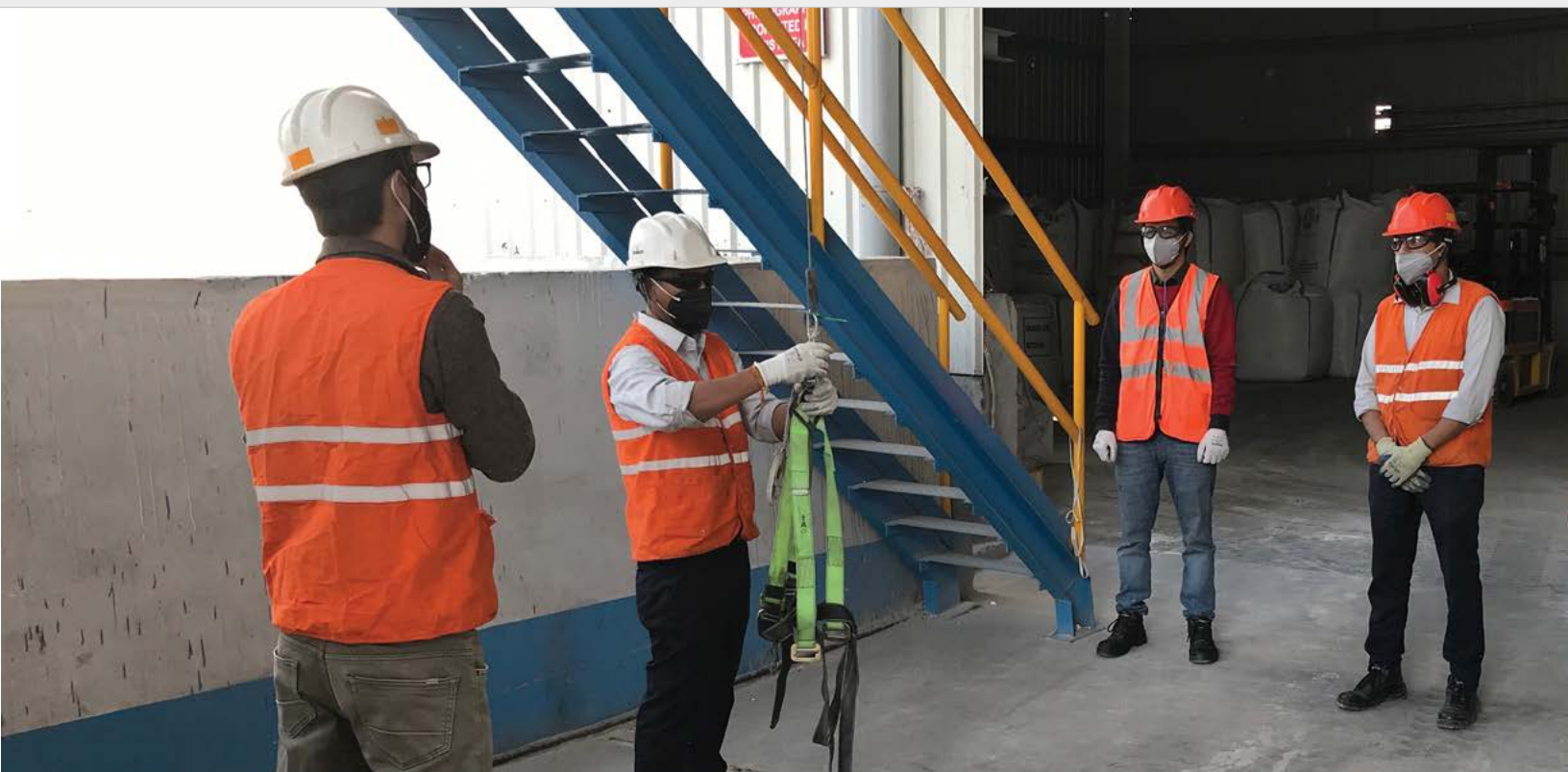
MTI Internal Webinars: We offer extensive education related to the principles of EHS, Lean and Operational Excellence through internal webinars by employees and for all employees that are recorded and made available for replay anytime. In 2020, MTI hosted 73 webinars with an average attendance of 250 employees.

Employee Onboarding and Talent Management

We offer our employees a multitude of opportunities to enhance their professional development.

New Employee Onboarding: All new employees receive extensive onboarding training on required safety practices, policies and practices and MTI culture starting on day one and continuing quarterly through the first year of employment.





Employee Talent Management

Annual Performance Assessment: The goal each year is for 100% of MTI employees to receive a performance evaluation. In 2020, 97% of employees received a performance review from their manager. Annual reviews focus on 19 core competencies which are a direct reflection of our core values. Our top five competencies in 2020 included trustworthiness, safety, thoughtfulness/caring, discipline, and teamwork oriented. In addition, we offer quarterly and mid-year performance checkups for select employees.

Mentorship Program: MTI had a strong launch of the mentorship program in 2020. The mission of MTI's Mentorship Program is to give employees the opportunity to develop their career, leadership and diversity of skills needed in order to be successful at MTI. By facilitating mentoring relationships, providing opportunities for one-to-one learning and teaching practical leadership skills, the program helps junior employees strengthen their knowledge, self-confidence, social competence and pursue leadership goals. The program focuses on employees at the entry management level or soon to be at this level to develop the next generation of leaders. These employees are strategically paired with a mentor

that has been carefully selected by senior leaders. Individuals were identified in 2020 and assigned mentors within the organization. Progress and results are reviewed on a quarterly basis during our Leadership Council Talent Review Sessions. We look to continue to build this program in the coming years.

Individual Development Plans (IDP): Individual Development Plans (IDP) and activities were a focus for 2020 and will continue into future years. This collaboration of managers and employees to help guide career progression and knowledge learning resulted in 618 employees with personalized development plans across 27 countries. The new Learning Management System (LMS) will also provide a platform to create personalized curriculum(s) aligned to leadership competencies.

360-Degree Review Process: Development at MTI is centered around a comprehensive performance review process, which includes 360-degree, multi-dimensional feedback for our senior leaders. The 360 process was inclusive of employees located in 11 countries where we operate, including Brazil, Canada, China, Japan, Ireland, India, Netherlands, Thailand, Turkey, U.K. and the U.S.

High-Performance Work System (HPWS) and Self-Directed Work Teams (SDWT): MTI is dedicated to implementing the organizational design concept of High Performance Work Systems (HPWS) for its operating facilities. HPWS organizes people with technical systems to achieve high performance and employee participation levels. This structure increases employee effectiveness and engagement and permits sites to operate more safely and effectively, with fewer supervisors and higher levels of teamwork. HPWS also provides employees with decision-making authority, business information and the training needed to make sound decisions, and an opportunity for performance-based rewards that align employee motivation and business needs. Employees can grow and develop through the training and certification provided with the skill-based Pay, multi-level job structure of HPWS.

Tuition Reimbursement: Learning and development is fundamental to success. That is an important concept at MTI and one that applies to both our employees and the company. Investing in our people is one of the top ways we acquire, retain, and develop top talent. As such, we are proud to offer educational assistance to all eligible employees. Educational Assistance is available

to all U.S. regular full-time employees that have been employed by MTI for at least six months. We reimburse employees for 100% of their tuition and associated fees upon successful completion of coursework.

Internship Program: We offer a pathway for interns to obtain employment upon graduation. Through MTI's College Internship Program, we provide an immersive and hands-on experience to prepare interns to successfully navigate a future career. Our interns gain real-work experience benefit from our social engagement and network with executives and key business leaders. The global program extends into multiple areas of the business and promotes diversity and inclusion. Interns were involved in high visibility projects that included work with our Senior Leaders and Leadership Council in order to provide an overview of the organization and culture. More than half of our global intern population were female or belonging to a minority group. The program includes a comprehensive evaluation program where both the organization and the intern are evaluated in order to continuously improve the program. Several of the interns in 2020 were offered full-time employment with MTI following their 2021 graduation.



Compensation and Benefits for Employees

MTI cares about all aspects of well-being, including the social, emotional, physical and financial welfare of our employees and their families. Through our robust Total Rewards package, we offer competitive compensation, comprehensive benefits and other programs to support growth — personally and professionally — as an MTI employee. In 2020, we enhanced some of the Company's benefits to support the health and well-being of our employees during the COVID-19 pandemic, including our Employee Assistance Program (EAP), telehealth, temporary sick leave, family leave and voluntary leave of absence policies and programs.

Our commitment to supporting professional development at all levels and to promoting our people offers employees the opportunity to actively pursue their career advancement goals as a valued member of the MTI family.

Employee Wellness Activities

MTI began offering a Global Employee Assistance Program in 2020. All employees and dependents within the organization now have a readily available resource to assist with behavioral, mental, and social based needs.

The U.S. Wellness program continues to evolve and now offers virtual wellness opportunities to engage employees while maintaining safety during the pandemic. Living Well 365 continues to provide a user-friendly and comprehensive platform to engage our employees and dependents throughout the year. The wellness offerings include several behavioral health resources.

Other locations around the world continue to offer programs such as annual physical check, stress management, lifestyle change sessions, and employee/dependent meetings with public health nurses to discuss medical conditions and follow up with improvement programs.

Community Engagement

Our focus on people is not just for those who call MTI home. Our commitment extends to the people in all the communities where we operate. Throughout our history, we have maintained a strong sense of community and have strived to be a good corporate citizen. We understand the value of partnering with the local communities, and we recognize that thriving and resilient communities are essential for a sustainable future. Community engagement benefits our neighbors, resonates with employees on a personal level, and allows us to operate with the trust and confidence of our fellow citizens.

In many locations, MTI is a major employer, taxpayer, and sponsor of community initiatives. Our facilities closely partner with local stakeholders to understand how we, as an organization and as individuals, can apply our time, talent and charitable giving to have a meaningful and lasting impact.

