



# 2023

## Sustainability Report

Emerson's Environmental, Social  
and Governance progress



**EMERSON**



# About This Report

*Emerson's 2023 Sustainability Report presents information focused primarily on data collected and activities that occurred during Emerson's fiscal 2023 (October 1, 2022 — September 30, 2023), and is reported based on 62,000 employees and 130 manufacturing locations, except where indicated otherwise. Some data and information in this report is as of the report release date, June 2024. The brands depicted in the presentation are the trademarks and registered trademarks of their respective owners and are not owned by Emerson Electric Co.*

Portfolio management is an integral component of Emerson's growth and value creation strategy. Over the past three years, the Company has taken significant actions to accelerate the transformation of its portfolio through the completion of strategic acquisitions and divestitures of non-core businesses. These actions were undertaken to create a higher growth and cohesive industrial technology portfolio as a global automation leader serving a diversified set of end markets. The Company's recent portfolio actions include the following transactions:

On October 11, 2023, the Company completed the acquisition of National Instruments Corporation ("NI"). NI provides software-connected automated test and measurement systems that enable enterprises to bring products to market faster and at a lower cost. In the report, this business will be referred to as Test & Measurement.

On May 31, 2023, the Company completed the previously announced sale of a majority stake in its Climate Technologies business to private equity funds managed by Blackstone. Emerson retains a 40 percent non-controlling common equity interest in a new standalone joint venture between Emerson and Blackstone. The Climate Technologies business includes the Copeland™ compressor business and the entire portfolio of products and services across all residential and commercial HVAC and refrigeration end-markets. The new standalone business is named Copeland.

On October 31, 2022, the Company completed the divestiture of its InSinkErator business, which manufactures food waste disposers, to Whirlpool Corporation. On May 31, 2022, the Company completed the divestiture of its Therm-O-Disc sensing and protection technologies business to an affiliate of One Rock Capital Partners, LLC.

Certain data, statistics and metrics included in this report, including those related to greenhouse gas emissions, are estimates, have not been prepared in accordance with generally accepted accounting principles. Although this information is based on accepted methodologies and assumptions believed to be reasonable at the time of preparation, they should not be considered as guarantees and may be subject to further revisions.



*The cover photo of this report was selected as part of the Emerson Sustainability Photo Contest. Emerson Employee Roxana-Maria Florea took this photo of Dragan Dam in Romania during the fall of 2023.*

## About This Report

The content of this report is informed by collaboration and engagement with various stakeholders and considers frameworks and initiatives such as the United Nations Sustainable Development Goals, the Global Reporting Initiative (GRI) Standards, the Sustainability Accounting Standards Board (SASB) and the Task Force on Climate-Related Financial Disclosures (TCFD). In this report, we may use certain terms including those that the GRI or other standards refer to as “material,” “substantive,” or “significant” to reflect the issues or priorities of that are important to us and our various stakeholders or topics or standards designated as such under the GRI or other applicable standards. These terms as used in this report are not intended to be construed as they have been defined by or construed in accordance with the securities laws or any other laws of the United States or any other jurisdiction, or as these terms are used in the context of financial statements and financial reporting.

No part of this report constitutes, or shall be taken to constitute, an invitation or inducement to invest in us or any other entity and shall not be relied upon in any way in connection with any investment decisions. This report is not comprehensive and should be read in conjunction with our Annual Report on Form 10-K and our other [SEC filings](#).

Information on our website does not constitute part of this document.

We expect to update this report annually. However, we undertake no obligation to update any statements herein to reflect later developments.

Any questions or comments regarding this report can be directed to our:

**Chief Sustainability Officer**

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### TREATMENT OF RECENT ACQUISITIONS AND DIVESTITURES IN THIS REPORT\*

Business	Divest or Acquire	Fiscal Quarter of Transaction	Company, Business Description and Relevant Financials	Narrative	Social Data	Environmental Sustainability Data
<b>Copeland</b>	Divest Majority Ownership	Q3 2023	Out	Out	Out	In Scope 3 Category 15 Investments
<b>NI</b>	Acquire	Q1 2024	In	In	Out	Out
<b>AspenTech</b>	Acquire Majority Ownership	Q3 2022	In	In	Out	In Scope 3 Category 15 Investments
<b>Flexim</b>	Acquire	Q4 2023	In	Out	Out	Out
<b>AFAG</b>	Acquire	Q4 2023	In	Out	Out	Out
<b>InSinkErator</b>	Divest	Q1 2023	Out	Out	Out	Out

\*Excludes any divested companies prior to fiscal 2023, but includes any bolt on acquisitions since fiscal 2022.

# Safe Harbor Statement

This report contains various forward-looking statements and includes assumptions concerning Emerson's operations, future results and prospects. You can identify forward-looking statements by the use of words such as "anticipate," "estimate," "expect," "aim," "project," "intend," "plan," "believe," "will," "should," "could," "target," "goal", "forecast," and other words and terms of similar meaning in connection with any discussion of future operating, financial performance, or business plans or prospects. These forward-looking statements are based on current expectations and are subject to risks and uncertainties. Emerson undertakes no obligation to update any such statements to reflect later developments. In connection with the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, Emerson provides the following cautionary statements identifying important economic, political and technological factors, among others, changes in which could cause the actual results or events to differ materially from those set forth in or implied by the forward-looking statements and related assumptions. Such factors include, but are not limited to, the following: (1) the current and future business environment, including capital and consumer spending, potential volatility of the end markets served, pricing, interest rates, inflation, and economic and currency conditions; (2) competitive factors and competitor responses to Emerson initiatives; (3) development and market introduction of anticipated new products; (4) the ability to defend and protect our intellectual property rights; (5) favorable environments for and execution of acquisitions and divestitures, domestic and foreign, including regulatory requirements and market values of candidates; (6) integration of acquisitions and separation of disposed businesses; (7) the availability of raw materials and purchased components; (8) stability of governments and business conditions in countries where we operate which could result in adverse changes in exchange rates, changes in regulation, tariffs or trade barriers, nationalization of facilities or disruption of operations; (9) unrestricted access to capital markets; (10) our ability to attract, develop and retain key personnel; (11) ability to prevent security breaches or disruptions of our information technology systems; (12) impact of potential product failures or similar events caused by product defects, cybersecurity incidents or other intentional acts; (13) Emerson's ability to successfully complete on the terms and conditions contemplated, and the financial impact of, the proposed National Instruments transaction; (14) changes in tax rates, laws or regulations and the resolution of tax disputes in U.S. and non-U.S. jurisdictions; (15) the impact of improper conduct by our employees, agents or business partners; (16) the outcome of pending and future litigation, including environmental compliance; (17) availability of renewable energy on a commercially reasonable basis; and (18) the Russia-Ukraine conflict, among others that are set forth in Emerson's most recent Annual Report on Form 10-K and subsequent reports filed with the U.S. Securities and Exchange Commission. Statements in this report regarding our aspirational purpose, causes, values, and related commitments, goals or targets, including those regarding sustainability, greenhouse gas emissions, our net zero ambition and related goals, diversity, equity and inclusion or other initiatives, contain forward looking statements and are also intended to qualify for the protections of the "safe harbor" protections of the Private Securities Litigation Reform Act of 1995. Such statements are intended to help Emerson adapt and rise to the call of our various stakeholders and are not intended to create legal rights or obligations. Because success in these areas depends on the collective efforts of others and other factors such as competing economic and regulatory factors, technical advances, policy changes, labor markets, availability of candidates, and supplier and customer engagement, there may be times where actual outcomes vary from those aimed for or expected. While we strive to live our purpose and make a positive impact on society while continuing to advance toward our commitments, sometimes challenges may delay or block progress and we cannot assure that the results reflected or implied by any such statements will be realized or achieved.

