

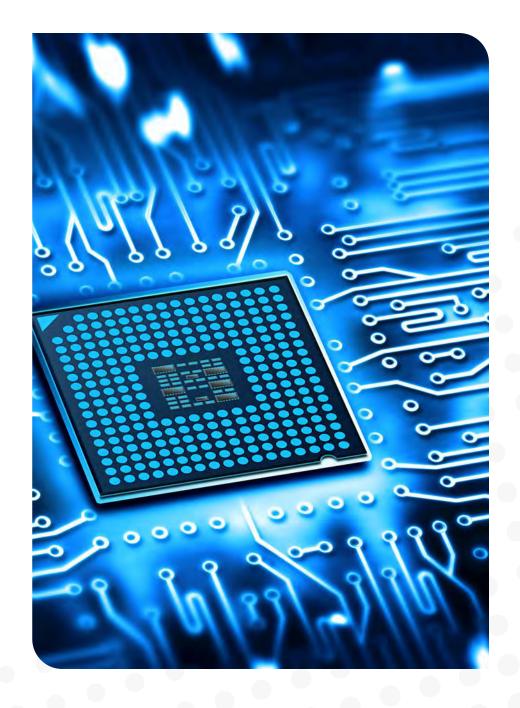
2024

Environmental, Social, Governance Report



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Letter from our President and Chief Executive Officer



On behalf of MKS, I am pleased to present our 2024 Environmental, Social, Governance (ESG) Report. With unprecedented challenges and uncertain markets, 2023 proved to be a challenging year for all of us. However, we have been resilient, continuing to go where the hardest problems are and remaining steadfast in our commitment to sustainability and our dedication to creating long-term value for all our stakeholders. This report serves as a testament to our progress, achievements, and ongoing efforts to integrate sustainability holistically into our business and enable technologies that transform the world.

At MKS, our commitment to sustainability is driven by our innovative spirit, collaborative approach, and foundation of integrity and trust. We combine our cutting-edge science and engineering with our focus on solving our customers' hardest technology challenges to develop products that support the success of our customers, the sustainability of our planet, and the safety and productivity of our communities. To this end, we have created solutions such as our Covertron® 600 pretreatment for plastics' metallization, which eliminates Cr(VI), and non-PFAS components to reduce environmental impact and enhance worker safety, and our EDEN® process chemical technology, a cost-effective and environmentally friendly process that reduces waste and operating expenses.

In August 2022, we closed our strategic acquisition of Atotech, which now operates as our Materials Solutions Division (MSD), and I am proud to announce that MSD has celebrated its first full year as part of the MKS team. During this integration, we looked to find opportunities to further our ESG efforts, not only in our legacy MKS business, but also the Atotech business, and I am excited to share that this year's report encompasses ESG-related updates, data, and insights for the new, fully integrated MSD. Along with this milestone, I am pleased to highlight a few of our other, recent ESG achievements and commitments:



We committed to reducing our combined Scope 1 and 2 emissions by 42% by 2030 from our 2022 baseline, in alignment with criteria established by the Science Based Targets initiative (SBTi). As a first step to setting SBTi-aligned Scope 3 emissions targets, we conducted a scope 3 screening analysis to determine Scope 3 categories relevant to our business and are now working to develop our consolidated Scope 3 emissions inventory. Once we determine our Scope 3 emissions targets, we will submit these climate goals to SBTi to be validated against SBTi guidance.



We rolled out our third annual global employee engagement survey – the first to include participation from Atotech employees post-acquisition – and launched our inaugural Employee Resource Group (ERG), Women@MKS, marking a significant step towards fostering a more inclusive and diverse workplace.



We continued to receive external recognition for our sustainability efforts. Our MSCI ESG rating was updated from "BB" to "A" in March 2023, and we were recognized in Sustainalytics' 2024 list of ESG Top-Rated Companies. We were also acknowledged in Newsweek and Statista's annual list of America's Most Responsible Companies.

As a foundational solutions provider to the connected world, we recognize the responsibility we have to the world around us. At MKS, we view this responsibility as *opportunity* – opportunity to develop products that transform our world from both a technological and sustainability standpoint. As we look to the future, we are excited by the great potential our business has for contributing and supporting global efforts to combat climate change and drive sustainable innovation.

John T.C. Lee

President and Chief Executive Officer





Business Overview

Business Overview

MKS Instruments enables technologies that transform our world. We deliver foundational technology solutions to leading edge semiconductor manufacturing, electronics and packaging, and specialty industrial applications. We apply our broad science and engineering capabilities to create instruments, subsystems, systems, process control solutions and specialty chemicals technology that improve process performance, optimize productivity and enable unique innovations for many of the world's leading technology and industrial companies. Our solutions are critical to addressing the challenges of miniaturization and complexity in advanced device manufacturing by enabling increased power, speed, feature enhancement,

and optimized connectivity. Our solutions are also critical to addressing ever-increasing performance requirements across a wide array of specialty industrial applications.

Following our acquisition of Atotech in 2022, we further strengthened our position as a foundational technology solutions provider, bringing Atotech's critical process chemistry and equipment solutions into our comprehensive portfolio. We operate Atotech as our Materials Solutions Division, which develops leading process and manufacturing technologies for advanced surface modification, electroless and electrolytic plating, and surface finishing.

Leading market positions attained through our domain expertise and proprietary technologies

Broad endmarket exposure characterized by deep customer relationships Foundational solutions provider for the connected world

\$3.6B

2023 revenue

\$288M

2023 R&D investment

~10K

total workforce

>85%

of wafer fabrication equipment applications served

A

MSCI ESG rating

34K+

customers

20

leading positions in product categories¹

~1,900

engineers and scientists

~3,800

patents worldwide

Sustainalytics ESG Industry Top-Rated for Technology Hardware in U.S. and Canada

One of America's Most Responsible Companies, presented by Newsweek and Statista

Our Sustainability Strategy

MKS plays an integral part in delivering enabling solutions in an increasingly connected world. This position provides us with an opportunity to make an impact in furthering not just our own sustainability goals, but also those of our customers. Our commitment to operating our business in an environmentally and socially responsible manner, in tandem with our employees, customers, suppliers, and communities, is unwavering.

At MKS, sustainability informs the way we conduct our business every day:

Driving Sustainable Operations

We seek to reduce the impact our products have on CO2 emissions, water usage, and waste and hazardous chemistry creation.

In 2023, we stated our commitment to reduce our combined Scope 1 and Scope 2 emissions by 42% by 2030 from our 2022 baseline according to criteria established by the Science Based Targets initiative (SBTi).

Innovating for Sustainability

Sustainability is at the core of our innovation strategy. Our customers' sustainability needs help define our next products and solutions.

In 2023, we launched several products that were PFAS-free, including Covertron 600 pretreatment for plastics' metallization, a Cr(VI)-free pretreatment solution for plastics' metallization, and Zintek® ONE HP inorganic silver zinc flake base coat for corrosion protection. These products reduce the chemical and carbon footprint of our customers and enhance worker safety without compromising on efficiency or quality.

Strengthening our Brand

With a broad portfolio of marketleading solutions, we seek to continue to quantify and report on the sustainability benefits of our solutions.

In 2023, we established a dedicated team to quantify the carbon footprints of our products and processes, which we share with our customers.

To execute our ESG strategy, we established a three-year roadmap designed to help strengthen our sustainability program. Recognizing that we can best manage what we can measure, our priorities have included consolidating our ESG data across the legacy MKS business and the Atotech business, as well as establishing baseline environmental data from which we will be able to set and assess reduction goals going forward.