We are deeply committed to making a difference in building strong communities. Our employees bring that commitment to life by participating in our various corporate social responsibility programs that encourage volunteerism in their communities. We support facility-led volunteer activities and donations to local charities, plant visits for community members, local employment opportunities and career fairs. Many activities focus on promoting safety through Family Safety days and emergency response planning and building more sustainable communities, such as initiatives to commemorate World Environment Day.

A Sampling of Community Projects at MTI

We continued to engage with our communities in 2020 while following COVID-19 protocols and using virtual technology.

United Way and Civic Involvement

To encourage employee participation in educational, health care, civic and cultural institutions that benefit our local communities, we offer a matching gift program to our employees. MTI matches any employee gift up to a maximum of \$5,000 per calendar year to eligible educational, health care, civic, and cultural institutions. Additionally, we actively participate in several local United Way campaigns across our locations. United Way is an organization that champions the health, education and financial stability of every person in every community.

In 2020, about 200 U.S. employees provided a donation to the United Way program and other organizations totaling over \$200,000 in donations. MTI matched our employee contributions providing a total of over \$400,000 in donations. Our Adams Specialty Minerals plant has long supported the United Way in Northern Berkshire, MA, and has been the largest donor in the region for a number of years. Adams was recognized by the chapter for the leading campaign of 2019 with 90% of employees contributing to the campaign. In the past 20 years, the Adams facility's donations have exceeded \$2.5 million.

Jumpstart Book Donations

Jumpstart is a national early education nonprofit organization working toward the day that every child in America enters kindergarten prepared to succeed by providing language, literacy and social-emotional programming to children in underserved communities. MTI has supported this work through an annual donation over the last several years. In recognition, MTI was provided with 500 copies of a children's book which MTI then donated at 10 elementary schools in the local communities in which we live and work.

China Book Donation Initiative for Underserved Community

Following the Jumpstart program in the U.S, the China Lead Team collaborated with all of our locations in China to organize a similar project to provide books to open a new library in the Xi-village. Highlights include:

- Over 1,400 books (science, humanities, and history) donated to Xi-village to open new library
- Participation from all MTI businesses in China
- Posters created to encourage participation and demonstrate the importance of the activity
- Worked closely with local government leaders to support the cause
- Several employees attended the library's opening ceremony



One Tree Planted

In recognition of Earth Day, MTI partnered with One Tree Planted, a nonprofit organization dedicated to global reforestation and restoring nature and biodiversity. Through this partnership with One Tree Planted, 10,000 trees were planted in areas of need around the world. We look forward to our future support of One Tree Planted and its mission to make it simple for anyone to help the environment by planting trees.

World Environment Day

Several of our global facilities celebrated World Environment Day through a variety of activities. Our team in Dandeli, India recognized and celebrated the importance of protecting the environment and the actions MTI as well as the team can take to be good neighbors in our communities. Activities included:

- Inviting families and local officials/police officers and frontline workers to participate in the events
- Developing an environmental pledge that all employees reviewed
- Discussing MTI's environmental goals and how sustainability is a key part of everything we do at MTI

- Raising awareness and educating around ways that employees and their families can make our world more sustainable
- Planting tree saplings at the facility and employees brought home saplings to plant at their home

Earth Day Celebrations

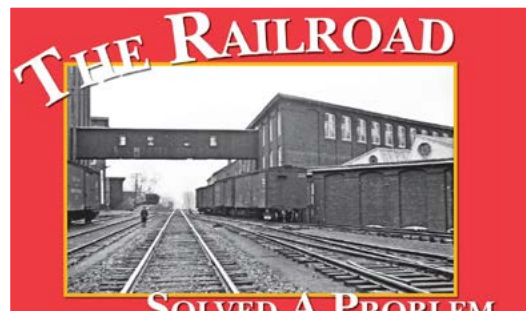
Many of our locations in the U.S. participated in activities to support the environment and involve employees in recognizing the important role sustainability plays in our lives and at MTI. At our corporate campus in Bethlehem, PA, employees planted new trees and installed bird feeders.

Thailand

Our facility in Thailand conducted organized a large philanthropy activity which included providing consumable goods to a school to support children with cerebral palsy.

Specialty Minerals in Adams, MA

is a proud sponsor of the Adams Historical Society and the "Explore Adams History" project. This project highlights the significance of the Railroad as the city developed and demonstrates our plant's role in the community as one of the larger local employers.



Our Poland Location helps #Szlachetna Paczka, Christmas 2020

CETCO-Poland took part in the 20th edition of a Polish nationwide social project called “Szlachetna Paczka” organized by the charity association “Wiosna.” The main goal is to provide resources and mental help for families and people in difficult life situations. Our employees organized money and food and cleaning products for local families.

Dillon, MT — Community Clean Up

Our Dillon, MT, facility partners with the Montana Department of Transportation to conduct annual cleanup activities near the facility. Each year employees volunteer to clean a two-mile section of U.S. Interstate 15, as well as adjacent highways.

Troy, Indiana Plant (Run for Your Mother)

Since 2013, our team in Troy, Indiana, has helped organize a 5K run that dedicates the proceeds to supporting high school graduates explore a variety of career paths. We have been a major sponsor and organizer of the local initiative and have helped raise over \$20,000.



Human Rights

MTI is committed to safeguarding the human rights of all employees as well as in our business interactions. We recently updated our [Human Rights Policy](#) to better reflect this commitment and our expectation for equal opportunity, respectful work environments, prohibition of discrimination, freedom of association, prohibition of forced and child labor, compensation, EHS and security and anti-corruption. We follow the United Nations Guiding Principles on Business and Human Rights, and the Ten Principles of the United Nations Global Compact. We undertake efforts to build awareness about our human rights policies and procedures and expect our global workforce to act in furtherance of this commitment, as outlined in our Summary of Policies on Business Conduct.

We expect all of our suppliers, vendors, business partners and other stakeholders to share our respect for human rights and conduct their business accordingly, in compliance with our Supplier Code of Conduct and all applicable laws and regulations.

Cyber Security

At MTI, it is our responsibility to protect, in accordance with applicable laws, the personal information of our employees and all other individuals with whom we work, including customers, partners, suppliers and contractors.

MTI's cybersecurity is led by the Chief Information Officer and supported by the Information Technology Team and Managed Security Services Provider (MSSP). This is a frequent topic in our Board's Audit Committee meetings. MTI's risk-based framework aims to:

1. Proactively identify potential risks to systems, assets, data and capabilities
2. Protect critical infrastructure services by defense-in-depth security architecture
3. Detect and respond to cyber events by taking appropriate actions
4. Recover and restore capabilities according to service level agreements

MTI requires the participation of all employee contractors that access our network in our cyber training curriculum. In 2020, focus areas included data security and privacy as well as ongoing spear-phishing campaigns. Employee's training progress is tracked and reported to senior leadership. Employees who fail phishing exercises receive remedial training.

In addition, MTI has defined and is executing on a Security Modernization roadmap to implement new security software tools, enhance internal and external resources, and heighten employee training to effectively prevent our systems from being compromised. We have periodic penetration testing and independent reviews are conducted by select third parties and our external auditors. We are currently working toward ISO 27001 certification.

Ethics, Integrity and Grievance Reporting Process

Compliance with Laws, Permits, Regulations and Company Values

It is MTI's policy to conduct our business activities in a lawful and ethical manner. Ethics and integrity starts with a strong tone from the Board of Directors and Senior Management. Our commitment is supported by clear policies and training and is reinforced and monitored by every MTI employee.

MTI's ethics and compliance program is structured and operated to promote integrity and ethical behavior, and to prevent criminal conduct and violations of laws. [Our Summary of Policies on Business Conduct \(Code of Conduct\)](#) details the expectations and requirements we have for our employees and applies to all areas of our operations.

MTI has an annual requirement for all employees to read and acknowledge the Code of Conduct, and we audit completion. In addition, our Internal Audit Department performs regular audits of the company's controls, including those systems which are designed to prevent unethical and unlawful conduct. During 2020, the company incurred no legal or regulatory fines or settlements associated with violations of bribery, corruption or anti-competitive behavior.