## Non-GAAP Financial Measures

In this report we provide non-GAAP measures to show our Company's performance, and the reconciliation of those measures to the most comparable GAAP measures is contained in the Reporting Section of this report or available at our website, [www.Emerson.com](http://www.Emerson.com), under Investors. These non-GAAP measures include results for the Company's segments on an underlying sales and adjusted segment EBITA basis and are intended to supplement the Company's results, including its segment earnings which are defined as earnings before interest and taxes. The Company defines adjusted segment and total segment EBITA as segment earnings excluding intangibles amortization expense, and restructuring and related expense. Underlying sales exclude the impact of currency translation and significant acquisitions and divestitures. Underlying sales and adjusted segment EBITA margin are measures used by management to evaluate the Company's segments' performance and are useful in understanding our ongoing operations and ongoing operational trends. These measures should be considered in addition to, and not as a replacement for, the most comparable GAAP measure.



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# About *Emerson*

This section encapsulates who we are and the purpose and values that drive our business, laying out our commitment to driving progress in Environmental, Social and Governance matters and summarizing our performance, awards and recognitions.

## IN THIS SECTION:

- [CEO Message](#)
- [Chair Message](#)
- [Company Profile](#)
- [Our Purpose](#)
- [Awards and Recognitions](#)
- [Report At-A-Glance](#)

*Emerson Office in Cluj-Napoca, Romania*  
Photo by: *Alexandra Viorela Marginean* | Emerson Employee



# CEO Message

***Over the past few years, we have been on a tremendous journey to transform Emerson, and we made great progress towards our goals in 2023. Our people are integral to this process, and I am inspired by the passion, determination and talent our team continues to display. We made several bold portfolio moves, including the acquisition of NI and the sale of Copeland, which further our position as a global leader in automation.***

Through these actions, we have built a cohesive portfolio that enables customers to navigate the full automation spectrum and aligns with the secular growth trends of digital transformation, sustainability and decarbonization, energy security and affordability and nearshoring. Advancing sustainability and driving value for our customers and shareholders are closely aligned. Emerson's customers rely on our technologies to better manage their operations, enhance productivity, reduce energy usage and emissions and improve safety and reliability.

Our Emerson Management System has enabled strong operational execution, growth, innovation and risk management throughout our transformation by focusing our leaders' and employees' time and resources.

I would like to share a few highlights of the significant progress we made in fiscal year 2023 and through the date of this report:

- We procured 49% of electricity used by Emerson locations from renewable sources, progressing toward our goal to source 100% of electricity from renewable sources by 2030. This, and a continued focus on energy efficiency and Scope 1 emission abatement strategies, has enabled us to reduce our Scope 1 and 2 greenhouse gas (GHG) emissions intensity by 52% since 2021.
- We continue to report climate-related data proactively and transparently. Emerson voluntarily participates in the Carbon Disclosure Project (CDP) and maintained an A- score in 2023; additionally, we were included in the CDP's Supplier Engagement Leaderboard, which represents the top 8% of companies assessed for supplier engagement on climate change, for the second consecutive year.
- We built upon the *Your Voice Counts* culture initiative, our company-wide continuous listening strategy, with our first "pulse check" survey. More than 39,000 employees responded, and we saw increases across 75% of engagement questions.

- We increased our representation in leadership for women globally and US minorities in 2023 by two and four percentage points, respectively, and were named a "World's Top Employer for Women" by *Forbes*.

Our 2023 sustainability report illustrates how we plan to navigate the complex challenges in business today, drive impactful solutions for decarbonization for customers and stakeholders and maintain our commitment to long-term value creation.

We have a 134-year history of pioneering change through innovation and are excited for the opportunities ahead to continue to disrupt the state of automation. Thank you for joining us as we go ahead to the boundless future of automation.



**Lal Karsanbhai**  
President and Chief Executive Officer



# Chair Message

***2023 was a pivotal year for Emerson, and in the midst of continued global macroeconomic uncertainty, Emerson advanced its transformation and delivered on our strategy, including the sustainability initiatives highlighted in this report.***

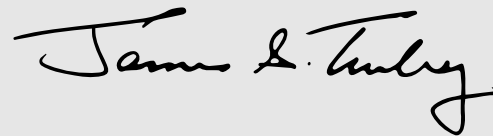
Our Board takes its role as stewards of Emerson's sustainability goals seriously and continues to oversee the management team in their efforts to further Emerson's sustainability programs. I am proud of the work Emerson's management team has accomplished, driving significant progress on their commitments.

Emerson, with its transformed portfolio, people and technology, is well positioned to benefit from powerful secular trends including sustainability and decarbonization and support customers in their energy transition.

The Board remains committed to ongoing refreshment to ensure we continue to have the right mix of skills, diversity, background and tenure, including to oversee our sustainability efforts. We have added seven new Directors over the past five years with a Board that will be composed of 50% women or people of color and a broader set of industry knowledge and expertise.

We recently appointed Calvin Butler, President and Chief Executive Officer of Exelon, to our Board, effective August 1, 2024. In addition to business transformation experience, he brings significant expertise in reliable, clean and affordable energy solutions that will advance our leadership position in the energy transition markets.

We look forward to helping guide the management team to lead our company and help our customers move towards a brighter and more sustainable future.



**James Turley**  
Chair, Emerson Board of Directors





# Emerson At-A-Glance

**EMR**  
NYSE

## COMPANY PROFILE

Emerson is a global leader in automation software and technology. We partner with customers in critical industries like energy, chemical, power and renewables, life sciences and factory automation to help them operate more sustainably while improving productivity, energy security and reliability.

