



# 2022 ESG Report



“The intersection of sustainability and profitability is well established in our business and has become more and more significant over time.”

2 CEO Message

#### About ESI

4 Who We Are

6 Sustainability Within our End Markets

7 ESI at a Glance

#### Vision & Strategy

8 Our ESG Journey

9 Sustainability Goals

10 Sustainability Approach and Strategy

13 Stakeholder Engagement

14 ESG Awards and Recognition

15 About This Report

#### Sustainable Chemistry

18 From Idea to Sustainable Solution: How we Innovate

20 Chemical Technology Enabling Sustainability: Our Approach

21 Our Sustainable Chemistry

23 Product Stewardship

26 Q&A with our Executive Chairman and President & CEO

#### Environmental Stewardship

27 Our Approach

28 Climate Change

29 Energy and Emissions

31 Environmental Compliance

32 Water and Waste

#### Social Impact

34 Our Approach

35 Occupational Health & Safety

39 Diversity, Equity & Inclusion (DE&I)

41 Workforce Prosperity

44 Volunteering and Charitable Giving

#### Governance & Compliance

46 Our Approach

47 Governance and Accountability

49 Ethics and Compliance

50 Managing Risks

51 Managing a Sustainable Supply Chain

53 Handling Data Security and Privacy

#### Appendix

54 External Memberships, Associations and Certificates

55 Policies, Reports and Disclosures

56 ESG Performance Data

62 Global Reporting Initiative (GRI) Index

77 Sustainability Accounting Standards Board (SASB) Index

79 Task Force on Climate-related Financial Disclosure (TCFD) Index



Element Solutions is a people-centric, customer-oriented company. Our customers choose our solutions, not simply our products.



## A Message from our President & CEO



### Dear Stakeholders,

At Element Solutions, we frequently talk about the power of “focus.” Picking the needle-moving activities and prioritizing them at the expense of other activities. When you combine focus with great people and aligned incentives, magic happens. Nowhere is that more evident than in ESG at ESI. Since we picked up the pen to write our first ESG report in late 2020, this company has taken tremendous strides. We have improved ESG data transparency, set ambitious goals, and made meaningful progress against those goals. This is a case study for how ESG reporting can be impactful. Due to its low-energy and low-discharge manufacturing, our company inherently is more environmentally sustainable than the average in our industry, but the reporting added focus and clarified opportunities for improvement. The need for goals gave us the impetus to set ambitious targets. Combined with the “Elements of our Culture” which encourage us to accept challenges, make commitments and care about our communities and the world at large, we were on our way.

It has not been an easy two years from a global macro perspective. However, with our key strategies well-identified – including “Enabling Sustainability” – the company has been able to manage through short-term volatility steadily without losing sight of our long-term opportunities. Our culture demands we deliver on our commitments – this is true in

all market environments. ESG is no exception. In 2022, we delivered on our sustainable development priorities, including the announcement of our ambitious [Sustainability Goals](#), supporting many of the United Nations Sustainable Development Goals, and the release of our first TCFD Index related to climate risk management. Whether it was the reinforced support behind our customers’ sustainability solutions or our continued responsible sourcing practices while navigating raw material shortages, we trafficked at the intersection of sustainability and customer value propositions. I am grateful to all our employees who allowed us to execute on our vision.

In 2022, we progressed against our long-term Sustainability Goals to improve our impact on the environment and the quality of our company:

- **Sustainable Chemistry:** We reached a milestone this year in terms of revenues from sustainable chemistry. In 2022, our net sales from sustainable products totaled ~\$700 million. We are well on our way to our 2030 goal of \$1 billion.
- **Energy Use & Emissions:** In 2022, we improved the foundation for our program around emissions reduction. We incorporated our recent acquisitions into our baseline and began to work with a third-party expert to expand our decarbonization approach and execution plan.

- **Occupational Health & Safety:** In 2022, we hosted another annual Global Safety Day and have enhanced safety training and observation rates around the world. We experienced a modestly lower total recordable incident rate (TRIR) this year as compared to 2021 and are actively working on specific initiatives to further improve this result.
- **Diversity, Equity & Inclusion (DE&I):** In 2022, we achieved our training goal on our journey to becoming a more inclusive and diverse global organization – 90% of our U.S. employees completed our DE&I training and 100% of our U.S. managers benefitted from a more in-depth inclusion program.

We work very closely with our customers to contribute to a sustainable supply chain that supports responsible manufacturing and human rights. We do this by focusing on providing new and innovative products to the market that improve environmental stewardship. Our products help reduce environmental impact by enabling green products or improving process efficiency, removing hazardous chemicals through green chemistry initiatives or supporting a circular economy through product and package recycling.

We are proving at ESI that improving from an ESG perspective is a long-term value driver.

We see substantial, profitable commercial opportunities associated with improving our customers' environmental impacts. These are driving us towards our target of \$1 billion of sustainability-related sales by 2030. We continue to innovate in this area and introduced several exciting capabilities in 2022. Some of the greatest breakthroughs are in our water treatment business with the launch of Shadow<sup>2D</sup>, a near-zero discharge system allowing nearly 99% of processed water to be re-used during direct metallization processes. This innovation allows customers in our core circuitry business to metalize circuit boards using less than 1% of the water they would have used in prior processes. Given that a large portion of the printed-circuit fabrication industry is located in water-stressed areas, particularly in China, this is a great opportunity to help our customers and the planet. We have innovated new equipment processes for existing customers in the industrial solutions business as well. Along the way, our installed base of ancillary water treatment equipment continues to prevent pollution and provide value through metals reclaim.

We have many other examples of sustainable chemistry in other businesses. Our solutions allow the automotive industry to move away from Hexavalent Chromium, which continues to gain traction with leading OEMs. Our direct metallization process minimizes the use of formaldehyde and other hazardous materials while also reducing water

and power consumption and waste generation. This process remains the industry standard. The list is long and growing.

It has been rewarding to see all of this internal progress recognized by third parties. Our improved ESG transparency and reporting have translated into strong recognition in our industry. We are proud of our EcoVadis medal for the second year in a row, improving to a Gold medal in 2022 from Silver in 2021. We were also included for a second time on Newsweek's list of America's Most Responsible Companies.

All of this contributes to a more engaged and satisfied workforce despite an increasingly challenging backdrop. In our 2022 engagement survey, we saw an 82% response rate with higher scores reflecting more positive sentiment on 97% of the questions as compared to 2020. We care about and invest in our people and their communities. Since our 2020 ESG report, we have donated over \$1.6 million with the ESI Foundation either matching employee donations or giving to causes they select. Our people are the most critical ingredient in our formulas, and therefore our sustainability strategy demands that we attract, develop and nurture a diverse, high-performance team. We are proud of our progress in this area, but there is more we can -- and will -- accomplish.

As we look to 2023 and beyond, we are excited to continue to engage with our customers, employees and other stakeholders on our sustainability journey. We are committed to delivering progress against our ambitious Sustainability Goals every year, adapting to the ever-evolving technology needs of our industry, and providing high-quality disclosures as reporting standards continue to evolve. We look forward to continuing this discussion and invite you to read the exciting detail of our progress and initiatives in this new report.



**Benjamin Gliklich**

*President & CEO*

# About ESI

## Who We Are

Element Solutions is a people-centric, customer-oriented company focused on innovation, quality and technical service. Aligned with our core value of "Enabling Sustainability," our sustainability vision is for our chemical technology to transform the markets we serve by driving environmentally and socially conscious innovation, growing our Research & Development (R&D) pipeline, and developing an expanded offering of sustainable solutions to meet and exceed the expectations of our customers, employees and other stakeholders.

We provide a broad range of chemical technology that enhances the performance of products people use every day. We prioritize our customers' success, which in turn drives opportunities for our employees and value for our stockholders. Our formula for value creation starts with our passion for R&D and innovation followed by an unrelenting focus on operational excellence. This formula, combined with our asset efficient business model, underpinned by organic growth and prudent capital allocation, drives our sustainable value creation.

We strive to embody the five "Elements of our Culture," our "5Cs": Challenge, Commit, Collaborate, Choose and Care. These core values are the foundation of our organization which our employees embrace in their interactions with customers, colleagues and other stakeholders to drive financial performance and create a rewarding work environment. Our executive offices are located in Fort Lauderdale, Florida, USA.

To learn more about our business, including our key markets and history, please visit our [Overview](#) and [Our History](#) webpages.

\*Based on our 2022 employee engagement survey

## ESI Worldwide

(as of December 31, 2022)

**\$2.55<sup>B</sup>**

Net Sales in 2022

**5,322**

Full-time employees

**50+**

Countries

## Businesses & Brands

(as of December 31, 2022)

**MacDermid Enthone**  
INDUSTRIAL SOLUTIONS

**MacDermid**  
GRAPHICS SOLUTIONS

**MacDermid**  
OFFSHORE SOLUTIONS

**MacDermid**  
ENVIO SOLUTIONS

**MacDermid Alpha**  
ELECTRONICS SOLUTIONS

**FERNOX**

**alpha**

**kester**

**MacDermid Enthone**

**compugraphics**

**ELECTROLUBE**

**+90%**

More than 90% of our employees believe the work they do every day contributes to ESI's overall success\*

## Enabling the Products of Everyday Life

The capabilities and outcomes that Element Solutions enables are present in countless moments every day— from picking up a smartphone to driving a car or opening a package of food. In many cases, we offer a full suite of technologies with complementary capabilities that provide a complete functional solution to our customers.

We regularly develop new products and processes and leverage our existing technologies and global footprint to profitably enter new markets or pursue market share. We also strategically focus our R&D resources on developing more sustainable solutions that retain performance attributes and technology leadership while reducing hazardous content.

We deliver our chemical solutions through two business segments:

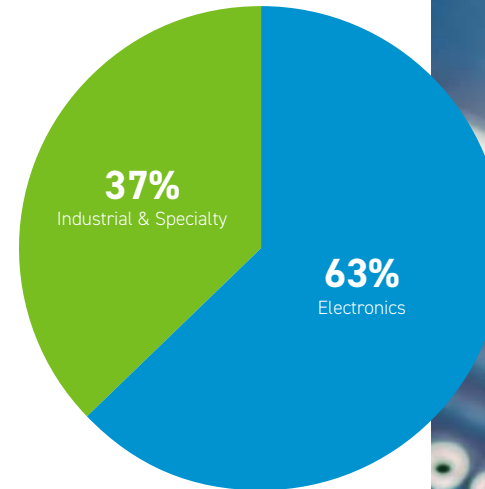
### Electronics

Our Electronics segment researches, formulates and sells specialty chemicals and material process technologies for all types of electronics hardware, from complex printed circuit board designs to advanced semiconductor packaging. In mobile communications, computers, automobiles and aerospace equipment, its products are an integral part of the electronics manufacturing process and the functionality of end-products.

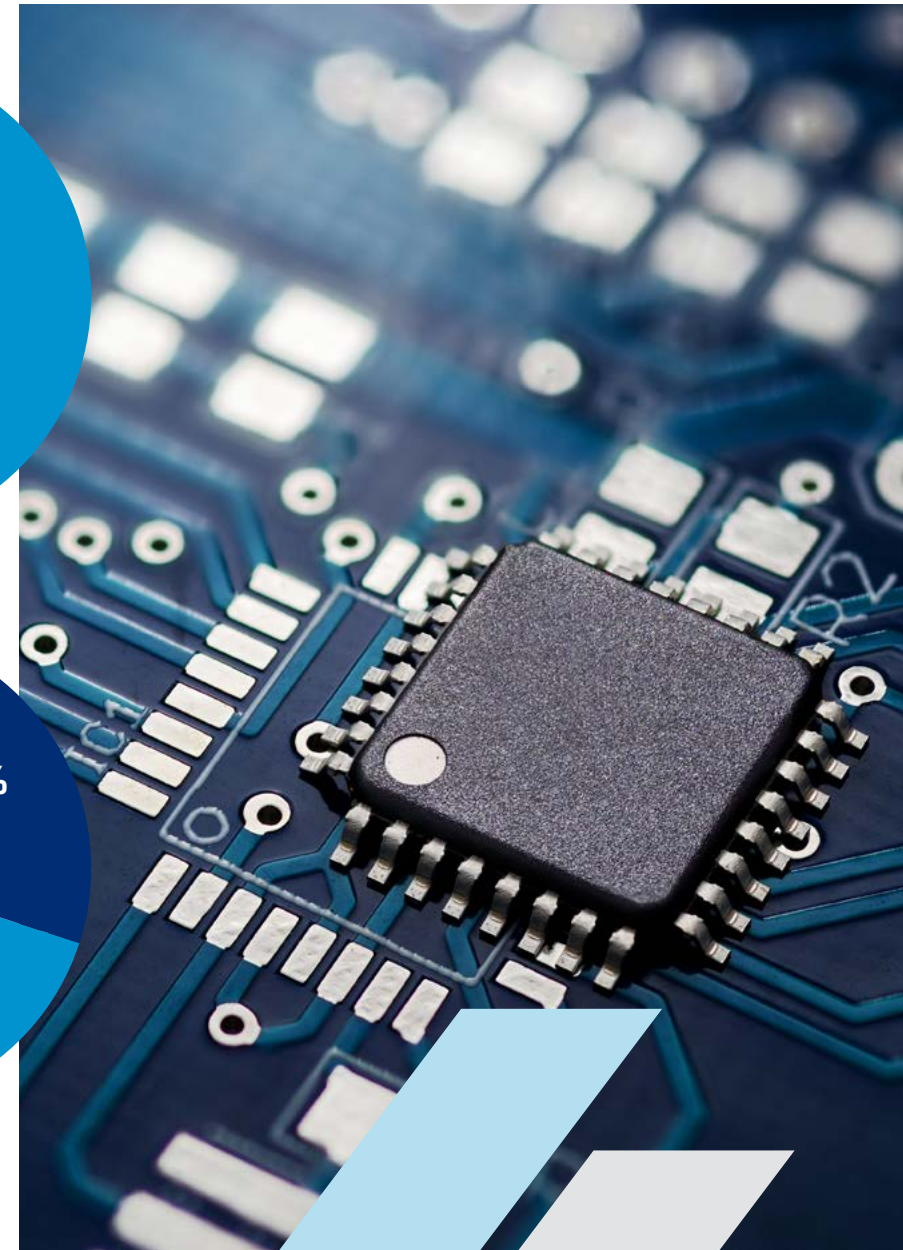
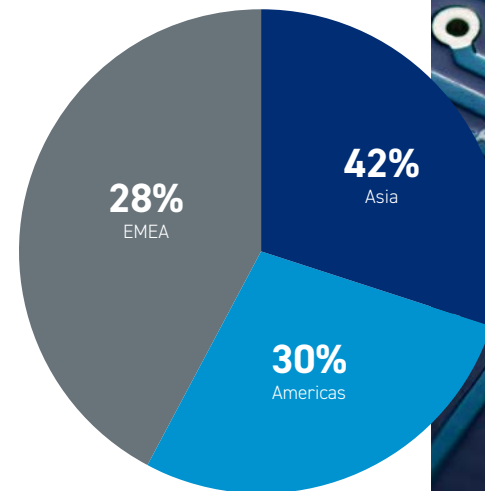
### Industrial & Specialty

Our Industrial & Specialty segment researches, formulates and sells specialty chemicals and process technologies that enhance surfaces or improve industrial processes in diverse industrial sectors from automotive trim to transcontinental infrastructure and from high-speed printing to high-design faucets.

### 2022 Segment Net Sales



### 2022 Regional Net Sales



# Sustainability Within Our End Markets

We develop solutions, including sustainable products, that are critical to the performance of products across a breadth of industries:

## Automotive



We are an industry leader in silver sintering technology that enables inverter efficiency, a critical component for electric vehicle charging and energy management.

## Mobile & Wearables



Our wide variety of lead-free, VOC-free, halogen-free solder and technologies for printed circuit board assembly allow our customers to comply with increasingly stringent environmental regulatory standards.

## Computing & Telecom



Our Shadow<sup>2D</sup> direct-metallization technology, which offers printed circuit board manufacturers a sustainable alternative to traditional electroless copper plating, eliminates the need for precious metals and toxic chemicals while utilizing over 99% less water and up to 57% less power consumption.

## Consumer Goods



Our proprietary evolve and evolve Bond pre-treatment solutions enable REACH compliant decorative plating without the use of Hexavalent Chromium in automotive and other consumer goods categories.

## Printed Packaging



Our thermal processing equipment solutions enable major companies in the industry to eliminate solvents from their platemaking processes and reduce CO2 emissions while maintaining the same print quality.

## Energy & Resources



Our Oceanic Environmental Control Fluid (ECF) is a leading product in its industry formulated to meet design-life requirements for a broad range of temperatures within subsea systems.

## Water Treatment & Waste Reduction Solutions



Our EnvioTECH water and materials recycling systems help customers recover over 90%\* of materials such as nickel or copper from waste streams for re-use in the manufacturing process.

\*Management estimates



## The Elements of Our Culture: The 5Cs

### Challenge

We establish ambitious goals, take calculated risks, maintain high standards and seek to exceed expectations.

### Collaborate

We value teamwork, with our customers and our colleagues, in pursuit of excellence and improvement in everything we do.

### Commit

We make commitments and hold ourselves accountable, individually and as teams, to deliver on them.

### Choose

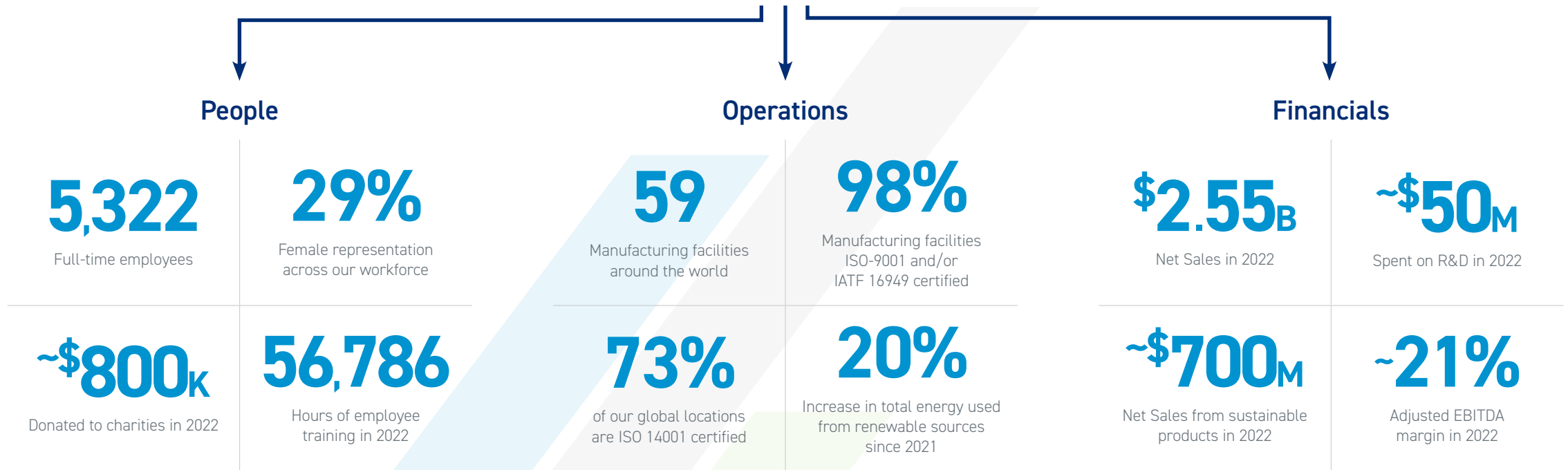
We empower our employees to make choices and take calculated risks. We choose to hire, recognize and reward people who demonstrate good judgment and choose to have good attitudes and strong work ethics.

### Care

We care about our customers, our colleagues, our environment and our place in the world at large.

## ESI at a Glance

Our employees embody the 5Cs of our culture in their interactions with customers, colleagues and other counterparties to drive sustainable financial performance and create a rewarding environment.





# Vision & Strategy

## Chemical Technology Enabling Sustainability

Our ESG vision is for our chemical technology to enable sustainability in the markets we serve with environmentally and socially conscious innovation. We view sustainability as the correct path for both the planet and the success of our businesses. We believe deeply that ESG factors impact our ability to support customers, create opportunities for our people, mitigate risks, enhance our resilience and reputation, and overall contribute to long-term value creation.

## Our ESG Journey

In 2020, we began our official ESG journey with our first multi-stakeholder materiality assessment. For this assessment, we:

- Developed a list of relevant ESG topics from internal and external sources, including criteria from our business strategy, relevant ESG reporting guidance, such as the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) Chemical Sector Disclosures, and ESG information disclosed by our industry peers
- Engaged our key stakeholders, including our leadership team, internal subject matter experts, employees, investors, suppliers and customers to understand their ESG priorities as they relate to Element Solutions
- Benchmarked ESG topics and trends across our industry peers
- Discussed the findings of this materiality assessment with our leadership team to align on the ESG topics most material to us in achieving our business objectives and to our stakeholders

In early 2021, we published our inaugural 2020 ESG Report. In this report, we included the results of our assessment, addressed our sustainability initiatives and committed to setting company-wide goals across four key areas:

- Increasing growth through sustainable chemistry solutions
- Reducing our energy use and emissions
- Improving occupational health & safety performance
- Increasing diversity, equity & inclusion (DE&I)

Since then, we have made meaningful progress toward those objectives while formalizing our ESG approach and strategy. In early 2022, we announced ambitious [Sustainability Goals](#) within each of these key areas. These goals align with multiple United Nations Sustainable Development Goals (SDGs) and further articulate our commitment to ESG principles and their integration into our business strategy and day-to-day operations.

In early 2022, we also published our 2021 ESG Data & Resources document, which supplemented our 2020 ESG Report with updated 2021 data, GRI and SASB disclosures and our first Task Force on Climate-Related Financial Disclosures (TCFD) Index.

Throughout the year and in connection with the preparation of this 2022 report, we engaged with key stakeholders to further validate or monitor changes in material topics and inform the development and reinforcement of our sustainability strategy. We saw the increasing importance of certain social topics, such as occupational health & safety and DE&I. Other stakeholder interactions, including with our investors and customers, underscored the continuing importance of environmental topics, such as greenhouse gas (GHG) emissions and climate change. For more information on our engagement efforts, see [Stakeholder Engagement](#).

We are now firmly grounded in our ESG strategy, which is to improve our sustainability profile while driving long-term value and accountability. We have also taken meaningful steps toward a consistent and transparent disclosure framework as well as a more formal ESG governance, as described in [Sustainability Approach and Strategy](#) and [Governance & Compliance](#).

# Sustainability Goals

In early 2022, we set ambitious Sustainability Goals that are representative of key issues and opportunities for ESI. These are within short- and longer timeframes, focused on continuous improvement:

 Achieved  On Track

Focus Area	Goals	Progress to Date	2022 Progress	Read More
<b>Sustainable Chemistry</b>	Reach sustainable chemistry sales of \$1 billion by 2030		We achieved ~\$700 million of net sales from sustainable products, which represent ~28% of our 2022 total net sales and an increase of ~33%* compared to our 2020 baseline.	Page <a href="#">20</a>
<b>Energy Use &amp; Emissions</b>	Reduce our combined Scope 1 and Scope 2 GHG emissions intensity by 25% per metric ton of production by 2030 from a 2020 base of 0.158 MT CO2e/MT of production		Our combined Scope 1 and Scope 2 GHG emissions intensity was 0.156 MT CO2e/MT of production or an intensity improvement of 1.3% as compared to 2020.	Page <a href="#">29</a>
<b>Occupational Health &amp; Safety</b>	Reduce our total recordable incident rate (TRIR) every year as we strive toward achieving zero significant safety incidents		Our TRIR was 0.95 or a decrease of 2% as compared to 2021.	Page <a href="#">35</a>
<b>DE&amp;I</b>	<b>Training</b> Launch a DE&I awareness training required for all U.S. employees and achieve a completion rate of at least 80%. by 2023		90% of our U.S. employees completed a DE&I training.	Page <a href="#">39</a>
	100% of our U.S. managers to complete more in-depth inclusion training by 2023		100% of our U.S. managers completed a more in-depth DE&I training program.	Page <a href="#">39</a>
	<b>Recruiting</b> Attain diverse candidate slates for 80% of U.S.-based roles by 2023		84% of U.S.-based roles filled in 2022 had at least one diverse candidate.	Page <a href="#">39</a>
	Attain diverse candidate slates for 90% of U.S.-based roles by 2024		We intend to maintain this successful candidate slate by continuing our outreach initiatives towards our 2024 goal of 90%.	Page <a href="#">39</a>
	<b>Support &amp; Connectivity</b> Fund and launch at least three employee resource networks for diverse populations by 2023		Three employee resource groups were created offering supporting resources to targeted groups: the ECN (Early-in-Career Network) for new hires, the Asian Employee Resource Group and the Women's Resource Group.	Page <a href="#">39</a>

\*Adjusted to exclude the impact of currency changes and certain pass-through metal prices.

## Sustainability Approach and Strategy

At ESI, we enable sustainability to fulfill our role as a responsible corporate citizen and to create commercial value. We consider ESG to be a business imperative, an extension of our growth strategy and a reflection of our values. ESG is embedded in our DNA and demonstrated in our innovation process, manufacturing efficiency and product quality. It is also reflected in our culture of DE&I, adherence to strong safety and governance principles, volunteering initiatives in the communities where we live and operate, and rigorous focus on continuous improvement.

Our ESG progress lies in committing to our ESG initiatives, which means being able to assess our sustainability profile and implement and track relevant key performance indicators (KPIs) for improvement, where needed. Our CEO is directly accountable to our Board for our sustainability initiatives. Our CEO sets internal ESG objectives for our CFO and our Director of ESG Strategy which involve deployment of sustainability initiatives around the world and across our business operations. Our Director of ESG Strategy, certain members of our Sustainability Council and other business unit leaders also have sustainability-

related performance objectives, which are factored into their performance reviews.

Introducing more green capabilities through innovative R&D is a growing focus for us and the industries we serve. Our sustainable solutions help our customers achieve ambitious business and environmental goals. We are also committed to act as responsible stewards, which means providing a high-level of protection to human health & safety and the environment, not only in the way we source raw materials and manufacture and deliver our products, but in the way our products are used and handled by our customers and other end-users.

In our Mergers & Acquisitions (M&A) process, we take the environmental impact of target companies seriously. Our acquisition of the Coventya Holding group in September 2021, for example, contributed to the reduction of our overall greenhouse gas (GHG) emissions intensity. We also strive to pursue the acquisition of businesses with innovative and sustainable chemistry portfolios.

Organically, ~7% of our 2022 capital expenditures was dedicated to ESG action items, including sustainability initiatives and health & safety improvements. In 2022, integration of ESG into our daily operations continued to take shape and we created new cross-functional and regional teams to manage and develop our ESG strategy and actions.



Our sustainability approach and strategy are based on the following key principles:

### Assessing Material ESG Areas & Related Risks

As a global company, we face certain trends and risks inherent in international trade and respond to ESG concerns in many jurisdictions. Our 2020 materiality assessment helped us identify and focus on the material ESG issues and opportunities for our business. We keep refining this assessment by proactively and regularly monitoring market trends and engaging with our key stakeholders in order to continue to identify and address their concerns.