Ethical Standards Training

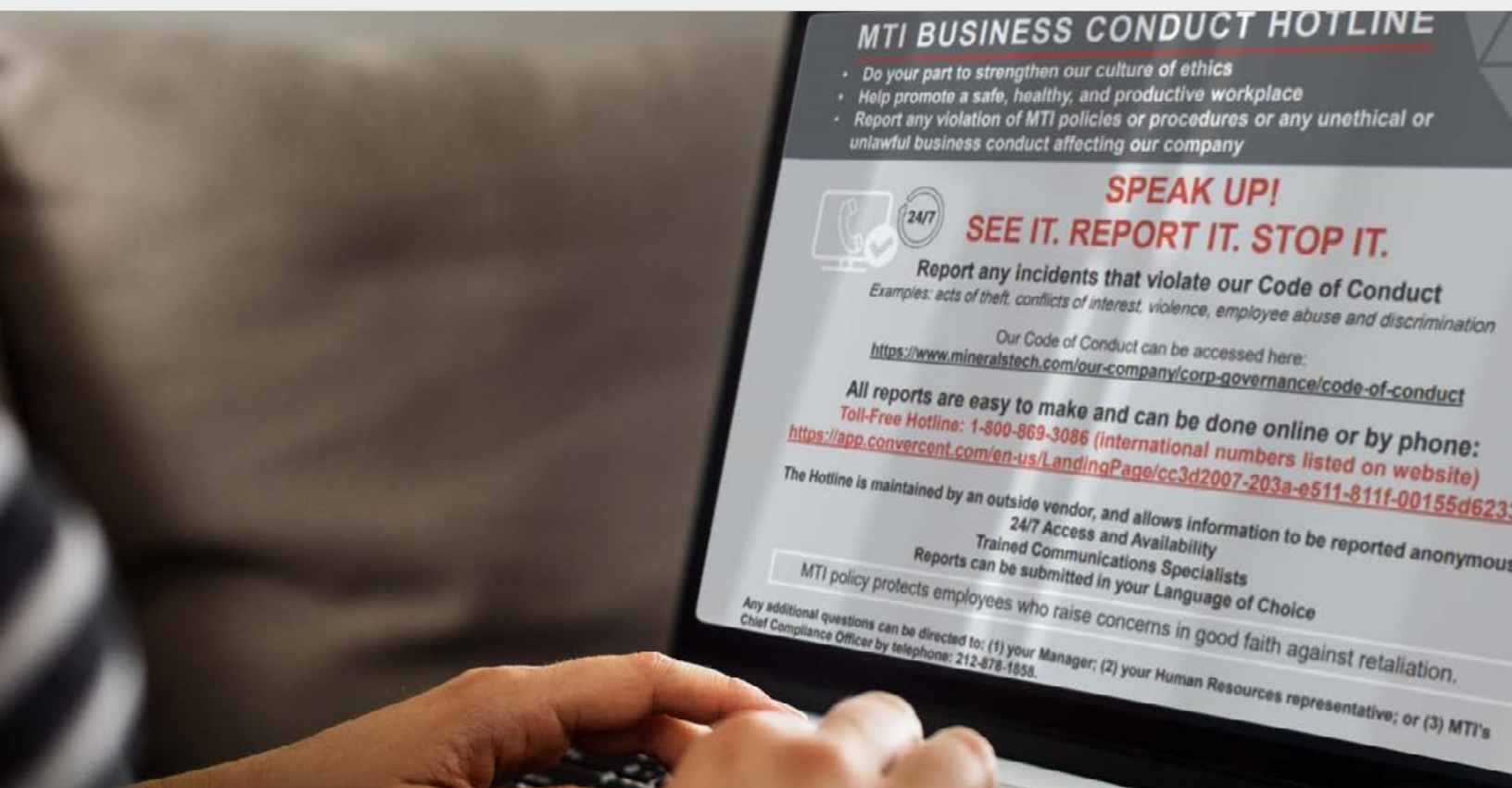
In addition to the annual requirement to read and acknowledge the MTI Code of Conduct, all employees receive periodic training on various ethics and compliance subjects. Recent training topics have included sexual harassment, bullying, diversity and inclusion, and conflicts of interest. These periodic trainings occur on a 2-3 year rotation as our Legal Department assesses the risks and introduces a training schedule most relevant for each year. Ethics and compliance training is also required and included in every employee's onboarding.

We perform ethics and compliance due diligence for all third-party relationships, including agents, distributors, and contractors. These third parties are required to attest that they will behave ethically, and fully adhere to our business conduct policies.

Grievance Reporting Process Through Dedicated MTI Compliance Hotline

We encourage employees and third parties to report any suspected violations of our policies or law, including those relating to human rights, internally to senior management or through the Company's confidential Compliance Hotline by telephone 1-800-869-3086 or [electronically](#).

An effective reporting system is critical to supporting our efforts to foster a culture of integrity, accountability, and ethical decision-making. For that reason, a new and improved ethics and compliance hotline was launched in 2020 to provide a confidential and secure mechanism to report any potential illegal, unethical, or improper conduct as outlined in our Code of Conduct. The hotline is operated by an independent, third-party provider and available 24 hours a day, seven days a week. Reports can be made in any language and employees can speak to a third-party responder in their language of choice.



All reports are investigated until resolved and appropriate action is taken based upon the findings. MTI policy protects employees who raise concerns in good faith against retaliation.

The MTI Compliance Hotline is proactively communicated to employees via posters on-site, employee onboarding and verbal communication during periodic Internal Audits, and it is also displayed prominently on our intranet site.

Policies and Guidelines

In addition to our Code of Conduct, our corporate governance policies show our commitment to honest, ethical business practices and compliance with applicable law. These documents and policies are the principles and guidelines that we follow to ensure effective corporate governance practices within MTI.

Careers and Employment

- [Equal Opportunity](#)
- [Diversity Policy and Mission Statement](#)

Corporate Responsibility & Sustainability

- [Anti-Corruption and Anti-Bribery Policy](#)
- [California Transparency in Supply Chains Act](#)
- [Code of Ethics for Senior Financial Officers](#)
- [Conflict Minerals Policy](#)
- [Compliance Hotline](#)

- [General Terms and Conditions](#)
- [Human Rights Policy](#)
- [Minerals Technologies Values](#)
- [Minerals Technologies Environmental Health & Safety Policy](#)
- [Summary of Policies on Business Conduct \(Code of Conduct\)](#)
- [Supplier Code of Conduct](#)
- [United Kingdom MTI Tax Policy](#)
- [Website Privacy Statement](#)

An aerial photograph of a large, greenish-blue industrial water reservoir or tailings pond. The pond is surrounded by rugged, brownish-yellow mountains and hills. In the foreground, there are some industrial structures and a road. The sky is clear and blue.

Sustainable Growth

Strong financial performance is key to the sustainable growth of our business and our future success. Our sustainability imperative helps create growth opportunities, and our growth opportunities support our sustainability goals and focus.

Responsibly Growing MTI

We know that sustainability in the broadest sense is key to achieving long-term growth and financial success. Our stakeholders around the world expect us to deliver on our financial commitments by generating and distributing economic value in a sustainable way.

Our differentiated mine-to-market approach creates value for a wide variety of stakeholders, including our shareholders, investors, employees, suppliers, and local communities. We combine our leading technology platforms, extensive application expertise, and world-class processing capabilities to transform unique mineral reserve positions into a comprehensive portfolio of value-added solutions for our customers. This approach has resulted in leading positions across a diverse set of end markets and geographies.

Our strategy is to grow revenue and earnings:

- Organically through geographic expansion and new product development
- Inorganically through acquisitions of minerals-based companies

Financial Position to Deploy Capital With a Balanced Approach

Our growth initiatives are supported by a strong and flexible balance sheet which provides the ability to generate attractive, sustainable returns for shareholders.

We maintain a disciplined approach to capital allocation while also contributing to long-term strategic investments for our business. This approach allows us to maintain our reputation as a leader in our markets, well-positioned to respond to the evolving needs of our customers.

\$1.6B

Revenue

\$213M

Operating income*

13.4%

Operating margin*

\$175M

Free cash flow

\$400M

Senior unsecured notes offering completed

\$122M

Net debt reduction and lowered net leverage ratio to 1.8X EBITDA

\$48M

Returned to shareholders

\$66M

Capex invested in improving the sustainability of our operations and growing the business

* Excludes Special Items

EMPLOYEE SUGGESTIONS

NEW
IDEAS

IN-PROCESS/
REVIEW

COMPLETED

Statistics

Previous Year		
Suggestions Submitted	Suggestions Completed	% Completed
1206	865	72%

Our Innovation and New Product Development Process

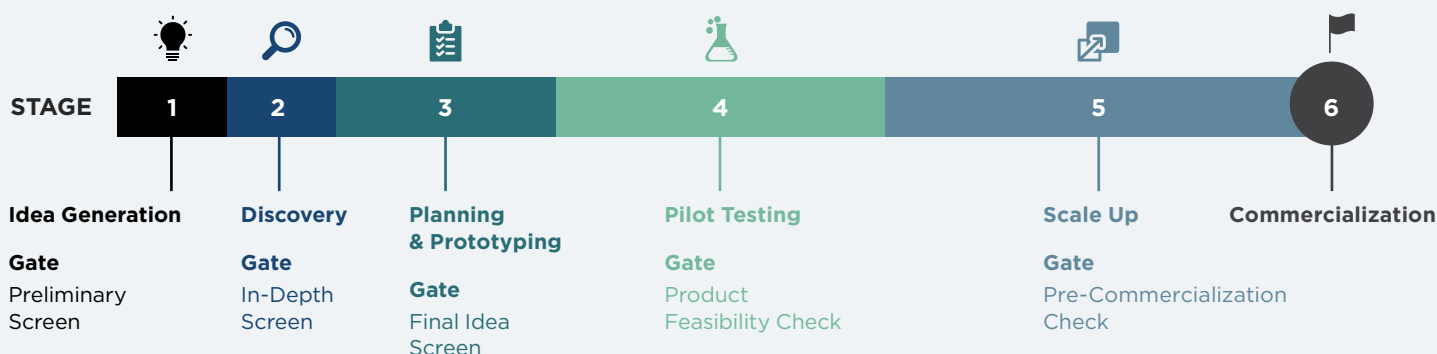
Our robust technology portfolio provides a more differentiated solutions offering which extends our positions in core product lines and supports our expansion into new markets and geographies. Given our world-class technology platforms and leadership positions across diverse businesses, we are in a unique position to anticipate market trends, better understand customers' specific challenges and deliver higher-value solutions.

Stage-Gate Process to enhance R&D efforts

Our new product and process development (NPPD) is overseen by our Technology and Innovation Lead Team (TLT), one of our culture-based teams that reports to our CEO. The team members are individuals with significant R&D and commercial expertise from across all businesses. The TLT develops the policies, tools, best practices, and

metrics to ensure we are staying at the forefront with our innovation and technology initiatives. Our NPPD management system is designed to allow every employee to submit suggestions for new products and processes or improvements of old ones. **In 2020, our employees submitted 163 new product and process ideas.**

Our stage-gate NPPD process ensures projects progress in a focused manner that maximizes the benefits while reducing the time to commercialization. Each development stage has a specifically defined plan and critical metrics to track process toward product goals and growth strategies. This approach allows us to quickly surface knowledge and gaps that are addressed through direct interactions and feedback loops with our customers. Additionally, our system provides a mechanism to evaluate how our products support our customers' sustainability goals.