## Headquarters



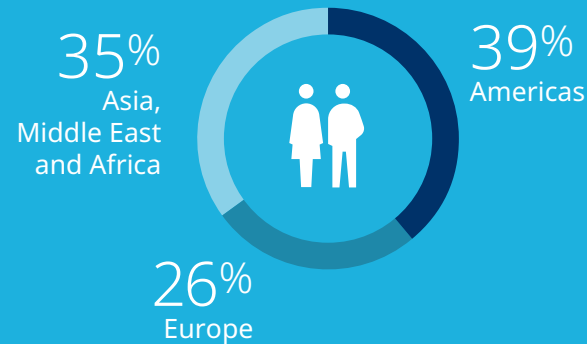
Founded **1890**

**18,100** active patents

**67** years of increased dividends

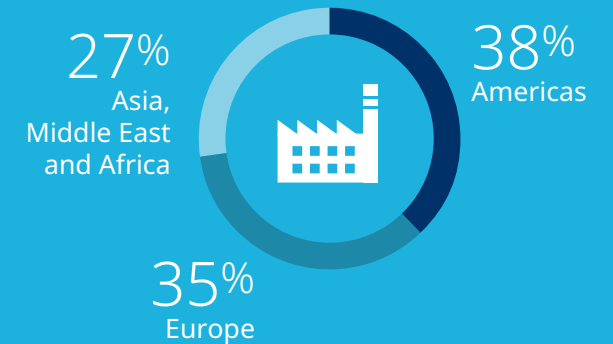
**74,000** employees

## Geographic distribution



**130** manufacturing locations

## Geographic distribution



\*The data/information on this page is current as of June 2024.



# Our Purpose

**We drive innovation that makes the world healthier, safer, smarter and more sustainable.**

Emerson is uniquely positioned to bring innovation, enabling technology and domain expertise that supports essential industries that we all depend on in our daily lives. Our Purpose reflects the important role and impact we can deliver. It is also the rallying cry to our employees to be forward thinking, collaborative, committed and excel in all we do to support our stakeholders, communities and the world.

Our Causes and Values are the driving forces behind our Purpose, and serve as the foundation for how we make decisions, act and collaborate. They inform our direction as an organization, reflect our culture and establish the foundation of how we engage and lead in the world.

## Our Causes



## OUR VALUES

### Integrity

We are uncompromising in our honest and ethical behavior, which creates trusting relationships with one another, customers, suppliers and communities.

### Safety & Quality

We are unwavering in our commitment to the highest standards of safety and quality for ourselves and our customers.

### Support our People

We attract, develop and retain exceptional people in an inclusive work environment, where all employees can reach their greatest potential.

### Customer Focus

We actively listen to our customers to deeply understand their needs and deliver the unique solutions that ensure their success.

### Continuous Improvement

We constantly strive for improvement in all aspects of our business, guided by metrics, feedback and our disciplined management process.

### Collaboration

We work seamlessly across geographies and functions to fully leverage our breadth and expertise.

### Innovation


We passionately pursue new technologies, capabilities and approaches to drive tangible value for our customers.



# Awards and Recognitions

Emerson is taking bold action to deliver progress toward our sustainability goals, such as our 2045 net zero value chain and 2030 net zero operations emission targets, as well as our 2030 diversity targets.

While there remains progress to be made, the intentional focus on specific topics across our teams worldwide is evident in our improved performance, as demonstrated by recognitions and awards from some of the leading organizations around the globe.



Rated 'A-' by CDP on climate change leadership



Among the top 8% assessed for supplier engagement on climate change



Awarded a Silver EcoVadis rating  
EcoVadis Carbon Management Leader



Award for a second year distinguishing corporate energy management programs



2023 America's Best Large Employers, ranked #192



2023 Readers' Choice, Top 50 Employer, ranked #22



2023 Readers' Choice, Top 50 Employer, ranked #15



2023 Readers' Choice, Top 50 Employer, ranked #41



2023 America's Most Responsible Companies, ranked #143; (Emerson has been ranked four consecutive years)



World's Top Employers for Women, ranked #269 of 400 companies



2023 Industrial IoT Company of the Year (Emerson is a five-time recipient)



Placed first in 30+ categories across the 2023 CONTROL Global Reader's Choice Awards



2023 America's Most Innovative Companies, ranked #33 of 300 companies



America's Best Employers for Women, ranked #205 of 400 companies



# Report At-A-Glance

## ENVIRONMENT

**Net Zero Value Chain**  
emissions by 2045 from a 2021 baseline.

**Net Zero Operations**  
by 2030 from a 2021 baseline.

**Near-term and Net Zero targets**  
have been approved by the Science Based Targets initiative.

Reduced Scope 1 and 2 GHG emissions intensity by **52%** since 2021.

Reached **49%** of electricity procured from renewable sources at Emerson locations worldwide.

Achieved a **41%** reduction in energy intensity from 2018, surpassing the 25% reduction target in advance of 2030.

## SOCIAL

**40%** of global leadership targeted to be **women** by 2030.

**30%** of U.S. leadership targeted to be **minorities** by 2030.

8 Employee Resource Groups with over **13,000 members**.

Company-wide continuous listening strategy with **85%** employee participation and an employee engagement score of 78%.

Implemented company-wide **wellbeing programs** and policies.

**\$200M** pledged to address education equity over 10 years.

Goal to continuously work toward **zero recordable injuries**.

A **36%** reduction in first aid cases and a **23%** reduction in recordable injuries compared to FY2022.

**Nick Piazza** appointed Chief People Officer, August 2023.



## GOVERNANCE

**50%** of Directors are women or persons of color.\*

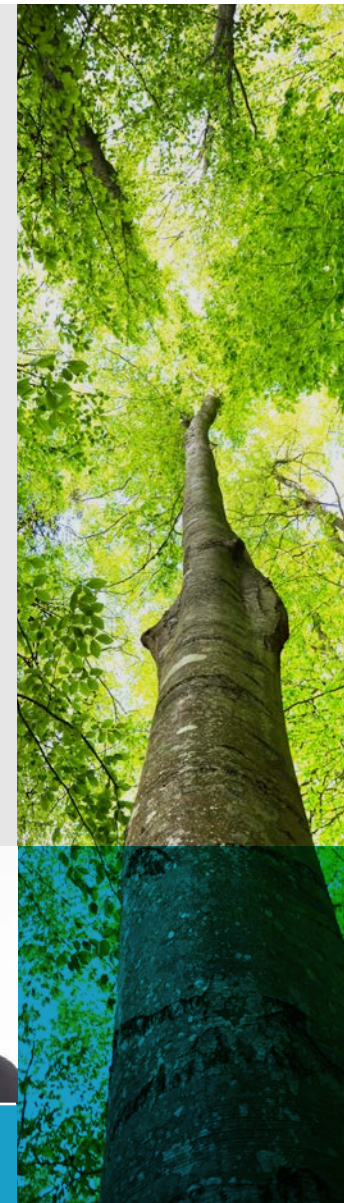
**2/3** of required Board Committees are chaired by women.