### Integrating ESG into our Business Processes

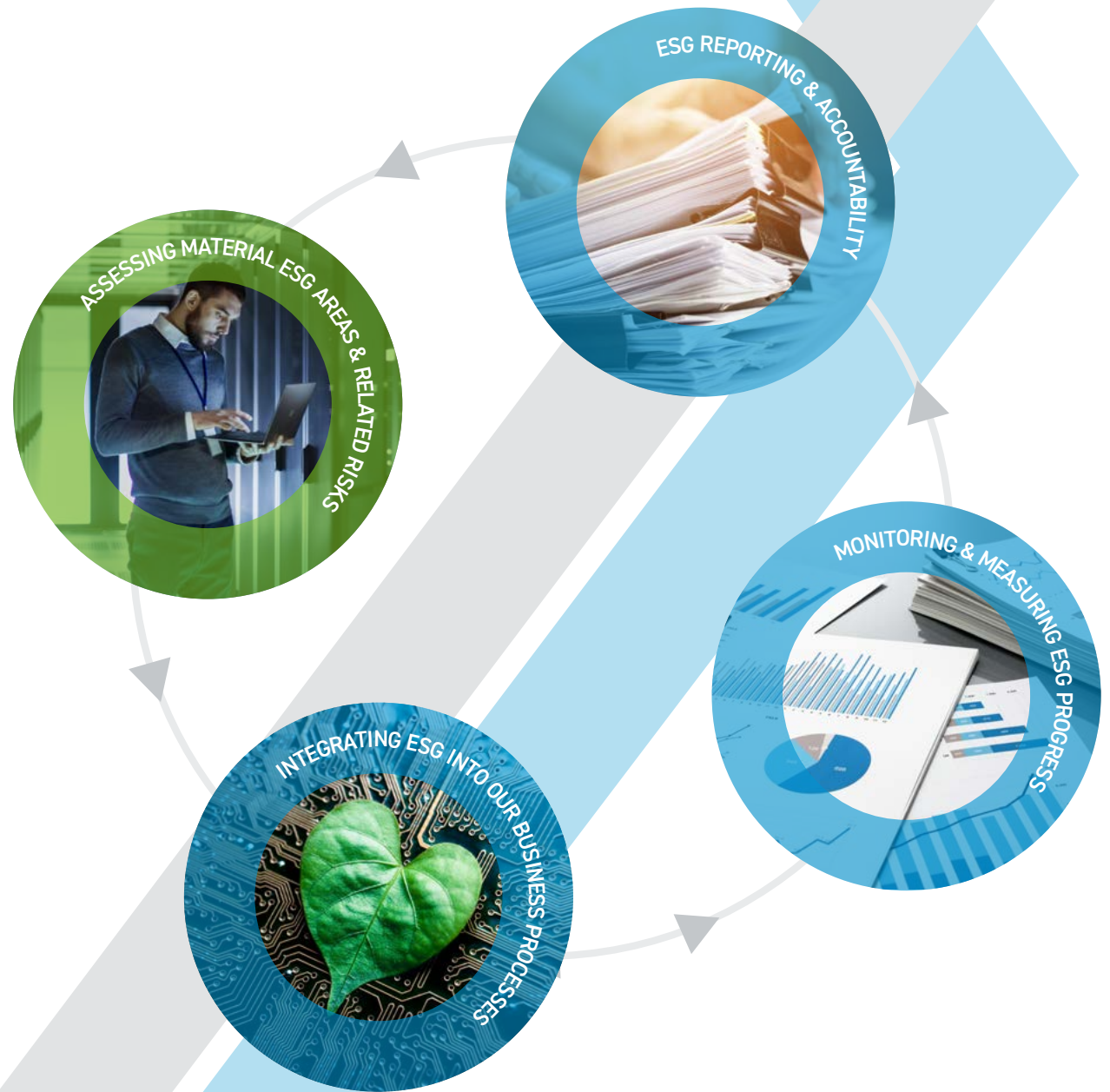
The identification and management of ESG risks and opportunities is an integrated part of our innovation process, supply chain activities and enterprise risk management approach. Understanding the key challenges facing our customers helps us focus our innovation efforts, such as reducing GHG emissions or water use. Understanding our internal footprint and impact similarly helps us define our internal improvement priorities and risk management efforts.

### Monitoring & Measuring ESG Progress

We are committed to put in place robust performance monitoring systems to track and measure our progress within our key ESG areas as well as against our Sustainability Goals and other ESG objectives. With respect to ESG data, we strive to be disciplined and consistent in what we measure with strengthened systems for collecting data and the implementation of processes for improvements.

### ESG Reporting & Accountability





By providing transparent disclosure, we hold ourselves accountable for progress on our sustainability efforts. Transparent disclosure is also a robust tool for engagement with our customers, stockholders, employees and community members. Our ESG disclosures follow industry-leading standards such as the GRI and SASB, and the TCFD framework.





## Our ESG Strategy and Disclosure Framework

Our ESG strategy and disclosure framework centers on four strategic sustainability pillars and areas of action: Sustainable Chemistry; Environmental Stewardship; Social Impact; and Governance & Compliance. These areas reflect how we are working as a team to deliver solutions to global challenges and supporting multiple United Nations SDGs:

Our Purpose		Chemical Technology Enabling Sustainability			
<b>Our Sustainability Pillars</b>		<b>Sustainable Chemistry</b> Improve environmental footprints through innovation	<b>Environmental Stewardship</b> Protect the environment & our planet	<b>Social Impact</b> Promote equity & well-being	<b>Governance &amp; Compliance</b> Increase accountability & transparency
<b>Our Focus</b>		<ul style="list-style-type: none"> <li>Growth through sustainable chemistry solutions</li> </ul>	<ul style="list-style-type: none"> <li>Address climate change</li> <li>Reduce our energy use and emissions</li> <li>Reduce our operational footprint</li> </ul>	<ul style="list-style-type: none"> <li>Improve occupational health &amp; safety performance</li> <li>Promote DE&amp;I</li> </ul>	<ul style="list-style-type: none"> <li>High standards of business conduct and ethics</li> <li>Accountability</li> <li>Commitment to transparency</li> </ul>
<b>Material ESG Topics</b>	High materiality	Innovation for sustainable products Green chemistry Circular economy Product safety and transparency	Climate change Energy and emissions Sustainable chemistry Environmental compliance	Employee health and safety Diversity, equity and inclusion Talent attraction and development Product stewardship Volunteerism and charitable giving	Governance and accountability Ethics and compliance Reporting approach Commitment to quality Sustainable supply chain
	Moderate materiality		Water management Waste management	Labor practices	Stakeholder engagement Data security and privacy
<b>Our Sustainability Focus Areas</b>		Increasing growth through sustainable chemistry solutions  	Reducing our energy and emissions  	<ul style="list-style-type: none"> <li>Improving occupational health &amp; safety performance</li> <li>Promoting DE&amp;I</li> </ul> 	Increasing transparency with improved ESG disclosures  

# Stakeholder Engagement

We engage with our stakeholders including employees, investors, customers, suppliers, public policy makers, communities and trade organizations through various channels for their input on relevant issues, including ESG matters. The chart below lists each stakeholder group and examples of ways we engaged with them during 2022:

## How We Engage with Employees

- Culture surveys, ESG-focused surveys, interactive company intranet, "Idea Chest" suggestion box, and physical and virtual displays of our "5Cs"
- Quarterly global townhalls with Q&As, on-site town halls, annual Global Safety and Quality Days, company-wide announcements (in multiple languages), and newsletters focused on sustainability, community service, environmental compliance, health & safety and employee wellness
- Anonymous whistleblower compliance hotline
- Engagement of employee labor unions and collective bargaining groups
- Training on various subjects, online or in person
- Engagement through our ESI Cares program

## How We Engage with Investors

- Regulatory filings, disclosures and press releases
- Annual stockholder meetings
- Conference calls and meetings, including Investor Days and non-deal ESG roadshows
- Investor Relations website and phone line
- Investor feedback shared with the Board of Directors on a regular basis

## How We Engage with Customers

- Industry events, on-site visits, meetings and environmental reviews focused on ESG actions and product offerings
- Key customers engagement on material ESG issues, including meetings, presentations, technology roadmap exchanges, VOC (voice-of-customer) surveys, and responses to customers' ESG requests
- Dedicated support teams (by phone/email)
- Partnerships with customers for technical certifications

## How We Engage with Suppliers

- On-going interaction with procurement and compliance teams
- Review and acknowledgment of our Supplier Code of Conduct
- Coupa Risk Assess (CRA) screening
- Annual ESG questionnaires, including conflict minerals and other minerals of concern

## How We Engage with Government/Regulators

- Interaction with government and intergovernmental bodies on evolving regulations and necessary filings and licenses
- Regular responses to inquiries/audits
- Commitment to the OECD's due diligence guidance on responsible supply chains where applicable
- Support industry groups through association memberships

## How We Engage with Communities

- Global volunteering activities through ESI Cares
- Donations to charities through local Charitable Committees with support from the ESI Foundation
- Collaboration with academic research institutions
- Conflict minerals management and sustainable sourcing practices

## How We Engage with Trade Organizations

- Engagement through trade association events, advisory panels, issue-specific forums and informal best practices sharing



## Strategic Research Partnerships

### Purdue University, Indiana

In 2022, we continued our two-year project partnership on solder joint microstructure evolution and aging under thermal stress. This initiative follows a five-year research program with Purdue focused on low temperature solder materials.

### Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), India

In 2022, we partnered with JNCASR, a multidisciplinary research institute, to measure outgassing of solder pastes and understand the mechanism of voiding in solder joints.

## ESG Awards and Recognition

ESI operates with a strong commitment to integrity, innovation, sustainability and social responsibility. In 2022, we were recognized by several leading organizations for our commitment to operating responsibly and sustainably:



### EcoVadis – Gold Medal

In 2022, ESI received a Gold Medal from EcoVadis for our recent sustainability efforts, after a Silver Medal in 2021. This latest achievement places ESI among the top 10% of companies assessed by EcoVadis, who provides valuable information to customers about environmental, social, ethics and supply chain sustainable practices.



### Newsweek – America's Most Responsible Companies List

For the second consecutive year, ESI has been recognized as one of "America's Most Responsible Companies" by Newsweek Magazine. In its assessment, Newsweek considered the publicly available ESG data of 2,000 of the largest U.S. headquartered public companies across 14 industries and a survey of 11,000 participants related to these companies' ESG performance.



### WEL – Breakthrough Award

In October 2022, ESI was honored at the Women Executive Leadership (WEL) 2022 Corporate Salute Event for helping to accelerate the advancement of gender diversity in boardrooms and C-Suites. The Breakthrough Award honors companies like ours who have named one or more women to our Board of Directors for the first time since WEL's Census in 2017. Since that year, ESI appointed two female directors in 2018 and 2021, representing 25% of its current Board.



## About This Report

Unless otherwise noted, this 2022 ESG Report covers the period of January 1, 2022 to December 31, 2022 and provides updated and supplemental qualitative and quantitative information on our approach to managing ESG topics that are material to our company. We intend to continue to report on ESG matters and progress toward our [Sustainability Goals](#) going forward. For prior sustainability publications and additional ESG information, see our [Sustainability Website](#).

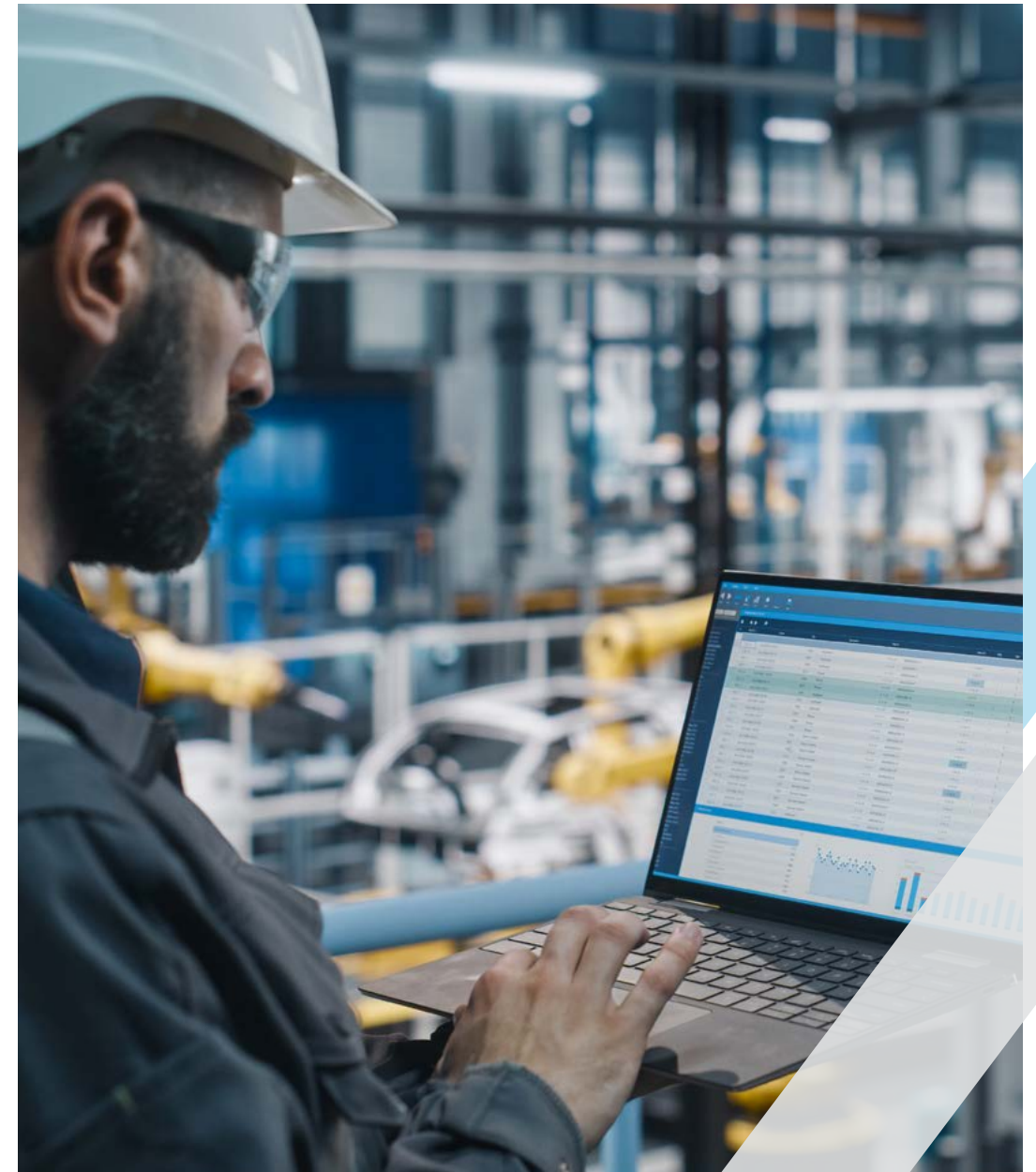
### Report Boundaries

In this Report, the terms "Element Solutions," "we," "us," "our," "ESI," and the "company," refer to Element Solutions Inc, a Delaware corporation, and its consolidated subsidiaries, taken as a whole, unless the context otherwise indicates. The environmental data covers 52 of our 59 manufacturing facilities that were operational in 2022. We excluded de minimis locations and standalone on-site labs, offices and warehouses per our materiality guidelines. 14 of the 52 manufacturing facilities in scope were acquired in 2021 and early 2022 and integrated into our sustainability reporting. These sites in scope, representing 97% of our 2022 net sales revenue, were selected based on quantitative factors, such as manufacturing production, sales volumes, energy consumption, waste generation and personnel on site.

Where needed, environmental data has been retroactively updated to reflect these acquisitions and allow comparability of data over time. Additional updates to data and reporting methodology are noted throughout this Report. Our updated social data is based on our 5,322 full time employees as of December 31, 2022.

### Internal Assurance and Data Quality

We collect monthly environmental data from each of our sites in scope for reporting, following our internal guidelines. The data is validated throughout the year both locally and centrally as part of our internal data validation process, including automated comparative analytics, internal site benchmarking and support sampling to mitigate the risk of manual errors. Our Corporate Audit Team also validates our ESG data and data collection process independently following the same approach as in our internal audit plan. We have a robust controls framework that includes first line site-based controls to ensure adherence to our policies and procedures. We maintain multiple IATF 16949, ISO 9001 and ISO 14001 certifications, second line functions including Corporate Environmental Health and Safety (EH&S) and Regulatory that oversee risk control and compliance, and third line internal audit that provides independent risk assurance and oversight. We plan to expand the involvement of our Internal Audit team in our ESG efforts, including incorporating a recurring ESG data validation process into our annual internal audit plan.







Where needed, historical data was adjusted in our reporting system and explained within this Report for data quality and transparency purposes.

For our 2030 Energy Use & Emissions Sustainability Goal, we reset our 2020 baseline to retroactively include 13 of the sites acquired in 2021 and 2022 due to their aggregate impact on the achievement process of this goal. For goal-related updates, the threshold for restating our baseline was a 5% change resulting from an acquisition, divestiture or other event. These adjustments are highlighted and explained throughout this Report.

### Reporting Guidelines and Content

This Report has been prepared in accordance with the GRI Standards (using the 2021 version where applicable), the SASB Chemical Sector Disclosures and the TCFD Recommendations (where applicable). Our 2022 ESG performance data tables and GRI, SASB and TCFD indexes can be found in the Appendix of this Report. Our updated 2022 TCFD Index demonstrates our ongoing commitment to managing climate-related risks and opportunities across our businesses.

### Reporting Uncertainties

Non-financial information is subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different, but acceptable

measurement techniques can result in different measurements. The precision of different measurement techniques may also vary.

For purposes of this Report, the term "material" is used to refer to key sustainability topics relevant to ESI and should not be read as equating to any use of this word in the company's filings with the Securities and Exchange Commission. This Report also contains data from third party sources, which are not controlled by ESI and cannot be fully verified.

Unless the context otherwise indicates or requires, all our product names, trade names, trademarks, service marks or logos used or referenced in this Report are part of the company's intellectual property, although the "©" and "TM" trademark designations may have been omitted. All rights to such intellectual property are reserved.

### Special Note Regarding Forward-Looking Statements

This 2022 ESG Report includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 relating to, without limitation, ESI's Sustainability Goals and other sustainability topics that are not historical facts or information. These forward-looking statements will often contain words such as "expect," "anticipate," "project," "will," "should," "believe," "intend," "plan," "assume," "estimate,"

"predict," "seek," "continue," "outlook," "may," "might," "aim," "can have," "likely," "potential" "target," "hope," "goal," "priority," "guidance," "confident," "committed," "designed" or "strive" and variations of such words and similar expressions. These statements should be evaluated with caution considering the many risks and uncertainties inherent in ESG reporting and the company's business. These statements are based on expectations, assumptions, estimates and other projections about the company, only speak as of the time of such statements, and are not guarantees of future results or performance. The company does not undertake or plan to update or revise them, whether as a result of new or more information becoming available, changes in expectations, assumptions, estimates or results, future events or otherwise. Actual results of the company may differ materially from any future results expressed or implied in the forward-looking statements if one or more of the underlying projections prove to be inaccurate or are unrealized.

There can be no assurance that such forward looking statements will prove to be correct. Any public statements or disclosures by the company following this Report that modify or impact any of the forward-looking statements contained in or accompanying this Report will be deemed to modify or supersede such outlook or other forward-looking statements.

# Sustainable Chemistry



Enabling Sustainability is a pillar of ESI's strategy. It is both good business and good for the world in the context of global environmental protection and the United Nations' SDGs. The market leading and innovative solutions we offer reduce our health & safety and environmental impacts while supporting our sustainability and profitability goals as well as those of our customers. We are also aware and commercially mindful of the increasing expectations relating to sustainability from our employees, our customers, our end-users and the communities in which we work and live. We view our sustainable offerings as our responsibility as a good corporate citizen but also as opportunities to create new revenue streams.



Analyzing customer samples at our research & development lab in Waterbury, CT.

In 2022, we continued our focus on sustainable chemistry through customer engagement, regulatory awareness and discipline in our product innovation processes. Aligned with this focus, we set a company-wide goal to reach sustainable products sales of \$1 billion by 2030. For more information, see our [Sustainable Chemistry Goal](#).

We focus on sustainable chemistry in three key opportunity areas:

- **Removing hazardous chemicals or substances of concern** in new products or products in which they are currently used through green chemistry while retaining the functionality of incumbent processes
- **Reducing environmental impact with innovation** that reduces energy usage, water withdrawal and yield loss through our value chain
- **Enabling the circular economy** through use of bio-based and recyclable materials as well as direct participation in reclaim and/or water or waste treatment processes

Sustainable Chemistry Net Sales	2020	2021	2022
Percentage of net sales from sustainable products	~25%	~27%	~28%
Percentage of net sales from products designed for use-phase efficiency*	10%	10%	11%

\*Use-phase efficiency as defined by SASB RT-CH-410a.1.



Our Head of Chemistry from our Fernox business at the lab in Woking, UK.

## From Idea to Sustainable Solution: How We Innovate

Our R&D teams collaborate with our product marketing, regulatory and safety teams to lead the development of our sustainable chemistry and processes. When designing new products, we consider many features and functions, usually beginning with specifications from our customers and original equipment manufacturers (OEMs). We are also mindful of regulatory requirements in the markets we serve while always aiming for best-in-class quality and safety. In many cases, we go beyond meeting legislative requirements and industry standards using a "sustainability scorecard" methodology. In this R&D process, we consider the use of bio-based materials, the reduction of hazardous materials and the full lifecycle impact of our new solutions (including disposal and recycling).

### Design and Implementation Process

Sustainability is a critical and challenging aspect of the supply chains in which we participate and an increasing focus for our business and the business of our customers. We view the active management of environmental challenges as an opportunity for revenue growth while reducing risk for our company and our customers. Our sustainable chemistry is inspired by:

**Customer & market needs:** We regularly seek ideas to generate new or enhanced products. Our product innovation process includes:

- Actively engaging customers and OEMs to understand their evolving expectations and concerns
- Regular R&D meetings to set strategic priorities and roadmaps for our own operations as well those of our customers
- Conducting regular market analysis and benchmarking

**Regulatory changes:** We consistently monitor and assess the global, regional and local regulatory landscape for forthcoming changes that might impact our business or present innovation opportunities. We aim to be proactive and adjust our products or processes as required in advance of any regulatory changes impacting the status of chemicals we use.



## Our Scorecard Approach

We design and develop new products through a stage-gate process, which allows us to evaluate their sustainability potential and understand their environmental impact relative to existing processes. This stage-gate process includes a sustainability scorecard, which consists of an analysis by our project teams of the potential impacts of the new product over a wide range of environmental, health & safety and social criteria.

Elements of our scorecard methodology generally include:

- **Raw Materials Impact:** We aim, where possible, to prioritize raw materials that are biodegradable. We also aim to include bio-based precursors, or materials sourced from recycled, local and/or conflict-free sources.
- **Energy Use:** We focus on initiatives designed to reduce the GHG emissions of our company, customers and value chain, including lowering operating temperatures or increasing process and/or material performance efficiency with chemistry and equipment solutions.
- **Waste Reduction:** We strive to eliminate or minimize the use of Substances of Very High Concern (SVHCs) or similar materials. We reclaim, where possible, materials and re-use them. We also develop specialized equipment that enables recovery and re-use of materials, such as copper, nickel and chromium.

- **Water Use Reduction:** We aim to reduce water used in our supply chains by streamlining processes and/or reducing or eliminating process complexity.
- **Recyclability:** We aim to aid recyclability of our products through the elimination of materials that limit recycling options.
- **Social Impact:** We work on improving the safety of manufacturing processes in both our internal and our end-user production facilities by focusing on the health & safety of our employees and our customers.

## REACH Compliance

Raw materials are assigned unique identification numbers by the Chemical Abstracts Service (CAS) and the European Chemicals Agency (ECHA). CAS and ECHA numbers allow us to confirm whether these materials are compliant with applicable regulatory requirements, in particular with respect to the European regulation for Registration, Evaluation, Authorization and restriction of Chemicals (REACH). When CAS or ECHA numbers are not available, we either request that our suppliers certify compliance, or we certify compliance ourselves. Where required, Safety Data Sheets (SDSs) are updated and communicated to our customers in accordance with the REACH requirements.

## Scorecard Methodology to Validate New Products

### Value Contribution to UN SDGs

- Good health & well-being
- Sustainable cities and communities
- Responsible consumption and production
- Climate action (energy & waste reduction)
- Clean water and sanitation
- Life below water
- Life on land

### Systematic Review of Product Attributes

- Raw material impact
- Energy use reduction
- Waste reduction
- Durability
- Recyclability
- Social impact
- Efficiency



Our Alpha Recycling Services reduce internal and customer reliance on tin mining





## Chemical Technology Enabling Sustainability: Our Approach

Our commitment to innovation, product sustainability and technical capability help solve our customers' challenges and meet the increasing demand for sustainable solutions in our end markets. We view these offerings as an opportunity to collaborate with our customers and OEMs as well as to generate new revenues. In that context, in 2022, we announced an ambitious sustainable chemistry revenue goal: \$1 billion by 2030.

Achieving our goal will require ongoing dialogue and partnership with our customers and OEMs to enhance our understanding of their priorities and challenges while communicating our value-add through sustainability. We will also closely monitor regulatory changes to anticipate new trends as well as focus on our product innovation processes and scorecard approach. Through customer engagement and collaboration between our product safety and R&D teams, we intend to focus on and support evolving industry sustainability trends. To complement our internal R&D objectives, we may consider acquisitions of businesses with innovative and sustainable chemistry portfolios, which would contribute to our goal.

\*Adjusted to exclude the impact of currency changes and certain pass-through metal prices.

Our sales teams will play a critical role in the consistent marketing of our sustainable chemistry offerings to customers, including by communicating benefits and performance capabilities. In turn, our strategic account management and OEM teams will ensure that our customers' sustainability needs are incorporated into our products and processes.

### 2022 Progress

In 2022, we achieved ~\$700 million of net sales from sustainable products, which represents ~28% of our 2022 total net sales and an increase of ~33%\* as compared to our 2020 baseline.

Based on these results, we are on track to achieve our 2030 goal. This increase underscores our innovation capabilities and the success of our sustainable solutions with our customers, who recognize the benefits of our products and our value proposition. In 2022, we added more than 10 new innovations to our product offerings which met our sustainable chemistry criteria.

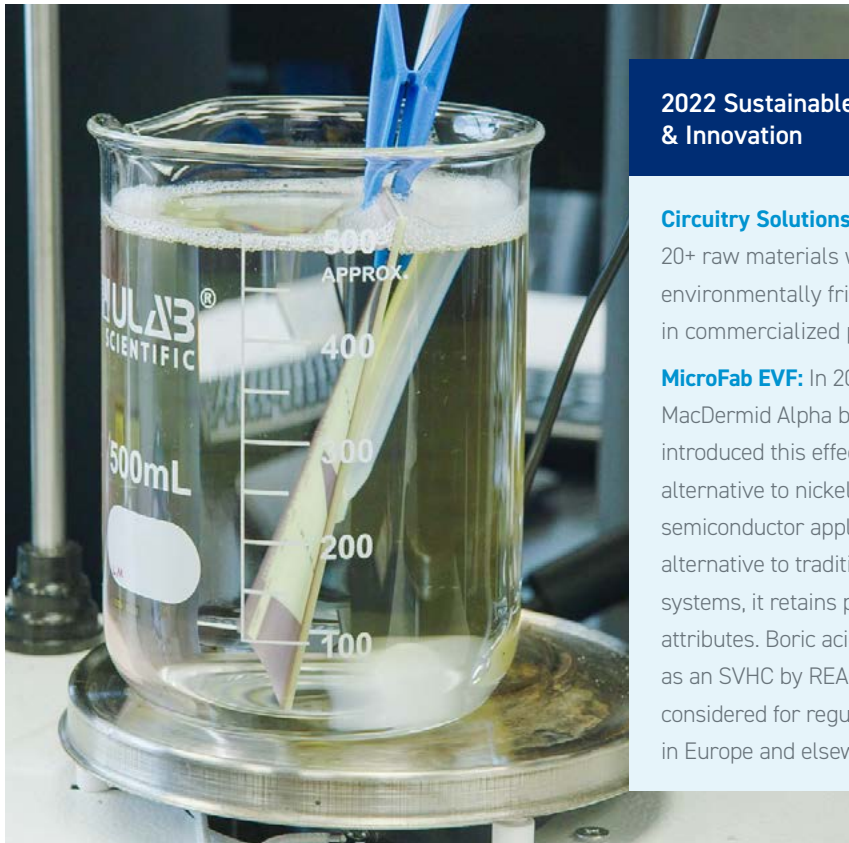


### Our Sustainable Chemistry Goal

Our goal is to reach sustainable chemistry sales of \$1 billion by 2030.

# Our Sustainable Chemistry

We consider products to be sustainable when their intrinsic purpose and/or significant results contribute to one or more of our three key opportunity areas: **Removing hazardous chemicals**, **Reducing environmental impact with innovation and/or Enabling the circular economy**. Our efforts to improve the safety and sustainability of our products support many of the UN SDGs.