Timeline from development to commercialization: Average of 20 months, down 50% from 2018

MTI's Comprehensive Portfolio of Customized Technologies Delivers Sustainable Value and New Revenue Opportunities



Growing Broad Consumer Products Portfolio

Pet Care Products

- We are the leader in premium bentonite clay-based cat products. Our clumping sodium and calcium bentonite clay litters reduce odors and our aesthetic additives enhance the customer experience.
- We continue to strengthen our portfolio and value proposition including:
 - Fragrance boosters sprinkled on the litter during use extend the lifetime of the cat litter to reduce disposal costs and enhance odor control.
 - New eco-friendly packaging for private label products to meet consumer preferences.

Personal Care

- We are a premier formulator of retinol delivery for a broad range of skin care applications, including pharmaceutical and cosmetic topical skin care creams and lotions.
- Our calcium carbonates function as antacids and digestive aids.

Fabric Care

- We manufacture a wide range of functional agglomerated fabric whitening agents, fragrances, surfactants, visual cues and fabric softening agents. Our products are added to powder laundry and unit-dose detergents.

Edible Oil Purification

- Utilizing a unique mineral and process, our advanced Rafinol™ bleaching earth products purify edible oils and biodiesel by removing undesirable chlorophyll, metals and colorants. Our bleaching earth solutions improve the quality and shelf life of edible oils for human consumption.



Agricultural Applications

- Our bentonite clay-based products are added to animal feed and improve animal health by reducing mycotoxins concentrations.
- Our calcium carbonate-based products are an excellent source of calcium and widely used in livestock and poultry animal foods.
- We enhance farmer crop yields and soil health with Enersol® and Agro-Lig® natural leonardite-based crop growth formulations and calcium carbonate-based soil amendments.



Automotive, Agricultural, and Industrial Castings Made from Iron and Steel

We significantly enhance our customers' processes every step of the way.

- Our foundry customers utilize our specialized Additrol® and Maxicarb® greensand bond formulations. These solutions improve iron and steel casting performance and productivity and reduce the emissions of our customers' foundry sands (by 10–25%) while enhancing the greensand recyclability.
- Our leading portfolio of Refractory products improves the productivity of the steelmaking operations, reduces our energy consumption and is a more cost-effective method.
- Our talc is a key component in the ceramic catalytic emissions control system in automotive and truck engines.



Residential and Commercial Buildings

Our products protect and enhance the safety, functionality and aesthetics of buildings.

- Our calcium carbonate, Specialty PCC and talc, which are used in roofing, resilient flooring, joint compounds, block, pavers, glass, windows, sealants, plastics, paints and coatings improve performance and durability and reduce requirements for resins, adhesives and plastics.
- Our Voltex® below grade waterproofing products prevent water ingress damage.
- Our Liquid Boot® vapor barriers reduce harmful vapors that could enter buildings from the surrounding soil.



Paper and Packaging Applications

Broad Technology Portfolio to Improve Sustainability of Papermaking Process

- Our precipitated calcium carbonate (PCC) enables customers to use significantly less pulp and fiber (trees) and energy than traditional fillers and serves as a key solution for filling and coating high-quality printing paper.
- Technologies such as the FulFill® platform of products, ENVIROFIL® PCC and NewYield® PCC improve fiber consumption and enable waste recycling. These are creating more value for customers and driving penetration in high-growth markets.

Consumer Packaging

- Our talc-based products reduce plastic film packaging by reducing waste and allowing food to stay fresh for longer.



Water Treatment

We have strengthened our technology portfolio specializing in treating complex, out of compliance aqueous streams and converting them to water that can be safely discharged.

- Commercialized in 2019, our FLUORO-SORB® adsorbent products trap and retain PFOS and PFAS contaminants to reduce exposure to humans and play a key role in providing access to clean drinking water.
- Our advanced Resistex® and Bentomat® environmental barriers contain wastes and leachates in landfills and mining sites to prevent leaching of toxic chemicals into ground water.
- Our Energy Services business treats acid flows, completion fluids and produced water by removing oil droplets. These products support the safe discharge of over 1.9 billion gallons of water globally.

We Are Customer Driven

Listening to the Voice of the Customers (VOC) has always been part of MTI's DNA and is the foundation of how we innovate closely with our customers, grow our business, and deliver sustained value. VOC is strongly linked with our continuous improvement philosophy, sustainability strategy, and innovation culture.

We use our mineral and formulation expertise to enhance our customers' long-term sustainability by improving their process productivity, product quality and overall performance. That translates to external value through market share growth and cost savings or internal value such as more sustainable packaging materials, lower energy/water/landfill quantities, and reduced carbon emissions.

Under the sponsorship of our CEO and Leadership Council, the VOC Team is responsible for implementing company standards such as strategic account management, value selling methodologies, and customer driven, new product development processes designed to deliver the lowest cost and most innovative solutions to our customers. We also utilize a dashboard to communicate our metrics visually to better track trends and measure our continuous improvement.



Our Packaging Initiatives

Contributing to a Circular Economy

Carbon-Neutral Pet Care Packaging

MTI is leading sustainability improvements in pet care packaging. Our European Pet Care business (Moerdijk, Netherlands) has been a leader in the development of sustainable packaging for pet care in the EU with the launch of several new products that make use of fully recyclable materials. Sivomatic has also led the industry with packaging weight reduction and the introduction of cat litter products that are certified carbon neutral.

For example, when analyzing the amount of packaging required to deliver a pound of granular cat litter from the manufacturing site to a customer distribution center, the type of packaging impacts the overall weight of the product we introduce to the market.

The data showed that the most efficient types of packaging for cat litter are bags and paper boxes, compared with pails and jugs (i.e., most cat litter delivered per pound of packaging). This is driven by the ability of boxes and bags to be more efficiently packed on pallets without wasted space between packages or a need for additional packaging to protect jugs during shipment. The data has helped us to adjust our packaging from more rigid plastic

to lighter and more easily recycled material such as paper boxes and bags.

The learnings from this work are currently being used to set targets that focus on transitioning all products to 100% recyclable, reusable, or compostable packaging, which will reduce their overall carbon footprint and improve post-consumer recyclability.

Personal Care Packaging Increases Recyclability

In last year's Report, we highlighted an investment that demonstrated our commitment to improving the sustainability of how we manufacture our personal care products for customers. Our aluminum tube packaging equipment started operation in mid-2020 and is enabling our customers to switch from their previous multilayer plastic tubes to squeeze tubes that are manufactured out of solid aluminum. With this enhanced equipment, we now produce personal care products that can be readily recycled in the well-developed aluminum can recycling process — avoiding the more complicated and more resource intensive process associated with plastic materials. In 2021, our Personal Care business will produce nearly 1.5 million products with the environmentally friendly aluminum squeeze tubes.



Product Safety

Supplying safe and sustainable products designed to meet the needs of our customers is a main goal of MTI. MTI strives to ensure our products are safe and regulatory compliant, including certified by independent experts and public institutions, and has a policy of continually evaluating safer formulary components to reduce hazard and risk for both MTI and our customers. Nearly all MTI products are developed with three minerals—bentonite, carbonates, and talc—that are inherently safe for many applications. As with all naturally occurring materials, our minerals contain auxiliary components that we monitor and measure for specific applications.

Many of our formulas use monomers, fatty acids, polymers and surfactants to modify the surface of our minerals and create a desired physical and chemical property. We evaluate the safety of these additives and ensure that we are using the safest additive at the lowest effective concentration. In many of our businesses, we disclose specific formula components and concentrations to our customers for joint safety reviews.

Bentonites

MTI mines bentonite clay in several global locations. Bentonite is commonly referred to as the “mineral of a thousand uses” and is a natural mineral derived from volcanic ash. Based on our extensive experience selectively mining for specific applications and modifying the surface of the mineral to deliver performance, bentonite clay has major commercial applications in consumer and industrial uses.

MTI’s bentonite-based formulations are regulatory approved for several applications, including:

1. Bentonite is certified as Generally Recognized As Safe (GRAS) per USA FDA 21CFR184.1155 for direct food use as well as many other USA FDA CDR’s for indirect and packaging use.
2. Several of our bentonite grades meet the requirements for the Bentonite and Purified Bentonite Monographs listed in the United States Pharmacopeia (USP), the National Formulary (NF), and European Union Pharmacopeia for pharmaceutical active agents and excipients.
3. Meets the requirements for purifying wine and juices including Food Chemical Codex.
4. Listed in several sections of Association of American Feed Control Officials for inclusion into animal feed.
5. Several of our facilities are FAMI-QS certified. FAMI-QS is quality and feed safety management system for the specialty feed ingredients and their mixtures.
6. Approved by the European Food Safety Authority as a binder and mycotoxin reduction agent.
7. Our bleaching earth products meet the requirements of FEDIOL, the European Union vegetable oil and protein meal industry association.
8. Our Bentomat® and Voltex® geosynthetic clay barriers are certified by the Polish National Institute of Public Health to use in civil engineering and structures in contact with drinking water.
9. Several of our building waterproofing, drilling products and our PFAS adsorbents, FLUORO-SORB® adsorbent are NSF/ANSI 60 and 61 Certified to standards for the control of equipment that comes into contact with either potable water or products that support the production of potable water.
10. Several of our products are KOSHER and HALAL certified.



Carbonates

MTI mines limestone and dolostone in several locations. These ground calcium carbonates and calcium magnesium carbonates are widely used as an industrial and consumer mineral. Our Specialty Minerals business unit manufactures granular and powder products at several facilities as an ingredient for a wide range of industrial and consumer products.