The Board added **7 new Directors** in the last five years, underscoring the Emerson Board's commitment to ongoing refreshment.\*

Achieved **CDP Supplier Engagement Leader status** for a second year.

Key elements of our primary data centers, cloud environments and our enterprise IT organization are **certified under ISO 27001**.

**Michael Tang** appointed Chief Legal Officer, January 2024.



\*Depicts data/information effective August 2024





# Value Creation

Emerson's transformation into a focused automation leader offers exciting opportunities to accelerate value for all stakeholders. This section provides details on our strategy, the role of automation in essential industries, innovation and growth, and continued operational excellence delivered through our Emerson Management System.

## IN THIS SECTION:

- [An Exciting Future](#)
- [What We Do](#)
- [The Critical Role of Automation](#)
- [Innovation](#)
- [Emerson Management System](#)
- [Financial Targets](#)

# Built to Deliver on an Exciting Future

The work at Emerson is busy and rewarding. We delivered a strong set of operating results in fiscal 2023. We made significant progress in our sustainability and human capital management efforts. And at the same time, the organization, together with our Board of Directors, made substantial progress over the past three years with a comprehensive portfolio transformation of Emerson becoming a focused, cohesive global automation leader.

This report provides information on the Emerson business we owned and operated through the 2023 fiscal year and, where indicated, incorporates updates on progress made as of June 2024. We are proud of our organization and the impact we make on the world. The people at Emerson, no matter the job function or strategic initiative, bring a high level of passion, integrity, creativity and professionalism to what they do.

## Portfolio Transformation Actions

Our large portfolio transformation moves are substantially complete. In October 2022, we completed the sale of InSinkErator, a long-term Emerson business focused on kitchen-based waste disposal and water products, to Whirlpool Corporation. We followed this with the sale of a majority stake in our Climate Technologies business to Blackstone, in May of 2023, now named Copeland.

On the addition side, we completed a landmark transaction with AspenTech in May 2022, acquiring a majority ownership stake in one of the premier industrial software companies. Emerson, together with AspenTech, has one of the industry's most comprehensive portfolios of advanced automation technologies and software serving essential industries.

In October 2023, Emerson completed the acquisition of NI, a provider of software-connected automated test and measurement systems that enable enterprises to conduct and bring important innovation to market faster and at a lower cost.

Emerson also completed the acquisition of two smaller companies with very relevant technology. In August 2023, Emerson acquired Flexim, a global leader in clamp-on ultrasonic flow measurement for liquids, gases and steam. The combination of Emerson's comprehensive measurement suite and Flexim's innovative technology will enhance the value we bring to customers across a variety of industries. Flexim is reported in our Measurement & Analytical business segment.

In September 2023, Emerson also acquired Afag, a technology leader in electric linear motion solutions that is complementary to the motion products in our Discrete Automation business. Afag serves customers in attractive, growing end segments including battery manufacturing, automotive, packaging, medical, life sciences and electronics. Afag is reported in our Discrete Automation business segment.





## Built to Deliver on an Exciting Future

### People at the Heart of Everything We Do at Emerson

Emerson's portfolio of technologies is critical to delivering value in a wide set of essential industries. But the true power of what Emerson has to deliver is in our people and the expertise that we bring to our customers everyday.

Emerson operates a global organization with design engineering, procurement, manufacturing, project engineering, service and sales activities. Emerson employees work very closely with customers to innovate, apply technologies and support their critical operations. We are fortunate that people choose to make long careers at Emerson, have developed deep domain knowledge and serve as important experts and stewards for automation and the industries that we serve.

We are intently focused on building an inclusive culture and making sure we have an exceptional team empowered to deliver on value creation for our customers and shareholders. We have assembled an incredible portfolio and are focused on innovation that matters for our customers and the important industries that we serve for the years ahead. Finally, we have a legacy of demonstrating operational excellence in a complex global environment and are focused on continuing to deliver value for our stakeholders.







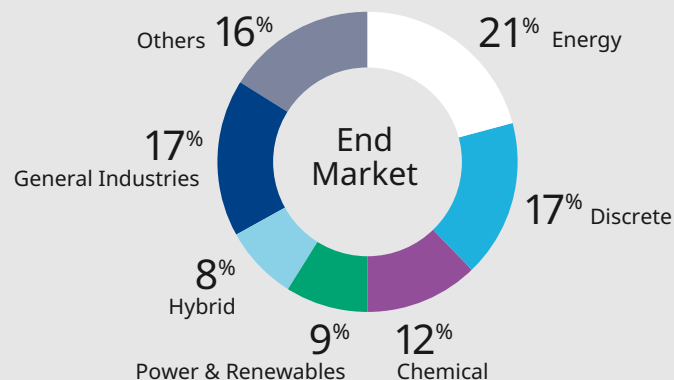
# What We Do

Emerson’s complete automation portfolio includes advanced intelligent devices, control systems and design and optimization software solutions to support a diverse set of industries and infrastructure that are essential to daily life. Customers rely on Emerson technologies to manage and automate operations better, increase productivity, reduce energy usage and emissions, improve safety and enhance reliability. A typical Emerson customer manages long-lived plants that can operate continuously for decades. Our worldwide operational footprint provides a high level of responsiveness and intimacy with customers throughout the lifecycle of their facilities.

We are often involved early in the design and conception of new greenfield facilities to provide expertise on the best digitalization strategies and to support the project implementation process. Once operations are established, we provide local support, service and replacement products to help customers make sure their facilities keep running. In many of the industries we serve, customers will replace and enhance their automation assets during pre-planned shutdown events, for which we frequently provide support on planning and implementation. We also support our customers when unplanned events occur.

Finally, we provide add-on software and hardware automation technology options such as our suite of wireless instrumentation products and our AspenTech optimization software offerings that can create additional value in existing facilities. Emerson’s installed base is estimated at \$150 billion, and greater than 60% of our automation revenue in 2023 came from supporting these existing installations.

## POST-ACQUISITIONS END MARKETS



Note: End market numbers represent post-acquisition 2023 Emerson including Test & Measurement.