We completed an inventory for our environmental metrics – energy, water, waste, Scope 1 and Scope 2 emissions – and are in the process of measuring our Scope 3 emissions. As described in more detail in this report, we have used this inventory to set a baseline and target for Scope 1 and 2 emissions. Once we complete the development of our Scope 3 emissions baseline, we plan to develop and submit a science-based target that includes Scope 1, Scope 2, and Scope 3 emissions to SBTi.

We also identified several new regulatory requirements, including the German Supply Chain Act, the EU Carbon Border Adjustment Mechanism, and the Corporate Sustainability Reporting Directive. We are continuously evolving our existing programs and policies to align and comply with these and all other regulatory requirements globally.

Stakeholder Engagement

Strong relationships are built on a solid foundation of integrity and trust. We strive to create and maintain stakeholder relationships that promote an open dialogue for discussing ESG matters that are important to our key stakeholders and us. We continue to engage with many of our stakeholders on sustainability issues – including through customer sustainability surveys and investor ESG surveys – and such conversations continue to inform the development of our ESG program.

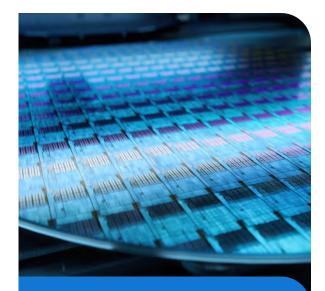
We recognize that suppliers are key stakeholders in driving sustainability in our value chains. Supply chain transparency and engagement have become critical to how we operate our business. We work with our customers to support their sustainability initiatives and we continue to work on developing our own broader supplier-engagement program.

Sustainable Product Portfolio

As an innovation leader operating at the cutting edge of science, engineering, and technology, our vision is to enable technologies that transform our world. We apply our broad science and engineering capabilities to create solutions that are critical to addressing the challenges of miniaturization and complexity in advanced device manufacturing by enabling increased power, speed, feature enhancement, and optimized connectivity.

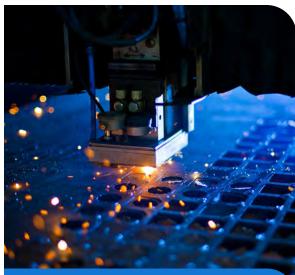
MKS has always partnered with customers to develop ground-breaking solutions for their most advanced technology challenges. Today our customers look to us to advance not just technology but also sustainability in how our products are developed and operated. Through this work, we enable our customers to be more successful and our societies to be safer and more productive.

Our products are used in a broad range of industries and applications. Our focus is not only to make our own products more sustainable, but also to advance critical sustainability technologies through our solutions.



Semiconductor

- Driving innovation in critical subsystems for deposition, etch, lithography, inspection/metrology, and wet processing
- Offering wet processing and gas delivery systems that reduce excess water usage, power and chemical consumption



Electronics & Packaging

- Enabling next-generation electronic devices with our critical laser-based processing systems
- Offering a portfolio of proprietary environmentally-friendly chemistry and plating equipment solutions to the printed circuit board and package substrate markets



Specialty Industrial

- Harnessing core expertise
 across markets such as surface
 finishing/functional coatings, solar
 manufacturing, synthetic diamond
 manufacturing, medical diagnostics
 and many more
- Using environmentally sustainable chemistry alternatives (chromium (VI)free, lead-free, nickel-free, cyanidefree) across many essential industrial processes
- Offering a portfolio of plating equipment solutions designed to save resources by enabling highly efficient chemical regeneration systems

Advancing Clean Energy Production

Clean Energy and Renewable Applications

Our products support and advance clean and renewable energy through various means, including the following:

- Sustainable and highly efficient plating solutions for c-Si solar cell grid metallization
- Revolutionary processes for more efficient solar energy production through electroplating of the contact fingers on solar cells, which increase cell efficiency at a significantly lower material cost
- Flow, valve, and pressure measurement products that control vacuum pressure and the delivery of gases used in the fabrication of photovoltaic cells
- Mass spectrometers, lasers, and photonics components used by solar panel manufacturers to optimize their process
- High corrosion resistant electroless nickel plating solutions for hydrogen fuel cellfocused applications





II. Making our products more sustainable



Dissolved ozone delivery system, with water recycling solution



Chemistries to enhance corrosion protection for wind turbines

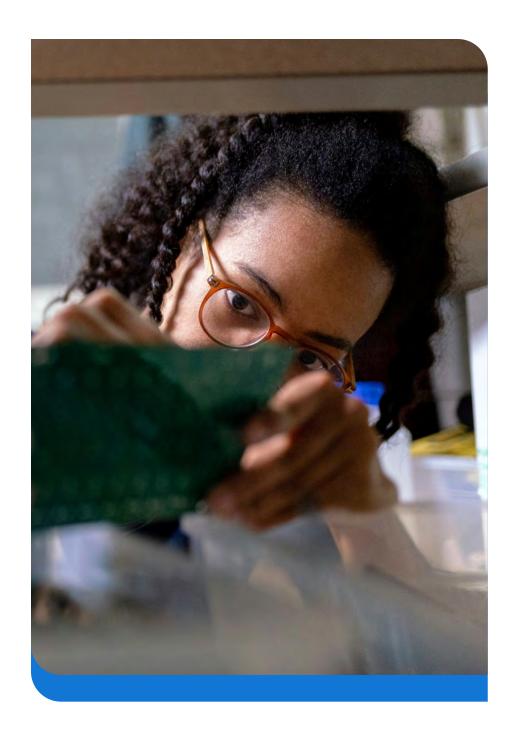


Environmentally sustainable chemistry alternatives (Cr VI-free, Pb-free, Ni-free, CN-free)



Auxiliary equipment for the reduction and treatment of wastewater





Product Life Cycle

In our ongoing commitment to sustainability and environmental responsibility, we take the Life Cycle Thinking approach to assess our product sustainability metrics. We embarked on a comprehensive journey to conduct Life Cycle Assessments (LCAs) on our products, processes, and technology. Additionally, we are committed to addressing customer requests for the disclosure of Product Carbon Footprints (PCFs). Through these efforts, we aim to strengthen our sustainability practices, enhance transparency, and meet the evolving expectations of our stakeholders, including customers, investors, and regulators.

LCAs provide a comprehensive approach to evaluating the environmental impact of products, spanning their entire life cycle. They help identify areas for resource reduction, waste reduction, and environmental harm mitigation. Expanding LCAs to plating processes enhances efficiency and sustainability. Disclosure of PCFs allows informed choices. Transparency is a key aspect of our sustainability efforts, involving open communication and stakeholder engagement. We provide information about our products' environmental impact through PCF disclosure, demonstrating our commitment to transparency. Conducting LCAs helps

us understand our current performance and drives innovation, identifying opportunities for product optimization and process improvement. LCAs and PCFs present challenges and opportunities, requiring meticulous attention and collaboration. However, they also offer opportunities for innovation and improvement, enhancing product sustainability through Life Cycle Thinking. Our sustainability initiatives require stakeholder engagement for success. We foster dialogue, solicit feedback, and view stakeholder engagement as an opportunity to identify innovative solutions, drive industry change, and create shared value.