## 2022 Sustainable Initiatives & Innovation

**Circuitry Solutions:** replaced 20+ raw materials with more environmentally friendly materials in commercialized products

**MicroFab EVF:** In 2022, our MacDermid Alpha business introduced this effective green alternative to nickel plating in semiconductor applications. As an alternative to traditional boric acid systems, it retains performance attributes. Boric acid has been listed as an SVHC by REACH and is being considered for regulatory restriction in Europe and elsewhere.

Conductivity test for our direct metallization process.

More details about these contributions and examples of sustainable products within each of our key areas are provided below:

## Removing Hazardous Chemicals Through Green Chemistry

We are committed to ensuring the safety of our workers and the safe use of our chemical solutions throughout our value chain – meaning our employees, our customers, our OEMs, the end markets we serve and the communities in which we operate. As such, we strive to reduce or, where feasible, eliminate a wide range of materials classified as SVHCs in our products. Examples of these solutions include:

**Chromium and PFOS-Free Pre-Treatment for Plating on Plastics** – eliminates a hazardous material for plating on plastic for consumers



**Safer Solder: Lead-Free Solder and Halogen-Free Fluxes** – allows our customers to comply with various regulatory standards while maintaining high standards of performance and functionality



**Biodegradable Oceanic Hydraulic Fluid: Ocean-Safe Solutions** – consumable, environmentally-friendly, biodegradable chemicals



### Recent Innovations

**Circuetch 300** – differential etch for use in integrated circuit (IC) substrates which does not contain solvents or flammable additives and is safer for operators



**Multiflex Copper** – supports a formaldehyde-free copper metallization process, eliminating carcinogens (formaldehyde) and poisons (cyanide) from the formula



**MicroFab EVF NiBar** – effective green alternative to nickel plating in semiconductor applications which retains the performance attributes of the traditional boric acid approach without the environmental, health and regulatory concerns



## Reducing Environmental Impact with Innovation

We design and develop sustainable, innovative solutions that enable our customers and end-users to reduce their water withdrawal and waste generation and optimize their energy usage. Many of our innovative products are sold to end markets that support cleantech industries, such as electric vehicles (EVs) and solar panels. Examples of these solutions include:

**Sintered Silver** – supports the demand for efficient and high throughput of electric current designed to make EVs more powerful, reliable and durable



**Blackhole, Eclipse, Shadow for Direct Metallization** – requires less electricity, which reduces carbon footprint and helps offset carbon costs associated with manufacturing. This process also reduces water and palladium metal usage and waste generation



**Soldering and Metal Coating Processes** – improves energy generation in photovoltaics, LEDs and energy storage



### Recent Innovations

**Argomax 2148** – sintered silver technology, which enables higher power density soldering for increased power, range and reliability of EVs



**3S Membrane Systems for ZnNi Plating Processes** – minimizes cyanide formation and reduces total energy required while maintaining plating performance



**Oceanic Subsea Production Control Fluid (ECF) & Subsea Barrier Fluid (SBF)** – water-based, biodegradable product, which supports the preservation of marine environment. SBF includes products that enable carbon capture



**Shadow+** – a next generation of direct metallization which further reduces power and water needed for printed circuit board manufacturing



**OM565 & OM372** – innovative solder pastes which enable the use of lower temperatures and the manufacturing of higher density circuit boards



\*Management estimates

## Enabling the Circular Economy

When we design new products, we consider their entire lifecycle in our value chain. Supporting the circular economy is important for our business, driving us to create products and services that help our customers recover, reuse and safely utilize chemical products, water, metals and energy. Many of our solutions also prolong the life of our customers' resources and equipment. Examples of these products include:

**Recycled Tin & Metals Reclaim** – allows for metals to be reused multiple times within the supply chain



**Plastic Recycling Chemistry** – allows food-grade plastics to be separated and reused to make new plastic bottles



**Environmentally and RMI-Compliant Solder Recycling** – offers high reliability and high throughput applications while removing lead and volatile organic compounds



**MacDermid Envio** – a division of ESI specifically created to treat industrial wastewater. We offer EnvioTECH, EnvioCARE and other water chemistry required for water treatment and metals reclaim. See [Water and Waste](#).



### Recent Innovations

**Shadow<sup>2D</sup>** – allows reuse of nearly 99%\* of the process water used in direct metallization systems



## Recent Sustainable Innovations

**Oceanic SBF 70** – This biodegradable subsea barrier fluid, suitable for booster pumps, offers corrosion protection, lubricity, heat transfer properties and broad compatibility. SBF 70 can be used for reinjecting carbon dioxide (carbon capture), minimizing release of carbon dioxide during production.

**3S Membrane Systems** – This innovative 3S technology replaces conventional anodes with a ceramic membrane allowing only the required plating products to flow between the two solutions. This reduces the environmental impact by preventing cyanide formation in zinc nickel plating baths, minimizing hazardous chemicals generation and reducing energy usage.



# Product Stewardship

We take responsibility for minimizing the environmental and social impacts, including health & safety risks, of our products throughout their lifecycle. We have various policies and guidelines designed to ensure our customers receive safe, high-quality products and relevant product safety training and information. We also prioritize effective and compliant product labeling to help our customers use our products safely.

Our multi-faceted approach to product stewardship focuses on:

- Carefully selecting raw materials that provide the best product performance while minimizing risks to human health and the environment
- Designing innovative products that minimize our environmental and social impacts
- Reformulating existing products with green chemistry where possible
- Creating products that enable the recovery and/or reuse of chemicals, water, metals and energy
- Monitoring, anticipating and responding to regulatory developments
- Providing accurate information to maximize the safe use, handling, storage and distribution of our products



## Manufacturing Safe Products

We aim to protect our employees, customers, communities and the environment from potential risks and to comply with applicable laws, such as REACH and other chemicals management regulations.

### Product Stewardship Councils

Several of our businesses have Product Stewardship Councils to directly advance our sustainable chemistry initiatives. Their responsibilities include anticipating and proactively responding to government guidelines on usage or elimination of certain raw materials and ensuring the use of appropriate raw materials in new products.

Our Product Regulatory group assesses our products' potential safety risks and monitors any regulatory changes related to the materials we use. In connection with the development of any new product, they complete risk assessments on the chemical safety of the product and its component materials. This information is recorded in our Safety Data Sheet (SDS) compliance solution and is validated against publicly available data to initially classify this new product. SDSs include information such as the properties of hazardous chemicals included in that product. Based on this initial classification, our Product Regulatory group liaises with our R&D and marketing teams to resolve any areas of concern. Resolutions can include formulation changes or additional tests to confirm that regulatory, employee and customer safety standards are met or exceeded.

Our active product formulations are stored in our product compliance software systems allowing for ongoing monitoring of regulatory changes and their impact on existing products. If changes occur, they are quickly communicated to our customers and our Product Regulatory group provides education consultations when requested. Our Product Regulatory and R&D teams also promptly address new requirements resulting from any classification change.

### Product Safety Policies and Initiatives

Product safety is embedded in each stage of our R&D process, from sourcing raw materials to finished products, from new product launch to customer satisfaction. We have several checks and balances, including policies, manuals and material checklists as well as customers' feedback designed to ensure customer safety and legal compliance. Our key policies and guidelines governing our product health & safety principles include:

- [Global Quality Policy](#)
- Product Regulatory Pre-Launch Assessment Form
- Safety Data Sheet Authoring Policy
- Intelligent Authoring Safety Data Sheet (SDS) software





## Product Safety Training and Labeling

We use SDS software programs to ensure our product labeling complies with applicable laws and regulations. Our systems provide relevant and accurate data and data labels, which are customized by jurisdiction to meet local regulations and communicated to our customers. Our Product Regulatory group also maintains a direct phone line, the SDS Consultation Line, which allows our customers to connect with our specialists on various regulatory, safety and product-specific matters.

Our product safety protocols promote product safety by:

- Ensuring a proactive R&D approach to anticipated regulatory development
- Ensuring safe storage, handling and transport of our products by providing accurate hazard identification and classifications in our SDSs and on product labels for our products
- Educating our customers on regulatory requirements, existing or new, related to product usage, storage and handling
- Updating customers with respect to any change of formulations, initiated by us or our suppliers
- Barcoding system for tracking raw materials from delivery to finished goods in real time

While detailed and accurate labeling is a critical step to ensure safe handling and transport of our products, we do not stop there. We also provide training to our customers and OEMs, which takes various formats, including on-site with our technical services resources, online or in a classroom setting when health & safety protocols permit.

### MacDermid Enthone Plating Academy

Our MacDermid Enthone Plating Academy provides our customers and employees with comprehensive and advanced training on the proper use and handling of our products as well as certain of our key processes and technologies. In 2022, we held over 30 internal sessions for employees and trained over 700 customers. In addition, the Academy held trade booth and forum events, which were visited by more than 3,000 attendees.

## Safe Handling & Transportation

It is imperative to responsibly manage, monitor, and address any safety concern in the transportation of raw materials to our manufacturing facilities and the shipment of our finished products to our customers. To ensure that our employees, contractors and customers safely handle and use our products, we provide SDSs, which include disposal considerations and other product safety information. When applicable, we also offer technical support and training.

## Commitment to Quality

We are committed to the highest levels of product quality across all of our businesses. Similarly, we strive to set industry standards in reliability and customer satisfaction.

### Quality Management System

Our Quality Management System (QMS) includes our [Global Quality Policy](#) and other standards, guidelines and processes for achieving high-quality management in our value chain. Our approach is risk-based, process-oriented and focused on customer satisfaction with its mandatory elements set out at the Corporate level. ESI has established efficient manufacturing practices and product safety programs to safeguard our employees, products and facilities. All of our business units develop new product designs according to a multi-faceted stage-gate process following ESI's guidelines, know-how and high-quality standards. This robust and consistent R&D process provides confidence that products reach our customers effectively and reliably.

## Measuring Quality

Our QMS software is used by most of our manufacturing facilities to manage quality activities, such as document control, change control, customer complaints, corrective actions and internal audits. Quality professionals are also deployed at each of our sites with regional and global oversight to establish and maintain quality standards and robust systems of control.

### Quality Certifications

98% of our manufacturing facilities maintain ISO 9001 or IATF 16949 certified QMSs

Our facilities seek other quality system certifications or accreditations as the need or opportunity arises. See [Commitment to Quality-Certificates](#) on our website



# Q&A

with **Sir Martin E. Franklin**, Executive Chairman of our Board and **Benjamin Gliklich**, President & CEO

## Q: What is the role of the Board in ensuring ESI has the right business strategy in place to create long-term value for its stockholders?

**MEF:** An important responsibility of members of the Board at ESI is to oversee and evaluate the company's performance, including ESG performance, against what the company said it would implement and accomplish. The Board also has another, more strategic responsibility which is to look ahead. The Board and the company should be making decisions and putting action plans in place for even stronger company performance five or ten years from now. We need to clearly convey our strategy and vision to our stakeholders, including our stockholders, so they can be excited not just about the company they own today but the one that they will own in the future. In terms of ESG, ESI's recently announced goal relating to sustainable chemistry revenue growth is just one example illustrating our confidence in the ability to create strong value for stockholders through sustainability.

## Q: What is unique about ESI's sustainable product offerings?

**BG:** "Enabling Sustainability," one of the pillars of our strategy, has historically been and remains a fundamental element of our value proposition. This means that we focus significant internal efforts on improving the environmental footprints of our customers and reducing the use of hazardous chemicals in our products. It is simply in our DNA. Today, we provide a broad portfolio of solutions that enable better outcomes for our supply chains, our society and our planet. What differentiates our sustainable chemistry is the creativity, deep expertise and dedication of our R&D teams who, in close consultation and collaboration with our customers, deliver sustainable, high-quality solutions that create opportunities for new revenue every day.

## Q: How does the company view its progress in terms of ESG goals and performance?

**BG:** Sustainability benefits both the planet and our businesses. We strive to act as responsible, and also successful stewards. Our ESG goals – advancing DE&I, improving safety, reducing our emissions and increasing revenue from sustainable products – are core priorities for us. We've seen good progress and results so far, but there is still work to be done. And we are doing it. With respect to our emissions, for example, we have made significant progress

with the hiring of a third-party consultant to assist us mapping out our strategy and implementing our global decarbonization program. In 2023, we plan to action initiatives, which we expect will help us lessen our impact and make great strides toward the achievement of our emissions goal by 2030.

## Q: Has the Board's oversight evolved in the context of the increasing importance of ESG?

**MEF:** The Board oversees ESG matters as part of its oversight of the company's risk management program. In early 2021, the Board formally delegated the oversight of ESI's sustainability and social responsibility efforts to its Nominating and Policies Committee. When appropriate, the Board and this committee receive updates on ESG progress and risks. We believe this governance structure provides appropriate oversight of ESG matters affecting the company while allowing ESI's Board to further develop subject matter expertise and remain apprised of trends in this area.

## Q: What can we expect from ESI in 2023 and beyond?

**BG:** We now have a strong foundation on which to build on our sustainability investments and activities. We believe improving our environmental and social footprint as well as that of our customers will generate long-term value. In 2023, we will continue to work closely with our customers to develop sustainable supply chain solutions that drive competitive advantages, and we look forward to bringing many new and innovative products to the market. We will continue progress on our other sustainability goals and improve transparency with better tracking of ESG data and disclosure. We also plan to expand our external outreach and education to highlight our enhanced ESG efforts and latest achievements to current and potential investors.

**Benjamin Gliklich**  
President & CEO



**Sir Martin E. Franklin**  
Executive Chairman of the Board



# Environmental Stewardship



## Our Approach

Actively managing environmental issues is not only our responsibility as a good corporate citizen but also an opportunity to create new revenue streams from sustainable chemistry while reducing risk for our company and our customers.

Our customer-centric and market-driven approach seeks to protect people, the environment and one of the world's most precious resources, water. Beyond our Sustainability Goals, these are core values for our company and our people. Our commitment to innovation and product sustainability help solve global environmental challenges while meeting our customers' increasing demand for sustainable solutions and more stringent regulatory requirements in our end markets.

We are committed to protecting our planet by combating climate change, including contributing to a lower-carbon future, both in our operations and value chains. We also understand the importance of executing on our approach. In this section, we highlight significant progress toward our [Energy Use & Emission Goal](#) and several of our energy and emissions reduction initiatives. To track and validate our actions and environmental compliance, we maintain external certification systems, such as ISO 14001, a globally recognized environmental management system.



### 2022 Overview

~\$700M

Net sales from sustainable products in 2022

~20%

Increase in total energy used from renewable sources since 2021

~5%

Reduction in total water withdrawal since 2021\*

73%

of our global sites are ISO 14001 certified

\*See [Water and Waste](#) for more information on water and waste reduction initiatives



# Climate Change

We understand that climate change poses a unique challenge for society and that collective effort is required to effectively prepare for and mitigate its impacts. Responsible manufacturing is at the heart of our operations. We are committed to operate our sites in a manner that reduces GHG emissions, conserves water, and minimizes and properly disposes of waste. We also strive to help our customers do the same, including by exceeding regulatory requirements where possible

We also work to address climate change by setting ambitious objectives for ourselves and implementing sustainable initiatives where possible. In 2022, we announced our goal to reduce our combined Scope 1 and Scope 2 GHG emissions intensity by 2030. For more information, see [Energy and Emissions](#).

We are in the preliminary stage of understanding our Scope 3 emissions and intend to incorporate this data into our disclosures in the future.

## TCFD Index

In 2022, we became an official Task Force on Climate-related Financial Disclosures (TCFD) supporter and published our inaugural TCFD Index, which presented our preliminary assessment of the impact of climate change to our businesses. Although no specific climate change risk was identified as expected to have a substantial financial or strategic impact on

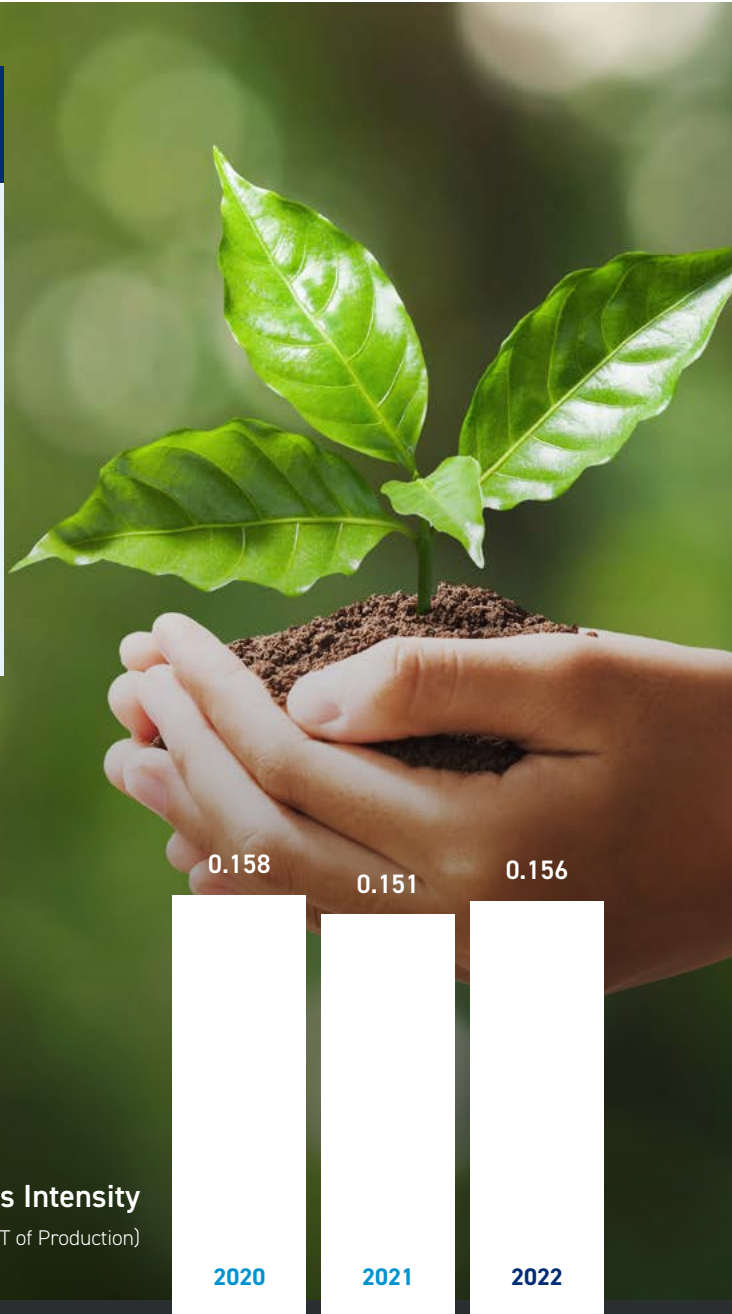
our business, we are committed to address and manage any climate-related regulatory, reputation and/or market risks if and when they arise. We also believe climate change presents robust commercial opportunities for our business, including in clean technology markets, such as vehicle electrification. Our next step is to conduct climate scenario analysis to further assess climate-related risks and opportunities for our business leveraging the TCFD recommendations.

Overall, we believe we have a resilient supply chain and logistic network with multiple suppliers and manufacturing redundancies which provide a strong foundation for managing potential risks and opportunities. Our business is globally diversified with production facilities spanning most of the markets where our customers are located. Internally, our emergency response and disaster recovery system, developed and tested by our risk management team, is intended to ensure business continuity, including continuity of supply to our customers. We believe our ability to source raw materials and ship products from multiple locations around the world is a competitive advantage and presents a commercial opportunity for us in the face of potential physical climate risks.

For more information, see our updated [TCFD Index](#).

## ESI's Climate-related Management Strategies and Initiatives

- Proactively monitoring registration and compliance requirements as they develop
- Implementing and upholding ISO 14001 Environmental Management Systems
- Maintaining business disruption insurance to mitigate the impact of disruptive events
- Conducting periodic internal environmental compliance audits
- Entering into energy efficiency and renewable energy transactions and partnerships



# Energy and Emissions

Minimizing our climate impact also means understanding and reducing our environmental impact, including with respect to our energy use and GHG emissions. We are actively pursuing opportunities to assess and reduce our energy consumption and emissions along our value chains while addressing risks climate change may pose for our business. In 2022, we announced a Sustainability Goal in support of this approach:



## Our Energy Use & Emission Goal

Our goal is to reduce our combined Scope 1 and Scope 2 GHG emissions intensity by 25% per metric ton of production by 2030 from a 2020 base of 0.158 MT CO<sub>2</sub>e/MT of production.

In 2022, our combined Scope 1 and Scope 2 GHG emissions\* intensity was 0.156 MT CO<sub>2</sub>e/MT of production or a decrease of 1.3% as compared to our 2020 emissions intensity baseline.

We believe we are on track to achieve our 2030 goal. To meet our objective, our plan is to implement initiatives designed to reduce our overall energy use and GHG emissions, including:

- Continuing to conduct audits of our sites to identify our main energy consumers and reduce consumption
- Investing in technology improvements, including replacing outdated and inefficient equipment and high-energy consuming lighting
- Shifting to renewable electricity
- Cascading energy and emissions reduction goals into our supply chain and R&D organizations to align our teams behind innovative solutions for our own operations and our customers'
- Further engage with third-party energy and emission experts as new opportunities arise

## Managing Our Impact

We strive to understand and reduce our environmental impact and regularly implement initiatives to achieve this objective. With respect to our energy use and GHG emissions for example, at least 80% of our sites have replaced traditional lighting with LEDs, either partially or completely, and we are evaluating additional replacements where feasible. For more information, see [Energy and Emissions Reduction Initiatives](#). We also routinely analyze our environmental policies and procedures to comply with, and exceed where possible, requirements under applicable laws, regulations and industry standards.

Our sites track various sustainability and efficiency metrics and are committed to driving environmental performance improvements. This process is being fully digitalized to support our ability to respond in real-time. Our sites regularly report environmental performance as well as actions designed to further reduce our GHG emissions to our ESG Executive Steering Committee (ESG Committee), global procurement organization and Supply Chain VPs of each of our business units. This ongoing dialogue supports our continuous effort to reduce our GHG emissions and our impact on climate change in general. For more information on our ESG Committee, see [Governance & Compliance](#).

## Measuring Our Footprint

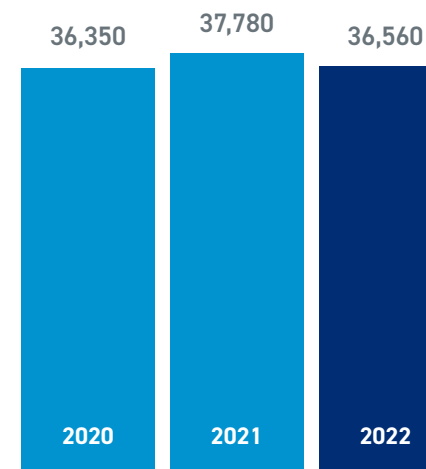
Due to the formulation-based nature of our operations, our energy consumption is lower than that of other more traditional chemical manufacturers who focus on molecule synthesis. Regardless, we actively monitor our electricity and energy consumption to help drive reductions. We regularly assess and measure our Scope 1 and Scope 2 emissions generated by our organization using the market-based methodology outlined in the World Resource Institute's GHG protocol.

In 2022, electricity usage accounted for approximately 50% of our total energy consumption and ~64% of our total (Scope 1 and Scope 2) GHG emissions. In addition, renewable energy contributed ~7% of our overall energy use, which was 22% higher than the renewable energy we consumed in 2021.

	2020	2021	2022
Total Renewable Energy Sourced or Generated (GJ)	26,760	31,060	37,245
Total Renewable Energy Sourced to Total Energy Consumed (%)	~5%	~6%	~7%

## GHGs (Scope 1 & Scope 2) By Year

(MT CO<sub>2</sub>e)



\*We measure the carbon emissions associated with the natural gas, diesel, oil and liquefied petroleum (LPG) we utilize for heating our buildings and backup generators (Scope 1 emissions) and the electricity and steam we purchase to power our operations (Scope 2 emissions).





### Energy and Emissions Reduction Initiatives\*

Over the past several years, we implemented initiatives designed to increase our renewable energy consumption and promote cleaner air quality, including:

**Heat Loss Reduction in Hungary** – In Q4 2022, our facility in Dunaharaszti improved its metal melting process with the purchase of specific covers for its melting pots. These covers reduce heat loss, enhance energy efficiency and minimize employee exposure to potentially hazardous fumes. They also improve safety by reducing the risk of injury from molten metal splashes.

**PV Water Heaters in India** – In March 2022, our facility in Pune installed solar water heaters. These heaters allow us to heat water to the required temperature using a completely renewable energy source, therefore reducing the Carbon footprint typically associated with a conventional water heater. We estimate that future energy savings will be 12,000 KWh or 8 MT of CO<sub>2</sub>e per year, which would represent a ~8% reduction of Pune’s total annual CO<sub>2</sub>e footprint.

**Renewable Energy Purchase in the U.K.** – Our Birmingham, Wantage and Wigan facilities recently switched to 100% renewable energy sources through green tariffs, leading to a reduction of ~1,500 MT CO<sub>2</sub>e GJ of conventional electricity use in 2022.

**Energy Efficiency Partnership in the U.S.** – In 2020, we engaged Siemens Industry, Inc. in a five-year energy management partnership for the centralized collection, audit and analysis of key energy performance data for our facilities. Based on these ongoing studies, we expect to implement data driven strategies to improve the overall efficiency of our energy use.

**Solar Energy in Singapore** – In 2020, we entered into a 25-year solar energy supply agreement at our MacDermid Enthone and Alpha Metals Singapore sites. These systems, installed and commissioned in the spring of 2022, are expected to reduce the CO<sub>2</sub>e from electricity use by ~240 MT at the two sites, combined, per year.

\*Quantitative information on this slide are management estimates



# Environmental Compliance

As a global specialty chemicals company, maintaining environmental compliance is critical to our business and vital for our customers and communities. Our customers rely on us to proactively manage environmental risks across our supply chain, foster good relationships with our local stakeholders and deliver our products in a timely and safe manner. We fulfill these expectations through prudent environmental risk management based on Board-approved policies informed by global industry standards.

Our Corporate EH&S group, regional EH&S managers and local EH&S teams dedicate their time to managing environmental compliance. Our ESG Committee retains ultimate responsibility for environmental compliance, acting as a liaison between our Board of Directors and our global EH&S organization.

## Managing Risks

Our Corporate EH&S group leads our environmental management efforts, including compliance and audit management while staying abreast of regulatory changes. EH&S managers are responsible for securing and maintaining environmental permits and licenses required to operate as well as resolving risks. Our Sustainability Council, which includes



Environmentally-compliant handling of finished goods at our Ferndale, MI facility.

global EH&S representatives, also fosters dialogue and shares best practices to promote the operation of our manufacturing facilities, laboratories and offices in an economically, environmentally sustainable and socially responsible manner. For more information on our Sustainability Council, see [Governance and Accountability](#).

Our facilities set site-specific environmental improvement goals and targets, which depend on the site's operations and applicable requirements and often relate to energy use, waste or water reduction. See [Water and Waste](#) for more information.

## Evaluation and Monitoring

We monitor and report on our company's performance related to environmental compliance and other environmental topics. 73% of our global sites in scope are ISO 14001 certified, and we intend to certify the rest of our sites in the future. Following ISO 14001 standards, a globally recognized environmental management system, improves resource efficiency, supports waste reduction strategies, manages costs, and underscores our commitment to continuous improvement. For more information, see our [Certificates](#) on ESI's website.

As part of our environmental compliance management process, our Corporate EH&S team conducts regular internal environmental compliance audits at our production sites. Our local EH&S managers also conduct regular audits of facilities. Third-party audits are conducted in response to customer requests and insurance requirements, and to support our ISO and other certifications. In 2022, we experienced no material cases of non-compliance with environmental laws and regulations.

### 2022 Environmental Initiative Examples

**Ferndale, Michigan:** In 2022, we installed a system to collect rainwater for use in our air scrubbers. This initiative resulted in an estimated increase of 94% of water provided from alternative sources as compared to 2021. We are currently monitoring this project and may decide to install this system at other sites in subsequent years.