## IMPORTANT FACTS ABOUT OUR BUSINESS

~ \$150 billion  
of installed base in customer facilities

> 60% of our sales are related to maintenance and replacement of installed base in 2023

~ 13% of 2023 sales from software

~ 70% of Emerson sales are tied to sustainability enabling technologies\*

\* Sustainability Enabling Technologies are defined as Emerson’s technologies which are capable of being utilized for sustainability enabling activities. Neutral technologies such as services, enclosures, mechanical devices and products or services purchased from a third party but included in the overall sale are excluded from sustainability enabling technologies as they do not have a direct enabling impact. Emerson’s definition of sustainability enabling technologies is not intended to and does not align to any governmental or other third-party taxonomy or framework.



What We Do

Our Reported Business Segments – Software & Control

Control Systems & Software




Control Systems & Software control plant processes by collecting and analyzing information from measurement devices in the plant. These technologies determine optimal settings with software based on a customer’s specific algorithms and use that information to adjust valves, pumps, motors, drives and other control hardware for maximum product quality, process efficiency, sustainability and safety.

AspenTech\*




AspenTech specializes in asset optimization software that enables industrial manufacturers to design, operate and maintain their operations for maximum performance. It combines decades of modeling, simulation and optimization capabilities with industrial operations expertise and applies advanced analytics to improve the profitability and sustainability of production assets.

Test & Measurement\*\*




Emerson completed the acquisition of NI on October 11, 2023. This business will be referred to as the Test & Measurement segment going forward. It provides software-connected automated test and measurement systems that enable enterprises to bring products to market faster and at a lower cost. Important markets for this segment include semiconductor, transportation, aerospace and research institutions. The Test & Measurement business spans the full range of customer needs including modular instrumentation, data acquisition and control solutions and general-purpose development software.

Industries Served     
 Process Hybrid Discrete

2023 Revenue:	\$2.6 Billion
2023 Underlying Sales Growth:	11%
2023 Adjusted Segment EBITA Margin:	21.5%

Industries Served     
 Process Hybrid Discrete

2023 Revenue:	\$1.0 Billion
2023 Underlying Sales Growth:	(1%)
2023 Adjusted Segment EBITA Margin:	36.4%

Industries Served     
 Process Hybrid Discrete

2023 Revenue:	\$1.7 Billion
2023 Underlying Sales Growth:	N/A
2023 Adjusted Segment EBITA Margin:	21.2%

\* Emerson is a majority owner of AspenTech, which is publicly traded on NASDAQ: AZPN

\*\* As reported, based on 2023 Emerson fiscal year basis.

What We Do

Our Reported Business Segments – Intelligent Devices

Measurement & Analytical

Emerson’s Measurement & Analytical business is a leading supplier of intelligent instrumentation measuring the physical properties of liquids or gases, such as pressure, temperature, level, flow, acoustics, corrosion, pH, conductivity, water quality, toxic gases and flame. These devices transfer data and asset management information to control systems and automation software, allowing process and hybrid industry operators to make educated decisions regarding production, reliability, sustainability and safety.

Final Control


Our Final Control business is a global provider of control valves, isolation valves, shutoff valves, pressure relief valves, pressure safety valves, actuators and regulators for process and hybrid industries. These solutions respond to commands from a control system to continuously and precisely control and regulate the flow of liquids or gases to achieve safe operation along with reliability, sustainability and optimized performance.

Safety & Productivity

Emerson’s Safety & Productivity business delivers tools for professionals that support important infrastructure, promote safety and enhance productivity. Pipe-working tools include pipe wrenches and cutters, pipe threading and roll grooving equipment, battery hydraulic tools for press connections, drain cleaners and diagnostic systems, including sewer inspection cameras and locating equipment. Electrical tools include conduit benders and cable pulling equipment, battery hydraulic tools for cutting and crimping electrical cable and hole-making equipment.

Discrete Automation

Our Discrete Automation business designs solenoid valves, pneumatic valves, valve position indicators, pneumatic cylinders and actuators, air preparation equipment, pressure and temperature switches, electric linear motion solutions, programmable automation control systems and software, electrical distribution equipment and materials joining solutions used primarily in discrete industries.


Industries Served 

*Process Hybrid Discrete*

2023 Revenue: **\$3.6 Billion**

2023 Underlying Sales Growth: **16%**

2023 Adjusted Segment EBITA Margin: **27.1%**


Industries Served 

*Process Hybrid Discrete*

2023 Revenue: **\$4.0 Billion**

2023 Underlying Sales Growth: **13%**

2023 Adjusted Segment EBITA Margin: **24.7%**


Industries Served 

*Process Hybrid Discrete*

2023 Revenue: **\$1.4 Billion**

2023 Underlying Sales Growth: **(1%)**

2023 Adjusted Segment EBITA Margin: **23.9%**

Industries Served 

*Process Hybrid Discrete*

2023 Revenue: **\$2.6 Billion**

2023 Underlying Sales Growth: **3%**

2023 Adjusted Segment EBITA Margin: **21.4%**



# The Critical Role of Automation

One of Emerson’s unique attributes is the global leadership positions established across our advanced intelligent devices, control systems and design and optimization software solutions businesses. Our technology portfolio supports the foundational functions of automation through its complete cycle: See-Decide-Act-Optimize.

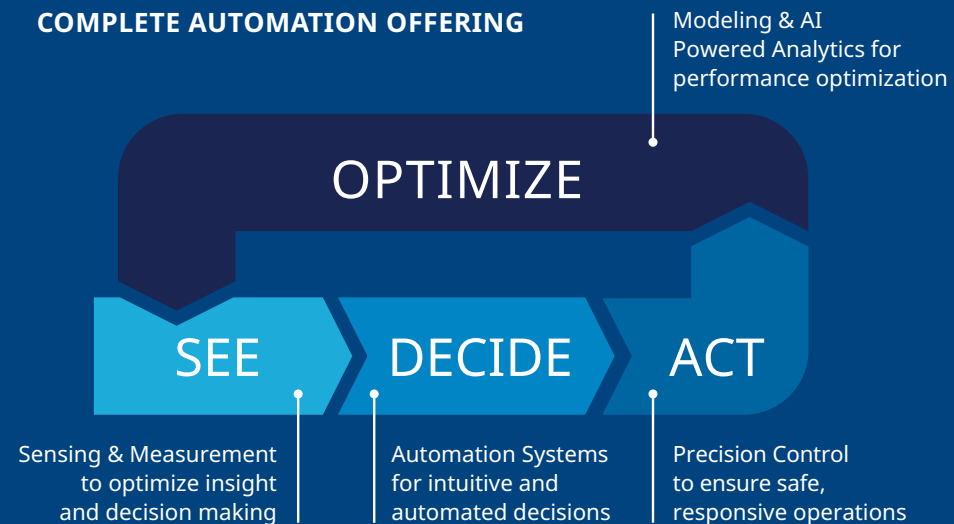
Our intelligent devices sense and measure critical variables such as pressure, temperature, flow rate, analytical properties, density and level to support the **SEE** function. These variables are then communicated to a control system, which is constantly evaluating inputs and judging how to best adjust processes in real time, serving as the **DECIDE** function. The control system then sends signals to intelligent actuators and valve elements to make physical adjustments to the process, fulfilling the **ACT** function.