MTI Carbonates are regulatory approved for several applications, including:

1. Calcium Carbonate is Generally Recognized As Safe (GRAS) per USA FDA 21CFR184.1191 for direct food use as well as many other USA FDA CDR's for indirect and packaging use.
2. Several of our Calcium Carbonate products meet the requirements for the Monographs listed in the United States Pharmacopeia (USP), the National Formulary (NF), and European Union Pharmacopeia for pharmaceutical active agents and excipients.
3. Several of our facilities and products are certified for the Food Safety System Certification (FSSC) 22000 management system.
4. Several of our calcium carbonate products are KOSHER and HALAL certified, Gluten Free, Organic, Natural, and Vegan.
5. Listed in several sections of Association of American Feed Control Officials for inclusion into animal feed, including as a source of calcium, a major nutrient for the animals.
6. Several of our products are NSF-14 certified for plastic piping systems and NSF 60 certified for drinking water treatment.
7. Several of our grades meet the California Proposition 65 and European Union 170i purity standards.

Talc

MTI mines talc at our Dillon, Montana, facility and produces a wide range of powdered natural and purified products. Major industrial commercial applications of our talc include anti-caking, automotive plastics, blown and cast films, ceramics, coatings, paints, rubber, roofing, and sealants.

1. Several of our grades are generally approved as pigment or colorant in the manufacture of articles which come into contact with food and also generally approved for use in olefin polymers used in the manufacture of articles, which come into contact with food, under 21 CFR 177.1520.
2. Many of our products are Generally Recognized As Safe (GRAS) as an anticaking agent.
3. Several of our Talc products meet the requirements for the Monographs listed in the United States Pharmacopeia (USP), the National Formulary (NF), and European Union Pharmacopeia, Japanese Pharmacopeia (JP), and Food Chemical Codex (FCC) for pharmaceutical active agents and excipients.
4. Several of our Talc products are KOSHER and HALAL certified.
5. Our talc products are continuously tested to ensure that there are no irritating impurities present that can impact the usability of the products.



Collaborating with Our Suppliers

Our suppliers are our partners, and they play a very important role in helping MTI create a more sustainable future. In addition to the supply of raw materials and services needed for our operations, formulations and daily function, our suppliers are also a critical source of sustainable innovation, and our joint projects enable MTI to offer our customers significantly improved products and services.

MTI has over 1,400 raw material suppliers globally and around 300 of these are considered strategic suppliers. In 2020, we developed new virtual tools to ensure compliance with MTI standards and audited the majority of our strategic suppliers. Our total supplier spend in 2020 was about \$800 million. All of our suppliers are expected to comply with MTI's Supplier Code of Conduct, Anti-Corruption and Anti-Bribery Policy, Conflict Minerals Policies, and Standard Terms and Conditions. This ensures that all procurement decisions are made with integrity and objectivity, divorced from any personal considerations or benefits. All MTI employees are instructed to adhere to the MTI Code of Conduct when dealing with suppliers.

In 2020, MTI did not incur any legal, regulatory fines, or settlements associated with violations of bribery, corruption, or anti-competitive standards.

To assess the overall performance of our suppliers, we regularly audit and evaluate our suppliers using supplier evaluation forms that contain the following elements:

- 1. Safety** — our number one priority that must be demonstrated in suppliers' policies and practices. Risk reduction programs are promoted, and metrics are recorded, including reportable incidents, lost workday incidents, and near misses with corrective actions identified to improve safety.
- 2. Environment** — We expect our suppliers to set emissions and waste reduction targets to achieve improvements in sustainability.
- 3. Supplier Compliance and Ethics** — We assess how our suppliers promote integrity and ethical behavior and operate to prevent criminal conduct and violation of laws, including, but not limited to modern slavery, child labor, human trafficking, conflict minerals and anti-corruption.

- 4. Supplier Social Responsibility** — We ensure suppliers have comprehensive policies that promote diversity and inclusion and outreach with their communities.
- 5. Product Quality and Product Safety** — Suppliers must notify MTI immediately if any product safety or registration information becomes available. If nonconformances occur, the supplier must take the required actions to correct the nonconformances through internal controls. In addition, the supplier Certificate of Analysis helps provide consistent control around nominal specification values.
- 6. Customer Service** — We expect our suppliers to produce and deliver materials or goods on the required timeline with any potential non-compliance communicated in advance. The supplier documentation is timely, accurate, and complete in all areas.
- 7. Quality System** — Every supplier must have documented policies and procedures in place to provide quality products. Each supplier must meet at least annually with the MTI location(s) it services to review specifications and perform annual self-audits to verify compliance.
- 8. Continuous Improvement** — Each supplier must proactively recommend improvement opportunities that will enhance quality, reduce costs, and address market changes.
- 9. Commercial** — All suppliers are required to have documented disaster recovery and long-term supply plans that specifically address conducting business with MTI. Supplier has implemented preventative measures against a cyber-attack, but also has detailed protocol to maintain business operations if a cyber-attack occurs.

In selecting suppliers, we look to source as much as possible from local suppliers to benefit the communities where we work and to reduce logistics costs and delivery times. MTI only conducts business with reputable suppliers who are capable of providing the goods and services required. One of our goals is to identify partnerships with diverse suppliers, including small, socially and economically disadvantaged businesses which can provide competitive sources of materials and services.



Appendix

SASB Index

The disclosures in this report are informed by the recommendations of the Sustainability Accounting Standards Board (SASB) guidelines for the Chemicals industry.

TOPIC	ACCOUNTING METRIC	CATEGORY	CODE	DISCLOSURE (2020 DATA)
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	RT-CH-110a.1	349,091 short tons of CO ₂ e, none are covered under emissions-limiting regulations.
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	RT-CH-110a.2	See “ Emissions ”
Air Quality	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Quantitative	RT-CH-120a.1	(1) 1,836 tons (2) 2,874 tons (3) 131 tons (4) Not reported
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	Quantitative	RT-CH-130a.1	(1) 6,918,591 GJ (2) 19% (3) 10% self-generated and purchased electricity from renewables (4) 0.3% self-generated renewable energy
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	RT-CH-140a.1	(1) 6.32 billion gallons, 12% from host mills in regions with high or extremely high water stress. For additional details on water withdrawn and discharged, please see “ Water Use ” section
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	RT-CH-140a.2	Zero incidents
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	RT-CH-140a.3	See “ Water Use ” section
Hazardous Waste Management	Amount of hazardous waste generated, percentage recycled	Quantitative	RT-CH-150a.1	60 tons, 0 tons recycled, 60% incinerated with energy recovery
Community Relations	Discussion of engagement processes to manage risks and opportunities associated with community interests	Discussion and Analysis	RT-CH-210a.1	See “ Community Engagement ” section

Workforce Health and Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	RT-CH-320a.1	(1) 0.60 (2a) 0 (2b) 0
	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	Discussion and Analysis	RT-CH-320a.2	See “ Our Safety Foundation ” section
Product Design for Use-phase Efficiency	Revenue from products designed for use-phase resource efficiency	Quantitative	RT-CH-320a.2	60% of our total company revenue was derived from products and services that enhance both MTI's and our customers' sustainability objectives. See “ MTI's Sustainable and Clean Technology Products and Revenues ”
Safety & Environmental Stewardship of Chemicals	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	Quantitative	RT-CH-410b.1	Not reported
	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	Discussion and Analysis	RT-CH-410b.2	Not reported
Genetically Modified Organisms	Percentage of products by revenue that contain genetically modified organisms (GMOs)	Quantitative	RT-CH-410c.1	Not applicable, 0% of our products contain GMO's
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	RT-CH-530a.1	Not Reported
Operational Safety, Emergency Preparedness & Response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Quantitative	RT-CH-540a.1	In 2020, 30 incidents in the form of environmental releases, with only 5 being reportable occurrences All of the spills were classified as small and 100% of the spills were contained and captured in our comprehensive spill response
	Description of management systems used for prevention of corruption and bribery throughout the value chain	Quantitative	RT-CH-540a.2	See “ Ethics, Integrity and Grievance Reporting Process ” section
Activity Metrics	Production by reportable segment	Quantitative	RT-CH-000.A	Not Reported

Task Force on Climate-Related Financial Disclosures (TCFD) Index

We are committed to providing transparency on our climate change risk management, governance and performance. The Task Force on Climate-Related Financial Disclosures (TCFD) has developed voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to stakeholders. A summary of our response to the TCFD-recommended disclosures is below.

Governance

Board Oversight — Mineral Technologies' (MTI) Board of Directors has primary responsibility for oversight of risk and strategy for the company, which includes our sustainability efforts as well as climate-related risks and opportunities.

The Corporate Governance and Nominating Committee is directly responsible for reviewing and evaluating MTI's programs, policies and practices relating to social, environmental and governance issues which could impact the long-term sustainability of our business. This includes strategy and risk, environmental performance and 2025 targets among other topics. The Corporate Governance and Nominating Committee, along with the Chairman of the Board and CEO, formally review and approve each publication of MTI's Corporate Responsibility and Sustainability Report on an annual basis.

In addition, the entire Board follows a formal, monthly schedule for consideration of environmental, health and safety and social matters, which are reviewed at each regularly scheduled board meeting. Overall corporate responsibility efforts, including sustainability matters and progress, are periodically reviewed with the Committee as well as the full Board at regularly scheduled board meetings.

Management Oversight — MTI's Leadership Council (LC) under the direction of our Chairman/CEO oversees businesses, functional areas, and culture-based lead teams — all of which integrate sustainable processes and practices into their strategies and identify and manage risks. The entire LC, which is composed of our senior business and resource unit executives, is actively engaged in the management of MTI's broad sustainability practices. Our CEO champions

sustainability at an organization level; each business unit leaders helps drive sustainability practices and initiatives as part of their overall business strategy.

In 2020 MTI created a dedicated Sustainability Lead Team (separate from previous oversight of our sustainability efforts from within the Environmental, Health and Safety Lead team). This dedicated team, part of our strengthened commitment to sustainability, is responsible for the development and attainment of meaningful long-term environmental and sustainability goals, and guides MTI's sustainability strategy. Additionally, this team provides more structure around MTI's sustainability efforts as well as a platform to better share best practices across the entire company.