We recognize that meaningful change requires collective effort. Therefore, we invite our suppliers and peers to join us in adopting LCAs and PCF disclosure as standard practices within the industry. Performing LCAs for our products and preparing PCF disclosure reflects our unwavering commitment to sustainability and transparency. By understanding and mitigating the environmental impacts of our products, we strive to create value for our stakeholders. Together, we can harness the power of data-driven insights to drive positive change, foster innovation, and build a more sustainable and resilient future for all.

CASE STUDY

Pretreatment: Our Covertron 600 Pretreatment for Plastics' Metallization

In the dynamic landscape of metal finishing, the quest for sustainable solutions has reached new heights. Our latest innovation, Covertron 600 pretreatment for plastics' metallization, represents a significant milestone in the transition towards Cr(VI)-free pretreatment processes for plastics.



Covertron 600 marks a groundbreaking shift by eliminating hexavalent chromium from decorative plating lines. This innovative pretreatment process not only meets the stringent requirements of REACH regulations, but also delivers performance and quality comparable to traditional Cr(VI) benchmarks. The Cr(VI)-free and non PFAS pretreatment for a large variety of polymers, including most of the currently used plateable resins, and more specific applications, such as selective plating, completes MKS' sustainable range of Cr(VI)-free processes for plating on plastics.

Features and Benefits:

- Comparable Performance: Covertron 600 offers process length, quality and performance on par with Cr(VI) processes, ensuring reliability and consistency.
- Simple Integration: Compatible with various plastics and plating materials, Covertron 600
 facilitates easy integration into existing production lines, minimizing disruptions and optimizing
 efficiency.
- Wide Applicability: From ABS and ABS/PC to selective materials and high-heat ABS (HH-ABS), Covertron 600 caters to a diverse range of plastics, meeting the needs of various industries.
- Environmental Sustainability: By eliminating Cr(VI) and non-PFAS components, Covertron 600 aligns with sustainability objectives, reducing environmental impact and enhancing worker safety.

By transitioning to Covertron 600, companies reduce their environmental footprint significantly. Lower energy consumption due to reduced temperature requirements, elimination of hazardous substances like hexavalent chromium, and regeneration equipment for maintaining optimal process conditions contribute to a greener and more sustainable future.

CASE STUDY

EDEN process chemistry technology for bath life extension: Electrodialysis system for electroless nickel

By fusing chemistry and technology, the EDEN process chemistry technology was created to increase the bath life of traditional electroless nickel. By using a unique electrodialysis membrane technology, EDEN is able to extract sodium sulfate and sodium orthophosphate, two main byproducts, from the plating bath selectively. Simultaneously, it sustains a constant concentration of all essential components in the bath formulation, resulting in uniform quality and decreased waste. EDEN offers a consistently fast plating speed for the duration of the bath.

CHALLENGE

The demand for long-life electroless nickel plating processes, which provide consistent quality throughout bath life, has steadily increased over the years.

Fully automated and long-life electroless nickel plating processes are required to be both economical and environmentally friendly as well as economically feasible compared to conventional electroless nickel processes.

MKS SOLUTION

EDEN process chemistry technology, based on electrodialysis technique, using special membranes which are purposely designed to remove the by-products selectively from the bath, provide steady-state conditions within the plating bath. These allow for a set of bath operating parameters to be controlled under steady conditions that lead to a consistent quality of deposit properties and a consistent plating speed.

The process is proven to reduce operating costs through waste nickel reduction, labor cost saving, downtime reduction, and is more environmentally friendly.

MKS created a cost-effective and ecologically friendly process with EDEN, which reduces waste and operating expenses. Nickel-phosphorus (NiP) coatings with constant deposit quality at the specified Metal Turnover (MTO) are provided by EDEN making it the right choice for all critical components.



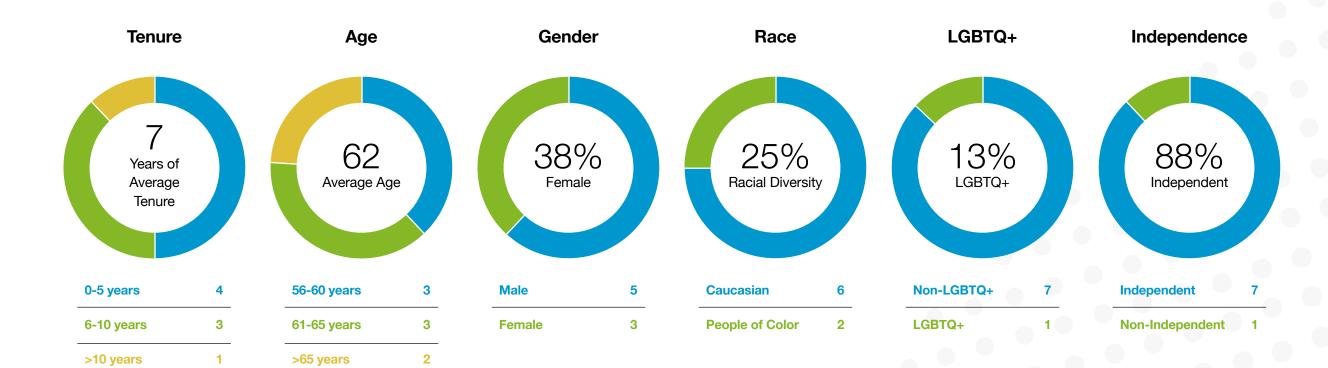
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Corporate Governance

Our Board of Directors



In 2022, 50/50 Women on Boards™, the leading global education and advocacy campaign driving gender balance and diversity on corporate boards, recognized MKS as a "3+" company for having three or more female board members.



ESG Oversight and Risk Management

ESG is a key priority for MKS and our leaders. As such, our ESG Program is overseen by our Nominating and Corporate Governance Committee of our Board of Directors and our President & CEO.

At MKS, we maintain an Enterprise Risk Management (ERM) program to identify, assess, prioritize, and respond to key risks facing the company. This includes a formal risk assessment and update to the Board every year, and ongoing updates to executive management. In addition, the Board receives regular updates from the members of the management team responsible for managing specific strategic, operational, financial, and compliance/EHS risks.

In partnership with our property insurance provider, FM Global, we conducted climate-risk assessments on windstorm, flood, wildfire, and earthquake exposure at certain of our major sites and intend to expand the assessments to cover all our major sites in the future. For more information on how we evaluate climate-related risks and opportunities, please see the Task Force on Climate-Related Financial Disclosures (TCFD) index at the end of this report.

Board of Directors

Led by our Nominating and Corporate Governance Committee

Oversees the ESG program strategy, goals, and initiatives.



Executive Sponsors

Led by our President and Chief Executive Officer

Champion sustainability as an enabler for growth in the organization. Sign off on all targets and performance disclosures as well as critical investment decisions. Review ESG progress and provide guidance on a quarterly basis.



ESG Steering Committee

Led by our Head of Sustainability

Guides sustainability strategy development and target setting and secures investments and resources for driving performance. The Head of Sustainability reviews performance and progress with the Nominating and Corporate Governance Committee of the Board of Directors on an annual basis.



Working groups

Led by members of our Sustainability team

Cross-functional teams contributing to different workstreams. Drive and implement projects and initiatives to execute our sustainability strategy.

Audit Committee

Oversees cybersecurity risk management and financial risk management.

Key Policies and Statements

Our ESG-related policies and statements include:

CODE OF BUSINESS CONDUCT AND ETHICS [2]

Our Code of Business Conduct and Ethics links our mission and guiding principles with standards of professional conduct that we expect of our Board, management team and employees across the globe. We also require our sales representatives and distributors to follow appropriate codes of conduct as set forth in our agreements with them. These practices reflect our commitment to integrity with respect to our employees, business partners and the communities in which we work.