Software technologies like those in AspenTech’s portfolio utilize data provided by intelligent devices and control systems to analyze trends over time, simulate potential enhancements and offer options for incorporation into the control system logic as part of the **OPTIMIZE** function. Emerson has established global leadership in each of the intelligent device, control system and software functions and serves as a steward and thought leader in the future direction of automation in the diverse industries we support.

Automation serves as the digital backbone and nerve center for our customers critical operations. Leveraging significant accumulated domain knowledge, automation provides important insights into what is happening in the customer’s process and provides the levers for enhancing product quality, yield, efficiency, reliability, uptime, energy efficiency, emissions intensity, regulatory reporting, asset integrity and personnel safety.



## COMPLETE AUTOMATION OFFERING





**GLOBAL MACROECONOMIC TRENDS**

Digital Transformation



Energy Security & Affordability



Sustainability & Decarbonization



Nearshoring



**The Critical Role of Automation**

**Global Macroeconomic Trends and Organic Growth Drivers**

We have identified several global macroeconomic trends that we anticipate will drive Emerson opportunities going forward. Digital transformation remains a key theme in the industrial world where technological advancements provide new value creation opportunities for safety, efficiency and productivity. Sustainability and decarbonization are critical drivers in a world that is rapidly embracing and deploying solutions to meet global net zero goals by 2050. Energy security and affordability remain important themes as the energy transition process takes place, given its importance in supporting economies and livelihoods around the world. And finally, we are supporting regionalization and nearshoring to provide resilience and self-sufficiency across a wide set of critical industries and value chains.

Intentionally providing more focused exposure to these global macro trends is at the center of Emerson's organic growth plan, and at the heart of our innovation focus as we consider the most impactful value we can create for the industries we serve. We believe Energy Transition, Industrial Software and Priority Hybrid and Discrete Markets are three growth platforms that will create superior market-based growth and expand specific opportunities for Emerson in both the near-term and long-term.

**Energy Transition**

Much of the world's energy systems are undergoing comprehensive change with a focus on substantially reducing carbon dioxide emissions. Over time, we are seeing a significant increase in the deployment of renewable energy, hydrogen, carbon capture, biofuels and biogas from waste, resource circularity, electrification and smart grid management. Emerson's automation portfolio serves as the digital backbone and is strongly aligned with these global sustainability imperatives, and actively supports each of these critical energy transition solutions. These energy transition solutions are expected to provide an opportunity to grow Emerson's future relevance and impact.

**Industrial Software**

It is our belief that automation will become increasingly more software centric over time. Building additional strength and depth in AspenTech and Emerson software will become increasingly important for enhancing the impact of automation.

**Priority Discrete and Hybrid Markets**

Emerson has a well-established leadership position in process-related industries. We have a strong presence in hybrid and discrete-related industries such as life sciences, metals and mining and factory automation, but have room to expand our exposure through intentional innovation actions, complete floor to cloud value-creating solutions and targeted portfolio moves.

# Innovation and a Vision for Boundless Automation

Innovation is fundamental to everything we do at Emerson. We work closely with customers to help advance the state of automation and value creation across a wide range of process, hybrid and discrete industries. Given our customers' design and operate long-lived facilities and expect Emerson to help keep these facilities running over time, our innovation process is focused on bringing additional value to both existing installations and new greenfield operations.

Emerson has brought forward many important industry innovations over time including development and contribution of intellectual property to HART™, WirelessHART™ and FOUNDATION™ Fieldbus networking protocols that are widely used across the world. We were also one of the first companies to move away from custom designed computing platforms and instead significantly leverage and adapt widely available commercial information technologies with the creation of the DeltaV™ distributed control system.

The DeltaV and Ovation™ control systems have continued to break new ground with capabilities related to better project implementation, adaptability to manage late design changes in large projects, built-in cybersecurity architecture and development of a wide set of software applications including simulation, asset management, planning and training. NI transformed the test industry by pioneering a revolutionary software-driven modular hardware architecture to provide new levels of flexibility.

Emerson innovation has also extended to the field device layer with extensive sensing technology developments. These include specialized final control capabilities to perform in very challenging conditions, high-performance discrete automation control and sensing devices, and battery powered professional tools to support the build-out of important molecule and electron infrastructure. Our recently acquired Test & Measurement business has been a leader in the test automation space where its LabVIEW™ software serves as the backbone for electrical testing in many industries worldwide.

As we look ahead, we are excited for what is possible to advance the state of automation and create even more valuable insight, control, software and data management capabilities for our customers. We are focused on four important technology spaces.

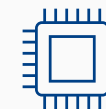
The first is **DISRUPTIVE MEASUREMENT TECHNOLOGIES** to bring more insight to what is happening in our customers' manufacturing processes. We also consider the best ways to bring these capabilities to the environments of our customers and how they can be added in existing operations.

**SOFTWARE-DEFINED AUTOMATION SYSTEMS** is our second focus area. Changes in computing power, software containerization and the evolution of more capable edge computing capabilities provide opportunities to drive further value with software that can operate at various levels of an automation architecture.

A related third area is **SELF-OPTIMIZING ASSET SOFTWARE** which can continuously leverage the knowledge across the operating assets in a facility to infer the health of these assets and help predict when maintenance intervention might be required.

The final area focuses on **SUSTAINABILITY TECHNOLOGY** solutions that help customers address optimal performance and sustainable operations. These innovations focus on the energy transition, use of more sustainable materials and the importance of advancing infrastructure capabilities to support the evolution of renewable power and storage installations, support the full hydrogen ecosystem from production to transport to use, emissions management and carbon capture, the battery value chain and the enablement of circularity capabilities.