The Sustainability Lead Team includes senior leaders from various functional areas across our global footprint and meets regularly. The Sustainability Lead Team reports directly to the CEO, and directly interacts with the Board of Directors, Leadership Council and business leaders.

Strategy

Climate Related Risks and Opportunities — We have identified climate-related risks that may affect us over the short-, medium- and longer-term. Key risks include:

Regulatory Risks — Current and emerging regulations are relevant and always included in the Company's processes for identifying and assessing climate-related risks because our operational footprint includes many countries with different regulatory requirements, and the consequences for non-compliance could negatively impact our operations, financial performance and reputation.

Reputational Risk — Reputation is relevant and always included in MTI's processes for identifying and assessing climate related risks due to the potential negative impact of lost revenue that may arise from customers' dissatisfaction with MTI's failure to substantially meet its goals for emissions reduction and/or a lack of participation in various environmental disclosure platforms. Additionally, we regularly assess how we might be influenced by a changing climate and take seriously the potential for business disruption that could occur under extreme weather and natural disasters, and reputational risk from not proactively addressing climate change issues including the potential negative impact of lost revenue and increased expenses that could arise from damaged infrastructure.

Market opportunities including the opportunity to provide products to support reduction goals of partners — Shifts in supply and demand are relevant and always included in the Company's processes for identifying and assessing climate related risks due to the potential impact of decreased revenues that could arise from not capitalizing on new market opportunities, as well as increased revenue from energy-efficiency product demand. We are focused and helping our customers, consumers and communities meet their own sustainability goals through efforts such as waste carbon dioxide extraction and sequestration as well as through development of new products.

Impact on strategy — Our Board and Management teams consider sustainability as a vital driver to our long-term growth. As a global resource- and technology-based manufacturing company, we recognize the significance of climate change and responsible consumption and production and our role in addressing our stakeholders' interest in these issues. We have a responsibility to ensure compliance with all environmental regulations in the locations where we operate, which includes reducing the impact of our operations on people, communities and the planet. We are aware of the risks posed to our business by climate changes (including physical risks) and have been working to reduce environmental impact through more

efficient manufacturing process and best practice adoption. Additionally, we are focused on evolving our new product development processes and pipeline to meet our own environmental goals and address customers' most pressing sustainability challenges. We are accelerating the speed with which we bring products to market and we are increasing the percentage of new products with a sustainability benefit.

Risk Management

The MTI Board of directors has primarily responsibility for oversight of risk which includes our sustainability efforts as well as climate-related risks and opportunities. The Corporate Governance and Nominating Committee is directly responsible for reviewing and evaluating MTI's programs, policies and practices relating to ESG issues which could impact the long-term sustainability of our business, including strategy and risk. The entire board regularly considers topics such as the potential value creation, vulnerability and timing of climate and any other risk or opportunity including reputational, financial, strategic and operational concerns.

Metrics

a) Metrics used

We track our Scope 1 and 2 carbon emissions to assess climate-related performance

b) Scope 1 and Scope 2 GHG emissions (2020)

Scope 1 emissions: 349,091 short tons of CO₂e

Scope 2 emissions: 120,950 short tons of CO₂e

c) Targets

We have established 2025 environmental reduction targets in six focus areas, including Scope 1 and 2 emissions to continue to reduce our environmental footprint.

Our current target to reduce Scope 1 emissions has been raised from 10% to 20% by 2025 compared to our 2018 baseline year.

Our target for Scope 2 emissions is a 15% reduction by 2025 compared to our 2018 baseline year.

GRI Content Index

We continue to follow the Global Reporting Initiative (GRI) Standards as a guide for identifying, measuring and disclosing our non-financial impacts. Our 2020 Corporate Responsibility and Sustainability Report has been prepared referencing the GRI Standards.

GRI STANDARD (DISCLOSURE)	DESCRIPTION	LOCATION
1. Organizational Profile		
102-1	Name of the organization	Minerals Technologies Inc.
102-2	Activities, brands, products and services	Minerals Technologies Inc. is a resource- and technology-based company that develops, produces and markets worldwide a broad range of specialty mineral, mineral based and synthetic mineral products and related systems and services. MTI's products are available globally and not restricted in any form.
102-3	Location of headquarters	622 Third Avenue, 38th Floor New York, NY 10017 USA
102-4	Location of operations	2020 Form 10-K , pp. 22-25
102-5	Ownership and legal form	MTI is a publicly traded corporation (NYSE: MTX).
102-6	Markets served	Corporate Responsibility & Sustainability Report: Sustainable Growth, pp. 63 – 64 ; Sustainable & Clean Technologies; pp. 7 – 8 , and pp. ii ; 2020 Annual Report: inside cover, pp. 1 – 22
102-7	Scale of the organization	Corporate Responsibility & Sustainability Report, pp. i – ii , pp. 61 ; 2020 Form 10-K pp. F-1 to F-43
102-8	Information on employees and other workers	People, pp. 49 – 50
102-9	Supply chain	Collaborating with Our Suppliers, pp. 68
102-10	Significant changes to the organization and its supply chain	In 2020, no significant changes occurred related to our organization or supply chain.
102-11	Precautionary Principle or approach	Throughout our operations and our product development, we are guided by the precautionary principle and carefully take into account the effects on the environment, health and safety.
102-12	External initiatives	Strong Commitment to Mining Sustainability, pp. 40 – 41 ; Our Packaging Initiatives Contributing to Circular Economy, pp. 65 ; Community Engagement, pp. 54 – 57

GRI STANDARD (DISCLOSURE)	DESCRIPTION	LOCATION
102-13	Membership of associations	MTI employees hold numerous professional memberships including the following significant organizations: <ul style="list-style-type: none"> • Association for Manufacturing Excellence (AME) • American Society of Safety Professionals (ASSP) • Industrial Minerals Association (IMA) • Sorptive Minerals Institute (SMI) • American Society of Mechanical Engineers (ASME) • American Petroleum Institute (API) • American Conference of Governmental Industrial Hygienists (ACGIH) • American Industrial Hygiene Association (AIHA) • American Board of Industrial Hygiene (ABIH) • Produced Water Society (PWS)
2. Strategy		
	Statement from senior decision-maker	Q&A with Our Chairman and CEO, pp. 1 – 4
3. Ethics and Integrity		
102-16	Values, principles, standards and norms of behavior	As the Corporate Compliance Officer, the General Counsel of MTI has ultimate responsibility for monitoring compliance with MTI's Policies on Business Conduct and all related MTI policies and procedures. MTI's Summary of Policies on Business Conduct provides an overview of key policies for conducting MTI's business legally and ethically and is publicly available in MTI's preferred employee languages: Bahasa Melayu, Chinese, Dutch, English, Finnish, French, German, Gujarati, Hindi, Japanese, Korean, Polish, Portuguese, Spanish, Thai, and Turkish.
102-17	Mechanisms for advice and concerns about ethics	Ethics, Integrity and Grievance Reporting Process-Compliance with Laws, Permits, Regulations and Company Values, pp. 58 – 59
4. Governance		
102-18	Governance structure	Sustainability Governance & Accountability, pp. 14 – 15 ; 2020 Proxy Statement, Committees of the Board of Directors, pp. 21
102-19	Delegating authority	Sustainability Governance at MTI; pp. 11 – 12 ; Lead Teams Report to CEO, pp. 12
102-20	Executive-level responsibility for economic, environmental and social topics	Sustainability Governance at MTI; pp. 11 – 12 and Lead Teams Report to CEO, pp. 12
102-21	Consulting stakeholders on economic, environmental and social topics	Stakeholder Engagement, pp. 14 – 15 and Collaborating with Our Suppliers, pp. 68
102-22	Composition of the highest governance body and its committees	2020 Annual Report back cover; Committees of the Board of Directors" on Page 24 – 26 of MTI's 2021 Proxy Statement

GRI STANDARD (DISCLOSURE)	DESCRIPTION	LOCATION
102-23	Chair of the highest governance body	Douglas T. Dietrich is our Chairman and CEO. Robert L. Clark is our Lead Independent Director
102-24	Nominating and selecting the highest governance body	2021 Proxy Statement , pp. 25
102-25	Conflicts of interest	MTI Code of Conduct ; 2021 Proxy Statement , pp.13
102-26	Role of highest governance body in setting purpose, values and strategy	2021 Proxy Statement , pp. 13 – 27
102-29	Identifying and managing economic, environmental and social impacts	2020 Corporate Responsibility and Sustainability Report; 2021 Proxy Statement, pp 12 – 26; 2021 Form 10K, pp. 11 – 16
102-31	Review of economic, environmental and social topics	2021 Proxy Statement , pp. 25 – 26
102-32	Highest governance body's role in sustainability reporting	2021 Proxy Statement , pp. 26; Q&A with Our Chairman and CEO, 1 – 4; A Message from Alison A. Deans, pp. 10 ; Sustainability Governance at MTI, pp. 11 – 12
102-33	Communicating critical concerns	Stakeholder Engagement, pp. 14-15 ; 2020 Annual Report and 2020 Form 10K
102-35	Remuneration policies	2021 Proxy Statement , pp. 19, 24 – 25
102-36	Process for determining remuneration	2021 Proxy Statement , pp.67 – 77
102-37	Stakeholders' involvement in remuneration	2021 Proxy Statement , pp. 12
5. Stakeholder Engagement		
102-40	List of stakeholder groups	Stakeholder Engagement, pp. 14 – 15
102-41	Collective bargaining agreements	We respect our employees' right to join, or refrain from joining, labor unions or other legally authorized associations and to collectively bargain.
102-42	Identifying and selecting stakeholders	We identify our stakeholders as those entities that can affect or be affected by our actions, objectives and policies.
102-43	Approach to stakeholder engagement	Stakeholder Engagement, pp. 14 – 15 ; Collaborating with Our Suppliers, pp. 68
102-44	Key topics and concerns raised	Stakeholder Engagement, pp. 14 – 15