ANTI-CORRUPTION POLICY AND PROCEDURES [2]

As a global company, we take our obligation to comply with international anti-corruption laws seriously. MKS employees are prohibited from offering, giving, soliciting, or receiving any form of bribe or kickback, directly or indirectly.

WHISTLE-BLOWER HOTLINE

Our Code of Business Conduct and Ethics outlines our grievance process for anyone who believes an employee has engaged or is engaging in conduct that violates our Code of Conduct. We provide all employees with access to a confidential, anonymous, 24/7 MKS Compliance Hotline, operated by a third party. We do not tolerate retaliation against any employee that makes a good faith report.

ENVIRONMENTAL HEALTH AND SAFETY POLICY

Environmental health and safety considerations are fundamental to our business practices. We ensure that all employees of MKS understand, promote, and assist in the implementation of leading health and safety practices and principles.

HUMAN RIGHTS AND LABOR STANDARDS POLICY [2]

We are committed to upholding the human rights of workers and treating employees with dignity and respect as understood by the international community. This applies to all workers, including temporary, migrant, student, contract, and direct employees, and any other type of worker.

STATEMENT ON COMBATTING HUMAN TRAFFICKING AND MODERN SLAVERY

We are committed to conducting business in an ethical and responsible manner and we have a zero-tolerance policy relating to human trafficking and forced labor. With regard to our operations and supply chain, we are committed to maintaining and improving our systems and processes to ensure we comply with all national and international rules and regulations regarding human trafficking and forced labor. We post our annual Statement on Combatting Human Trafficking and Modern Slavery in our Business and Supply Chains on our website.

POLITICAL CONTRIBUTIONS POLICY

MKS funds, assets, and personnel may not be used to make any political contribution or render assistance to any political party or candidate for political office. Examples of prohibited contributions include cash contribution to political candidates, political parties or other political organizations, using or loaning Company personnel or property for political party work or campaign activities, or guaranteeing the debt of a political party.

CYBERSECURITY AND DATA PRIVACY POLICY

MKS' IT Department and MKS' Business Continuity Plan prepare us for a broad range of potential events and position us to respond to and continue operations during and after a cyberattack. MKS has strategies to reduce our cybersecurity and data privacy risks, through conducting periodic risk assessments and audits, hiring data security personnel, providing annual training programs, updating our restoration procedures, and investing in strengthened access requirements and threat detection capabilities.

In February 2023, MKS was subject to a ransomware event and certain systems were affected by the deployment of malware from ransomware actors. Following this incident, we made certain enhancements to our enterprise information security program, including with respect to privileged access management, security monitoring and response, and application backup and recovery.

Key Management Systems

In 2021, MKS developed a formalized Global Management System for Environmental, Health, and Safety (MEHS), designed to protect our employees, other stakeholders, and the environment. Our approach to managing the environment and employee health and safety are guided by four strategic pillars:

Foundation and Structure Operational Discipline

Mindset Governance and Culture and Compliance

Our Environmental Health and Safety team has developed a strong foundation and structure for the MEHS over the last few years, and we are implementing the system across our organization in a stepwise process that is expected to be completed by 2026.

In 2023, we advanced the implementation of our Global MEHS Management system at seven major sites across the globe. We also conducted internal MEHS audits at certain key sites in Europe and Asia and initiated more internal audits at our sites in the United States. To ensure we support global ownership of our management system, our MEHS policies are translated into local languages and made available to each region. We also provide safety training globally to all employees annually.

At MKS, 25 of our sites¹ have a formalized Occupational Health and Safety (OH&S) Management System certified to ISO 45001-2018, the internationally recognized standard for providing a safe and healthy workplace.

Moreover, 41 of our sites have a formalized Environmental Management System (EMS), certified to ISO 14001-2015, the

internationally recognized standard for designing and implementing an EMS. The EMS portion of our MEHS uses a set of processes and practices that enable us to reduce our environmental impact. For example, our EMS enables the efficient use of our resources and reduces our waste to increase our operating efficiency and achieve continuous improvement. We continue to evaluate ISO 14001 certifications at additional sites to enhance our global EMS.

EMS-Certified Sites





3

Environment

Reducing our Carbon Footprint

At MKS, we are committed to reducing the environmental impact of our products and operations. We manage our program through the use of our EMS, which is detailed in the **Key Management Systems** section.

We engage with our internal teams to develop a comprehensive plan to reduce our operational emissions across the business. After completing the transformational acquisition of Atotech in August 2022, we developed a combined company baseline for Scope 1 and 2 emissions

and began the process of evaluating and calculating Scope 3 emissions. In December 2023, we committed to reducing our combined Scope 1 and 2 emissions by 42% by 2030 from our 2022 baseline, according to criteria established by SBTi. We are also in the process of evaluating a Scope 3 emissions target.

In the meantime, our corporate Facilities and Environmental, Health, and Safety teams evaluate opportunities across our sites where we can:

148 MWh

of renewable energy generated and consumed through the use of solar panels on site at our facility in Manesar, India in 2023

23,724 MWh

of renewable energy procured through utility providers in 2023



Implement energy efficiency measures



Procure renewable energy through utility providers

In January 2023, we began procuring green electricity in two buildings in Rochester, NY, avoiding approximately 2,500 tCO2e of emissions annually.



Purchase renewable energy certificates (RECs) through a Virtual Power Purchase Agreement (VPPA)





Solar road lamps were installed in Guangzhou in 2023, reducing an estimated 60 tCO2e annually and saving \$14,000 USD annually.

Environmental Performance Metrics

We continue to collect data for greenhouse gas (GHG) emissions, energy usage, water usage, and waste globally across all of our sites. To support our data collection, tracking, and reporting efforts, we implemented a data management system that consolidates electricity, water, natural gas and fuel usage for 104 of our sites. We plan on onboarding the remaining sites with significant usage onto this platform in order to further streamline our consolidation efforts and provide a holistic view of our environmental performance metrics.

We also recognize the importance of tracking our environmental impact across the value chain. Building on our initial assessment of Scope 3 emissions² categories relevant to MKS, we are continuing to evaluate additional categories in light of our acquisition of Atotech and are working toward a consolidated Scope 3 baseline for our entire business. Following the development of this consolidated Scope 3 baseline, we expect to develop a Scope 3 target in line with SBTi criteria.

In 2023, MKS conducted a Scope 3 screening analysis and this assessment identified our emissions from the products we sell, as well as the goods and services we purchase, as the most significant contributors to our overall Scope 3 emissions profile. Although detailed emissions calculations are not yet available, recognizing these areas allows us to

focus our efforts and Scope 3 targets on areas with the most substantial impact.

Our environmental data shown on the right reflects our efforts over the past year to improve how we capture the impact of our business on the environment and, with this information, the ability to assess how we can reduce our impact going forward. In 2023, we procured 23,724 MWh of renewable electricity through utility providers, accounting for 14% of our electricity consumption.

We saw a decline in non-renewable energy usage of 7% in 2023 from 2022, driven primarily by an increase of renewable energy procured through utility providers at two sites in Rochester, NY, as well as temporary business closures at some sites due to the ransomware event we identified in February 2023.