**Maple Plain, Minnesota:** In 2022, level floats and spray balls were added to scrubbers and mixing tanks which we estimate will reduce the scrubbers' annual water usage by ~10% or 23,000 gallons.

# Water and Waste

Our commitment to reducing our environmental impact includes being a responsible water and waste steward. As water availability and scarcity vary considerably from region to region, we evaluate opportunities to minimize the amount of water we consume on a local basis.

Our Sustainability Council oversees our water and waste footprints and related sustainability efforts. They share best practices, sponsor sustainability initiatives and engage with facility managers to reduce our environmental footprint across water, waste and energy.

## Monitoring and Reducing Water

Water is a material input and output of our production process given the nature of our products. It is a significant input for the preparation of our chemical solutions, and it is used to support production as well as cooling and cleaning. A significant portion of our water withdrawn is included in our manufactured products.

We regularly monitor our water use and pursue opportunities to minimize both consumption and contamination. Initiatives include reusing rinse waters from previous manufacturing batches and the use of high-pressure low volume devices and other water-conserving equipment for cleaning production vessels. Twenty of our manufacturing facilities

(and several R&D only facilities) treat their own wastewater before disposal. We also use closed-loop water chillers instead of single pass, non-contact cooling water systems in many locations. We have experienced no material incidents associated with water quality permits, standards and regulations in the last three years.

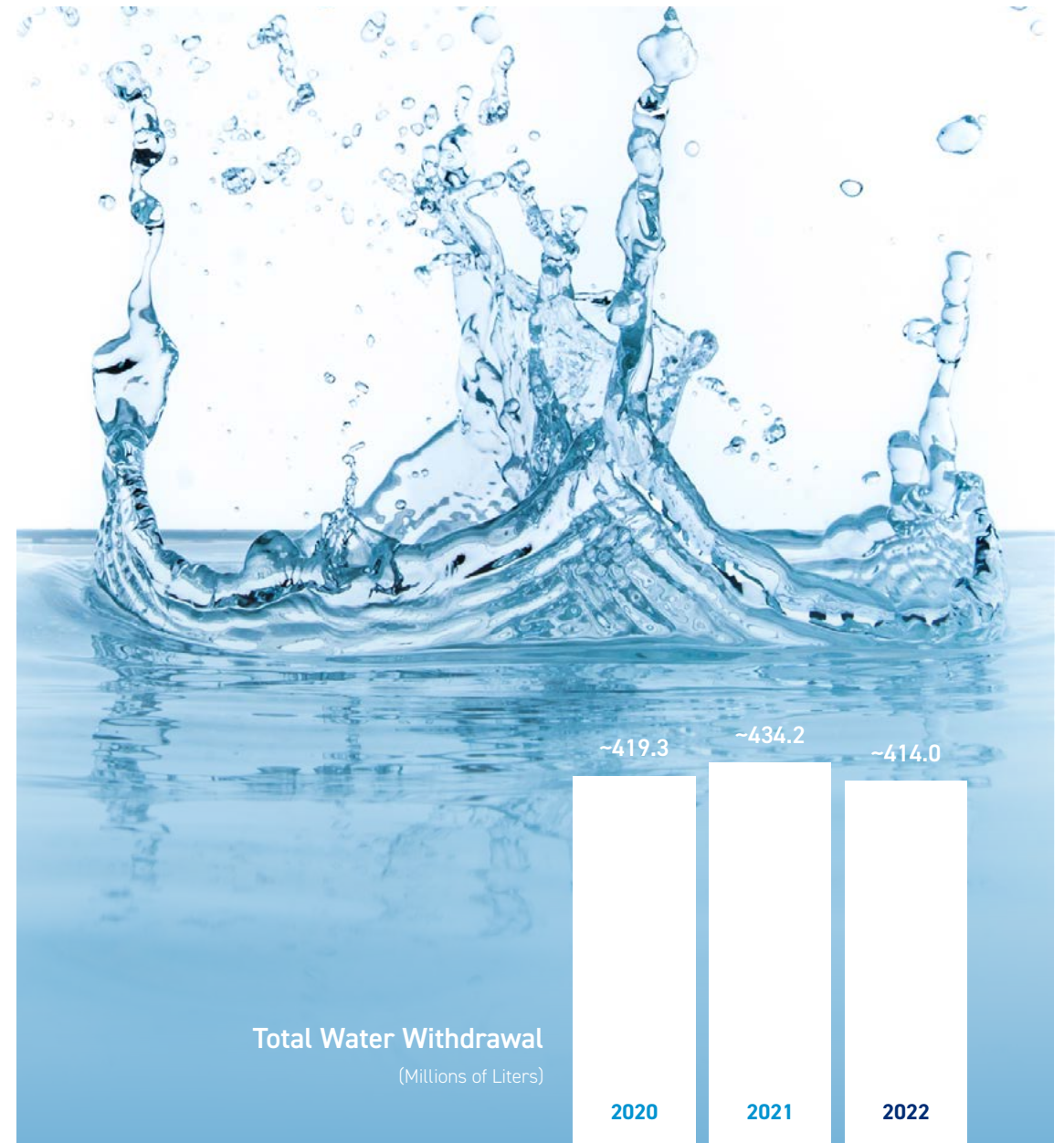
## Reducing Water in Water Stressed Areas

We primarily focus our reduction efforts in areas of our operations with potential water stress as classified by the Aqueduct Water Risk Atlas. Eleven of our sites in scope operate in high or extremely high water stressed areas, which represented ~9% of our total water withdrawal in 2022.

In these communities, we focus on driving collective action for water stewardship by reducing our and our customers' water use and consumption through increased efficiency and other water management strategies.

### Reducing Water Withdrawal in Water Stressed Areas

**India:** Our sites have focused on increasing their consumption of greywater since 2020 — Chennai by 333%, and Pune by 66%.





### Zero Waste to Landfill

Our H.K. Wentworth facility in Ashby, UK has been certified as a Zero Waste to Landfill business.



### Measuring and Reducing Waste

We monitor and aim to reduce general and hazardous waste within our production operations. Many of our facilities have set specific goals and targets related to the management of hazardous waste as part of their broader ISO 14001 certified environmental management systems. Initiatives to manage waste include capturing "heels" (leftovers) of batches, which we then use in subsequent batches, and reusing first water rinse from a tank in the production process of a similar product.

We believe our efficient use and management of materials and waste mitigate our impact on the environment while reducing our operational costs. Due to an increased focus on materials management in 2022, our recycled waste was 11% higher, which led to a reduction in our total waste of ~3%, including a reduction in hazardous waste of ~4% and non-hazardous waste of 10% as compared to 2021.

We also work to support the waste reduction capabilities of our customers, many of whom recognize the value of reducing waste in the overall value chain. Our **MacDermid Envio Solutions** business has been on the forefront of designing, building and implementing water and material recycle systems, which positively impact the environmental footprint of our customers by combining intimate chemistry know-how and advanced engineering solutions. MacDermid Envio's water recycling and reuse systems are designed to be a practical approach to the capture and reuse of industrial wastewater. For more information, see [MacDermid Envio](#).

### MacDermid Envio Solutions

#### EnvioTECH Water & Materials Recycling

MacDermid Envio's NiCycle, CuCycle and HexCycle are industrial recycling systems used by many leading surface finishing companies to recover valuable materials, such as metal salts consumed during processing. These systems can also be used in combination with Reverse Osmosis (RO) and/or Deionizing (DI) systems to recover the water used during manufacturing. EnvioTECH's designs are tailored for use with processes including watts nickel, semi-bright nickel, bright nickel, micro porous nickel, satin nickel, acid copper, decorative chromium and chromium etching processes.

#### WaterCARE Chemistry

Due to strict governmental and permit limits, the surface finishing industry has always presented a unique set of challenges for wastewater treatment. MacDermid Envio Solutions offers chemical treatment expertise to help meet our customers' environmental needs for wastewater treatment and address their regulatory constraints. Its WaterCARE range of chemical products are designed as part of our complete wastewater management portfolio.



# Social Impact

At ESI, the success of our business is fundamentally connected to the well-being of our highly-skilled employees. We recognize our responsibility to create a healthy and safe work environment. We believe that an inclusive and diverse team drives innovation, allowing us to compete more effectively. We also believe that building connections among our employees, their families and our communities creates a more meaningful, fulfilling, and enjoyable workplace. We strive to support the communities in which we operate, which in turn support our most important assets, our people.



Our colleagues volunteering at a food bank in New Hudson, MI.

## Our Approach

We are focused on empowering our people to thrive. We offer employees the ability to contribute meaningfully through challenging experiences, mutual respect and a motivating, diverse and inclusive workplace.

We believe culture makes an organization. Our employees embody our "5Cs"-- Challenge, Collaborate, Commit, Choose and Care – with customers, colleagues and other stakeholders. Following these same core principles, we engage our employees, empower our leaders and encourage

strong and productive internal relationships through open communication and mentorship.

In the midst of a highly competitive talent market, we strive to provide employees professional and personal opportunities. Our support comes through learning, development, advancement opportunities and health & safety guidelines as well as volunteering and donation initiatives.

To better understand the support and resources our employees need, we conduct regular employee surveys and use their feedback to measure progress and continue to improve.

## 2022 Performance

# 100%

U.S. managers completed diversity training

# 56,786

Hours of employee training

# ~\$800K

Donated to charity

## 2022 Employee Survey

We conduct regular employee engagement surveys, which help us understand our strengths and areas for improvement. In 2022, 82% of our employees participated in our survey and 97% of the questions received a better score as compared to 2020.

# Occupational Health & Safety

Occupational health & safety is foundational to the success of our business. We nurture a safety-first culture and emphasize health & safety in our everyday operations and across our organization from the most senior level of the company to the facility floor.

As a global company, our operations are subject to extensive laws and regulations relating to product safety, occupational health & safety and environmental protection matters. To promote worker health & safety around the world, we monitor legal and regulatory requirements locally and use comprehensive management tools, including policies, training requirements, best practices and processes, and product quality and safety measures. Strong safety standards and programs help us maintain our reputation as an industry leader and responsible employer while reducing our legal and financial exposure.

We benchmark our health & safety performance against statistics obtained from the U.S. Bureau of Labor and Statistics (BLS). Specifically, we review our total recordable incident rate (TRIR) and lost time injury rate (LTIR) performance against the BLS's benchmarks for General Manufacturing, Chemical Manufacturing and Metals Manufacturing. Our health & safety metrics are tracked locally and consolidated at the Corporate level on a monthly basis. These metrics are reviewed by our Nominating and Policies

Committee or Board of Directors, as needed, at least on a quarterly basis. In 2022, we set a public goal for improving our health & safety performance which demonstrates our commitment to health & safety and maintaining a safe work environment:



## Our Health & Safety Goal

In 2022, we set a goal to achieve continuous annual reductions in our Total Recordable Incident Rate (TRIR) as we strive toward achieving zero significant safety incidents.

Our [Supplier Code of Conduct](#) provides minimum standards to promote ethical and responsible conduct related to, among other topics, health & safety. For more information [Third-Party Risk](#).

In 2022, our TRIR was 0.95 or a decrease of 2% as compared to 2021. Overall, our TRIR performance has continuously improved since 2020. Over the past three years, our TRIR has been significantly lower than industry benchmarks published by the BLS and we are confident in our ability to drive even better results.

Health & safety performance is a continuous improvement journey, and each of our facilities strives to improve each year. Our approach to achieve our health & safety goal includes plans to:

- Develop a more comprehensive training curriculum using our digital training platform to increase the number of safety training hours and workshops
- Continue to host Global Safety Days annually at each of our primary manufacturing and R&D sites globally to strengthen our culture of safety and control top site-specific risks and hazards
- Continue to track all relevant leading indicators, such as Safety Observations and percentage of incidents and Safety Observations resolved and closed in a timely manner
- Audit each site at least once every three years using a checklist covering ~30 health & safety and environmental topics
- Act swiftly to remediate any material issues identified in Safety Observations or audits and provide management support to do so when necessary
- Track training hours at each manufacturing site and ensure each of our colleagues receives adequate health & safety training each year

In 2022, we hosted our **Global Safety Day** on sites across the company. The day had numerous activities including a video series from leaders titled "Why Safety Is Important To Us". A safety guide for managers, supervisors and shift leaders translated

into multiple languages was also issued allowing them to initiate and lead discussions with their teams. As part of this event, our employees were required to attend a Global Safety Principles training course related to "Slips, Trips and Falls," the most common cause of injuries in the workplace. We focus on potential hazards and challenge our employees to be safe in everything that they do.

Our Corporate EH&S team, which is responsible for policy development and site audits, also maintains a health & safety page on the Company intranet. This page is a central repository for health & safety policies and information in general which are translated into the various languages spoken by our employees. "Fact Sheets" are regularly posted on this site which provide guidelines on important health & safety topics, such as Chemical Safety, Hazardous Waste Management and Contractor Safety Management. In line with our culture of "Care," our Corporate EH&S team also issues a quarterly newsletter, which provides, in multiple languages, material guidance and best practices on various health & safety topics, including occupational health & safety hazards as well as required occupational health & safety programs, risks assessments and industrial hygiene.

We implement processes designed to minimize health & safety risks for our employees. For more information, see [Ensuring Safe Processes](#).

## Managing Health & Safety

Our [Global Environmental, Health & Safety Policy](#), which is translated into multiple languages and available on our website and on our Corporate EH&S Team's intranet page, demonstrates our commitment to manufacturing products and providing services in a safe work environment.

In support of this Policy, our onsite EH&S personnel as well as our Safety Committees are responsible for managing health & safety protocols. Our Safety Committees, which include site leadership, encourage our employees to be involved in health & safety improvement initiatives. These committees regularly examine safety performance, ensure policies are followed and, when necessary, assess root cause for Safety Observations and incidents. Our onsite EH&S personnel work closely with our Corporate EH&S team. Our CEO, Corporate EH&S group, General Counsel, Head of Industrial & Specialty, Head of Electronics and Head of Human Resources (HR) regularly review the health & safety performance of our manufacturing facilities.

To promote and maintain a healthy and safe workplace, all of our sites maintain health & safety management systems, of which 32% are certified to the ISO 45001 standard. When not using ISO 45001 (formerly OHSAS 18001) accreditations, our sites employ different safety programs, which include risk assessments. In addition, our software platforms



EH&S and Sustainability colleagues at our West Haven, CT manufacturing facility.

enable our sites to report key health & safety information (such as incident reporting and job hazard analyses) and to monitor health & safety performance.

Employees and other personnel working at our facilities are trained and briefed on occupational health & safety principles as well as work procedures specific to their individual tasks prior to starting a new role or activity. **We initiated a formal tracking of health & safety training, which totaled 23,579 hours.**

Topics covered included safe handling of hazardous chemicals, suitable waste disposal, emergency response and incident management.

### Health & Safety Policies and Initiatives

Our workplace health & safety policies and initiatives include, but are not limited to:

- [Global Environmental, Health, and Safety Policy](#)
- Safety Days held at various sites around the world on annual or more frequent basis
- Safety Observations: up ~87% vs 2021
- Health & safety newsletters and fact sheets
- Health & safety training
- Health & safety performance tracking
- Site meetings and interactive discussions on health & safety matters
- ISO 45001 Certifications at nearly a third of our sites across the globe\*

## Expecting the Unexpected

While we cannot predict when an emergency may occur, our organization is prepared with the strategic, operational and financial resiliency to react and recover from emerging global risks. Our manufacturing facilities have crisis protocols in place, including escalation to our Regional or Corporate teams in the context of major events. These emergency plans are designed to ensure that situations are handled quickly and effectively. This allows us to respond and minimize potential impacts to our personnel and business, including keeping our employees safe and ensuring continuity of operations. In the context of the COVID-19 pandemic, this integrated approach translated into proactively implementing company-wide health & safety policies and procedures based on guidance from global health organizations, relevant governments and pandemic response best practices. These actions protected – and continue to protect – our employees and allowed us to keep our facilities open. We continue to monitor the implications of the pandemic on our employees, supply chain and customers in order to assess and address any new social or operational risks.

\*Includes data from our newly acquired businesses, which we are in the process of integrating and certifying



## Ensuring Effective Health & Safety Management

Identifying and controlling health & safety hazards in our workplace and day-to-day processes are fundamental to the prevention of injuries and illnesses. Our software systems capture observations, incidents and responses, and guide our health & safety teams in performing the following procedures:

- Site risk assessments on existing operations
- Job Hazard Analysis (JHA) prior to the commencement of any positions
- Engineering controls, administrative controls and personal protective equipment (PPE)
- Employee training to mitigate potential hazards
- Regular industrial hygiene and medical check-ups for employees who handle hazardous chemicals
- Emergency response mock drills
- Health & safety training and potential hazard identification exercises
- Root cause analysis following incidents and Safety Observations using various tools (Fishbone Diagram, 5 Why, Fault Tree) and reviews of response effectiveness to prevent recurrence
- Implementation of safety ideas submitted through the Idea Chest or shared with our site-level Safety Committees



Signage used at Safety Day in Trecate, Italy.

Many of our facilities implement medical surveillance programs as a best practice to monitor potential exposure to various hazardous chemicals. Certain of our facilities also perform noise surveys to assess whether noise exposure is above regulated threshold values. Job stress is handled by our local HR teams on a case-by-case basis in addition to other resources available to our employees through our benefits programs, including Mindfulness training.

When pursuing acquisitions, assessing the management of health & safety programs during our due diligence process plays a key role in the overall assessment of the targeted business or company, including with respect to potential liabilities or necessary remediation.

## Ensuring Safe Processes

We implement processes designed to minimize health & safety risks for our employees. Our Hazardous Waste Management Awareness Fact Sheet outlines regulatory requirements and best practices for all our units in terms of waste identification, labeling, shipping, transportation and disposal, storage, emergency preparedness/prevention and minimization.

Our internal policy requires these risks be managed through a "Hierarchy of Controls," which prioritizes eliminating hazards or substituting less hazardous materials or processes to mitigate worker exposure to hazards. Once workplace hazards are identified, the hierarchy of controls is followed with the goal of first trying to engineer hazards out, then using administrative controls and personal protective equipment (PPE).

# 68%

In 2022, 68% of the ideas submitted into our Idea Chests were implemented

## Hazard Identification & Communication

Through our [Global Environmental Health & Safety Policy](#) and [Rules of Conduct](#), we empower our employees to report work-related hazards and conditions. Our global [Business Conduct and Ethics Policy](#) establishes personal responsibility for maintaining a safe and healthy working environment using good common sense and following health & safety laws and ESI's policies. It also requires employees to promptly report any instance in which an ESI business may not be complying with health & safety laws or policies by contacting their supervisor or business unit leader. We also deploy web-based tools and policies throughout our global operations, such as our Significant Incident Reporting Policy, to assist all employees and other personnel in reporting incidents, near miss events and general hazards.

Safety Observations are a critical component of our effective safety-first culture, and we ask everyone to constantly be mindful of potentially unsafe situations or behaviors. In 2022, 7,085 Safety Observations were reported, up ~87% from 2021, which demonstrates the effectiveness of our safety campaign and our employees' increased awareness.

Our proactive approach to risk identification enhances our comprehensive safety program and improves results. We continue to enhance company-wide programs for common activities across the company while evolving specific practices to target key safety risks unique to each of our sites. To ensure the quality of our processes, we have developed targeted training programs and guidance documents.

## Measuring Health & Safety Performance

Safety performance at our facilities is supported by the strong leadership of our site managers, our safety-first culture and our continuous improvement mindset. Our sites understand the importance of safety, tracking leading indicators and using safety management tools as well as root cause analysis in the event of an incident. For more information, see [ESG Performance Data](#).

In 2022, the total number of hours worked increased by 16.4% when compared to 2021. We also saw an increase in total cases of recordable injury/illness and lost time injury/illness compared to 2021. We believe these results are in part attributable to employees returning to work after a period of remote activities as well as the inclusion of our newly acquired businesses into the scope. We are focused on improving our practices and reinforced our initiatives designed to align our latest acquisitions with our health & safety programs.



## Health & Safety Highlights

# 1,000+

Days without a lost-time injury at over ~40% of our manufacturing sites around the world

# 403%

Increase in Safety Observations since 2019

# 0

Process safety incidents in 2022

# 0.95

TRIR in 2022

# Diversity, Equity & Inclusion (DE&I)

We believe a diverse workforce leads to better outcomes, innovation and growth. Creativity and problem-solving skills thrive when a broader group of people with varying backgrounds and perspectives come together to achieve a common goal. We value individual differences and aim to build a culture of empathy and diversity in a workplace where our colleagues can be their authentic selves. At the same time, a diverse workforce also helps us attract and retain a broader talent pool.

As we continue our path toward inclusion, we intend to seek out additional practices that are both globally consistent and locally relevant and expand our initiatives beyond the U.S.



## Training

- Launch a DE&I awareness training required for all U.S. employees and achieve a completion rate of at least 80% by 2023
- 100% of our U.S. managers to complete more in depth inclusion training by 2023

## Recruiting

- Attain diverse candidate slates for 80% of U.S.-based roles by 2023
- Attain diverse candidate slates for 90% of U.S.-based roles by 2024

## Support & Connectivity

- Fund and launch at least three employee resource networks for diverse populations by 2023

## 2022 Performance



### Our DE&I Goals

In 2022, we formalized a set of goals supporting our overall DE&I approach across three pillars: Training, Recruiting, and Support & Connectivity.

### Goal Achieved



In 2022, 90% of our U.S. employees completed our DE&I training and 100% of our U.S. managers benefited from a more in-depth program. Both received very positive feedback. We are proud of these achievements, which should help increase awareness and minimize unwelcomed bias.

### Goal Achieved



84% of U.S.-based roles filled in 2022 had at least one diverse candidate.

### Goal On Track



We intend to continue our outreach initiatives toward our 2024 goal of 90%.

### Goal Achieved



In 2022, three employee resource groups were created offering supporting resources for targeted groups: the ECN (Early-in-Career Network) for new hires, the Asian Employee Resource Group and the Women's Resource Group. We believe these global networks will bring together employees with different backgrounds and experiences while allowing them to thrive in both their professional and personal lives.



Inclusion is an ongoing journey, and we have adopted policies and goals and implemented initiatives to guide and assess our progress. With these tools, we aim to develop and expand on our global strategy for sustainable DE&I success.

### Promoting DE&I

Together with executives from across the company, our CEO, and our Head of HR lead the effort to promote diversity and inclusiveness within our organization. We have Board-approved policies designed to ensure fair hiring practices and have actions in place to prevent discrimination and harassment. In particular, our [Business Conduct and Ethics Policy](#), [Fair Employment Policy](#) and [Rules of Conduct](#), define discrimination and inappropriate behavior, accountable roles and responsibilities, grievance mechanisms and reporting procedures, and are shared with all employees.

To reinforce these policies, we provide diversity training and have online training programs available for our employees around the world. In 2022, 100% of our U.S. managers completed an in-depth inclusion training. Our ongoing training programs help raise awareness across the company, elevating our focus on diversity and embedding equity in our practices and processes. We also solicit feedback through global employee culture surveys with inclusion specific questions.

### Recruiting Diverse Candidates

As part of our commitment to full and equal employment, we are continuing to grow female and minority representation in our business. Our primary mechanism for improving diversity is through thoughtful and intentional diversity recruiting. We strive to hire candidates from different backgrounds and ethnicities. We consider qualified candidates regardless of background, gender, religion or race and do not ask about prior misdemeanor convictions on our job applications so as not to exclude qualified candidates. Overall, 1,642, or 30.5%, of our current employees worldwide do not have a college degree.

The chemical industry is an industry where the number of women was historically and remains today comparatively low. Despite the difficulties we face to recruit a more diversified employee population based on gender and race/ethnicity, we see the benefits of hiring and developing women and minorities at every level of our organization. In the U.S., we have an Affirmative Action Program (AAP) intended to ensure equal employment opportunities within our company for qualified minorities, women, individuals with disabilities, and protected veterans. Additionally, our outreach and diversity recruiting efforts in the U.S. include other targeted hiring initiatives, such as job postings on platforms that appeal to women in the industries we serve as well as other minority candidates. We also proactively recruit through veteran recruiting organizations, including the U.S. Department of Labor's Veterans Employment Services.

### Labor Rights

As an innovation and service-based company, our workforce is our most vital asset. We are mindful of the fact that true customer satisfaction, business growth and longevity can only be achieved through healthy relationships between the company and its people— including labor unions. As such, ESI supports freedom of association and values effective communication and productive collaboration with our labor unions across the globe. Approximately 10% of our employees belong to unions, most of which are in the Americas and Europe. In the last three years, ESI has entered into ~30 collective bargaining agreements with labor unions which related to mandatory negotiation topics, including annual salary increases, benefits and working conditions. We believe our relationships with our employees and collective bargaining unions are satisfactory.

#### MacDermid Enthone Women's Alliance

The MacDermid Enthone Women's Alliance, founded in 2018, seeks to promote female representation in our industry by participating in and hosting events featuring female leaders in our industry. This organization offers a platform for sharing perspectives and experiences on increasing gender diversity in the specialty chemicals space.

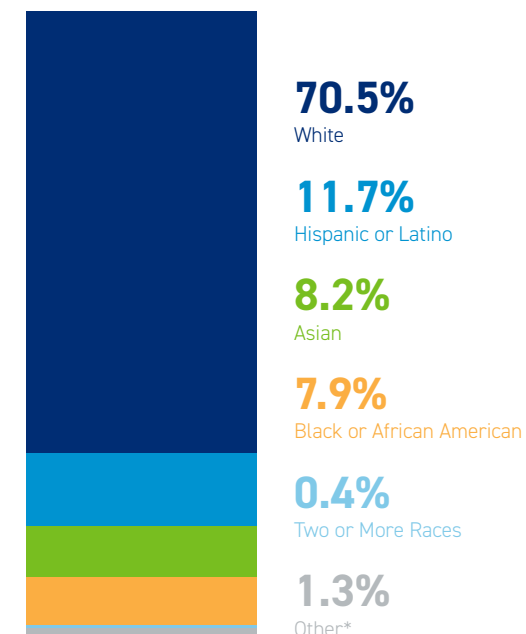
### Snapshot of Our People

Category	2022*
Total full-time employees	5,322
Female employees	29%
Ethnic minority employees (U.S.)	29%
Part-time employees	1%
Board of Directors diversity (women and minorities)	25%

\*For more information, see [ESG Performance Data](#)

### U.S. Race/Ethnicity Chart

(% of employees)



\*Other includes American Indian, Alaska Native, Native Hawaiian or Other Pacific Islander and unknown ethnicities

# Workforce Prosperity

Key elements of our human capital approach are the attraction, acquisition and engagement of highly-skilled employees. We are committed to developing and retaining our people through a fulfilling, meritocratic culture and competitive employee benefits. We invest in talent programs that train our current and future leaders internally and improve the quality of our teams with whom our customers interact daily. Our employees embody the “5Cs” of our culture: Challenge, Commit, Collaborate, Choose and Care. We expect that these principles positively impact all our interactions with customers, colleagues and other stakeholders. In addition to tracking employee satisfaction, our culture surveys provide us with feedback on our employee development efforts, compensation programs and other employer-employee dynamics.

## Talent Attraction and Retention

Our executive leaders, Head of HR and Head of Talent lead our efforts to attract, retain and develop our employees. Our Global Talent Acquisition team is responsible for enabling consistent recruiting efforts globally and attracting the best talent while increasing our diversity and hiring efficiencies. In 2021, this team implemented a new Global Applicant tracking system, a new Careers website and MyESI, an internet-based human resources and career



CEO recognizing employees for their years of service in Hiratsuka, Japan.

development portal. MyESI serves our focus on internal career mobility by gathering information from our employees on their prior experience, career aspirations and personal interests. This platform also allows employees to have greater access to opportunities internally.

We offer challenging opportunities with competitive compensation that help us attract diverse talent and foster a more creative, innovative and successful company. In addition, we provide our employees with

comprehensive benefits to meet their diverse needs. From healthcare to holidays, we are committed to helping our employees enjoy happy and healthy lifestyles while maintaining an appropriate work-life balance. In the U.S. and several other geographies, we offer programs that help and encourage employees to reach personal health goals and make improvements to avoid future health problems. We are also proud to offer programs that support the flexibility and work-life balance of our employees, including paid sick leave and parental leave.