GRI STANDARD (DISCLOSURE)	DESCRIPTION	LOCATION
6. Reporting Practice		
102-45	Entities included in the consolidated financial statements	For a list of entities covered by the report, see MTI's 2020 Annual Report on Form 10-K, Exhibit 21.1.
102-46	Defining report content and topic Boundaries	MTI determined that our governance, health and safety programs, progress towards 2025 targets, new product development, supply chain, and our policies and practices in taking care of our employees and stakeholders are pertinent to ensure our company's long term sustainability.
102-48	Restatements of information	There are no significant restatements of information compared to the previous report.
102-49	Changes in reporting	This report represents MTI's shift to reference the most recent GRI Standards reporting framework.
102-50	Reporting period	January 1–December 31, 2020
102-51	Date of most recent report	July 28, 2020
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding the report	Michael Landau, Corporate Communications email at sustainability@mineralstech.com
102-54	Claims of reporting in accordance with the GRI Standards	This report aligns with GRI Standards but has not been produced in accordance with the Core or Comprehensive option.
102-55	GRI content index	This document represents the company's content index. In connection with our sustainability policies, our 2020 Annual Report and Form 10-K, Investor Presentations, 2021 Proxy Statement and our website, this report helps showcase MTI's broad sustainability initiatives and how they are deeply integrated with our strategy, our people, in our plants, and throughout our processes and products.
102-56	External assurance	MTI is not seeking external assurance for this report. MTI will continue to evaluate external assurance in future years.

GRI STANDARD (DISCLOSURE)	DESCRIPTION	LOCATION
ECONOMIC		
Economic Performance		
201-1	Direct economic value generated and distributed	Sustainable Growth, pp. 60 – 61; 2020 Form 10-K, pp. F-1 to F-46.
201-4	Financial assistance received from government	No material governmental financial assistance was received.
Market Presence		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Both male and female employees are paid at least 100% of the local minimum wages.
Indirect Economic Impacts		
203-1	Infrastructure investments and services supported	Sustainable Growth, pp. 60 – 61; Collaborating with Our Suppliers, pp. 68; 2020 Annual Report, pp. 8
Anti-Corruption		
103-1	Explanation of the material topic and its Boundary	Ethics, Integrity and Grievance Reporting Process, pp. 58; Policies and Guidelines, pp. 59; Collaborating with Our Suppliers, pp. 68
103-2	The management approach and its components	Ethics, Integrity and Grievance Reporting Process, pp. 58; Policies and Guidelines, pp. 59; Collaborating with Our Suppliers, pp. 68
103-3	Evaluation of the management approach	Ethics, Integrity and Grievance Reporting Process, pp. 58; Policies and Guidelines, pp. 59; Collaborating with Our Suppliers, pp. 68
205-2	Communication and training about anti-corruption policies and procedures	Ethics, Integrity and Grievance Reporting Process, pp. 58; Policies and Guidelines, pp. 59; Collaborating with Our Suppliers, pp. 68
205-3	Confirmed incidents of corruption and actions taken	MTI is not aware of any instances of corruption in 2020 Ethics, Integrity and Grievance Reporting Process, pp. 58
Anti-Competitive Behavior		
206-1	Legal actions for anticompetitive behavior, anti-trust, and monopoly practices	MTI is not aware of any incidents of anti-competitive behavior, anti-trust or monopolistic practices in 2020 Ethics, Integrity and Grievance Reporting Process, pp. 58

GRI STANDARD (DISCLOSURE)	DESCRIPTION	LOCATION
ENVIRONMENTAL		
Energy		
103-1: Management Approach	Explanation of the material topic and its boundary	Scope 2 Indirect CO ₂ Emissions from Purchased Electricity; Electricity Usage; Source of Electricity and Energy Use, pp. 32 – 34
103-2	The management approach and its components	Q&A with our Chairman and CEO, pp.2; Environmental Performance and 2025 Targets, pp. 30 ; Scope 2 Indirect CO ₂ Emissions from Purchased Electricity; Electricity Usage; Source of Electricity and Energy Use, pp. 32 – 34
302-1	Energy consumption within the organization	Scope 2 Indirect CO ₂ Emissions from Purchased Electricity; Electricity Usage; Source of Electricity and Energy Use, pp. 32 – 34 ; Appendix, pp. 84
302-3	Energy intensity	Electricity Usage; Source of Electricity and Energy Use, pp. 33 – 34
302-4	Reduction of energy consumption	Scope 2 Indirect CO ₂ Emissions from Purchased Electricity; Electricity Usage; Source of Electricity and Energy Use, pp. 32 – 34
Water		
103-1: Management Approach	Explanation of the material topic and its boundary	Water Use, pp. 35 – 36 ; Appendix, pp. 85
103-2	The management approach and its components	Environmental Performance and 2025 Targets, pp. 30 ; Water Use, pp. 35 – 36 ; Appendix, pp. 85
303-1	Interactions with water as a shared resource	Water Use, pp. 35 – 36 ; Appendix, pp. 85
303-4	Water discharge	Water Use, pp. 35 – 36 ; Appendix, pp. 85
303-5	Water consumption	Water Use, pp. 35 – 36 ; Appendix, pp. 85
Biodiversity		
103-1: Management Approach	Explanation of the material topic and its boundary	Strong Commitment to Mining Sustainably, pp. 40 – 41
103-2	The management approach and its components	Strong Commitment to Mining Sustainably, pp. 40 – 41
304-2	Significant impacts of activities, products and services on biodiversity	Strong Commitment to Mining Sustainably, pp. 40 – 41
304-3	Habitats protected or restored	Strong Commitment to Mining Sustainably, pp. 40 – 41

GRI STANDARD (DISCLOSURE)	DESCRIPTION	LOCATION
Emissions		
103-1: Management Approach	Explanation of the material topic and its boundary	Emissions, pp. 31 – 32 ; Energy Use, pp. 34 ; Appendix, pp. 83
103-2	The management approach and its components	Environmental Performance and 2025 Targets, pp. 30 ; Emissions, pp. 31 – 32 ; Appendix, pp. 83 – 84
305-1	Direct (Scope 1) GHG emissions	Environmental Performance and 2025 Targets, pp. 30 ; Emissions, pp. 31 – 32 ; Appendix, pp. 83 – 84
305-2	Energy indirect (Scope 2) GHG emissions	Environmental Performance and 2025 Targets, pp. 30 ; Emissions, pp. 31 – 32 ; Appendix, pp. 83 – 84
305-3	Other indirect (Scope 3) GHG emissions	MTI does not currently track Scope 3 emissions and will reevaluate in the future.
305-4	GHG emissions intensity	Emissions, pp. 31 – 32 ; Appendix, pp. 83 – 84
305-5	Reduction of GHG emissions	Environmental Performance and 2025 Targets, pp. 30 ; Emissions, pp. 31 – 32 ; Energy Use, pp. 34 ; Appendix, pp. 83 – 84
305-6	Emissions of ozone-depleting substances (ODS)	MTI does not believe we use any ozone depleting substances
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Environmental Performance and 2025 Targets, pp. 30 ; Emissions, pp. 31 ; Appendix, pp. 83 – 84
Effluents and Waste		
103-1: Management Approach	Explanation of the material topic and its boundary	Our Waste & Spills, pp. 37 – 39 ; Appendix, pp. 87
103-2	The management approach and its components	Environmental Performance and 2025 Targets, pp. 30 ; Our Waste & Spills, pp. 37 – 39 ; Appendix, pp. 87
306-2	Management of significant waste-related impacts	Our Waste & Spills, pp. 37 – 39 ; Appendix, pp. 87
306-3	Waste generated	Our Waste & Spills, pp. 37 – 39 ; Appendix, pp. 87
Environmental Compliance		
103-1: Management Approach	Explanation of the material topic and its boundary	Our Waste & Spills, pp. 37 – 39 ; Compliance with Laws, Permits, Regulations and Company Values, pp. 58
103-2	The management approach and its components	Our Waste & Spills, pp. 37 – 39 ; Compliance with Laws, Permits, Regulations and Company Values, pp. 58
103-3	Evaluation of the management approach	Our Waste & Spills, pp. 37 – 39 ; Compliance with Laws, Permits, Regulations and Company Values, pp. 58

GRI STANDARD (DISCLOSURE)	DESCRIPTION	LOCATION
Supplier Environmental Assessment		
308-1	New suppliers that were screened using environmental criteria	Collaborating with Our Suppliers, pp. 68
308-2	Negative environmental impacts in the supply chain and actions taken	MTI is not aware of any negative environmental impacts in the supply chain.
SOCIAL		
Employment		
401-1	New employee hires and employee turnover	Our People, pp. 49 – 50
Occupational Health and Safety		
103-1: Management Approach	Explanation of the material topic and its boundary	Safety, pp. 18 – 27 ; Our Philosophy, pp. 19
103-2	The management approach and its components	Safety, pp. 18 – 27 ; Our Philosophy, pp. 19 ; Our Safety Foundation, pp. 20 – 21
103-3	Evaluation of the management approach	Safety, pp. 18 – 27 ; Audits and Self-Assessment, pp. 26
403-1	Occupational health and safety management system	Safety, pp. 18 – 27 ; Our Philosophy, pp. 19 ; Our Safety Foundation, pp. 20 – 21
403-2	Hazard identification, risk assessment and incident investigation	Safety, pp. 18 – 27 ; Fatality Risk Reduction Programs, pp. 23 ; Contractor Safety Requirements, pp. 26
403-3	Occupational health services	Safety, pp. 18 – 27
403-4	Worker participation, consultation and communication on occupational health and safety	Safety, pp. 18 – 27 ; Our Philosophy, pp. 19 ; Our Safety Foundation, pp. 20 – 21
403-5	Worker training on occupational health and safety	Safety, pp. 18 – 27 ; Our Philosophy, pp. 19 ; Our Safety Foundation, pp. 20 – 21
403-6	Promotion of worker health	Safety, pp. 18 – 27 ; Employee Wellness Activities, pp. 54