To improve our water and waste management strategies, we are currently using internal key performance indicators (KPIs). For example, we identified key sites to study water management using the World Resources Institute (WRI) Aqueduct Water Risk Atlas for sites with high and extremely high water stress. For waste, we are working to better understand our waste types and quantities. As a first step, we are focusing on waste data collection at our manufacturing sites.

Metric	2022	2022 Data Coverage	2023	2023 Data Coverage	
Metric	2022	(by area) ³	2023	(by area) ³	
GHG Emissions (tCO2e)					
Scope 1 Emissions ⁴	8,321	87%	7,370	91%	
Scope 2 Emissions (Market-Based)	66,207	96%	61,656	96%	
Scope 2 Emissions (Location-Based)	71,814	96%	69,796	96%	
Total Scope 1 and Scope 2 (Market-Based) Emissions	74,528		69,026		
Energy Management (MWh)	Energy Management (MWh)				
Electricity Usage	168,675	96%	164,403	95%	
Self-Generated Energy	109	100%	148	100%	
Fuel Usage (natural gas, LPG, fuel oil, diesel, kerosene and propane)	39,117	87%	34,621	91%	
District heating (purchased)	5,901	100%	4,879	91%	
Steam (purchased)	4,125	100%	3,874	100%	
Total Energy Usage	217,927		207,924		
Water Management (m3)					
Water Usage	687,375	95%	556,856	94%	
Waste Management (t)					
Waste ⁵	5,772	83%	5,656	83%	

^{(1) 104} out of MKS' 150 labs, offices, warehouses and manufacturing sites.

⁽²⁾ Scope 3 emissions reflect emissions from sources that are owned or controlled by other organizations but are the consequence of our organization's activities.

⁽³⁾ Data coverage indicates the percentage of total area covered in square feet. Total area includes all worldwide manufacturing sites, labs, offices, and warehouses of MKS Instruments, Inc. and its subsidiaries, and covers a total of 7,076,262 square feet.

⁽⁴⁾ Excludes emissions from refrigerants, company cars, and onsite wastewater treatment.

⁽⁵⁾ We are working to improve the quality of our waste data to understand underlying waste streams.





Social

A Culture of Responsibility

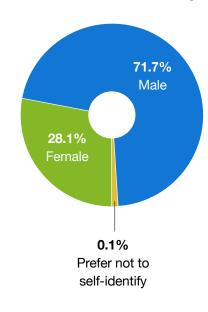
At MKS, we are committed to operating our business in a socially responsible manner. We make it a priority to establish and foster meaningful relationships with people and communities that are built on the basis of integrity and trust. Our Guiding Principles guide every aspect of our business strategy, including and especially our social responsibility initiatives, and we continuously strive towards creating and maintaining a culture of responsibility. Recognizing our efforts, Newsweek and Statista acknowledged MKS in their 2024 list of America's Most Responsible Companies.

"We are proud to be recognized for socially responsible business practices as we strive to develop products that enable our customers to be more successful, our planet more sustainable, and our communities safer and more productive."

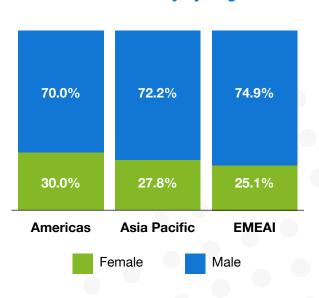
John T.C. Lee, President and CEO of MKS Instruments, Inc.

Workforce Metrics (as of December 31, 2023) 10.200 Global Workforce (including temporary workers, excluding contract employees) 33% 33% Asia Pacific /liddle East, <8% 37 region **Voluntary Turnover** Countries During 2023 34% >9 Years 28% Americas of Global Workforce Average Employee Tenure is Female

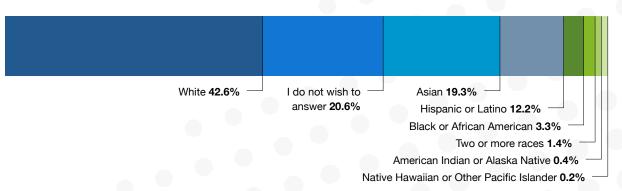
Global Gender Diversity¹



Gender Diversity by Region



U.S. Race / Ethnicity



Diversity data is as of December 31, 2023 (1) Percentages do not sum to 100% due to rounding.

Our People

We believe that our people are the key drivers of our continued success. As such, we are dedicated to investing in our people and empowering them to be leaders and thinkers who constantly explore new ideas and push the limits of innovation. Our commitment to diversity and inclusion stems from the importance we place on having mutual respect with one another. We are proud to be recognized as one of U.S. News and World Report's 2024 Best Companies to Work For in the Industrials and Business Services Industry.

Employee Engagement

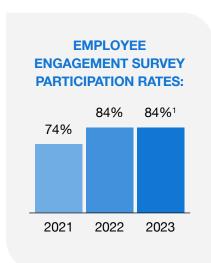
With our global workforce, ensuring that each and every employee feels engaged and valued is of the utmost importance. We believe that action and messaging must come from the top, and as such, our President & CEO holds the organization accountable at the highest level. We conduct employee surveys annually in order to gain insights into our employees' thoughts, feelings, and concerns regarding MKS.

In 2023, MKS conducted its third annual global employee engagement survey – a significant milestone for MKS, as it included participation from Atotech employees for the first time.

The survey results and findings were analyzed and shared with the President & CEO, the Executive Leadership Team, and the Board of Directors. Survey results were communicated to all employees and were supplemented with executive videos and both in-person and virtual focus groups that discussed prevailing themes.

Additionally, our Executive Leadership Team routinely engages with our employees worldwide, ensuring that leadership has a comprehensive, holistic understanding of employee views. We are very proud of our leaders' commitment to continuously enhancing MKS' workplace environment.

"Innovation" and "Manager Effectiveness," both of which are key areas of focus for MKS, saw improvements of 2% each based on the results from our 2023 survey, confirming that our company-wide initiatives are having a positive impact.

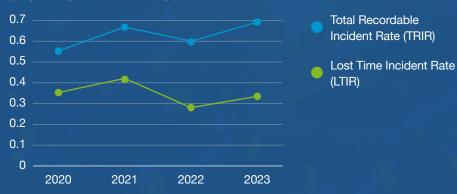


Employee Occupational Health & Safety

MKS is committed to providing a safe workplace for all employees and strives towards zero injuries, occupational illnesses, and incidents. We accomplish this through compliance with applicable laws and regulations regarding workplace safety, including recognition and control of workplace hazards, tracking injury and illness rates, and maintaining detailed emergency plans. We also have a holistic Global Management System for Environmental, Health, and Safety, which is detailed in the **Key Policies** and **Statements** section.

Additionally, MKS provides mandatory environmental, health, and safety training to ensure all employees are provided with the knowledge to perform their jobs safely and to protect the environment. In 2023, we delivered a total of 12 courses in various languages, which included five new courses. We are working to standardize this training across our three divisions to facilitate safer work environments and enable us to track safety metrics on a global level.

GLOBAL SAFETY METRICS²



(2) The TRIR and LTIR metrics (2020-2023) reflect data for all full-time employees at MKS following the integration of Atotech. The data presented has been recalculated such that the 2020-2023 metrics shown above include Atotech employees.

⁽¹⁾ Our 2023 employee engagement survey was the first to include participation from our Materials Solutions Division (legacy Atotech) employees.