## INNOVATION PRIORITIES



Disruptive Measurement Technologies



Software-Defined Automation Systems



Self-Optimizing Asset Software



Sustainability



## Innovation and a Vision for Boundless Automation

### A Vision for Boundless Automation

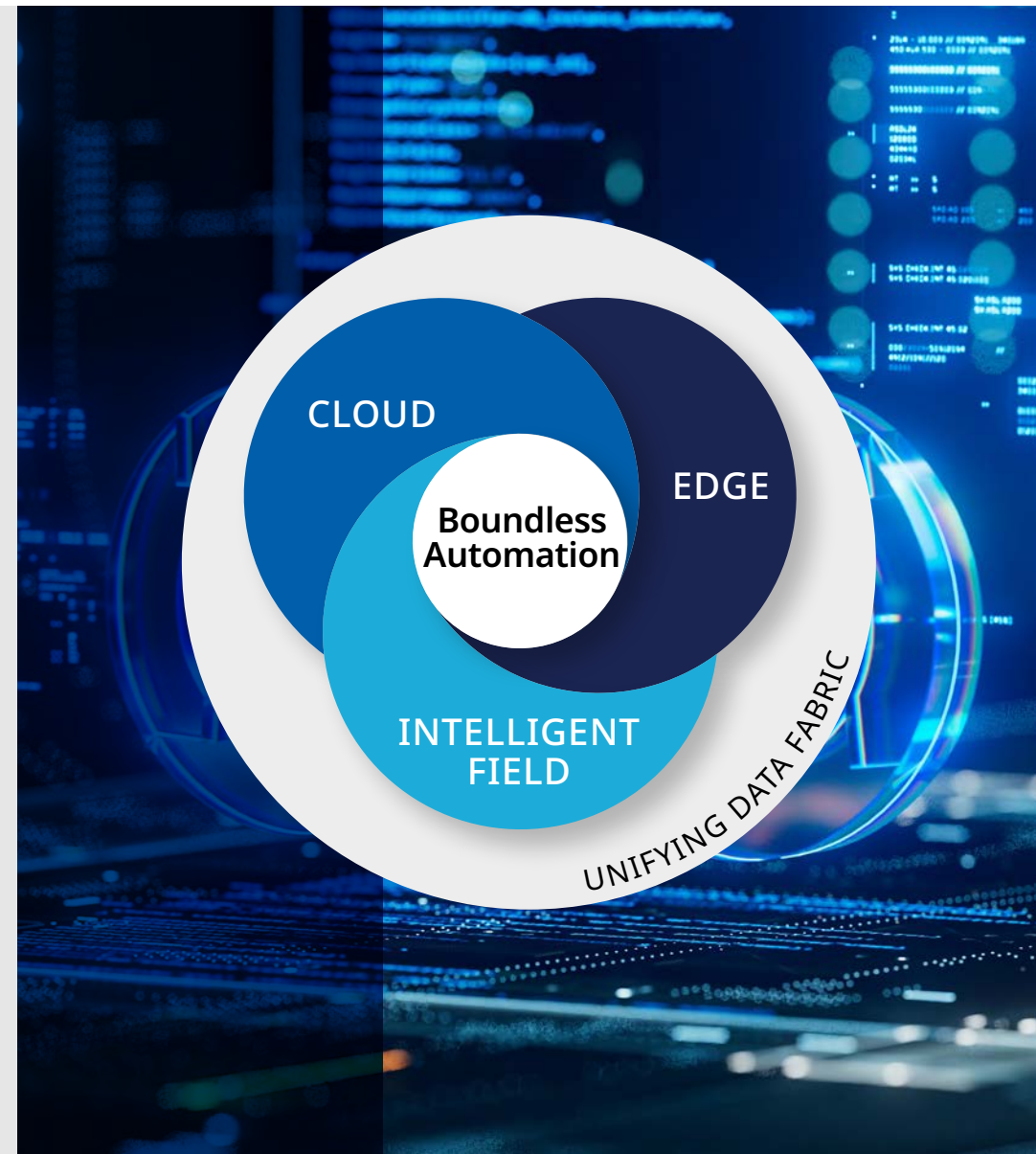
These technologies and others enable Emerson's recently introduced Boundless Automation vision for how automation will continue to extensively evolve and incorporate a number of important advancements to make data systems more flexible, more unified and more inherently secure. As we consider what will be possible with cloud computing, edge computing and software capabilities, as well as intelligent devices, software, diagnostics and communications capabilities in the field, there will be opportunities to move beyond the siloed system architectures of the past to a future where data and insight more readily moves to where it is needed.

In various parts of our customers' organizations, more powerful data analytics can span not just one location, but across a fleet of locations, with more involved simulation and modeling capabilities leveraging artificial intelligence technologies that can further enhance operational excellence.

We are introducing new features in our products now that support our vision for Boundless Automation, and there will be many more capabilities in the years to come. Advancing the world of automation requires a significant amount of domain knowledge across the industries we serve. It will also require significant collaboration with customers and other technology providers. It is our view that Emerson's customers will create more value of their own as software features are made more granular and can be flexibly placed at whatever level of the cloud, edge, or intelligent field makes the most sense for a given application.

In fiscal 2023, Emerson's innovation spend was 7% of sales. With the more intentional focus on our innovation pace and the inclusion of the test and measurement business in 2024, we expect this level will increase.

*Emerson spent approximately*  
**7%** *of sales on*  
*innovation*  
*in fiscal 2023*





**Innovation and a Vision for Boundless Automation**

**Emerson Ventures Expands Our Innovation Focus**

Since launching the Emerson Ventures program in 2021, we have continued to make investments in early-stage technology companies of high strategic relevance to our businesses and served markets. Our focus areas include disruptive discrete automation technologies, industrial software, environmental sustainability solutions and associated enabling technologies like AI, cybersecurity, wireless and edge computing.

Currently, we have nine companies in the Emerson Ventures portfolio, including three new companies added in the past year. These new companies are focused in the areas of manufacturing management software, AI-based fuel and CO<sub>2</sub> savings technology for shipping and verification and validation for automated systems. In the past year, we also deepened our commitment and partnership with an existing portfolio company in the edge computing orchestration and virtualization space via a second investment.

For More Information please refer to [Emerson Venture Capital Investments webpage](#).



*In 2021, we  
committed to investing*  
**\$100 M**  
*in Emerson Ventures.*





# Emerson Management System

As we have transitioned to a more cohesive automation company, we have taken the opportunity to evolve the Emerson management process. Our prior management process was designed for a time with more disparate operating units. We have updated our current Emerson Management System to be comprehensive and focused on the enterprise as a cohesive entity, dedicated to operational execution and enhanced growth, efficient use of leadership time and resources, and a more balanced approach to innovation and risk management.