We strive to promote and provide equal treatment in the workplace, including gender representation and pay equity. In 2022, aligned with our inclusion efforts, we conducted our first U.S. gender pay gap review, which helped us understand gender representation at different job levels.

## Supporting Employee Health & Work Life Balance

To create a healthier workforce, increase employee morale and foster employee engagement, we provide a robust suite of health and wellness benefits. In our U.S. locations for example, we offer:

- Paid parental leave
- Education tuition assistance
- Commuter reimbursement program and car allowances
- Medical and dental plans
- Short and long-term disability
- Accidental and critical illness coverage
- 401(k) plan company matching contributions
- Flexible and remote work program

## Training and Development

We invest in talent development programs to grow our leaders and continuously improve the quality of our teams.

We use MyESI to conduct employee performance reviews and aggregate employee self-assessments and manager feedback on an annual basis. In 2022, 98% of eligible employees received performance reviews. Talent development and succession plans for each of our functions and segments are built on this information and are reviewed regularly to secure a pipeline of talent able to maintain business operations. Throughout this review and our professional development and promotion process, we have check points in place designed to prevent discrimination as outlined in our [Fair Employment Policy](#).

We see internal mobility within our organization as a measurement tool of employee development. Our internal fill rate of 43% for open positions speaks to our commitment to invest in training and development initiatives to grow and retain our talent.

We offer numerous online, in-person and single-day event training programs to all our employees, including our **“Elements of Learning”** online training. Through this program, all employees have access to Skillsoft, our primary training platform, which offers an expansive curriculum of leadership training content, including Developing Leadership Skills, Business Ethics Essentials, Women in Leadership,

Customer Service Skills and Project Management. We use this platform for certain mandatory training, such as our annual training related to our [Business Conduct and Ethics Policy](#). We also offer focused training tailored to specific positions and topics of general importance to the company, such as Responsible Sourcing and Human Rights. In 2022, over 92% of our employees participated in career and skill-specific trainings and our total employee training reached 56,786 hours.

We have a variety of programs across the company that facilitate mentorship and encourage networking, including:

- **ESI High Potential (HiPo) program:** A leadership program for high-performing employees around the world which includes training, individual development work, teamwork, mentorship and networking opportunities. Each participant is assigned a project that has the potential to be transformational for ESI as well as a mentor who helps guide the participant on the project, and other areas. We have had 91 HiPo participants since the inception of this program in 2019. We have retained 91% of them and 67% have been promoted.
- **The Early-in-Career Network (ECN):** ECN offers various networking and training opportunities, including live events such as “ESI Talks.” This group targets new hires with the goal to provide valuable information about the company, its operations and its strategy company-wide. The networking events introduce colleagues across the company allowing them to build out their internal network, meet with

senior leaders and form mentoring relationships. Additionally, it helps employees build their careers at ESI and learn about new internal opportunities available to them.

We also have a comprehensive sales training program and a sales management system to support our more than 1,000 strong global salesforce.

**Dedicated Sales Training**

In 2022, our salesforce and sales managers each received ~10 days of sales training, coaching, and development.

## Employee Engagement

Employees receive regular updates on business performance and other topics of interest, including through quarterly global townhalls with live Q&A sessions with our CEO, on-site town halls when senior leaders visit locations, company gatherings, company-wide announcements and updates in multiple languages. Our CEO circulates a quarterly memo to employees on critical business updates, and our business leaders also engage with colleagues within their vertical. In addition, we regularly publish various global newsletters internally, including our Sustainability Newsletter, which updates employee on our sustainability initiatives, and our EH&S Newsletter, which highlights environmental compliance, health & safety and employee wellness matters.

## 2022 Progress

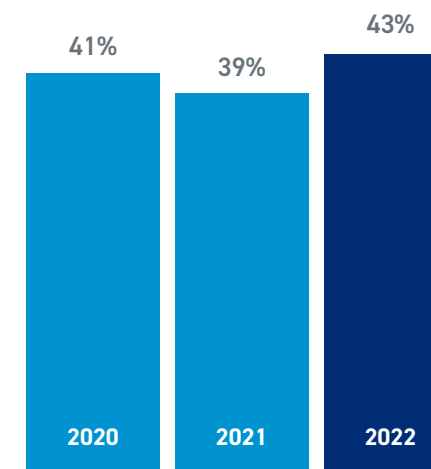
# 56,786

Hours of employee training

# 43%

Internal fill rate

### Internal Fill Rate History





## Employee Recognition

Recognizing employees who set outstanding examples for effort, leadership, collaboration, and effectiveness is part of our meritocratic culture. This recognition is also linked to the behaviors in our culture and reinforces it. All nominations for our employee awards are peer-driven as we believe this approach reinforces collaboration among colleagues and fosters collegiality.

In 2022, we updated our employee recognition program, introducing our **“Elements of Excellence,”** a recognition framework which consists of three levels:

- **Level 1: 5Cs Role Model Awards.** These are real-time spot awards for actions that embody our culture. Those actions must be specific and linked to one or more of the 5Cs.
- **Level 2: Functional Excellence.** These awards are for individuals and cover all of our business functions from innovation through to sales and technical service and from our supply chain through to our Finance, IT and HR departments. The awards go to high-performers for a full year of excellence in their function. They are tied to specific criteria and our 5Cs. We also have an award for our ESI Cares program that is linked to those who have done the most to serve their communities.
- **Level 3: Chairman’s Award.** This is our highest and most prestigious award for a small group of individuals who deliver exceptional results that transform our business while behaving in accordance with our culture and values.

### Level 1

## 5Cs Role Model

### Who is eligible?

- Everyone

### Achievements

- Recognizes demonstration of our 5Cs in the workplace in “real-time”
- Awards Role Models – everyday behaviors or actions that set a positive example for the company aligned to one or more of the 5Cs



### Level 2

## Functional Excellence

### Who is eligible?

- Everyone, according to their function

### Achievements

- Recognizes extraordinary and “needle-moving” improvements for the business from each of our functions that are connected to the Pillars of our Strategy and our culture



### Level 3

## Chairman’s Award

### Who is eligible?

- Everyone – the most prestigious award in the company

### Achievements

- Recognizes and shows appreciation to a small handful of colleagues who delivered exceptional results in the past year and in accordance with our culture and values



# Volunteering and Charitable Giving

Giving back to our communities is central to our business purpose. This is reflected in our company value of “Care,” one of the 5Cs of our culture, which promotes caring, not just about our own people, but also our communities and our place in the world at large. We believe we have a special social responsibility, and our employees value the time and resources we collectively give to their local communities.



Two of our colleagues in Waterbury at the Stock the Pantry event.

Our Director of ESG Strategy leads our volunteer initiatives with our team of Local Champions around the world and partners with numerous non-profit organizations in the communities where we live and work to give back to meaningful causes. Our **ESI Cares program**, which is digitally enabled through our ESI Cares platform, includes a grant solicitation process for employee donations while our ESI Foundation serves as our charitable giving entity.

## Employee Volunteering

We encourage our employees to play active roles in the growth and development of the communities in which they live and work. Our ESI Cares program allows them to participate in volunteering and giving opportunities with nearly two million charities around the world. We have funds dedicated to sponsoring our employees’ participation in global volunteering events and further encourage community engagement and volunteering by providing employees with a paid workday to volunteer with organizations they are passionate about.

To further encourage giving back, we also implemented a volunteer rewards program whereby employees are eligible to earn donation rewards to spend with eligible charities. Some of our volunteering initiatives across the company have included working with vulnerable or at-risk children, cleaning up local beaches and parks, tree planting, setting bird feeders to encourage biodiversity, and collecting and serving food at local homeless shelters.

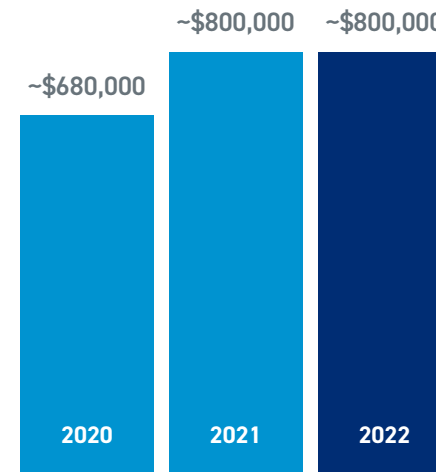
## Charitable Giving

Many of our facilities have Charitable Committees who work with not-for-profit organizations to raise funds and awareness for important, relevant causes. In 2022, we once again partnered with United Way of Greater Waterbury to be the city-wide host site for their annual “Stock the Pantry” event, which helps local food pantries stock their shelves for people in need. At this event, ~15,000 lbs. of food were collected from various organizations and citizens from the greater community of Waterbury, Connecticut, the location of our MacDermid legacy business.

Many other locations around the world participated in hunger awareness initiatives this year and delivered significant amounts of aliment to food banks and homeless shelters in their communities.

## Total Donations

(\$ amount donated)



## ESI Foundation

The ESI Foundation is our charitable giving entity. Funded through contributions made by ESI, it provides grants to qualified charitable organizations in the communities where our employees live and work and funds to match employee donations. With the support of the ESI Foundation, our ESI Cares program has allowed our employees to give back to their communities in a meaningful way, benefitting ~500 charitable organizations in 2022 alone.

The ESI Foundation focuses on causes important to the environmental and social well-being of our communities, such as The Canopy Project, which helped us celebrate Earth Day and the 150th and 100th anniversary of two of our legacy businesses with the planting of trees around the world as well as Equality Now, which protects and promotes the human rights of women.

Our Foundation also makes meaningful donations and grants to local charities selected by our employees as well as to global organizations, such as Doctors Without Borders, Save the Children, Amnesty International UK, the Everglades Foundation and The Rainforest Alliance.







Daffodil Days



Earth Day

## ESI Cares Initiatives Around the World

### Earth Day

ESI colleagues across the majority of our sites participated in Earth Day volunteering initiatives, which included litter picking, tree planting and electronics recycling, raising environmental awareness.

### Daffodil Days in Pennsylvania, United States

Employees counted and sorted over 7,800 daffodil and tulip bulbs as part of the local Relay for Life's fundraising efforts in the fight against cancer. The Altoona site has been participating in the Relay for 16 years.

### Bear Knitting in Suzhou, China

In late 2022, colleagues in our Suzhou office learned to knit sweaters for teddy bears, which were sold to raise funds for children's heart surgeries.



Bear Knitting

### Ukraine Disaster Relief

Our colleagues in Europe collaborated to provide aid to Ukrainian refugees. In Germany, they donated funds and collected food and other necessary items, which they delivered to Przemysl, a Polish town near the Ukrainian border. In Hungary, the team prepared hundreds of sandwiches, which were delivered to the train station where refugees were arriving in March 2022. Many other countries also participated in volunteering relief efforts.

### Elderly Walk in Naarden, Netherlands

In September 2022, our colleagues volunteered at a nursing home in Naarden taking the residents for a walk and sharing stories. In December 2022, our colleagues took the same group our residents for a stroll to the local holiday market.



# Governance & Compliance



Achieving our value creation objectives requires a strong governance foundation. We are committed to operating responsibly and holding ourselves accountable for our actions and decisions. This requires clear management directives, disciplined Board oversight, a robust risk assessment program, uncompromising high standards of business conduct and ethics – which we require our counterparties to uphold – and proactive security practices designed to safeguard confidential information and data privacy.

## Our Approach

Our governance frameworks and business policies are designed to create accountability. We are committed to consistently meeting or exceeding applicable laws and regulations to best support the interests of our company, employees, stockholders, customers, supply chain, and other stakeholders. We also strive to support and respect the rights of all people. Our promise to respect the law and internationally proclaimed ethics and human rights principles is the common thread connecting our businesses, operations, employees and counterparties. This core approach is firmly grounded and supported in our corporate policies.



### Our Governance Structure

ESI’s commitment to strong corporate governance, including ESG governance, begins with our Board of Directors (Board). The Board is responsible for overseeing the company’s risk management program and overall company performance and compliance. Committees of the Board take the lead in areas of oversight within their areas of responsibility with the Nominating and Policies Committee overseeing ESI’s sustainability and social responsibility efforts. Each of our three standing Board Committees oversees elements of our ESG efforts. See [Overseeing ESG Strategy and Performance](#).

Our ESG Committee leads our ESG initiatives and charitable activities throughout the company. Its members, who include senior leaders, such as our CEO, CFO, General Counsel, Head of Industrial & Specialty, Head of

HR and Director of ESG Strategy, meet on a quarterly basis. Our executive leadership team and our ESG Committee provide periodic updates to our Board on ESG matters, risks and opportunities. They also keep the Nominating and Policies Committee apprised periodically or on an as-needed basis.

Our Sustainability Council consists of leaders from multiple functions across the company, including EH&S, Sourcing, R&D and ESG Strategy. Their main responsibilities are to oversee the implementation of the ESG Committee’s sustainability strategy and track performance against our [Sustainability Goals](#) and other ESG initiatives. The Sustainability Council meets weekly and reports to the ESG Committee quarterly to provide updates and assist in oversight as well as to receive input from the ESG Committee on important ESG focus areas.

# Governance and Accountability

Our corporate governance framework defines our approach to oversight and accountability to ensure that our operations align with the interests of our employees and other stakeholders. Effective corporate governance is critical to the appropriate management of risks specific to our businesses and the creation of long-term value.

## Board Oversight

Our Board of Directors, which provides the highest level of oversight for the company's strategy and performance, adheres to the [Board of Directors Governance Principles and Code of Conduct](#) and the [Amended and Restated By-laws](#) of the company which cover Board composition, performance evaluation, conflicts of interest and Board duties and responsibilities, among other topics.

## Performance Through a Diverse and Independent Board

Racial, ethnic, age and gender diversity are among the key factors that the Nominating and Policies Committee considers when identifying and selecting directors. We believe that diversity fosters a variety of viewpoints and, consequently, a more constructive and effective decision-making process and higher level of success for the company.

Our businesses cover broad end-markets and geographies. For that reason, we recognize the importance of having a blend of longer-serving directors with a deep understanding of our operations and the markets we serve, and more recent additions who are able to provide fresh perspectives.

## Overseeing ESG Strategy and Performance

The Board and its committees oversee and engage with our executive team with respect to progress against corporate and business plans, short- and long-term strategic objectives, and ESG priorities. These ESG priorities include the tracking and achievement of our Sustainability Goals and other ESG initiatives.

Collectively, our Board brings a balance of relevant skills, professional experience and diversity of backgrounds and perspectives to the oversight of ESI's business risks and strategies. All of our directors have relevant expertise, such as chemical industry expertise, executive management, risk management, accounting, M&A, global tax structuring and planning and internal audit, along with critical qualifications that align with the current needs of the company.

In addition, each Committee oversees specific strategic and ESG areas relevant to their respective charters:

Committees	Area(s) of Strategic and ESG Responsibility
<b>Audit Committee</b>	Oversees accounting and financial reporting, internal audit, compliance complaints and policies and procedures relating to risk assessment and risk management
<b>Compensation Committee</b>	Oversees CEO and executive compensation, including short and long-term incentives; Reviews Board remuneration
<b>Nominating and Policies Committee</b>	Searches for and evaluates Board candidates; Reviews Board structure and corporate governance guidelines; Oversees self-evaluation of the Board and its committees; Reviews succession plans; Reviews sustainability and social responsibility efforts and related policies

For more information about our corporate governance framework and directors, please refer to the [Governance](#) page of our website and our [2022 Proxy Statement](#).

## ESG Governance Framework

Our ESG Committee is responsible for providing guidance related to the company's ESG efforts and embedding a culture of sustainability across our businesses. Specifically, its responsibilities include:

- Reporting progress toward our Sustainability Goals and sustainability challenges to the Board and the Nominating and Policies Committee
- Recommending the company's strategic ESG priorities and goals to the Board
- Steering various sustainability efforts around the company, including operational efficiencies, responsible sourcing, sustainability brand marketing and sustainable innovation efforts
- Leading various global health & safety initiatives
- Overseeing our community impact efforts, including charitable donations and volunteering through our ESI Cares campaigns and the ESI Foundation

# Board of Directors



**Sir Martin Ellis Franklin, KGCN**  
Executive Chairman  
Founder & CEO  
Mariposa Capital, LLC



**Benjamin Gliklich**  
President & CEO  
Element Solutions Inc



**Ian G. H. Ashken<sup>(2)(3)</sup>**  
Former Vice Chairman and President  
Jarden Corporation



**Elyse Napoli Filon<sup>(1)</sup>**  
Former Vice President - Finance  
W.R. Grace & Co.



**Christopher T. Fraser<sup>(2)(3)</sup>**  
Former Chairman & CEO  
KMG Chemicals Inc.



**Michael F. Goss<sup>(1)(2)</sup>**  
Independent Lead Director  
Former CFO  
Condé Nast



**Nichelle Maynard-Elliott<sup>(1)</sup>**  
Former Executive Director  
Mergers & Acquisitions  
Praxair, Inc.



**E. Stanley O'Neal<sup>(3)</sup>**  
Former Chairman & CEO  
Merrill Lynch & Co., Inc.

<sup>(1)</sup>Member of the Audit Committee  
<sup>(2)</sup>Member of the Compensation Committee  
<sup>(3)</sup>Member of the Nominating and Policies Committee

Independent Oversight
75% independent Board
100% independent Board Committees
Only one Board member is a Company executive
Separation of CEO and Chairman roles
Independent Lead Director
Regular executive sessions of independent directors at Board meetings (chaired by the independent Lead Director) and Committee meetings (chaired by independent Committee chairs)
Board & Committee Composition
Annual election of all directors
Focus on diversity with 2 women directors, or 25% of the Board
1 female director serving in a Board leadership position (chair of the Audit Committee)
Executive and Board succession planning process
Median tenure of directors of ~6 years
Annual Board and Committee assessments
Mandatory retirement age of 73



# Ethics and Compliance

Our success is contingent on conducting our business in an ethical manner. Providing clarity on what our expectations are with respect to ethical and compliant behavior also promotes trust, transparency and reliability among our stakeholders.

We set and communicate high compliance standards to drive ethical behavior by our employees. Our [Business Conduct and Ethics Policy](#), which applies to all ESI directors, officers and employees as well as our contractors and consultants, is the foundation of our integrity and ethics principles and serves as the ethical compass of the company. Each year, all full-time employees, including our executive officers, are required to certify that they have read, understand and will comply with this Policy.

Our Business Conduct and Ethics Policy and other material policies are translated in relevant languages in order to be accessible and understood by our employees and made available centrally on our intranet.



In addition to our Business Conduct and Ethics Policy and our [Conflicts of Interest Policy](#), we have adopted other specific standards, policies and procedures to help us uphold our high legal and ethical standards. Examples include:

## Human Rights

We are committed to support and protect internationally proclaimed human rights in our operations and do not tolerate violations of any laws or regulations pertaining to immigration, wages, hours, benefits, and working conditions, or prohibiting discrimination, forced or compulsory labor, human trafficking, slavery and child labor. As part of our contracting processes, we request a representation that our counterparty will comply with our [Supplier](#)

[Code of Conduct](#), which is also available in multiple languages and requires suppliers to abide by fair and humane employment practices and uphold human rights. For more information, see [Managing a Sustainable Supply Chain](#).

## Bribery and Corruption

Our [Foreign Corrupt Practices Act/Anti-Corruption Policy](#) supports our commitment to integrity and ethical dealing. It also explains the specific requirements and prohibitions applicable to our operations under the provisions of the U.S. Foreign Corrupt Practices Act (FCPA) and similar global anti-corruption legislations.

## Anti-trust

It is our longstanding policy to observe and comply with both the spirit and letter of antitrust laws - both domestic and foreign. Unlawful anti-competitive behaviors with competitors or customers are prohibited, including price fixing, agreements to limit production, markets divisions and illegal boycotts. Our Business Conduct and Ethics Policy and Supplier Code of Conduct outline ESI's strict expectations of all employees, officers and directors as well as third parties doing business with us.

## Policies Supporting Human Rights

- [Business Conduct and Ethics Policy – Employees/Directors](#)
- [Business Conduct and Ethics Policy – Contractors/Consultants](#)
- [Anti-slavery and Human Trafficking Policy](#)
- [UK Modern Slavery Act](#)
- [California Transparency Act](#)
- [Fair Employment Policy](#)
- [Supplier Code of Conduct](#)
- [Supply Chain Conflict Minerals Policy](#)

## Managing Risks

Our commitment to ethics and compliance begins at the very top of our organization. Our Board of Directors, CEO, CFO and General Counsel oversee the establishment and communication of ethical conduct, highlighting the importance of maintaining strict compliance with all laws and regulations governing our operations.

Our [Business Conduct and Ethics Policy](#) and other ethics and compliance policies are shared with all employees, starting with our onboarding process. Any new employee is required to acknowledge in writing their agreement to comply with this Policy. To reinforce our policies, we provide training available for our employees around the world.

We expect our suppliers, contractors, sales representatives and any other third party doing business with ESI to similarly act in a manner consistent with our core values and our Business Conduct and Ethics Policy. We also expect our suppliers around the world and their subcontractors to fully comply with our [Supplier Code of Conduct](#) as well as all applicable laws and industry standards.

### Training and Monitoring

We require training on our Business Conduct and Ethics Policy and other key corporate policies. Topics covered include bribery, labor & human rights, anti-harassment and discrimination. Our employees receive this mandatory training using our online training platform, Skillsoft. We also provide related training sessions and refreshers on an annual basis. New modules or refresh of existing trainings are added where and when necessary. In addition, we offer targeted specialized ethical and compliance training for those employees in certain locations or functions, either online or in person. In 2023, we will introduce training sessions for our procurement teams dedicated to Responsible Sourcing which will cover environmental and social topics relevant to our business.

We use all these training opportunities to foster a culture of ethics and compliance throughout the organization. Ultimately, our goal is to prevent, manage and mitigate any ethics and compliance risks within our walls and beyond our facilities.

#### Required Employee Training

100% of full-time employees are trained on:

- Business Conduct and Ethics
- Anti-Bribery Awareness
- Insider Trading

### Third-Party Risk

We have policies and procedures in place to identify those potential business counterparties who may pose a regulatory or reputational risk to our company. We also have systems to screen counterparties and manage that risk. For more information, see [Third-Party Monitoring and Screening](#).

Our Supplier Code of Conduct provides minimum standards to deter improper actions and promote ethical and responsible conduct related to human rights, labor, health & safety, the environment, and others. Where appropriate, we require suppliers to review and acknowledge our Supplier Code of Conduct before any transaction with us. We also encourage our business counterparties to share their own supplier requirements and relevant policies. This helps us align and provide consistency across our broad supply chain, adding transparency and efficiency to our risk management process.

We monitor the performance of our suppliers and manage third-party risk using a variety of preemptive screening tools. Compliance-sensitive third parties also receive periodic training. Third parties identified as being located in high-risk jurisdictions or countries under regulatory scrutiny are required to sign and provide certificates acknowledging compliance with applicable trade laws and regulations. We also request that they complete an online compliance course specifically related to our [Foreign Corrupt Practices Act/Anti-Corruption Policy](#) through our Skillsoft training tool to emphasize our expectations with respect to their full adherence to our ethical standards.

# 100%

of our employees trained on Business Ethics and our Business Conduct and Ethics Policy covering topics such as bribery, labor & human rights, anti-harassment, and discrimination.

# Managing a Sustainable Supply Chain

We strive to maintain a supply chain that is reliable, resilient, flexible and, most importantly, responsible and ethical. We have established supply chain risk management policies, guidelines and systems designed to ensure our responsible supply chain practices. These include guidance and due diligence with respect to the materials and minerals we purchase for use in our products and the suppliers with whom we choose to partner. We strive to diversify our suppliers and source our materials locally, where possible or as needed.

Our [Supplier Code of Conduct](#) applies to all our suppliers around the world. This Code reinforces the principles of our [Business Conduct and Ethics Policy](#) by providing examples of actual or potential non-compliance and good management practices. Both our Code and Policy, aligned with our [Anti-slavery and Human Trafficking Policy](#), strictly prohibit the use of slavery and human trafficking in our operations and supply-chain. We expect our suppliers to hold themselves and their own suppliers to these same high-ethical standards.

## Supply Chain Risk Management

Our General Counsel and broader legal and compliance organization work closely with our supply chain teams to maintain responsible sourcing practices that are compliant with applicable local laws and regulations. Our Sourcing leaders along with the supply chain VPs of each of our business verticals lead our responsible sourcing practices on the ground according to Corporate guidance. In addition, our Sourcing and Compliance teams develop goals and lead our facilities and suppliers in the implementation of responsible sourcing initiatives.

We periodically conduct supplier audits, which help assess a supplier's compliance infrastructure. As indicated in our Supplier Code of Conduct, issues such as human trafficking, slavery, forced/prison labor and child labor are zero tolerance violations. When and where necessary, our supply chain teams receive training on conflict minerals and/or human rights issues to raise and maintain internal awareness with respect to ESG-related risks.

Supply chain risk management efforts and challenges are reported to our ESG Committee, which takes an active role in enforcing the execution of our policies and measuring our ESG performance.

## Third-Party Monitoring and Screening

As part of our third-party due diligence process, we have vetted ~4,000 of our suppliers and screened around 6,000+ business counterparties. Our comprehensive compliance vetting program uses industry leading platforms, such as Coupa Risk Assess (CRA) and Dow Jones. This program allows us to preemptively screen and evaluate for any known ethical and compliance risks associated with counterparties around the world, including customers, suppliers, vendors, distributors, consultants, manufacturer representatives and other business counterparties.

Our vetting tools compare our existing or potential counterparties against a worldwide database of information. This database includes global sanctions lists, such as the Specially Designated Nationals and Blocked Person List of the Department of the Treasury's Office of Foreign Asset Control (OFAC), politically exposed persons, questionable beneficial ownership or state ownership, official government exclusion lists. The system is also able to report adverse media feeds flagging known human rights abuses or environmental violations.

We regularly review third parties identified in the database using a standardized risk rating system of low, medium, and high levels. Those associated with a high level of risks are subject to additional due diligence and information requests. They are also

required to complete more in-depth online compliance and ethical training based on our Business Conduct and Ethics Policy and Supplier Code of Conduct. If the additional required information requested is not promptly provided, is considered unsatisfactory, or if the training is not completed, we may escalate to senior management for review and remediation, including but not limited to, discontinuing that particular business relationship.

### Coupa Risk Assess (CRA)

In 2022, 1,122 business counterparties were screened through our vetting program designed to identify, assess and mitigate certain compliance risks, including risks related to bribery and corruption. Additional screenings may also be completed for any red flags relating to human rights, child labor, compliance & ethics and other ESG matters as well as penalties and reported violations.



## Responsible Sourcing Policies and Commitments

Our Supplier Code of Conduct and other policies establish minimum requirements of conduct for our suppliers and practices for their factories. These policies reinforce our commitment to human rights and enhance supplier awareness on actual or potential non-compliance matters. Listed below are some of our policies and certificates for responsible sourcing:

- [Business Conduct and Ethics Policy – Employees/Directors](#)
- [Business Conduct and Ethics Policy – Contractors/Consultants](#)
- [Anti-slavery and Human Trafficking Policy](#)
- [UK Modern Slavery Act Disclosure](#)
- [California Transparency Act Disclosure](#)
- [Supplier Code of Conduct](#)
- [Supply Chain Conflict Minerals Policy](#)
- [Responsible Minerals Assurance Certificate](#)
- [Conflict Minerals Report](#)

We also formally support the [Responsible Minerals Initiative \(RMI\)](#).

## Responsible Business Alliance (RBA) Membership

ESI is a member of the Responsible Business Alliance (RBA), a major industry coalition dedicated to corporate social responsibility in global supply chains. Membership was granted upon review by the RBA of ESI's practices relating to labor and human rights, safety, ethics and environmental topics as well as completion of third-party audits. This accomplishment further highlights our commitment to ethical conduct, transparency and continuous improvement throughout our supply chain.

### MacDermid Alpha In Good Standing with the Responsible Minerals Initiative (RMI)

In 2022, after two consecutive successful RMI audits, MacDermid Alpha, our tin smelting facility in the U.S., qualified for an extended conformance term of 3 years (v. 1 year initially) between on-site RMI assessments. This further demonstrates the alignment of our due diligence procedures with the RMI Responsible Minerals Process (RMAP) standards based on the Organization for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.