Training and Development

MKS remains steadfast in its dedication to fostering learning and professional growth. We offer our employees a diverse array of programs, courses, and resources aimed at enhancing their career trajectories and fostering knowledge-sharing among peers. In 2023, we expanded our course offerings to encompass areas such as employee engagement, change management, and leadership excellence, underscoring our commitment to continuous improvement.

As part of our commitment to personal and professional development, our Global Learning and Development team designed and launched a three-year strategy in alignment with our corporate goals and objectives. The strategy takes an integrated approach to professional development and includes the following:

- LinkedIn Learning is offered to all regular employees to support their personal and professional development goals. This platform provides 24x7 accessible e-learning opportunities for our employees.
- Our Virtual Learning Corner (VLC) is a curated course library of professional topics that also includes select LinkedIn Learning courses. The VLC is refreshed quarterly and aligns with the MKS learning strategy and topics related to our performance management process.
- Our Global Learning Catalog contains leadership and individual development courses that
 can be accessed by employees virtually or in-person. The catalog links our VLC, LinkedIn
 Learning, and Workday platform together to create a seamless and integrated interface that our
 employees can access for all their professional development activities.

Developing our leaders, both current and future, continues to be an important focus area for us. As such, we host various leadership-focused training sessions, both virtually and in-person, through initiatives such as our Emerging Leaders Program, New Leader Orientation, Quarterly Leadership Series and Management Foundations. Each of these programs is uniquely tailored to support our leaders at the different stages in their leadership journeys.

Diversity, Equity, and Inclusion

At MKS, we embrace the strength found in our diversity – a diversity of perspectives, experiences, and thoughts. Our unwavering commitment is to cultivate an inclusive environment where every team member feels valued and empowered to bring their authentic selves to their work. This dedication stems from our belief that diverse viewpoints not only spur innovation, but also fuel exceptional performance and sustainable progress. Diversity, equity, and inclusion (DE&I) are deeply ingrained in our cultural fabric.

Our Executive Leadership Team reflects this commitment, with women representing 33% and people of color representing 33%. Similarly, our Board of Directors is comprised of 38% women, 25% people of color, and 13% LGBTQ+ members, and our Lead Director is a woman. We have also garnered recognition for our efforts to advance gender diversity on public company boards.

MKS is proud to have recently launched Women@MKS, our inaugural Employee Resource Group (ERG), marking a significant step towards fostering a more inclusive and diverse workplace. This initiative underscores our commitment to not only enhancing employee engagement and development but also to amplifying our impact on the communities we serve. By bringing together a vibrant and diverse group of talents through Women@MKS, we are laying the foundation for more innovative solutions and sustainable growth.

MKS is committed to providing total compensation packages that attract, motivate and retain our employees. Additionally, MKS is committed to recognizing and rewarding employees' sustained performance and results. We run a recognition program for all U.S. employees, which allows peer-to-peer recognition and recognition by managers. We continue to assess the potential expansion of this recognition program globally. We also maintain a global flexible work policy. We are committed to ensuring that our total compensation packages are externally competitive and internally equitable, while supporting our business plans and strategies.

In order to ensure pay equity throughout our global organization, we routinely conduct comprehensive analyses of pay practices across gender and other diversity dimensions in our major regions to identify and rectify any disparities promptly and effectively. We will continue to conduct global pay equity analysis and make appropriate adjustments if needed.

Our DE&I initiatives extend beyond MKS. We actively seek to cultivate ongoing relationships and partnerships with other constituents that share our mission and vision. Through these collaborative efforts, we hope to create lasting and meaningful change.

Our Current DE&I Sponsorships

NATIONAL SOCIETY OF BLACK ENGINEERS

One of the largest student-governed organizations in the world, aimed at supporting black and under-represented communities in STEM education, careers and diversifying the talent pipeline in technology.

SOCIETY OF WOMEN ENGINEERS

The world's largest advocates and catalyst for change for women in engineering and technology.

THE TREVOR PROJECT

A non-profit organization working in suicide prevention and crisis intervention for LGBTQ+ young people.

WOUNDED WARRIOR PROJECT

An organization with the mission to empower wounded warriors who incurred physical or mental injuries during their service on or after September 11th, 2001.

Community Engagement

As a company with global reach and presence, MKS recognizes the importance of giving back to the communities and environments in which we live and work. We strive to provide our employees with opportunities to engage in community-focused, philanthropic initiatives and events.

In 2023, our employees in Germany took part in a cycling charity initiative focused on climate protection and CO2 avoidance. In total, our teams in Berlin, Brandenburg and Feucht covered a distance of 29,383 km. In addition, for every kilometer ridden, MKS donated EUR 0.50 to PrimaKlima, a non-profit organization aimed at lowering the anthropological greenhouse effect and protecting the climate.

"I am pleased that we have made a strong contribution to climate protection in our region with this campaign, and I would like to thank everyone who took part. Our donation of over EUR 14,000 will be dedicated to forest protection and conservation in Brandenburg and Mecklenburg-Western Pomerania."

Ingo Steinbeck, Senior Director of Finance

Product Stewardship

At MKS, we are dedicated to protecting human health, preserving natural resources, and supporting the integrity of the global environment. As such, we aim to develop differentiated and innovative products, solutions, and services that consistently meet or exceed our customers' expectations. Reflecting our commitment to continuous improvement and innovation, we foster a world-class quality culture that promotes problem solving with data-driven solutions and inspires accountability and ownership with employees at every level. Our principles provide guidance to our teams worldwide, informing best practices to adhere to, even for day-to-day business conduct.

MKS products are designed, manufactured and tested for safety to conform with essential requirements of relevant directives and standards, customer requirements, product-specific regulations, and/or other applicable safety testing standards.

The MKS Quality Management System is compliant with the ISO 9001-2015 Standard, and 67 MKS sites¹ are certified to ISO 9001-2015. This certification standard demonstrates our continued commitment to ensuring customer trust and to improving the quality of our products and services.

In our chemistry business, we classify substances of concern according to a matrix that includes hazardous potential, use case, and global regulatory restrictions, both current and anticipated, and actively seek to eliminate the substances of highest concern. In 2023, we achieved a 19% reduction in overall high-risk products.

We are at the leading edge of commercializing processes that remove substances of concern and using less hazardous chemicals whenever possible. We continue to promote the use of TriChrome® Cr(VI)-free decorative chrome plating and BluCr® trivalent hard chrome technology, which eliminate both the need for hexavalent chromium and the use of PFAS-containing mist suppressants and in 2023, we launched Atotech CMA (compact membrane anodes) Closed-Loop System for alkaline zinc nickel plating. This solution facilitates nearly wastewater-free operations while minimizing waste generation and reducing our carbon footprint.

Supply Chain

A critical part of our business strategy is cultivating strong relationships with our supply chain. As part of our responsible and sustainable sourcing strategy, we are committed to working in partnership with our suppliers to set clear expectations on how we work together. Our goal is to create partnerships that support responsible and ethical business practices, conduct, and compliance with applicable laws and regulations, resulting in better outcomes for our employees, our businesses, and our environment.

For example, we are implementing several initiatives to comply with the German Supply Chain Act for our German sites that are in scope, including launching an internal due diligence process to determine key risks to human rights and labor rights, as well as appointing a dedicated Human Rights Officer. We are currently establishing systems and processes to roll out our supplier monitoring and evaluation efforts to help identify and manage key risks in our supply chain.

Supplier Code of Conduct

MKS has adopted the industry standard Responsible Business Alliance ("RBA") Code of Conduct as its Supplier Code of Conduct. The Supplier Code of Conduct provides standards and guidelines of conduct for all suppliers doing business with MKS worldwide. Please see our Supplier Code of Conduct for further details.