GRI STANDARD (DISCLOSURE)	DESCRIPTION	LOCATION
Occupational Health and Safety		
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Safety, pp. 18 – 27 ; Our Philosophy, pp. 19 ; Our Safety Foundation, pp. 20 – 21
403-8	Workers covered by an occupational health and safety management system	All MTI employees and contractors on site are covered by our health and safety management system
403-9	Work-related injuries	Safety, pp. 18 – 27 ; Fatality Risk Reduction Programs, pp. 23 ; Injuries, pp. 24 ; Contractor Safety Requirements, pp. 26
403-10	Work-related ill health	Safety, pp. 18 – 27 ; Fatality Risk Reduction Programs, pp. 23 ; Injuries, pp. 24 ; Contractor Safety Requirements, pp. 26
Training and Education		
103-1: Management Approach	Explanation of the material topic and its boundary	Social, pp. 43 – 57 ; Our Advancing Our People-Focused Culture Through Training, pp. 51 ; Employee Talent Management, pp. 51 – 53
103-2	The management approach and its components	Social, pp. 43 – 57 ; Our Philosophy, pp. 44 ; Employee Talent Management, pp. 51 – 53
404-2	Programs for upgrading employee skills and transition assistance programs	Social, pp. 43 – 57 ; Our Advancing Our People-Focused Culture Through Training, pp. 51 ; Employee Talent Management, pp. 51 – 53
404-3	Percentage of employees receiving regular performance and career development reviews	Social, pp. 43 – 57 ; Employee Talent Management, pp. 51 – 53
Diversity and Equal Opportunity		
103-1	Explanation of the material topic and its boundary	Social, pp. 43 – 57 ; Diversity and Inclusion, pp. 47 – 51
103-2	The management approach and its components	Social, pp. 43 – 57 ; Diversity and Inclusion, pp. 47 – 51
Supplier Social Assessment		
414-1	New suppliers that were screened using social criteria	Collaborating with Our Suppliers, pp. 68
414-2	Negative social impacts in the supply chain and actions taken	MTI is not aware of any significant negative supply chain developments.
Public Policy		
415-1	Political contributions	MTI did not make political contributions
Customer Health and Safety		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	MTI is not aware of any non-compliance concerning the health and safety impacts of products and services.

Environmental Performance Appendix

MTI and Business Segment Scope 1 Direct Emissions and Airborne Pollutants and 2020 Progress Towards 2025 Targets¹

SCOPE 1 DIRECT GHG CO ₂	REDUCTION TARGET (%)	2018	2019	2020	2025 TARGET	PERCENT REDUCTION 2020 FROM 2018
MTI Scope 1 Direct GHG CO ₂ Process and Mobile (tons)	20	441,881	390,782	349,091 ²	353,000	21
Performance Materials		250,515	228,440	186,167		
Specialty Minerals		123,773	99,716	99,554		
Refractories		67,593	62,626	63,370		
MTI Scope 1 Direct GHG CO ₂ Intensity (lbs/tons)		97	84	82		15.5
Performance Materials		137	114	100		
Specialty Minerals		115	93	98		
Refractories		387	383	422		

AIRBORNE POLLUTANTS	REDUCTION TARGET (%)	2018	2019	2020	2025 TARGET	PERCENT REDUCTION 2020 FROM 2018
MTI Airborne Pollutants (tons)	50	6,873	4,964	5,275 ²	3,437	23.3
Performance Materials		6,369	4,488	4,736		
Specialty Minerals		436	417	483		
Refractories		69	60	56		
Airborne Pollutants (tons) by category	50	6,873	4,964	5,275 ²	3,437	23.3
Carbon Monoxide (CO)		455	471	433		4.8%
Nitrogen Oxides (NOx)		2,176	2,025	1,836		15.6%
Sulfur Dioxide (SO ₂)		4,101	2,324	2,874		29.9%
Volatile Organic Compounds (VOC)		140	144	131		6.4%

AIRBORNE POLLUTANTS	REDUCTION TARGET (%)	2018	2019	2020	2025 TARGET	PERCENT REDUCTION 2020 FROM 2018
MTI Airborne Pollutants Intensity (lbs/tons)		1.5	1.1	1.2		20.0
Performance Materials		3.5	2.2	2.5		
Specialty Minerals		0.4	0.4	0.5		
Refractories		0.4	0.4	0.4		

1. Total emissions for carbon dioxide and airborne pollutants are provided for both stationary combustion sources and mobile sources. Many of the Specialty Minerals, Refractories and Performance Materials facilities report emissions of nitrogen oxides (NOx), sulfur dioxide (SO₂), carbon monoxide (CO) and volatile organic hydrocarbons (VOCs) to the local authorities. This data has been used where available. If no plant estimates are available, emissions have been calculated using total fuel usages and the United States Environmental Protection Agency (EPA) most recent emission factors. This data covers 100% of our material air quality emissions. Since there are no significant combustion processes (dryers, kilns, etc.) or fuel usage by mobile equipment at the Paper PCC facilities, these sites are not included in our data.

2. For 2020, we reclassified a fuel coal used by two of our facilities from anthracite to bituminous coal. This reduced Scope 1 emissions and increased airborne pollutants

MTI and Business Segment Scope 2 Indirect Emissions and 2020 Progress Toward 2025 Targets

SCOPE 2 INDIRECT GHG CO ₂	REDUCTION TARGET (%)	2018	2019	2020	2025 TARGET	PERCENT REDUCTION 2020 FROM 2018
MTI Scope 2 Indirect GHG CO ₂ (tons)	15	154,573	158,578	120,850	131,387	21.8
Performance Materials		92,801	98,959	72,364		
Specialty Minerals		48,802	48,571	38,835		
Refractories		12,173	11,048	9,651		
MTI Scope 2 Indirect GHG CO ₂ Intensity (lbs/tons)		34	34	28		17.6
Performance Materials		51	49	39		
Specialty Minerals		46	45	38		
Refractories		70	68	64		

MTI and Business Segment Water Used and Discharged and 2020 Progress Toward 2025 Targets

WATER USED	REDUCTION TARGET (%)	2018	2019	2020	2025 TARGET	PERCENT REDUCTION
MTI Process Water Used (billion gallons)	11	7.41	7.60	6.32	6.60	14.7
Performance Materials		0.04	0.05	0.05		
Specialty Minerals		7.6	7.54	6.26		
Refractories		0.01	0.01	0.01		
MTI Process Water Used Intensity (gallons/tons)		838	819	744		11.2
Performance Materials		14	16	14		
Specialty Minerals		1,491	1,522	1,400		
Refractories		32	32	32		

WATER DISCHARGE	REDUCTION TARGET (%)	2018 BASELINE	2019	2020	2025 TARGET	PERCENT REDUCTION 2020 FROM 2018
MTI Process Water Discharged (billion gallons)	11	4.13	4.14	3.26	3.70	21.1
Performance Materials		0.01	0.02	0.01		
Specialty Minerals		4.25	4.12	3.25		
MTI Process Water Discharged Intensity (gallons/tons)		465	446	383		17.6
Performance Materials		3	5	3		
Specialty Minerals		834	832	727		
Refractories		1	1	0		

Water Withdrawal by Source

We have mapped our demand for water across different regions of the globe and analyzed for water stressed geographies where we operate. We defined water-stressed geographies as those with a rating of “High” to “Extremely High” in the aqueduct water-risk atlas. This helps us identify special strategies for water-stressed areas.

More than 60% of our demand for water was in the Americas, followed by Europe and Asia/Australia at nearly 20% each. Water stressed geographies by geography are primarily in India, and some parts of China and Brazil. In these locations, we rely on the supply of about 745 million gallons from our customers, and we do not extract any water from either surface (river/lakes) or well water. We have a strong process for working with our paper mill customers to conserve, recycle and develop technologies to reduce water consumption in these locations.

MILLION GALLONS	SURFACE SOURCES (LAKES/ PONDS, RIVERS/CREEKS)	WELL WATER	FROM OTHER ORGANIZATIONS HOST MILL, MUNICIPAL/CITY WATER	MTI TOTAL
Americas	1,035	1,509	1,339	3,882
Europe	0	203	1,042	1,245
Asia & Australia	341	0	847	1,188
MTI Totals	1,376	1,711	3,228	6,316

Water Discharge by Destination

MILLION GALLONS	HOST MILL	MUNICIPAL/CITY WASTEWATER TREATMENT	SURFACE SOURCES (LAKES/PONDS, RIVERS/CREEKS)*	MTI TOTALS
Americas	787	97	1,381*	2,265
Europe	470	0	137*	607
Asia	384	0	0	384
MTI Totals	1,641	97	1,518	3,256

*Safe discharge as described in permits.

MTI and Business Segment Landfill Waste and 2020 Progress Toward 2025 Targets

LANDFILL WASTE	REDUCTION TARGET (%)	2018	2019	2020	2025 TARGET	PERCENT REDUCTION 2020 FROM 2018
MTI Landfill Waste Disposed (ton)	20	208,946	213,360	172,021	166,000	17.7
Performance Materials		25,864	14,319	9,631		
Specialty Minerals		177,906	194,416	158,083		
Refractories		5,176	4,625	4,306		
MTI Landfill Waste Disposed Intensity (lbs/ton)		46	46	40		13
Performance Materials		14	7	5		
Specialty Minerals		70	78	71		
Refractories		30	28	29		



Photos depicting individuals not wearing the proper COVID-19 Personal Protective Equipment (PPE) or in close proximity to one another were taken prior to the onset of COVID-19. Minerals Technologies implemented strict protocols at all locations aligned with evolving guidance around the world to combat COVID-19.

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