# Handling Data Security and Privacy

For ESI, information security and privacy are more than just administrative and compliance functions—they serve to protect our data and to enable our innovation. We have established robust policies and procedures to manage cybersecurity defenses, controls and programs to safeguard our company, our business counterparties and our people.

## Managing Security Risks

Our Chief Information Security Officer (CISO) is responsible for the development and oversight of our information security program. Senior leadership and, when advisable, our Board receive updates throughout the year from our CISO regarding cybersecurity and information security risks, including the nature of threats, the state of our defense and detection capabilities, incident response plans and employee training activities, as applicable. Our CISO manages a global information security team with full responsibility for preventing and managing threats. The team works within the organization as well as with expert cybersecurity firms and resources to identify, classify, prioritize, remediate, and mitigate cyber-related risks to our business.

We are committed to continually improve our IT security systems. In 2022, we continued to enhance our cyber security program with the assistance of a leading 24x7 managed detection and response

(MDR) provider. We also implemented an advanced email protection solution and cloud security software as a service (SaaS). These improvements, along with periodic information security training of our employees, continue to improve the security and reliability of our IT environment.

### ISO/IEC27001:2013 Certification

In November 2021, our information security management system became certified as ISO/IEC27001:2013 compliant. ISO/IEC27001:2013 is an international security standard that lays out best practices for data protection and security management systems. See our [certificate](#).

## In-Depth Defense

To protect our business against today's increasing cybersecurity threats, we have developed a rigorous, multi-layered information security infrastructure to defend our data, network and employees. Overseen by our CISO, our infrastructure is built with multiple enforcement mechanisms to guard against simple and complex attacks. These mechanisms include anti-malware, intrusion detection and prevention, multi-factor authentication, data loss prevention, security incident event management (SIEM), application and network layer vulnerability management, application control, advanced email security, integrity monitoring, and privileged access

management, among others. These protections are tested by external Penetration Testing on an ongoing basis to assure their continued effectiveness.

Similarly, our Disaster Recovery (DR) program is regularly evaluated with input from our business and executive leadership teams. Our DR program, which is part of our company's overall business continuity plans, is designed to allow business continuity and stable IT operations in the event of a major outage caused by unplanned activity, such as a natural disaster or a material cyber incident.

To uphold privacy rights, our [Website Privacy Policy](#) and Data Protection and Privacy Policy are designed to ensure compliance with applicable privacy and data protection laws, including, the General Data Protection Regulation (GDPR) in the E.U. and the California Consumer Protection Act (CCPA) in the U.S. These policies, which are applicable globally, protect the privacy of the personal data of our employees, customers and other business counterparties from whom we collect personal information. Other data security policies address our data security procedures related, without limitation, to computer security incidents, human resources, use of mobile devices, technology disasters and third-party security.

## Placing Our Colleagues at the Center of Data Security

Information security is a shared responsibility. We educate our employees about the critical role they play in data security with a comprehensive

Security Awareness Program designed to help them recognize potential threats and provide helpful guidance to incorporate into their day-to-day tasks. Our employees play a pivotal role in data protection which complements the IT security mechanisms and controls we have in place.

We require our employees to participate in training and simulated phishing campaigns to help them identify and report fraudulent emails. If one of our employees succumbs to a simulated phishing email, they are presented a "learning opportunity" notification, which comprises of additional tips and information on spotting fraudulent emails or websites.

### ESI's Security Awareness Program

Our Security Awareness Program consists of:

- Annual online Security Awareness training
- Periodic cyber-security newsletters and advisory communications
- Simulated phishing campaigns with "learning opportunities"
- Outlook plugin for easy reporting to our Information Security team of any phishing attempts or security concerns
- Annual acknowledgement of the Information Security Acceptable Use Policy



# Appendices

## External Memberships, Associations and Certificates

We are proud members of several organizations and associations within our industry and end markets we serve, including but not limited to the following:

- [Associação Brasileira Técnica de Flexografia \(Brazil\)](#)
- [Belgaqua \(Belgium\)](#)
- [British Occupational Hygiene Society \(U.K.\)](#)
- [Chinese Society of Surface Treatment Engineering \(China\)](#)
- [Electronics Industries Association of India \(India\)](#)
- [Flexographic Technical Association](#)
- [Global Association for Electronics Manufacturing](#)

- [Hong Kong Printed Circuit Association \(Hong Kong\)](#)
- [International Electronics Manufacturing Initiative](#)
- [Japan Surface Finishing Suppliers Association \(Japan\)](#)
- [Marine Technology Society \(U.S.\)](#)
- [National Association of Metal Finishing](#)
- [Polskie Towarzystwo Galwanotechniczne \(Polish Electroplating Society\) \(Poland\)](#)
- [Surface Mount Technology Association](#)
- [Taiwan Electrical and Electronic Manufacturers' Association \(Taiwan\)](#)
- [Taiwan Printed Circuit Association \(Taiwan\)](#)
- [Taiwan Surface Finishing Association \(Taiwan\)](#)
- [VOA \(Verband für Oberflächentechnik von Aluminium\) \(Germany\)](#)
- [VDA \(Verband der Automobilindustrie e.V.\)](#)

We also engage in the following sustainability-focused organizations and partnerships:

- [American National Standards Institute \(North America\)](#)
- [EcoVadis \(North America\)](#)
- [Haryana Environmental Management Society \(India\)](#)
- [Industrial Waste Management Association \(India\)](#)
- [Responsible Business Alliance](#)
- [Responsible Minerals Initiative](#)
- [Shanghai Environmental Protection Association \(China\)](#)
- [Water Regulations Advisory Scheme \(U.K.\)](#)
- [Women of Flexo](#)
- [Holygrail 2.0 – Digital Watermarks Project](#)
- [Confederation of Indian Industry](#)
- [Indian Energy Storage Alliance](#)
- [Consortium for Waste Circularity](#)

Our various business and facilities are certified and accredited under the following standards:

- [ISO 9001:2015 - Quality Management System](#)
- [ISO 14001:2015 - Environmental Management System](#)
- [ISO/IEC 17025:2017 - Testing and Calibration Laboratories](#)
- [IATF 16949:2016 - Automotive Quality Management System](#)
- [ISO 45001:2018 - Occupational Health & Safety Management System \(replaces OHSAS 18001:2007\)](#)
- [ISO 27001: 2013 – Information Security Management System](#)
- [Valpak Zero to Waste Landfill](#)





# Policies, Reports and Disclosures

We strive to achieve high standards of quality, ethics and performance while consistently exceeding applicable requirements and enhancing customer satisfaction.

## Policies and Disclosures

### Quality

- [Global Quality Policy](#)
- [Six Sigma Management System](#)

### Environmental, Health & Safety

- [Global Environmental, Health & Safety Policy](#)

### Ethics and Compliance

- [Board of Directors Governance Principles and Code of Conduct](#)
- [Code of Ethics for Senior Financial Officers](#)
- [Foreign Corrupt Practices Act/ Anti-Corruption Policy](#)
- [Business Conduct and Ethics Policy – Employees/Directors](#)

- [Business Conduct and Ethics Policy – Contractors/Consultants](#)
- Business Conduct and Ethics Policy
  - [Bribes and Kickbacks](#)
  - [Environmental Protection](#)
  - [Political Contributions](#)
- [Conflicts of Interest Policy](#)
- [Rules of Conduct](#)
- [Fair Employment Policy](#)
- [Insider Trading Policy](#)
- [Animal Testing Statement](#)

### Governance and Accountability

- [Board of Directors Governance Principles and Code of Conduct](#)
- [Audit Committee Charter](#)
- [Compensation Committee Charter](#)
- [Nominating and Policies Committee Charter](#)
- [Stock Ownership Guidelines](#)
- [UK Tax Strategy](#)

### Data Security

- [Website Privacy Policy](#)
- Data Protection and Privacy Policy

### Human Rights and Responsible Sourcing

- [Anti-Slavery and Human Trafficking Policy](#)
- [UK Modern Slavery Act](#)
- [California Transparency Act](#)
- Business Conduct and Ethics Policy
  - [Environmental Protection](#)
- [Supplier Code of Conduct](#)
- [Supply Chain Conflict Minerals Policy](#)
- [Conflict Minerals Report](#)
- [Responsible Minerals Assurance Certificate](#)

### Latest Reports

- [Annual Report](#)
- [2022 Proxy Statement](#)



# ESG Performance Data

Unless otherwise noted, this ESG performance data relates to the period of January 1, 2022 to December 31, 2022 and covers ESG topics that are material to our company. Please refer to [About this Report](#) for more information. For prior sustainability publications and additional ESG information, see our [Sustainability Website](#).

ECONOMIC PERFORMANCE			
	2020	2021	2022
<b>Segment Net Sales</b>			
Electronic Solutions (%)	63	64	63
Industrial Solutions (%)	37	36	37
<b>Regional Net Sales</b>			
Americas (%)	30	28	30
EMEA (%)	27	28	28
Asia (%)	43	44	42
<b>Business</b>			
Amount Spent on R&D	\$48.6m	\$49.7m	\$48.8m
Percentage of Sales Spent on R&D (%)	2.6	2.1	1.9
Total Net Sales from Sustainable Products	\$450m+	\$650m+	\$700m+
Percentage of Net Sales from Sustainable Products (%)	~25+	~27+	~28+
Total Net Sales from Products Designed for Use-Phase Efficiency	\$180m+	\$230m+	\$260m+
Percentage of Net Sales from Products Designed for Use-Phase Efficiency (%)	10	10	11
<b>Operations</b>			
Manufacturing Facilities	42	59	59
Number of Countries We Operate in and Service	50+	50+	50+

**GLOBAL WORKFORCE REPRESENTATION**

<b>Overall Headcount</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Total	4,435	5,401	5,381
Male	3,176	3,824	3,827
Female	1,259	1,577	1,554
Employment Work Type: Full Time	4,501	5,310	5,322
Employment Work Type: Part Time	52	71	59
Headcount by Rank: Management-Male	266	330	328
Headcount by Rank: Management-Female	46	53	59
Headcount by Rank: Professional-Male	1,883	2,262	2,289
Headcount by Rank: Professional-Female	850	1,047	1,063
Headcount by Rank: Others-Male	971	1,232	1,210
Headcount by Rank: Others-Female	348	477	432
New Hires	389	630	853
Turnover Rate	11.2%	14.9%	14.9%

**EMPLOYEE COUNT BY ETHNICITY**

<b>United States</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Asian	105	104	89
Black or African American	73	72	85
Hispanic or Latino	116	122	126
Two or More Races	12	8	4
Other*	61	63	14
White	722	749	762

\*includes American Indian, Alaska Native, Native Hawaiian or Other Pacific Islander and undisclosed ethnicities.

**EMPLOYEE COUNT BY REGION**

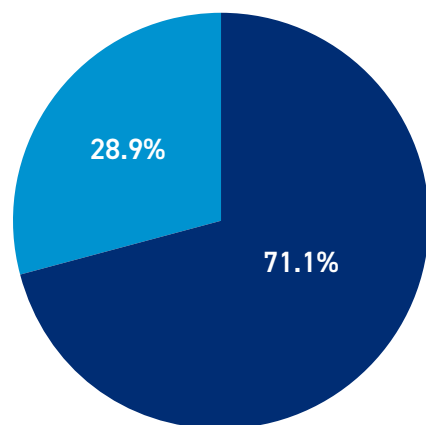
	<b>2020</b>	<b>2021</b>	<b>2022</b>
Americas	1,409	1,506	1,452
Europe, Middle East and Africa (EMEA)	1,386	1,743	1,853
Asia-Pacific (APAC)	1,758	2,152	2,076





**SNAPSHOT OF OUR PEOPLE**

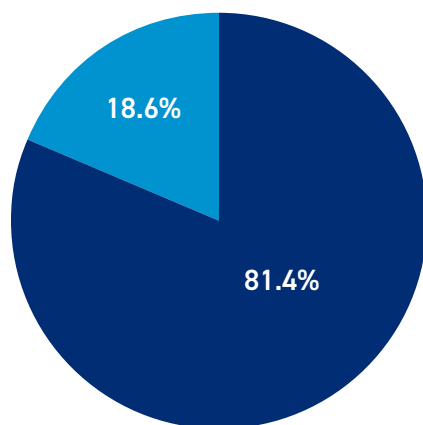
Category	2020	2021	2022
Female Employees (%)	28	29	29
Ethnic Minority Employees (U.S.) (%)	34	33	29
Part Time Employees (%)	1	1	1
Total Full-Time Employees	4,501	5,310	5,322
Board of Directors - Female Members (%)	25	25	25



**Global Employees**

by Gender

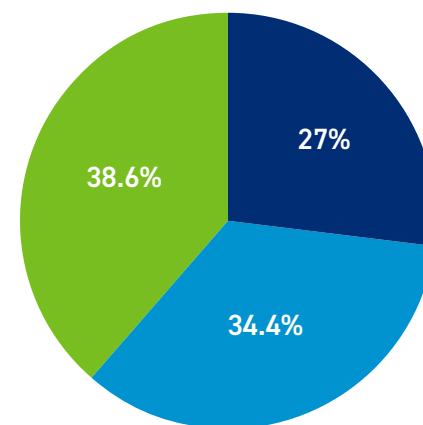
● Female ● Male



**People Manager**

by Gender

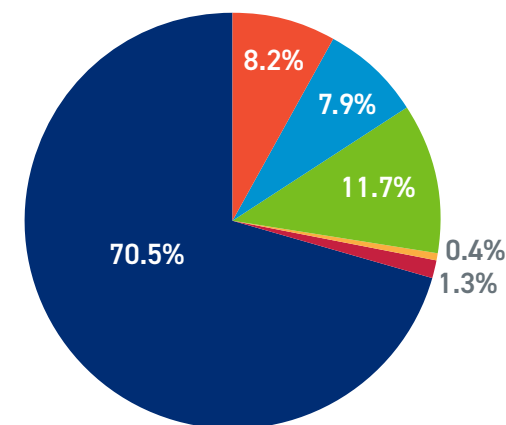
● Female ● Male



**Employee Location**

by Region

● Americas ● Europe, Middle East and Africa ● Asia-Pacific



**U.S. Race/Ethnicity**

% of Employees

● Asian ● Black or African American ● Hispanic or Latino ● White ● Two or More Races ● Other\*\*

**OVERALL HEADCOUNT BY AGE RANGE**

	2020	2021	2022
Under 30	453	603	594
30-40 years	1,226	1,425	1,379
40-50 years	1,331	1,588	1,608
50-60 years	1,196	1,291	1,308
60+ years	347	494	492

**SOCIAL IMPACT**

	2020	2021	2022
Internal Fill Rate (%)	41	39	43
Total Employee Training Hours*	22,810	26,283	56,786
Percentage of Employees Who Participated in Career and Skill-Specific Training (%)	50	66	92
Percentage of Employees Who Received Development Focused Performance Reviews (%)	99	98	98
Percentage of Employees Member of Labor Unions (%)	7	6	10
Percentage of Employees Without a College Degree (%)	30	32	31
Number of Employees Without a College Degree	1,354	1,709	1,642

\*In prior years, we did not report EH&S training hours. Without EH&S Hours, our 2022 total training hours would be 33,207.

**CHARITABLE GIVING**

	2020	2021	2022
Donations	~680,000	~800,000	~800,000
Number of Charities Donated To		~850	~500

**ENVIRONMENTAL HEALTH & SAFETY\***

	2020	2021	2022
Total Hours Worked	7,121,953	7,397,828	8,610,566
Total Number of Recordable Injury/Illness	41	36	41
Total Number of Lost Time** Injury/Illness	19	18	30
Total Days Away from Work-Injuries/Illness	160	194	856
Severity Rate – Days away from work (I&I)	4.49	5.24	19.88
Total First Aid-Only Cases	59	54	78
Total Safety Observations	2,622	3,792	7,085
Total Recordable Incident Rate (TRIR)	1.15	0.97	0.95
Lost Time Injury Rate (LTIR)***	0.53	0.49	0.70
Process Safety Incidents Count (PSIC)-PSE1	2	3	0
Process Safety Incidents Count (PSIC)-PSE2	2	0	0
EH&S Training Man Hours Completed****			23,579

\*Environmental Health & Safety performance does not include contractors.

\*\*We define lost time as any work-related incident that results in days away from work.

\*\*\*LTIR is calculated as (number of lost time incidents \* 200,000) / total employee hours.

\*\*\*\*2022 was the first year we started tracking EH&S training hours for reporting purposes.

**ENERGY AND EMISSIONS**

	2020	2021	2022
<b>Fuel and Energy Consumption</b> (Gigajoules)			
Natural Gas	213,280	222,900	220,845
Diesel	15,515	15,595	14,445
Liquefied Petroleum Gas (LPG)	9,030	9,240	9,355
Purchased Steam	6,670	7,425	7,335
Purchased Electricity	223,770	228,830	216,435
Total Energy Consumed	495,025	515,045	505,665
Total Energy per MT (Total Production)	2.15	2.06	2.16
Total Renewable Energy Sourced or Generated	26,760	31,060	37,245
Total Renewable Energy Sourced to Total Energy Consumed (%)	5.41	6.03	7.37
<b>Greenhouse Gas Emissions</b> (MT CO2e)*			
Total Scope 1	12,555	13,030	12,840
Scope 2 Emissions (Market-based Method)	23,795	24,750	23,720
Total Scope 1 & 2	36,350	37,780	36,560
Total Emissions per Production Weight (MT)	0.158	0.151	0.156

\*Environmental data includes management estimates

\*In 2022, we obtained the license to use the 2022 IEA Emissions Factors and updated our emissions disclosures retroactively to 2020.

**WATER (Liters)**

	2020	2021	2022
Total Water Withdrawal	419,259,360	434,151,210	413,991,365
Total Water Discharged*	223,590,930	224,429,450	205,358,965
Total Water Consumption**	195,668,430	209,721,760	208,632,400
Water Recycled and Reused***	2,644,755	3,120,225	6,133,870
Water Withdrawn from Recycled Sources (%)	0.63	0.72	1.48

\*In some cases, our wastewater is containerized and sent offsite for disposal. This wastewater is captured under Hazardous Waste.

\*\*Total Water Consumption calculated using the water balance formula: Water Consumption = Total Water Withdrawal - Total Water Discharged.

\*\*\*Alternative water includes repurposed or recycled water.



**WASTE (Metric tons - MT)\***

	<b>2020</b>	<b>2021</b>	<b>2022</b>
Non-Hazardous Waste	2,845	3,340	3,005
Hazardous Waste	13,155	15,810	15,210
Recycled Waste	3,230	3,415	3,795
Total	19,230	22,565	22,010

\*In 2022, we updated our waste data collection methodology and have restated historical figures to meet this new methodology.

**PRODUCTION (Metric tons - MT)\***

	<b>2020</b>	<b>2021</b>	<b>2022</b>
Americas	58,372	60,957	60,645
Asia-Pacific (APAC)	91,920	100,395	92,700
Europe, Middle East and Africa (EMEA)	79,790	88,175	81,210
Total	230,080	249,525	234,555

\*Includes approximate converted quantities as Metric Ton is a standard measure across most, but not all, our businesses. Due to the diversity of our portfolio, mass and product value are not necessarily correlated.

**CERTIFICATIONS**

	<b>2020</b>	<b>2021</b>	<b>2022</b>
Percentage of Sites with ISO 45001 Certificates (%)	33+	33+	33+
Percentage of Sites with ISO 9001 and/or IATF 16949 Certificates (%)	100	100	98
Percentage of Sites with ISO 14001 Certificates (%)	87	87	73



# Global Reporting Initiative (GRI) Index

Number	Disclosure	Cross-References or Answers
<b>GRI 1: FOUNDATION 2021</b>		
	Statement of use	Element Solutions Inc ("ESI," "we," "our" or "us") has prepared this 2022 ESG report in accordance with the Global Reporting Initiative (GRI) Standards for the period January 1, 2022 – December 31, 2022. We applied the 2021 version of the GRI 2: General Disclosures and GRI 3: Material Topics. We applied the 2018 version of the GRI Standards for GRI 303 and GRI 403; the 2020 version of the GRI Standards for GRI 306; and the 2016 version of the GRI Standards for all other disclosures in this Index. The "2016," "2018," "2020," and "2021" labels refer to the respective GRI Standards issue dates, not the date of information presented in the report. This index links to relevant information on our website, in our 2022 10-K Annual Report and in our 2022 Proxy Statement, among others.
<b>GRI 2: GENERAL DISCLOSURES 2021</b>		
<b>THE ORGANIZATION AND ITS REPORTING PRACTICES</b>		
2-1	Organizational details	<p><a href="#">Element Solutions Inc</a></p> <p>Incorporated in the State of Delaware on January 22, 2014.</p> <p>Our common stock is publicly traded on the New York Stock Exchange under the ticker symbol "ESI."</p> <p>ESI's headquarters are located at: 500 East Broward Boulevard, Suite 1860 Fort Lauderdale, Florida 33394, USA.</p> <p>At December 31, 2022, we had operations and serviced customers in more than 50 countries.</p> <p>For more information, refer to:</p> <p><a href="#">About ESI</a>  <a href="#">2022 10-K Annual Report (Corporate Information, page 9; Properties, page 23; Business, page 1 and Market for our Common Stock, page 24)</a>  <a href="#">2022 Proxy Statement (Security Ownership, pages 54-56)</a>  <a href="#">ESI Website (Overview)</a></p> <p>ESI operates 63 manufacturing and R&amp;D sites in 18 countries. Major manufacturing operations are in Brazil, China, Germany, India, Italy, Malaysia, Mexico, Singapore, South Korea, Turkey, the United Kingdom and the United States. We have direct operations in 32 countries and can service customers through distribution relationships in an additional 20+ countries.</p>
2-2	Entities included in the organization's sustainability reporting	<p><a href="#">Vision &amp; Strategy - About this Report</a></p> <p><a href="#">2022 10-K Annual Report (Business, page 1)</a></p>
2-3	Reporting period, frequency and contact point	<p>January 1, 2022 to December 31, 2022.</p> <p>We publish ESG Reports or updated sustainability performance data annually which is aligned with ESI's financial reporting period.</p> <p>ESI's 2022 ESG Report date: March 8, 2023</p> <p>sustainability@elementsolutionsinc.com</p>



Number	Disclosure	Cross-References or Answers
2-4	Restatements of information	<a href="#">Vision &amp; Strategy - About this Report</a> Following the acquisitions of the Coventya Holding, H.K. Wentworth and HSO groups, historical ESG data was restated to enable comparability of information between periods. Additionally, we updated our tracking methodology related to waste and grey water data. We also licensed more up-to-date emissions factors. Our emissions figures throughout this Report use IEA's 2022 Emission Factors and were restated retroactively for comparison purposes. We had historically reported our water withdrawal under the title "water consumption" which has been updated in this Report.
2-5	External assurance	<a href="#">Vision &amp; Strategy - About this Report</a>
<b>ACTIVITIES AND WORKERS</b>		
2-6	Activities, value chain and other business relationships	ESI is a global diversified specialty chemicals company focused on providing innovative solutions across several large and growing end-markets that enhance the products of everyday life.  For a description of ESI's value chain, including its activities, products, markets served and supply chain, refer to:  <a href="#">About ESI</a> <a href="#">Vision &amp; Strategy - About this Report</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain</a> <a href="#">Appendix - External Memberships, Associations, and Certificates</a> <a href="#">Vision &amp; Strategy - Stakeholder Engagement</a> <a href="#">2022 10-K Annual Report (Business, pages 1, 2-4; Customers, page 6)</a> <a href="#">ESI Website (About; Our History; Our Businesses and Key Markets)</a>  <a href="#">Supply Chain Conflict Minerals Policy</a> <a href="#">Supplier Code of Conduct</a>  There were no significant changes regarding our sector, value chain or business relationships in 2022.
2-7	Employees	<a href="#">ESG Performance Data (Snapshot of Our People; Global Workforce Representation; Employee Count by Ethnicity; Employee Count by Region; Overall Headcount by Age Range)</a>  <a href="#">2022 10-K Annual Report (Human Capital Management, page 6; Selling &amp; Marketing, page 6)</a>  There were no significant fluctuations in the number of employees during and between reporting periods.
<b>GOVERNANCE</b>		
2-9	Governance structure and composition	We maintain gender and ethnic diversity on our Board. For more information on Governance structure and composition, refer to: <a href="#">Governance &amp; Compliance - Our Governance Structure</a> <a href="#">Governance &amp; Compliance - Governance and Accountability</a> <a href="#">ESG Performance Data (Snapshot of Our People)</a> <a href="#">Board of Directors Governance Principles and Code of Conduct</a> <a href="#">ESI Website (Corporate Governance; Board of Directors; Board Committees)</a>
2-10	Nomination and selection of the highest governance body	<a href="#">2022 Proxy Statement (Director Nominees, pages 4-7; Corporate Governance, pages 8-21; Election of Directors, pages 1-3; Nominating and Policies Committee, pages 18-20)</a> <a href="#">Board of Directors Governance Principles and Code of Conduct</a> <a href="#">Nominating and Policies Committee Charter</a>
2-11	Chair of the highest governance body	<a href="#">2022 Proxy Statement (Directors Nominees, pages 4-7; Board Leadership Structure, page 14)</a> <a href="#">ESI Website (Board of Directors)</a>



Number	Disclosure	Cross-References or Answers
2-12	Role of highest governance body in overseeing the management of impacts	<a href="#">Vision &amp; Strategy</a> <a href="#">Governance &amp; Compliance - Governance and Accountability - Board Oversight</a> <a href="#">Audit Committee Charter</a> <a href="#">Nominating and Policies Committee Charter</a> <a href="#">Compensation Committee Charter</a> <a href="#">2022 Proxy Statement (Role of the Board of Directors, page 13; Risk Management and Oversight, page 19)</a>
2-13	Delegation of responsibility for managing impacts	<a href="#">Vision &amp; Strategy</a> <a href="#">Governance &amp; Compliance - Our Approach</a> <a href="#">Governance &amp; Compliance - Governance and Accountability - Overseeing ESG Strategy and Performance</a> <a href="#">Nominating and Policies Committee Charter</a> <a href="#">2022 Proxy Statement (Risk Management and Oversight, page 19; Corporate Responsibility and Sustainability, pages 20-21)</a> <a href="#">TCFD Index</a>
2-14	Role of the highest governance body in sustainability reporting	<p>ESI's ESG reports and updates are led by our Director of ESG Strategy in conjunction with other functions for the review of ESI's management before being presented to our CEO and the Board for final approval.</p> <a href="#">Governance &amp; Compliance - Our Approach - Our Governance Structure</a> <a href="#">Vision &amp; Strategy - About this Report</a> <a href="#">Governance &amp; Compliance - Governance and Accountability - Board Oversight</a> <a href="#">Nominating and Policies Committee Charter</a> <a href="#">2022 Proxy Statement (Environment, Social and Governance Initiatives; pages 11-13; Corporate Responsibility and Sustainability, pages 20-21)</a>
2-15	Conflicts of interest	<a href="#">Governance &amp; Compliance - Board Oversight</a> <a href="#">Board of Directors Governance Principles and Code of Conduct, page 2</a> <a href="#">Conflicts of Interest Policy</a> <a href="#">2022 Proxy Statement (Certain Relationships and Related Transactions, pages 21-22)</a> <a href="#">Audit Committee Charter</a> <p>Information related to material conflicts of interest would be disclosed to stakeholders in ESI's annual Proxy Statement.</p>
2-16	Communication of critical concerns	<a href="#">2022 Proxy Statement (Communicating with the Board of Directors, pages 68-69)</a> <a href="#">Business Conduct and Ethics Policy (Corporate Compliance Hotline page 16)</a>
2-17	Collective knowledge of highest governance body	<a href="#">Vision &amp; Strategy - About this Report</a> <a href="#">Governance &amp; Compliance - Governance and Accountability - Overseeing ESG Strategy and Performance</a> <a href="#">ESI Website (Board Of Directors)</a> <a href="#">2022 Proxy Statement (Directors Nominees - Business experience and qualifications, pages 4-7)</a>
2-18	Evaluation of the performance of the highest governance body	<a href="#">Board of Directors Governance Principles and Code of Conduct pages 4, 6</a> <a href="#">2022 Proxy Statement (Board and Committee Assessment Process, page 19)</a>
2-19	Remuneration policies	<a href="#">Compensation Committee Charter</a> <a href="#">2022 Proxy Statement (Executive Compensation - Compensation Discussion and Analysis, pages 25-42; Director Compensation, pages 22-24; Corporate Responsibility and Sustainability, pages 20-21)</a> <a href="#">Vision &amp; Strategy - Sustainability Approach and Strategy</a>
2-20	Process for determining remuneration	<a href="#">Compensation Committee Charter</a> <a href="#">2022 Proxy Statement (Executive Compensation - Compensation Discussion and Analysis, pages 25-42; Stockholder Engagement, page 10; Director Compensation, pages 22-24)</a>
2-21	Annual compensation ratio	<a href="#">2022 Proxy Statement (Pay Ratio, pages 44-45)</a>