Throughout 2022 and 2023, we began surveying our most critical suppliers on material ESG topics. This initiative has provided us with insights on the maturity of our suppliers on key ESG topics. We are currently evaluating the responses we received and identifying risk classifications for these suppliers to help us define our broader supplier engagement plan.

Conflict Minerals

MKS is committed to identifying any of its suppliers who source "Conflict Minerals" from the Democratic Republic of the Congo (DRC) region from conflict sources. Please see our Conflict Minerals Policy for further details.

In 2023, we surveyed our direct supplier base, requesting the smelting source of any gold, tin, tantalum, or tungsten that may be used in the products supplied to MKS. We received responses from 72% of our suppliers, representing 93% of our total direct supplier spend. We report our results to the Securities and Exchange Commission (SEC) annually. Please see our 2024 Conflict Minerals Report for further details.







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About This Report and Indices

About This Report

Disclaimer

This 2024 ESG report is MKS' fourth report and was prepared in alignment with the Sustainability Accounting Standards Board (SASB) for our industry and incorporates the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) into our ESG reporting strategy and transparency efforts.

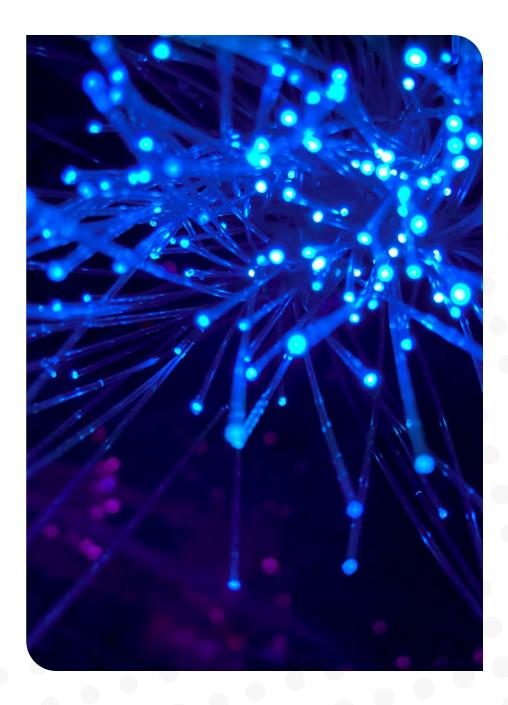
See our <u>SASB index</u> and our <u>TCFD index</u> for more information.

The quantitative metrics included in this report cover MKS' owned and leased facilities using available data for the 2023 calendar year. Please refer to the Environmental Performance Metrics page of this report for specific data coverage information. MKS engaged HXE Partners to support content development, review of quantitative data, and report design. Our ESG data and information included in this report is unaudited and may be subject to revision.

About This Report

MKS uses the SASB Standards and the TCFD framework to help guide our reporting efforts and the identification of material topics to our business.

This report contains forward-looking statements regarding MKS, including statements about our strategy, our goals, and our commitments. These statements are subject to a number of risks and uncertainties and are not guarantees of future performance. Actual events or results may differ materially from those in these forward-looking statements. Factors that could cause actual events to differ materially from those in these forward-looking statements are described in MKS' Annual Report on Form 10-K for the fiscal year ended December 31, 2023 filed with the SEC on February 27, 2024, and any subsequent quarterly reports on Form 10-Q. All forward-looking statements are based on MKS' current estimates, projections, and assumptions, and we assume no obligation to update them.



Sustainability Accounting Standards Board (SASB)

SASB is an independent, private sector organization with a mission to develop and disseminate sustainability accounting standards that help public corporations disclose material, decision-useful information to investors. For additional information on the SASB Standards, please visit sasb.org.

To support investors and stakeholders, MKS has provided the following disclosures based on the SASB Standards for our primary industry, Electrical & Electronic Equipment.

Primary Industry Standard: Electrical & Electronic Equipment

Activity Metrics (as of 12/31/2023)

Metric	Code	2023 Response	
Number of units produced by product category	RT-EE-000.A	Proprietary, confidential information	
Number of employees	RT-EE-000.B	See Section: A Culture of Responsibility - Workforce Metrics	

Accounting Metrics (as of 12/31/2023)

Metric	Code	2023 Response
ENERGY MANAGEMENT		
(1) Total energy consumed,(2) Percentage grid electricity and(3) Percentage renewable	RT-EE-130a.1	(1) Total energy consumed: 207,924 MWh (2) Percentage grid electricity: 79% (3) Percentage renewable: 11%
HAZARDOUS WASTE MANAGEMENT		
(1) Amount of hazardous waste generated, (2) percentage recycled	RT-EE-150a.1	(1) Amount of hazardous waste generated: 3,481 t (2) Percentage recycled: Not disclosed
Number and aggregate quantity of reportable spills, quantity recovered	RT-EE-150a.2	We do not currently track the number of reportable spills on a consolidated basis.

Sustainability Accounting Standards Board

Metric	Code	2023 Response
PRODUCT SAFETY		
(1) Number of recalls issued, (2) total units recalled	RT-EE-250a.1	In 2023, we had 15 recalls for a total of approximately 1,017 units. No safety-related issues were reported that corresponded to the recalls.
Total amount of monetary losses as a result of legal proceedings associated with product safety	RT-EE-250a.2	Monetary losses as a result of legal proceedings associated with product safety: \$0
PRODUCT LIFECYCLE MANAGEMENT		
Percentage of products by revenue that contain IEC 62474 declarable substances	RT-EE-410a.1	We do not track products that contain IEC 62474 declarable substances.
Percentage of eligible products, by revenue, that meet energy efficiency certification	RT-EE-410a.2	We do not manufacture products that are eligible for ENERGY STAR®.
Revenue from renewable energy-related and energy efficiency-related products	RT-EE-410a.3	See Section: Sustainable Product Portfolio for information on our renewable energy-related and energy efficiency-related products.
related products		We do not publicly disclose revenue generated from renewable energy-related and energy efficiency related products.
MATERIALS SOURCING		
Description of the management of risks associated with the use of critical materials	RT-EE-440a.1	To support supply chain continuity, we diversify, when possible, to avoid single source suppliers, particularly for our critical materials. We have a process to identify if any of our suppliers are on watch lists or have been debarred to ensure that we are doing business with permitted and reputable suppliers, and we require our suppliers to do the same.
		We continue to review supply chain continuity risks for products containing critical materials and will apply risk mitigation steps where needed.
BUSINESS ETHICS		
Description of policies and practices for prevention of: (1) corruption and bribery and (2) anti-competitive behavior	RT-EE-510a.1	See Section: Key Policies and Statements
Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	RT-EE-510a.2	Monetary losses as a result of legal proceedings associated with bribery or corruption: \$0
Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	RT-EE-510a.3	Monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations: \$0

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

The Financial Stability Board's TCFD has developed a voluntary, consistent climate-related financial risk disclosure for use by companies in providing information to investors, lenders, insurers, and other stakeholders. For additional information on TCFD, please visit **fsb-tcfd.org**.

MKS' TCFD report is organized around the framework's four main tenets, which are governance, strategy, risk management, and metrics and targets.