Number	Disclosure	Cross-References or Answers
<b>STRATEGY, POLICIES AND PRACTICES</b>		
2-22	Statement on sustainable development strategy	<a href="#">CEO Message</a>
2-23	Policy commitments	<a href="#">Governance &amp; Compliance - Ethics and Compliance</a>
3-3		<a href="#">Appendix - Policies, Reports and Disclosures</a> <a href="#">TCFD Index</a> <a href="#">Sustainability Website</a> <a href="#">Global Quality Policy (Promoting a Culture of Sustainability)</a> <a href="#">2022 Proxy Statement (Corporate Governance Guidelines, page 9)</a>
2-24	Embedding policy commitments	ESI's Business Conduct and Ethics Policy presents the Company's core values and high ethical standards across many topics. All ESI employees and contractors are expected to act at all times in strong compliance with the law, the guidelines set forth in the Business Conduct and Ethics Policy and other ESI policy statements. ESI's managers are responsible for assuring that this policy and others, which are translated in many relevant languages, are understood and followed. Compliance is taken into account in reviewing the performance of employees.  <a href="#">Governance &amp; Compliance - Governance and Accountability</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance</a> <a href="#">Social Impact - Workforce Prosperity - Training and Development</a> <a href="#">Business Conduct and Ethics Policy (page 1)</a>
2-25	Processes to remediate negative impacts	<a href="#">Governance &amp; Compliance - Managing Risks</a> <a href="#">Business Conduct and Ethics Policy (Corporate Compliance Hotline page 16)</a> <a href="#">2022 Proxy Statement (Risk Management and Oversight, page 19)</a>
2-26	Mechanisms for seeking advice and raising concerns	<a href="#">Business Conduct and Ethics Policy (Corporate Compliance Hotline, page 16)</a> <a href="#">Foreign Corrupt Practices Act/Anti-Corruption Policy (6.4 Notice: Reporting)</a> <a href="#">Vision &amp; Strategy - Stakeholder Engagement</a>
2-27	Compliance with laws and regulations	In 2022, we experienced no material cases of non-compliance with environmental laws and regulations. <a href="#">2022 10-K Annual Report</a>
2-28	Membership of associations	<a href="#">Appendix - External Memberships, Associations, and Certificates</a>
<b>STAKEHOLDER ENGAGEMENT</b>		
2-29	Approach to stakeholder engagement	<a href="#">Vision &amp; Strategy - Our ESG Journey</a> <a href="#">Vision &amp; Strategy - Stakeholder Engagement</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">Sustainability Website</a>
2-30	Collective bargaining agreements	<a href="#">Social Impact - Diversity, Equity &amp; Inclusion (DE&amp;I) - Labor Rights</a> <a href="#">Sustainability Website</a>



Number	Disclosure	Cross-References or Answers
<b>GRI 3: MATERIAL TOPICS 2021</b>		
3-1	Process to determine material topics	<a href="#">Vision &amp; Strategy - Our ESG Journey</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">Vision &amp; Strategy - Sustainability Approach and Strategy - ESG Strategy &amp; Disclosure Framework Mapping</a> <a href="#">Vision &amp; Strategy - Stakeholder Engagement</a>
3-2	List of material topics	<a href="#">Vision &amp; Strategy - Our ESG Journey</a> <a href="#">Vision &amp; Strategy - Sustainability Approach and Strategy - ESG Strategy &amp; Disclosure Framework Mapping</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> There are no material changes to the list of material topics for 2022 as compared to 2021.

Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
<b>ECONOMIC</b>			
<b>ECONOMIC PERFORMANCE</b>			
Relevant ESI Material Topic(s): Climate Change; Talent Attraction and Development; Stakeholder Engagement; Volunteering and Charitable Giving			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">ESI Website (Vision &amp; Strategy)</a> <a href="#">Vision &amp; Strategy - Stakeholder Engagement</a> <a href="#">Vision &amp; Strategy - About this Report</a> <a href="#">2022 10-K Annual Report (Business, page 1)</a> <a href="#">UK Tax Strategy</a>
GRI 2021: Economic Performance 2016	201-1	Direct economic value generated and distributed	<a href="#">Social Impact - Workforce Prosperity - Talent Attraction and Retention</a> <a href="#">Social Impact - Volunteering and Charitable Giving</a> <a href="#">ESG Performance Data (Economic Performance)</a> <a href="#">2022 10-K Annual Report (Business, page 1; Revenue Recognition, page 27)</a> <a href="#">2022 Proxy Statement (Executive Compensation - Compensation Discussion and Analysis, pages 25-42)</a>
	201-2	Financial implications and other risks and opportunities due to climate change	<a href="#">Environmental Stewardship - Climate Change</a> <a href="#">TCFD Index</a> <a href="#">2022 10-K Annual Report (Risk Factors, pages 10-23)</a>
	201-3	Defined benefit plan obligations and other retirement plans	<a href="#">Social Impact - Workforce Prosperity - Talent Attraction and Retention</a> <a href="#">2022 10-K Annual Report (Pensions Plans, pages 35-36; Footnote 10. Pension, Post-Retirement and Post-Employment Plans, pages F-23-F-27)</a> <a href="#">2022 Proxy Statement (Benefits and Other Perquisites, page 39)</a>

<b>INDIRECT ECONOMIC IMPACT</b>			
Relevant ESI Material Topic(s): Stakeholder Engagement; Governance and Accountability; Volunteering and Charitable Giving			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Vision &amp; Strategy</a> <a href="#">Vision &amp; Strategy - Sustainability Approach and Strategy</a> <a href="#">Social Impact - Occupational Health &amp; Safety - Expecting the Unexpected</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Managing Risk</a>



Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
GRI 203: Indirect Economic impact 2016	203-1	Infrastructure investments and services supported	<a href="#">Vision &amp; Strategy</a> <a href="#">Vision &amp; Strategy - Sustainability Approach and Strategy</a> <a href="#">Social Impact - Occupational Health &amp; Safety - Expecting the Unexpected</a> <a href="#">Environmental Stewardship - Environmental Compliance - Managing Risks</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Managing Risks</a> <a href="#">Sustainable Chemistry</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain</a> <a href="#">Social Impact - Volunteering and Charitable Giving</a>
<b>ANTI-CORRUPTION</b>			
Relevant ESI Material Topic(s): <a href="#">Ethics and Compliance</a> ; <a href="#">Governance and Accountability</a>			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Governance &amp; Compliance - Ethics and Compliance</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Managing Risks</a> <a href="#">Business Conduct and Ethics Policy (pages 7, 8, 14)</a> <a href="#">Foreign Corrupt Practices Act/Anti-Corruption Policy</a> <a href="#">2022 10-K Annual Report (Risk Factors, pages 10-23)</a>
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	<a href="#">Governance &amp; Compliance - Ethics and Compliance</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Managing Risks</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain - Third-party Monitoring and Screening</a> <a href="#">Business Conduct and Ethics Policy (pages 7, 8, 14)</a> <a href="#">Foreign Corrupt Practices Act/Anti-Corruption Policy</a> <a href="#">2022 10-K Annual Report (Risk Factors, pages 10-23)</a>
	205-2	Communication and training about anti-corruption policies and procedures	<a href="#">Governance &amp; Compliance - Ethics and Compliance</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Managing Risks</a>
<b>ENVIRONMENTAL</b>			
<b>MATERIALS</b>			
Relevant ESI Material Topic(s): <a href="#">Sustainable Chemistry</a> ; <a href="#">Managing a Sustainable Supply Chain</a>			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Sustainable Chemistry</a>
	301-2	Recycled input materials used	<a href="#">Sustainable Chemistry</a> In 2022, our MacDermid Alpha business used ~4,600 metric tons of recycled tin in the production of its solder technologies, representing ~48% of tin and tin alloys sold by the Company that year. In addition to purchasing recycled tin, we recycle tin and other metals in our own in-house smelting and refining facility in the U.S. In 2022, our reclaim facility recycled ~1,800 metric tons of in-house and third-party customers' scrap metals, reducing the burden of pollution and energy and water demand that comes from metals mining.



Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
<b>ENERGY</b>			
Relevant ESI Material Topic(s): Climate Change; Energy and Emissions			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Environmental Stewardship - Climate Change</a> <a href="#">Environmental Stewardship - Energy and Emissions</a> <a href="#">Environmental Stewardship - Energy and Emissions - Managing our Impact</a> <a href="#">Environmental Stewardship - Environmental Compliance - Managing Risks</a> <a href="#">TCFD Index</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a>
GRI 302: Energy 2016	302-1	Energy consumption within the organization	<a href="#">Environmental Stewardship - Energy and Emissions - Measuring our Footprint</a> <a href="#">Environmental Stewardship - Energy and Emissions</a> <a href="#">TCFD Index</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a>
	302-3	Energy intensity	<a href="#">Environmental Stewardship - Energy and Emissions - Measuring our Footprint</a> <a href="#">Environmental Stewardship - Energy and Emissions</a> <a href="#">TCFD Index</a>
	302-4	Reduction of energy consumption	<a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">Environmental Stewardship - Energy and Emissions - Energy and Emissions Reduction Initiatives</a>
<b>WATER AND EFFLUENTS</b>			
Relevant ESI Material Topic(s): Water Management			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Global Environmental, Health &amp; Safety Policy</a> <a href="#">Environmental Stewardship - Environmental Compliance - Managing Risks</a> <a href="#">Environmental Stewardship - Water and Waste</a> <a href="#">Sustainability Website</a>
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	<a href="#">Environmental Stewardship - Water and Waste</a> <a href="#">Environmental Stewardship - Water and Waste - Monitoring and Reducing Water</a>
	303-2	Management of water discharge-related impacts	<a href="#">Environmental Stewardship - Water and Waste - Monitoring and Reducing Water</a> <a href="#">ESG Performance Data (Water)</a> We discharge water in compliance with local regulatory requirements.
	303-3	Water withdrawal	<a href="#">Environmental Stewardship - Water and Waste - Monitoring and Reducing Water</a> <a href="#">ESG Performance Data (Water)</a>
	303-4	Water discharge	<a href="#">Environmental Stewardship - Water and Waste - Monitoring and Reducing Water</a> <a href="#">ESG Performance Data (Water)</a>
	303-5	Water consumption	<a href="#">Environmental Stewardship - Water and Waste - Monitoring and Reducing Water</a> Total Water Consumption = Total Water Withdrawal - Total Water Discharged. See our ESG Performance Data (Water) for more information.





Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
<b>EMISSIONS</b>			
Relevant ESI Material Topic(s): Climate Change; Energy and Emissions			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Global Environmental, Health &amp; Safety Policy</a> <a href="#">Environmental Stewardship - Environmental Compliance - Managing Risks</a> <a href="#">Environmental Stewardship - Energy and Emissions</a> <a href="#">Environmental Stewardship - Climate Change</a> <a href="#">Environmental Stewardship - Energy and Emissions - Managing our Impact</a> <a href="#">TCFD Index</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">2022 Proxy Statement (Environmental, Social and Governance Initiatives, page 11-13)</a>
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	<a href="#">Environmental Stewardship - Energy and Emissions - Measuring our Footprint</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a>
	305-2	Energy indirect (Scope 2) GHG emissions	<a href="#">Environmental Stewardship - Energy and Emissions - Measuring our Footprint</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a>
	305-4	GHG emissions intensity	<a href="#">Environmental Stewardship - Energy and Emissions - Measuring our Footprint</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">ESG Performance Data (Energy and Emissions)</a>
	305-5	Reduction of GHG emissions	<a href="#">Environmental Stewardship - Energy and Emissions</a> <a href="#">Environmental Stewardship - Climate Change</a> <a href="#">Environmental Stewardship - Energy and Emissions - Measuring our Footprint</a> <a href="#">TCFD Index</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a>
<b>WASTE</b>			
Relevant ESI Material Topic(s): Waste Management			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Global Environmental, Health &amp; Safety Policy</a> <a href="#">Environmental Stewardship - Environmental Compliance - Managing Risks</a> <a href="#">Sustainable Chemistry</a> <a href="#">Environmental Stewardship - Water and Waste</a> <a href="#">Sustainability Website</a>
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	<a href="#">Environmental Stewardship - Water and Waste - Measuring and Reducing Waste</a> <a href="#">ESG Performance Data (Waste)</a> We dispose of our waste in compliance with local regulatory requirements.
	306-2	Management of significant waste-related impacts	<a href="#">Sustainable Chemistry</a> <a href="#">Environmental Stewardship - Water and Waste</a> <a href="#">Sustainability Website</a> Where applicable and in accordance with local laws, we train employees to recycle waste and have various recycling initiatives in place at our manufacturing facilities.
	306-3	Waste generated	<a href="#">Environmental Stewardship - Water and Waste - Measuring and Reducing Waste</a>
	306-4	Waste diverted from disposal	<a href="#">Environmental Stewardship - Water and Waste - Measuring and Reducing Waste</a>
	306-5	Waste directed from disposal	<a href="#">Environmental Stewardship - Water and Waste - Measuring and Reducing Waste</a>



Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
<b>SUPPLIER ENVIRONMENTAL ASSESSMENT</b>			
Relevant ESI Material Topic(s): Managing a Sustainable Supply Chain			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Global Environmental, Health &amp; Safety Policy</a> <a href="#">Supplier Code of Conduct</a> <a href="#">Supply Chain Conflict Minerals Policy</a> Governance & Compliance - Managing a Sustainable Supply Chain
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	Governance & Compliance - Managing a Sustainable Supply Chain
	308-2	Negative environmental impacts in the supply chain and actions taken	Governance & Compliance - Managing a Sustainable Supply Chain
<b>SOCIAL</b>			
<b>EMPLOYMENT</b>			
Relevant ESI Material Topic(s): Talent Attraction and Development			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Fair Employment Policy</a> <a href="#">Social Impact - Workforce Prosperity</a> <a href="#">ESI Career Website</a>
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	<a href="#">Social Impact - Workforce Prosperity - Talent Attraction and Retention</a> <a href="#">ESG Performance Data (Global Workforce Representation)</a>
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	<a href="#">Social Impact - Workforce Prosperity - Talent Attraction and Retention</a> We provide a variety of benefits to our full-time employees from parental leave, healthcare, life insurance, disability coverage, retirement provision and stock ownership. The benefits we provide vary depending on location and are based on local human resources laws and regulations with which we comply.
<b>LABOR/MANAGEMENT RELATIONS</b>			
Relevant ESI Material Topic(s): Human Rights; Talent Attraction and Development; Labor Rights			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">2022 10-K Annual Report (Human Capital Management, page 6)</a> <a href="#">Sustainability Website</a> <a href="#">Vision &amp; Strategy - Stakeholder Engagement</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Human Rights</a> <a href="#">Business Conduct and Ethics Policy (Labor &amp; Human Rights, page 9)</a> <a href="#">Fair Employment Policy</a> <a href="#">Anti-slavery and Human Trafficking Policy</a>
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	<a href="#">Sustainability Website</a> <a href="#">Social Impact - Diversity, Equity &amp; Inclusion (DE&amp;I) - Labor Rights</a> <a href="#">Vision &amp; Strategy - Stakeholder Engagement</a> We comply with notice periods (as defined by collective bargaining agreements in place or by local laws or regulations) prior to the implementation of any changes that could potentially involve our employees.



Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
<b>OCCUPATIONAL HEALTH AND SAFETY</b>			
Relevant ESI Material Topic(s): Occupational Health and Safety; Manufacturing Safe Products			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Global Environmental, Health and Safety Policy</a> <a href="#">2022 10-K Annual Report (Human Capital Management, page 6)</a> Social Impact - Occupational Health and Safety Social Impact - Occupational Health and Safety - Managing Health and Safety Social Impact - Occupational Health and Safety - Ensuring Effective Health and Safety Management Sustainable Chemistry - Product Stewardship - Manufacturing Safe Products Vision & Strategy - Sustainability Goals
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Social Impact - Occupational Health and Safety
	403-2	Hazard identification, risk assessment and incident investigation	Social Impact - Occupational Health and Safety - Ensuring Effective Health and Safety Management
	403-4	Worker participation, consultation and communication on occupational health and safety	Social Impact - Occupational Health and Safety Social Impact - Occupational Health and Safety - Ensuring Effective Health and Safety Management Sustainable Chemistry - Product Stewardship - Manufacturing Safe Products
	403-5	Worker training on occupational health and safety	Social Impact - Occupational Health and Safety - Managing Health and Safety Social Impact - Occupational Health and Safety - Ensuring Effective Health and Safety Management Sustainable Chemistry - Product Stewardship - Manufacturing Safe Products
	403-6	Promotion of worker health	<a href="#">Global Environmental, Health and Safety Policy</a> Social Impact - Occupational Health and Safety - Ensuring Effective Health and Safety Management Social Impact - Workforce Prosperity - Employee Benefits ESG Performance Data (Global Workforce Representation)
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Social Impact - Occupational Health and Safety - Managing Health and Safety Social Impact - Occupational Health and Safety - Ensuring Effective Health and Safety Management Sustainable Chemistry - Product Stewardship - Manufacturing Safe Products
	403-8	Workers covered by an occupational health and safety management system	Social Impact - Occupational Health and Safety - Managing Health and Safety ESG Performance Data (Global Workforce Representation) ESI's safety data is submitted by our facilities and consolidated in our global safety management system for tracking and monitoring purposes.
	403-9	Work-related injuries	Social Impact - Occupational Health & Safety - Measuring Health and Safety Performance Social Impact - Occupational Health and Safety - Ensuring Effective Health and Safety Management ESG Performance Data (Environmental Health & Safety) In 2022, we have experienced no injuries of workers who are not employees but whose work we control. Lost time injury rates are calculated based on 200,000 hours worked and cover all our employees.



Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
	403-10	Work-related ill health	<a href="#">Social Impact - Occupational Health &amp; Safety - Measuring Health and Safety Performance</a> <a href="#">Social Impact - Occupational Health and Safety - Ensuring Effective Health and Safety Management</a> <a href="#">ESG Performance Data (Environmental Health &amp; Safety)</a> In 2022, we experienced no employee fatalities.

## TRAINING AND EDUCATION

Relevant ESI Material Topic(s): Talent Attraction and Development; Human Rights; Diversity, Equity & Inclusion; Occupational Health and Safety; Ethics and Compliance

			<a href="#">About ESI - ESI at a Glance</a> <a href="#">Social Impact - Workforce Prosperity</a> <a href="#">Social Impact - Workforce Prosperity - Talent Attraction and Retention</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">Business Conduct and Ethics Policy (Training, page 17)</a> <a href="#">ESI Website (Six Sigma)</a> <a href="#">2022 10-K Annual Report (Human Capital Management, page 6)</a>
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	<a href="#">Social Impact - Workforce Prosperity</a> <a href="#">ESG Performance Data (Global Workforce Representation)</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Training and Monitoring</a>
	404-2	Program for upgrading employee skills and transition assistance programs	<a href="#">Social Impact - Workforce Prosperity</a> In connection with retirement or termination of employment, we may offer severance pay and/or transition assistance depending on circumstances.
	404-3	Percentage of employees receiving regular performance and career development reviews	<a href="#">Social Impact - Workforce Prosperity - Training and Development</a> <a href="#">ESG Performance Data (Social Impact)</a>

## DIVERSITY AND EQUAL OPPORTUNITY

Relevant ESI Material Topic(s): Diversity, Equity & Inclusion; Governance and Accountability

GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Social Impact - Diversity, Inclusion &amp; Equity (DE&amp;I)</a> <a href="#">Social Impact - Diversity, Inclusion &amp; Equity (DE&amp;I) - Promoting DE&amp;I</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">Business Conduct and Ethics Policy (Training, page 17)</a> <a href="#">2022 10-K Annual Report (Human Capital Management, page 6)</a> <a href="#">2022 Proxy Statement (Environmental, Social and Governance Initiatives, page 13)</a>
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	<a href="#">Governance &amp; Compliance - Governance and Accountability - Performance Through a Diverse and Independent Board</a> <a href="#">ESG Performance Data (Snapshot of Our People)</a> <a href="#">2022 Proxy Statement (Board Diversity and Tenure, pages 2-3)</a> <a href="#">ESI Website (Board of Directors)</a>





Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
<b>NON-DISCRIMINATION</b>			
Relevant ESI Material Topic(s): Diversity, Equity & Inclusion; Governance and Accountability			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Social Impact - Diversity, Inclusion &amp; Equity (DE&amp;I)</a> <a href="#">Social Impact - Diversity, Inclusion &amp; Equity (DE&amp;I) - Promoting DE&amp;I</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">Business Conduct and Ethics Policy (Training, page 17)</a> <a href="#">2022 10-K Annual Report (Human Capital Management, page 6)</a>
GRI 406: Non-Discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	<a href="#">Social Impact - Diversity, Inclusion &amp; Equity (DE&amp;I) - Promoting DE&amp;I</a>
<b>FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING</b>			
Relevant ESI Material Topic(s): Human Rights; Talent Attraction and Development; Labor Rights			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Social Impact - Diversity, Inclusion &amp; Equity (DE&amp;I)</a> <a href="#">Social Impact - Diversity, Equity &amp; Inclusion (DE&amp;I) - Labor Rights</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Human Rights</a> <a href="#">Anti-slavery and Human Trafficking Policy</a> <a href="#">Supplier Code of Conduct</a>
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<p>We respect the rights of our employees to freely associate and bargain collectively in a legal, ethical and safe way.</p> <a href="#">Social Impact - Diversity, Equity &amp; Inclusion (DE&amp;I) - Labor Rights</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Human Rights</a> <a href="#">Sustainability Website</a> <a href="#">Supplier Code of Conduct</a>
<b>CHILD LABOR</b>			
Relevant ESI Material Topic(s): Human Rights			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Governance &amp; Compliance - Ethics and Compliance - Human Rights</a> <a href="#">Appendix - Policies, Reports and Disclosures</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain - Third-party Monitoring and Screening</a> <a href="#">Anti-slavery and Human Trafficking Policy</a> <a href="#">Supplier Code of Conduct</a> <a href="#">Business Conduct and Ethics Policy</a> <a href="#">2022 Proxy Statement (Environmental, Social and Governance Initiatives, page 13)</a>
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	<a href="#">Governance &amp; Compliance - Ethics and Compliance - Human Rights</a> <a href="#">Appendix - Policies, Reports and Disclosures</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain - Third-party Monitoring and Screening</a> <a href="#">Anti-slavery and Human Trafficking Policy</a> <a href="#">Supplier Code of Conduct</a> <a href="#">Business Conduct and Ethics Policy</a>



Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
<b>FORCED AND COMPULSORY LABOR</b>			
Relevant ESI Material Topic(s): Human Rights			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Governance &amp; Compliance - Ethics and Compliance - Human Rights</a> <a href="#">Appendix - Policies, Reports and Disclosures</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain - Third-party Monitoring and Screening</a> <a href="#">Anti-slavery and Human Trafficking Policy</a> <a href="#">Supplier Code of Conduct</a> <a href="#">Business Conduct and Ethics Policy</a> <a href="#">2022 Proxy Statement (Environmental, Social and Governance Initiatives, page 13)</a>
GRI 409: Forced and Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced and compulsory labor	<a href="#">Governance &amp; Compliance - Ethics and Compliance - Human Rights</a> <a href="#">Appendix - Policies, Reports and Disclosures</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain - Third-party Monitoring and Screening</a> <a href="#">Anti-slavery and Human Trafficking Policy</a> <a href="#">Supplier Code of Conduct</a> <a href="#">Business Conduct and Ethics Policy</a>
<b>LOCAL COMMUNITIES</b>			
Relevant ESI Material Topic(s): Volunteering and Charitable Giving; Managing a Sustainable Supply Chain			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Social Impact - Volunteering and Charitable Giving</a> <a href="#">2022 10-K Annual Report (Human Capital Management, page 6)</a> <a href="#">2022 Proxy Statement (Environmental, Social and Governance Initiatives, page 13)</a>
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments and development programs	<a href="#">Sustainable Chemistry</a> <a href="#">Environmental Stewardship - Water and Waste - Monitoring and Reducing Water</a> <a href="#">Environmental Stewardship - Water and Waste - Measuring and Reducing Waste</a> <a href="#">ESG Performance Data (Water; Waste; Certifications)</a> <a href="#">Social Impact - Volunteering and Charitable Giving</a> <a href="#">Vision &amp; Strategy - Stakeholder Engagement</a> <a href="#">ESI Facilities Certificates</a> <a href="#">Sustainability Website</a>
<b>SUPPLIER SOCIAL ASSESSMENT 2016</b>			
Relevant ESI Material Topic(s): Managing a Sustainable Supply Chain			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Global Environmental, Health and Safety Policy</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Human Rights</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain - Supply Chain Risk Management</a> <a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain - Third-party Monitoring and Screening</a> <a href="#">Anti-slavery and Human Trafficking Policy</a> <a href="#">Supply Chain Conflict Minerals Policy</a> <a href="#">Conflict Minerals Report</a> <a href="#">Supplier Code of Conduct</a>



Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	<a href="#">Governance &amp; Compliance - Managing a Sustainable Supply Chain - Third-Party Monitoring and Screening</a> <a href="#">Conflict Minerals Report</a>
<b>PUBLIC POLICY</b>			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Business Conduct and Ethics Policy (Political Contributions)</a>
GRI 415: Public Policy 2016	415-1	Political contributions	<a href="#">Business Conduct and Ethics Policy (Political Contributions)</a>
<b>CUSTOMER HEALTH AND SAFETY</b>			
GRI 3: Material Topics 2021	416	Management of material topics	<a href="#">Sustainable Chemistry - Our Sustainable Chemistry - Removing Hazardous Chemicals Through Green Chemistry</a> <a href="#">Sustainable Chemistry - Product Stewardship</a>
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	<a href="#">Sustainable Chemistry - Product Stewardship - Manufacturing Safe Products</a>
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	<a href="#">Sustainable Chemistry - Product Stewardship - Manufacturing Safe Products</a> <a href="#">Global Quality Policy</a> <a href="#">Global Environmental, Health and Safety Policy</a> We had no material incidents of noncompliance with respect to the health and safety impacts of products and services in 2022. A material non-compliance incident is one that results in a significant adverse impact to our business, condition (financial or otherwise), assets or results.
<b>MARKETING AND LABELING</b>			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Sustainable Chemistry - Product Stewardship - Manufacturing Safe Products - Product Safety Training and Labeling</a> <a href="#">Animal Testing Statement</a>
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	<a href="#">Sustainable Chemistry - Product Stewardship - Manufacturing Safe Products - Product Safety Training and Labeling</a> <a href="#">Animal Testing Statement</a>
	417-2	Incidents of non-compliance concerning products and service information and labeling	We had no material incidents of noncompliance with respect to product and service information and labeling in 2022. A material non-compliance incident is one that results in a significant adverse impact to our business, condition (financial or otherwise), assets or results.
<b>CUSTOMER PRIVACY</b>			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">Governance &amp; Compliance - Handling Data Security and Privacy</a> <a href="#">Website Privacy Policy</a>
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	We had no material complaints concerning breaches of customer privacy and losses of customer data in 2022.