Topic	Response		
GOVERNANCE			
Describe the board's oversight of climate-related risks and opportunities	Our Nominating and Corporate Governance Committee of our Board of Directors oversees the ESG program strategy, goals, and initiatives. Our Board of Directors is informed of our key enterprise risks, which include climate-related risks and opportunities, and the actions we are taking with respect to our ESG program.		
Describe the management's role in assessing and managing climate- related risks and opportunities	The ESG Steering Committee meets monthly and consists of key members of the senior leadership team, spanning Operations, Legal, Human Resources, Marketing, and Finance. The ESG Steering Committee guides the process and subsequent management of climate-related risks and opportunities for our business. The ESG Steering Committee reports to the Executive Leadership team, and the ESG Steering Committee Program Leader presents ESG-related performance and progress to our Nominating and Corporate Governance Committee on an annual basis.		
STRATEGY			
Climate-related risks and opportunities identified over the short, medium, and long term	We recognize climate-related risks and opportunities are likely to impact our business in the future. We regularly conduct risk assessments for physical climate-related risks related to our direct operations in partnership with our property insurer, and plan to include climate-related risks more explicitly into our ERM process in our next ERM cycle in 2024.		
	Our technology suite and product portfolio position us to capture climate-related opportunities that can expand our business and add diversity to our service offerings. For example, renewable energy, in particular, solar energy and electric vehicles, are applications that present opportunities for us. We also see an opportunity in some of our traditional businesses (e.g., automotive) in advancing decarbonization efforts, as our customers are driving demand for products that can be manufactured using more efficient production processes. We are ensuring that this demand influences our innovation priorities. We continue to invest R&D, time, and effort into products that transform our world from both a technological and sustainability standpoint, and as more and more of our customers and value chain partners set ambitious decarbonization goals, MKS is committed to supporting their progress in furthering global environmental efforts.		

^{*}We acknowledge that the TCFD was formally disbanded at the COP28 conference in late 2023, and the IFRS Foundation's International Sustainability Standards Board (ISSB) has taken over responsibility of monitoring climate-related risk disclosures effective January 1, 2024. In keeping with industry best practice, we are evaluating the inclusion of ISSB-aligned disclosures under IFRS 1 and IFRS 2 in future reporting cycles and look forward to providing updates in coming years.

Task Force on Climate-Related Financial Disclosures

Topic	Response		
Impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	At MKS, sustainability informs the way we conduct our business every day. We seek to reduce the impact our products have on CO2 emissions, water usage, and waste and hazardous chemistry creation. Further, sustainability is at the core of our innovation strategy. Our customers' sustainability needs help define our next products and solutions. As a leader in our industries, we seek to continue to quantify and report on the sustainability benefits of our solutions.		
	We recognize that decarbonization is high on the agenda for our customers and investors, and these stakeholders increasingly expect us to decarbonize our own operations. We are currently working on a corporate-level roadmap to formalize our efforts, which will include an assessment of the financial impact of implementing such initiatives.		
	We will also work to determine key market and business segments where sustainability, and especially reducing emissions, is an integral value proposition, and redefine go-to-market strategies with targeted value propositions for these segments.		
Resilience of strategy using a 2°C or lower scenario	We have not conducted a scenario analysis at this time.		
RISK MANAGEMENT			
Processes for identifying and assessing climate-related risks	Although we recognize that climate-related risks are relevant to our organization, climate-related risks are not currently separated out in our overall risk management practices.		
	Climate-related physical risks are assessed by us in partnership with FM Global, our property insurance provider for our major sites. We have conducted preliminary, climate-risk assessments on windstorm, flood, wildfire, and earthquake exposure topics for some of our major sites, including our sites in Irvine, CA, Wilmington, MA, and Loiret, France. Following these risk assessments, we worked with our property insurer to develop response and mitigation plans. Furthermore, we have identified key sites to focus on for water management using the WRI Aqueduct Water Risk Atlas for sites with high and extremely high-water stress.		
Processes for managing climate- related risks	Climate-related physical risks are assessed by us in partnership with FM Global, our property insurance provider for our major sites. We have conducted preliminary, climate-risk assessments on windstorm, flood, wildfire, and earthquake exposure topics for some of our major sites, including our sites in Irvine, CA, Wilmington, MA, and Loiret, France. Following these risk assessments, we worked with our property insurer to develop response and mitigation plans. Furthermore, we have identified		
Processes for managing climate- related risks	Climate-related physical risks are assessed by us in partnership with FM Global, our property insurance provider for our major sites. We have conducted preliminary, climate-risk assessments on windstorm, flood, wildfire, and earthquake exposure topics for some of our major sites, including our sites in Irvine, CA, Wilmington, MA, and Loiret, France. Following these risk assessments, we worked with our property insurer to develop response and mitigation plans. Furthermore, we have identified key sites to focus on for water management using the WRI Aqueduct Water Risk Atlas for sites with high and extremely high-water stress. Our ERM process consists of a top-down ranking of corporate risks, with those that are flagged frequently weighted more significantly. A top five emerging risks list and a top five current risks list are developed, and an action plan is prescribed and reviewed by executive leadership. Please see the "Integration of risk processes into		
Processes for managing climate- related risks Integration of risk processes into overall risk management	Climate-related physical risks are assessed by us in partnership with FM Global, our property insurance provider for our major sites. We have conducted preliminary, climate-risk assessments on windstorm, flood, wildfire, and earthquake exposure topics for some of our major sites, including our sites in Irvine, CA, Wilmington, MA, and Loiret, France. Following these risk assessments, we worked with our property insurer to develop response and mitigation plans. Furthermore, we have identified key sites to focus on for water management using the WRI Aqueduct Water Risk Atlas for sites with high and extremely high-water stress. Our ERM process consists of a top-down ranking of corporate risks, with those that are flagged frequently weighted more significantly. A top five emerging risks list and a top five current risks list are developed, and an action plan is prescribed and reviewed by executive leadership. Please see the "Integration of risk processes into overall risk management" section of this framework for further details on our ERM process. However, our climate-related risks, including those identified in FM Global's assessments and through our ERM process, will be discussed and reviewed by the ESG		

Task Force on Climate-Related Financial Disclosures

Торіс	Response
METRICS AND TARGETS	
Metrics used to assess climate-related risks and opportunities	We currently track environmental metrics for our global operations, including our Scope 1 and 2 GHG emissions, energy usage, water usage, and waste data. We are currently working on establishing a consolidated Scope 3 baseline.
	To improve our water and waste management strategies, we are currently using internal KPIs. For example, we have identified key sites to focus on for water management using the WRI Aqueduct Water Risk Atlas for sites with high and extremely high-water stress. For waste, we are working to better understand our waste types and quantities. As a first step, we are focusing on waste data collection at our manufacturing locations.
Scope 1 and 2 GHG emissions (for calendar year 2023)	Scope 1 Emissions: 7,370 tCO2e Scope 2 Emissions (Market-Based): 61,656 tCO2e
	MKS conducted a Scope 3 screening analysis and determined the following Scope 3 categories as relevant to our business: Use of Sold Products and Purchase of Goods and Services. We are currently working on establishing a consolidated Scope 3 baseline.
	Note: these Scope 1 and 2 emissions represent emissions only from the data we have available. Please see the Environmental Performance Metrics section of this report for more information on our data coverage.
Targets used to manage climate- related risks and opportunities and performance against targets	In December 2023, we stated our commitment to reduce our combined Scope 1 and 2 emissions by 42% by 2030 from our 2022 baseline, according to criteria established by SBTi. Following the development of our consolidated Scope 3 baseline, we expect to develop a Scope 3 target in line with SBTi criteria.