Number	Disclosure	Cross-References or Answers	Cross-Reference or Answers
<b>ESI MATERIAL TOPIC: SUSTAINABLE CHEMISTRY (GREEN CHEMISTRY, INNOVATION FOR SUSTAINABLE PRODUCTS, CIRCULAR ECONOMY)</b>			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">CEO Message</a> <a href="#">Sustainable Chemistry</a> <a href="#">Sustainable Chemistry - From Idea to Sustainable Solution: How We Innovate</a> <a href="#">Sustainable Chemistry - Product Stewardship</a> <a href="#">Global Quality Policy (Promoting a Culture of Sustainability)</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a>
N/A		Revenue generated from sustainable chemistry products	<a href="#">Sustainability Website</a> <a href="#">Sustainable Chemistry - Chemical Technology Enabling Sustainability: Our Approach</a>
<b>ESI MATERIAL TOPIC: SOCIETAL &amp; GEOPOLITICAL CONDITIONS</b>			
GRI 3: Material Topics 2021	3-3	Management of material topics	<a href="#">CEO Message</a> <a href="#">Environmental Stewardship - Environmental Compliance - Managing Risks</a> <a href="#">Governance &amp; Compliance - Ethics and Compliance - Managing Risks</a> <a href="#">Social Impact - Occupational Health &amp; Safety - Expecting the Unexpected</a> <a href="#">TCFD Index</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a>
N/A		Safeguarding business continuity against risks	<a href="#">Sustainability Website</a> <a href="#">Social Impact - Occupational Health &amp; Safety - Expecting the Unexpected</a> <a href="#">TCFD Index</a>





# Sustainability Accounting Standards Board (SASB) Index

CHEMICALS INDUSTRY DISCLOSURES			
Disclosure Topic	Disclosure Number	Disclosure Accounting Metric	Location and Answer
Greenhouse Gas Emissions	RT-CH-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	<a href="#">Environmental Stewardship - Energy and Emissions</a> <a href="#">Environmental Stewardship - Energy and Emissions - Measuring our Footprint</a> <a href="#">TCFD Index</a> <a href="#">ESG Performance Data (Energy &amp; Emissions)</a>
	RT-CH-110a.2	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.	<a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">Environmental Stewardship - Energy and Emissions - Managing our Impact</a> <a href="#">Environmental Stewardship - Energy and Emissions - Measuring our Footprint</a> <a href="#">Environmental Stewardship - Energy and Emissions - Energy and Emissions Reduction Initiatives</a> <a href="#">TCFD Index</a>
Air Quality	RT-CH-120a.1	Air emissions of the following pollutants: (1) NOX (excluding N2O), (2) SOX, (3) volatile organic compounds (VOCs) and (4) hazardous air pollutants (HAPs)	We are improving our process of capturing this information and intend to disclose it once it becomes available.
Energy Management	RT-CH-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable and (4) total self-generated energy	<a href="#">Environmental Stewardship - Energy and Emissions</a> <a href="#">Environmental Stewardship - Energy and Emissions - Measuring our Footprint</a> <a href="#">ESG Performance Data (Energy &amp; Emissions)</a>
Water Management	RT-CH-140a.1	(1) Total water withdrawn, (2) total water consumed and percentage of each in regions with High or Extremely High Baseline Water Stress	<a href="#">Environmental Stewardship - Water and Waste - Monitoring and Reducing Water</a> <a href="#">ESG Performance Data (Water)</a>
	RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards and regulations	<a href="#">Environmental Stewardship - Water and Waste - Monitoring and Reducing Water</a> We have experienced no material incidents associated with water quality permits, standards and regulations in the last three years.
	RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	<a href="#">Environmental Stewardship - Water and Waste - Monitoring and Reducing Water</a> <a href="#">ESG Performance Data (Water)</a>
Hazardous Waste Management	RT-CH-150a.1	Amount of hazardous waste generated and percentage recycled	<a href="#">Environmental Stewardship - Water and Waste - Measuring and Reducing Waste</a> <a href="#">ESG Performance Data (Waste)</a>
Community Relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	<a href="#">Social Impact - Volunteering and Charitable Giving</a> <a href="#">2022 10-K Annual Report (Human Capital Management, page 6)</a> <a href="#">Sustainability Website</a>
Workforce Health & Safety	RT-CH-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	<a href="#">Occupational Health &amp; Safety - Measuring Health and Safety Performance</a> <a href="#">Occupational Health &amp; Safety</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">ESG Performance Data (Environmental Health &amp; Safety)</a> <a href="#">Global Environmental, Health and Safety Policy</a>
	RT-CH-320a.2	Description of efforts to assess, monitor and reduce exposure of employees and contract workers to long-term (chronic) health risks	<a href="#">Occupational Health &amp; Safety - Managing Health &amp; Safety</a> <a href="#">Occupational Health &amp; Safety - Ensuring Effective Health and Safety Management</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a>



Disclosure Topic	Disclosure Number	Disclosure Accounting Metric	Location and Answer
Product Design for Use-phase Efficiency	RT-CH-410a.1	Revenue from products designed for use-phase resource efficiency	<a href="#">Sustainability Website</a>
Safety & Environmental Stewardship of Chemicals	RT-CH-410b.1	(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 and (2) percentage of such products that have undergone a hazard assessment	Certain of our products contain chemicals categorized as GHS Category 1 and 2 Health and Environmental Hazardous Substances. All products are evaluated for hazard and assigned hazard classifications as required by law. <a href="#">Sustainable Chemistry</a> <a href="#">Sustainable Chemistry - Product Stewardship - Manufacturing Safe Products</a> <a href="#">Sustainable Chemistry - From Idea to Sustainable Solution: How We Innovate</a>
	RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	<a href="#">Sustainable Chemistry</a> <a href="#">Sustainable Chemistry - From Idea to Sustainable Solution: How We Innovate</a> <a href="#">Vision &amp; Strategy - Sustainability Goals</a> <a href="#">Supply Chain Conflict Minerals Policy</a> <a href="#">Conflict Minerals Report</a> <a href="#">Supplier Code of Conduct</a>
Genetically Modified Organisms	RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)	We have no revenues from GMOs or genetic engineering.
Management of the Legal & Regulatory Environment	RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	<a href="#">Environmental Stewardship - Energy and Emissions</a> <a href="#">Environmental Stewardship - Climate Change</a> <a href="#">Social Impact - Diversity, Equity &amp; Inclusion (DE&amp;I) - Promoting DE&amp;I</a> <a href="#">Vision &amp; Strategy - Stakeholder Engagement</a>
"Operational Safety, Emergency Preparedness & Response"	RT-CH-540a.1	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR) and Process Safety Incident Severity Rate (PSISR)	<a href="#">Occupational Health &amp; Safety - Measuring Health and Safety Performance</a> <a href="#">Occupational Health &amp; Safety</a> <a href="#">Global Environmental, Health and Safety Policy</a>
	RT-CH-540a.2	Number of transport incidents	We had no significant transport incidents over the last three years.
Production	RT-CH-000.A	Production by reportable segment	<a href="#">About ESI - Who We Are</a> <a href="#">About ESI - Who We Are - Enabling the Products of Everyday Life</a> <a href="#">About ESI - Sustainability Within our End Markets</a> <a href="#">Vision &amp; Strategy - Sustainability Approach and Strategy</a> <a href="#">2022 10-K Annual Report (Business, page 1)</a> <a href="#">ESI Website (Overview)</a> <a href="#">ESI Website (Key Markets)</a>



# Task Force on Climate-related Financial Disclosure (TCFD) Index

We recognize that climate change is one of the most important issues facing the global community and support the work of the Task Force on Climate-related Financial Disclosures (TCFD). Identifying climate-related risks and opportunities as well as their potential financial impacts is challenging due to the large-scale and long-term nature of climate change. Yet, strategic and risk management decisions on managing those risks and seizing those opportunities depend on our ability to identify the specific climate-related risks and opportunities to which we are exposed.

Our 2022 TCFD Index below is aligned with the four sections of the TCFD framework: (1) governance, (2) strategy, (3) risk management and (4) metrics and targets. For additional information on our ESG journey, please visit: [elementsolutionsinc.com/sustainability](https://elementsolutionsinc.com/sustainability)

## GOVERNANCE

### Disclose the organization's governance around climate-related risks and opportunities.

#### Disclosure Topic

#### Cross-reference or Answer

Describe the board's oversight of climate-related risks and opportunities

[Governance & Compliance](#)  
[Nominating and Policies Committee Charter](#)

Our Board of Directors is responsible for the oversight of ESI on behalf of our stockholders. The Board meets at least quarterly to review performance and consider key strategic matters and enterprise risks, which include, where relevant, the impact of climate-related risks and opportunities on ESI's strategy. In addition, Board committees provide oversight of, among other items, sustainability matters, audit and risk.

The Board of Directors' Nominating and Policies Committee (Board Committee) is responsible for overseeing ESI's sustainability and social responsibility efforts and related policies, including with respect to risks and opportunities related to climate change, where deemed appropriate. The Board Committee oversees our internal ESG reporting and, together with the Board and Audit Committee of the Board, our planned integration of ESG issues into our company risk management analysis.

Our ESG Executive Steering Committee (ESG Committee) provides periodic ESG updates and, when appropriate and/or as requested by the Board Committee or the Board, makes recommendations on ESG strategy and performance.

Describe management's role in assessing and managing climate-related risks and opportunities

[Sustainable Approach and Strategy](#)  
[Climate Change](#)  
[Governance & Compliance](#)  
[Sustainability Goals](#)

Our ESG Committee, which includes senior leaders, such as our CEO, CFO, General Counsel, Head of Industrial & Specialty, Head of HR and Director of ESG Strategy, oversees ESI's ESG policies and practices throughout our business, including climate-related risks, opportunities and strategy-setting process. The ESG Committee meets on a quarterly basis and receives updates from our Sustainability Council, HR and other relevant functions.

Our Sustainability Council consists of leaders from multiple functions across the company, including EH&S, Sourcing, R&D and ESG Strategy. Its main responsibilities are to oversee the implementation of the ESG Committee's sustainability strategy and track performance against our sustainability goals and other ESG initiatives. The Sustainability Council meets weekly and reports to the ESG Committee quarterly to provide updates and assist in oversight as well as to receive input from the ESG Committee on important ESG focus areas.

Our ESG Strategy Director, the Sustainability Council and the ESG Committee engage with global functional leaders from our R&D, Supply Chain, Risk Management and business teams to assess climate-related risks and opportunities. This group evaluates material risks and opportunities based on their potential impact on our business and supply chain. In addition, each operating business unit and its leadership provide input on our process for identifying, characterizing, and responding to climate-related issues. Once identified, initiatives to address risks are coordinated by our Director of Risk Management. Issues and mitigating strategies are communicated to our organizational leaders across our businesses and, where appropriate, to our Board.

Our CEO is directly accountable to our Board for progress toward our sustainability goals as approved and monitored by the Board. The CEO sets sustainability goals and objectives for our CFO and his team, to drive responsibility for achievement of these goals into the organization. In addition, our ESG Strategy Director is compensated based on demonstrated steps toward and achievement of sustainability-related goals. Certain members of the Sustainability Council also have sustainability-related performance objectives, which are factored into these individuals' performance reviews.



**STRATEGY**

**Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material.**

**Disclosure Topic**

**Cross-reference or Answer**

Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term

- [Energy and Emissions](#)
- [Climate Change](#)
- [Sustainable Chemistry](#)
- [Sustainability Goals](#)

[Climate-related Risks](#)

We recognize that there are two aspects of climate risks to consider – physical and transition risks. These risks have different implications over the short, medium and long term. As part of our preliminary assessment, we tentatively defined time horizons as: short-term (1-5 years), medium-term (6-10 years) and long-term (11-20 years). Although climate-related risks and opportunities exist, none were identified to currently have a substantive financial or strategic impact on our business. We define “substantive financial impact” in both our direct operations and supply chain as any change that would significantly affect our business and operations. We continue to monitor potential risks and opportunities on an ongoing basis and will update our conclusions as appropriate based on this process.

Our customers depend on our timely delivery of products of reliable quality. Our products are integral to their manufacturing processes and overall product performance. Our ability to meet these expectations relies on continuous access to multiple sources of raw materials and working closely with our suppliers and contract manufacturers to help ensure continuity of supply while maintaining high quality. Physical risks, both acute and chronic, could disrupt our worldwide operations and supply chain and increase the potential financial impact of these disruptions by, for example, limiting access to the quantity and quality of raw materials we need and/or increasing the prices of these materials as worldwide supply and demand may be impacted.

Physical risks may also cause physical damage to, or the closure of, one or more of our manufacturing, R&D or technical service facilities. Climate-related events could also increase the risk of releases or other discharges of toxic or hazardous substances. One-time costs and/or increased operating costs in general may arise from extreme weather events or changing weather patterns, especially with respect to facilities, source of raw materials, suppliers or even customers in “high risk” locations. We believe climate change serves as a risk multiplier increasing both the frequency and severity of natural disasters that may affect our worldwide operations. As a result, current or future insurance arrangements may not provide protection for these costs, particularly if such events are catastrophic in nature or occur in combination.

Due to the formulation-based nature of our operations, our energy consumption is lower than that of other more traditional chemical manufacturers. Regardless, transition risks could arise from emerging regulations or policies that may, for example, increase pricing of GHG emissions, require the substitution of existing products and services with lower emissions options, which may in turn require greater R&D focus and expenses towards sustainable chemistry and/or impose increased reporting obligations.

[Climate-related Opportunities](#)

“Enabling Sustainability” is a pillar of our strategy because the intersection between sustainability and profitability is well-established in our business. To demonstrate our emphasis on sustainable products, we set a goal to reach sustainable chemistry sales of \$1 billion by 2030. In 2022, we achieved ~\$700 million of net sales from sustainable chemistry, which represents 28% of our 2022 total net sales and an increase of ~33% as compared to our 2020 baseline.\* This increase underscores our innovation capabilities and the success of our sustainable solutions with our customers, who recognize the benefits of our products and our value proposition.

We believe climate change presents robust commercial opportunities for our business. We continue to focus a portion of our innovation and commercial efforts on meeting customer needs within the clean technology markets as well as supporting customer efforts to establish a more circular economy within their supply chains. Vehicle electrification is an important end market for us, and we offer numerous relevant technology solutions. Examples include sintered silver technologies that protect the battery inverters and increase efficiency as well as light metal and plastic plating solutions that help reduce overall vehicle weight and increase range. Our sintered silver coatings in particular, sold under our Argomax brand, have been among our fastest growing products over the past several years. Our electronics circuit board and assembly materials are also used in numerous applications within the production of solar panels and LED systems. Our MacDermid Envio Solutions business focuses specifically on selling innovative equipment and solutions for recycling valuable metals and recovering treated water out of our customers production processes. These solutions are cost effective ways for our customers to establish a circular economy within their own facilities and in turn their broader supply chains. We expect these and similar opportunities to become key growth drivers for our business and continue to invest R&D and capital resources in these areas.

\*Adjusted to exclude the impact of currency changes and certain pass-through metal prices.



**Disclosure Topic****Cross-reference or Answer**

Our business is globally diversified with production facilities spanning most of the markets where our customers are located around the world. Overall, we believe we have a robust supply chain and logistics network with multiple suppliers and manufacturing redundancies. Internally, our business continuity and disaster recovery system, developed and tested by our enterprise Risk Management function, is intended to ensure continuity of supply to our customers. We believe this ability to source raw materials and ship products from multiple locations around the world is a competitive advantage and presents a commercial opportunity for us in the face of physical climate risks that may occur in the future. Our global technical know-how and continued diversification of our network, including the development of state-of-the-art facilities close to key customers and the reinforcement of more local supplier relationships through our increased presence in key markets, should also allow us to support more environmentally sustainable product offerings while reducing our carbon footprint, which we believe our customers are beginning to expect.

We also consider alternative energy sources as a climate-related opportunity. The use of lower emissions energy sources and new energy-efficient production technologies may lead to reduced operational costs, reduced exposure to potential future energy price increases and reduced exposure to GHG emission regulations. These cost savings would allow our business to operate in a more environmentally friendly manner and as such, improve the company's reputation among its stakeholders and markets.

With a more sustainable business, we may have access to new and emerging markets for our sustainable solutions, allowing for higher revenue. As our sales from sustainable products increase, we may also qualify for financing dedicated to green businesses or attract investors that specialize in green investments. As employees' preference evolves toward more environmentally and socially responsible businesses, we may also have greater recruiting capabilities, employee engagement and employee satisfaction.

We believe our overall business operational structure, flexible supply chain and comprehensive risk management procedures provide a strong foundation for managing potential climate-related risks and opportunities. We plan to further assess these and other potential risks and opportunities on an ongoing basis and update our conclusions as appropriate based on this process.

The risk information above and other related information on the Sustainability pages of our website or in our 2022 ESG report should not be construed as a characterization of the materiality or financial impact of that information. Please see our SEC filings for more detail.

Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

[Sustainable Chemistry](#)  
[Climate Change](#)  
[Energy and Emissions](#)  
[Environmental Compliance](#)

**Impact on Business and Strategy**

Opportunities in new sustainable chemistry products, such as those described in our 2022 ESG report and new cleantech-related products, align well with our business in general and our sustainability strategy in particular. We focus on removing hazardous chemicals through green chemistry, reducing environmental impact with innovation, and enabling the circular economy. This strategy aims to expand our products and services. We believe it also strengthens our ability to diversify our business activities and address shifts in supplier and consumer preferences.

**Impact on Financial Planning**

Although we believe we have robust supply chain and distribution networks, we may still be exposed to severe weather conditions and natural disasters. These events have the potential to cause business interruptions and adversely affect our operations. These changes can also lead to increased costs and liabilities. By continuing to improve supply chain resiliency at locations subject to physical events, we expect to mitigate future climate-related risks associated with manufacturing vulnerability.

The shifting demand of our customers toward more environmentally friendly products requires greater R&D focus on and expenses related to sustainable chemistry, or processes that have a lower carbon footprint. This shift in customer preferences may lead to additional costs, but also increased revenue and enhanced competitive advantage. Consistent with our sustainable chemistry strategy, we intend to focus on new revenue streams related to sustainability.



**Disclosure Topic**

**Cross-reference or Answer**

We are also exposed to the risk of emerging and escalating carbon pricing regulations. Carbon pricing programs can significantly increase both energy costs and indirect expenses related to raw materials used in our products and electricity required for operations. Using the market-based methodology outlined in the World Resource Institute’s GHG protocol, we assess the Scope 1 and 2 emissions generated by our organization. Through this process, we measure the carbon emissions associated with the fuels we utilize for heating our buildings and backup generators (Scope 1) and the electricity we purchase to power our operations (Scope 2). We are also proactive in the reduction of our emissions and in 2022, announced our goal to reduce our Scope 1 and Scope 2 GHG emissions intensity by 25% per metric ton of production by 2030 from a 2020 base of 0.158. In 2022, our combined Scope 1 and Scope 2 GHG emissions intensity was 0.156 MT CO2e/MT of production or a decrease of 1.3% as compared to our 2020 emissions intensity level. We believe we are on track to achieve our 2030 goal. To meet our objective, our plan is to implement initiatives designed to reduce our overall energy use and GHG emissions. See Energy and Emissions.

Additionally, other transition risks, such as potentially more stringent ESG-related regulations or policies, may result in greater operating costs, including increased expenses related to compliance, higher insurance premiums, and the early retirement of assets/PPE; all of which could, in turn, result in greater capital expenditures and higher costs associated with alternative sources of energy (e.g., PPA, solar panels). However, a significant increase in demand of cleantech products may also support revenue growth as our sustainable products are sold to a variety of cleantech industries, such as electric vehicles and solar panels.

Although we have not yet quantified the details around the potential effects of climate change to our business, strategy, and financials, we have had qualitatively assessed impacts with major stakeholder groups at the organization. The process of identifying our climate-related risks and opportunities was driven by our ESG Strategy Director, the Sustainability Council and the ESG Committee considering the nature of our businesses, the industries in which we operate and the markets we serve. Once identified and assessed, these climate-related risks and opportunities were presented to our functional leaders in R&D, supply chain as well as a broader group of commercial leaders across the organization for further assessment and discussion.

Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

In the future, we intend to conduct a climate scenario analysis to assess the climate-related risks and opportunities we identified for our business leveraging the TCFD recommendations. This analysis will help us shape our strategy, which we will continue to refine as risks and opportunities evolve.

We believe our overall business operational structure, flexible supply chain and comprehensive risk management procedures provide a strong foundation for managing potential climate-related risks and opportunities.

[Energy and Emissions](#)  
[Climate Change](#)

**RISK MANAGEMENT**

**Disclose how the organization identifies, assesses, and manages climate-related risks.**

**Disclosure Topic**

**Cross-reference or Answer**

Describe the organization’s processes for identifying and assessing climate-related risks

**Identification of Climate-related Risks and Opportunities**

The identification of our climate-related risks and opportunities is integrated into the company’s risk management program and procedures designed to identify and assess global risks and opportunities to our business, including sustainability risks and potential new revenue streams related to sustainable chemistry. As part of this risk management system, our business units and global supply chain leaders are responsible for identifying, assessing, managing, and monitoring risks associated with their business area.

[Energy and Emissions](#)  
[Climate Change](#)  
[Sustainable Chemistry](#)  
[Governance & Compliance](#)  
[Sustainability Goals](#)

**Assessment of Climate-related Risks**

Climate-related risks may affect our operations. Climate risks are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures and potential for disruption or delays in production. Our assessment relies on management’s evaluation of current events and our expectations regarding future developments.

**Disclosure Topic****Cross-reference or Answer**

Describe the organization's processes for managing climate-related risks.

[Sustainable Chemistry](#)  
[Environmental Compliance](#)  
[Energy and Emissions](#)  
[Energy and Emissions Reduction Initiatives](#)  
[Sustainability Goals](#)

ESI's climate-related monitoring and management strategies and initiatives include:

- Engaging in business continuity planning throughout the year to respond to potential impacts to our personnel and operations
- Enhancing supply chain resilience with multiple sources of raw materials and manufacturing redundancies
- Utilizing business disruption insurance to help mitigate the impact of a variety of disruptive events. For example, our global property insurance program addresses physical damage resulting from certain severe-weather events or natural disasters, and our global stock throughput insurance programs cover losses of raw materials or finished goods while stored or in transit
- Proactively monitoring registration and compliance requirements as they develop
- Increasing implementation of ISO 14001 Environmental Management Systems, with ~73% of our facilities ISO 14001 certified in 2022
- Conducting periodic internal environmental compliance audits at our U.S. and international sites by our Corporate Environmental Health & Safety (EH&S) group and our local EH&S managers, with a goal of auditing of each site at least once every three years
- Entering into energy efficiency partnership – In 2020, we entered into a 5-year management partnership with Siemens Industry, Inc. for the centralized collection, audit and analysis of key energy performance data at our facilities

While it is difficult to predict when a crisis or climate-related business disruption may occur, our risk management and business continuity procedures are designed to address a variety of disruptive scenarios. In addition to business continuity testing, our ongoing environmental audits are designed to help us identify and remediate gaps in our risk management process. As it relates to regulatory risks, the Sustainability Council and our EH&S group work with our businesses to track environmental policy changes and where necessary, model scenarios and learn from case studies. If and when risks materialize, relevant subject matter experts will be engaged to address these risks and their potential impact. These working groups are identified as the first and second lines of response, and exist both at the supply chain and corporate levels. Issues and mitigating responses are communicated to our organizational leaders and to our Board of Directors as needed.

Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

[Governance & Compliance](#)  
[Environmental Compliance](#)  
[Climate Change](#)  
[Expecting the Unexpected](#)  
[Nominating and Policies Committee Charter](#)

Sustainability and climate-related risks are part of our company-wide risk management assessment program. This program is used to identify, assess, quantify, and respond to a comprehensive set of risks in an integrated and informed fashion. To inform our risk assessment, our management works with subject matter experts to identify and characterize key risks that may affect the organization's business activities. Annually, we conduct a Business Impact Analysis survey that helps us understand the risks our supply chain may be exposed to. Our ESG Committee engages more specifically in the identification of ESG-related risks, including those specific to climate change. With respect to risks identified as critical, each corporate department and geography in which we operate has a designated team responsible for emergency response and business recovery. Training, maintenance, compliance, and planning are all incorporated into our risk management and business continuity planning and processes.

Our Board of Directors is also actively involved in the oversight of risks, including overall strategy and management of key risks the company faces. Updates on our risk assessment and management process are provided to the Board on an annual basis, or more frequently as the need arises.

**METRICS & TARGETS**

**Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.**

**Disclosure Topic****Cross-reference or Answer**

Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

[Energy and Emissions](#)  
[Energy and Emissions Reduction Initiatives](#)  
[Climate Change](#)  
[Environmental Compliance](#)

On a quarterly basis, we review environmental data including Scope 1 and Scope 2 GHG emissions generated by our organization. Scope 1 emissions include direct emissions from sources owned or controlled by the company. We track emissions data containing Scope 2 (indirect) emissions using the market-based methodology outlined in the World Resource Institute's GHG protocol. The table below presents a few of the metrics we use to monitor our environmental footprint, including energy consumption and energy consumption intensity, from 1/1/2022 to 12/31/2022.

Over the past several years, we implemented initiatives designed to increase our renewable energy consumption and promote cleaner air quality. For more information, see our [Energy and Emissions Reduction Initiatives](#). We also monitor other energy efficiency and renewable energy projects, physical climate risks associated with our sites, and regulatory changes associated with climate change with the help of our EH&S team, and the Sustainability Council.

Metric	2022 Performance
Total Emissions Intensity (MT CO2e/MT of Production)	0.156
Total Energy Consumed (GJ)	505,665
Total Energy Consumption Intensity (GJ/MT of Production)	2.16
Total Renewable Energy Sourced or Generated (GJ)	37,245
Renewable Energy as a % of Total Energy Consumed	7.4%

Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

[Energy and Emissions](#)  
[ESG Performance Data](#)

**ESI's 2022 GHG performance:**

We review our emissions data containing Scope 2 (indirect) emissions using the market-based methodology outlined in the World Resource Institute's GHG protocol. The data below represents our full 2022 performance, from 1/1/2022 to 12/31/2022. We review our performance on a quarterly basis. We are in the process of collecting information about our Scope 3 emissions and intend to incorporate this data into our disclosures in the future.

Metric	2022 Performance
Scope 1 (MT of CO2e)	12,840
Scope 2 (MT of CO2e)	23,720
Total Scope 1 & 2 (MT of CO2e)	36,560

Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

[Sustainability Goals](#)  
[Sustainable Chemistry](#)

In 2022, we announced our 2030 goal to reduce our Scope 1 and Scope 2 GHG emissions intensity by 25% per metric ton of production from a 2020 base of 0.158. We intend to monitor progress against this goal on a quarterly basis. In 2022, our combined Scope 1 and Scope 2 GHG emissions intensity was 0.156 MT CO2e/MT of production or a decrease of 1.3% as compared to our 2020 emissions intensity baseline. We believe we are on track to achieve our 2030 goal. See [Energy and Emissions](#).

We set our 2030 GHG emissions goal by working closely with the Sustainability Council to understand the concentration of our footprint across our sites, and the feasibility of lowering our Scope 1 and Scope 2 emissions. The Sustainability Council conducted market research and benchmarking analysis against peer companies to understand best practices for setting emissions targets. A subset of the Sustainability Council was tasked to report findings to the ESG Committee and conduct further analysis to determine the feasibility of pursuing our 2030 goal under a variety of different strategies.

In 2022, we announced our goal to reach sustainable chemistry sales of \$1 billion by 2030. We believe clean tech is a growth area for our business and this goal emphasizes our commitment to a more sustainable product offering. In 2022, we achieved ~\$700 million of net sales from sustainable chemistry, which represents 28% of our 2022 total net sales and an increase of ~33% as compared to our 2020 baseline.\* For more information, see [Chemical Technology Enabling Sustainability](#).

\*Adjusted to exclude the impact of currency changes and certain pass-through metal prices.





500 East Broward Boulevard, Suite 1860

Fort Lauderdale, FL 33394

(561) 207-9600 [sustainability@elementsolutionsinc.com](mailto:sustainability@elementsolutionsinc.com)

[elementsolutionsinc.com/sustainability](https://elementsolutionsinc.com/sustainability)