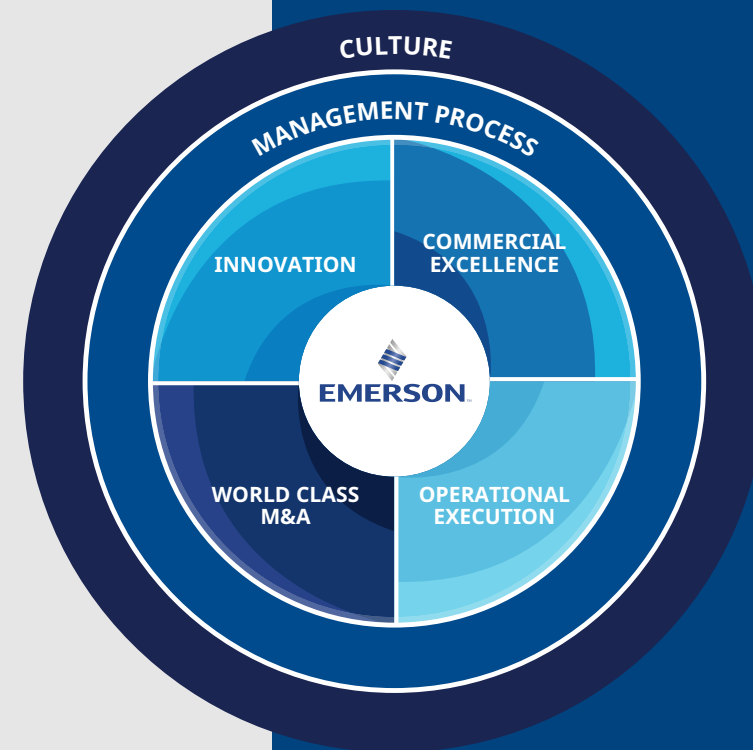
There are six central elements of the Emerson Management System. The first element is **INNOVATION**, which involves developing key technologies to unlock more organic growth and value creation. This is coupled with **COMMERCIAL EXCELLENCE**, building on our ability to address customer needs, leverage our installed base and drive enhanced customer intimacy and impact. The third element is **OPERATIONAL EXECUTION**, which maintains a strong focus on operational and supply chain excellence, leveraging Emerson's tremendous footprint and scale. The fourth element is a **WORLD-CLASS MERGERS AND ACQUISITIONS (M&A)** process, maximizing value through disciplined portfolio management and integration activities.

While these four elements form a strong nucleus of capabilities, we believe there are two additional elements that are essential to a complete system approach. Our **MANAGEMENT PROCESS**, which includes the cadence of how and when we interact through meetings and business updates enhances efficiency and agility in decision making. The final element is driving a modern **CULTURE** and empowering our teams to achieve results. We believe the Emerson Management System is the key to delivering value creation.

Emerson has established well-acknowledged operational capabilities across the world. Our teams have experience managing all relevant phases of the global economy and utilize some of the best toolkits to understand, plan and maximize agility and value creation. Over time, we have regionalized our operational and supply chain footprint to provide responsiveness to customers while supporting a focus on best cost and resiliency.

Our process is integral to driving top-quartile performance within our global business operations. The execution of short-range plans is reviewed quarterly, and medium-range and long-range plans are reviewed annually. The cadence of review balances delivery of near-term goals with planning for continuous operational improvement. Established tools and analytics provide comprehensive visibility into plans and execution performance. Operating margin improvements have reflected this process over the past three years with achievement of cost reset targets.

Throughout the process of transforming our portfolio, we have remained focused on right-sizing all functional areas and leveraging the enterprise through shared services and overhead management. We are also increasing our focus and investment in automation and efficiency in our own manufacturing operations, as well as enhancing the value of our facilities footprint.







VALUE CREATION FINANCIAL FRAMEWORK

4–7% *through-the-cycle organic growth*

~35% *incremental margins\**

Double-digit  
*adjusted EPS growth*

*Free cash flow margins of*

15–18%

\* Incremental margins is defined as the ratio of the change in adjusted segment EBITA for the current period less the prior period, divided by the change in the net sales for the current period less the prior period.

# Differentiated Financial Targets

Emerson adheres to a clear, specific framework of financial targets to create significant value and differentiate the company. Our goal is to deliver a through-the-cycle organic growth rate of 4–7%, with our ability to deliver this having been further enhanced with our portfolio transformation and intentional exposure to important global macroeconomic trends. We are committed to delivering on approximately 35% incremental profit margins and double-digit adjusted earnings per share (EPS) growth. We are also focused on driving free cash flow margins in the 15–18% range and leveraging a disciplined capital allocation framework.

Emerson recognizes the importance of performing for a diverse range of stakeholders, including shareholders, employees, customers, partners, governments and communities. In addition to our financial targets, delivering on the strategies outlined in this report are also important to advancing the needs of these stakeholders, fulfilling our purpose and growing as a more sustainable company.



For More Information please refer to [Emerson Investor Relations webpage](#).



# Environmental *Sustainability*

Environmental sustainability is a business imperative for Emerson and our value chain partners, from suppliers and customers to employees and communities. This section provides key insights into the progress made in advancing our sustainability strategy and supporting that of our suppliers and customers.

## IN THIS SECTION:

- [Overview](#)
- [Greening Of Emerson](#)
- [Greening By Emerson](#)
- [Greening With Emerson](#)

# Environmental Sustainability Highlights



## GREENING OF EMERSON

**Net Zero Operations**  
by 2030 from 2021 baseline.

**52%** reduction in Scope 1 and 2 emissions intensity since 2021.

Named **ENERGY STAR® Partner of the Year** for a second year.

Achieve **100% renewable electricity** sourcing by 2030.

**49%** of electricity procured from renewable sources at Emerson locations worldwide.

*\*Excluding Scope 3 Category 15, Investments*

**Net Zero Value Chain**  
by 2045 from 2021 baseline.

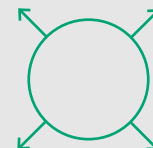
**4%** reduction in Scope 3 emissions since 2021.\*

**Zero Waste to Landfill**  
by 2032 from a fiscal 2022 baseline.

**56%** waste diversion rate across our manufacturing sites globally.

**CDP Climate Change Score A-.**

**8,600 employees** trained on environmental sustainability.



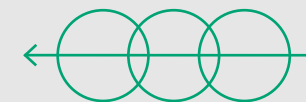
## GREENING BY EMERSON

Continue to progress our environmental sustainability efforts and investing in technologies, solutions and expertise to support customers in their **energy transition.**

Partnered with Syzygy Plasmonics to **electrify and decarbonize catalyst reactions** in chemical production using the power of light.

Selected by DG Fuels to automate new **Sustainable Aviation Fuel (SAF) production** facility in Louisiana.

Partnered with HaloSep to automate process of **converting household waste to power.**



## GREENING WITH EMERSON

Participation in **15 hydrogen associations or groups** worldwide.

In 2023, Emerson presented an innovation exhibit in the Expo City **Green Zone of COP28.**

Emerson became a **Terrawatt Partner** at Greentown Labs, the largest climate-tech incubator in North America.



# Our Approach to Environmental Sustainability and a Net Zero Future

## Emerson is Deploying Environmental Sustainability Strategies and Accelerating Decarbonization Across the Globe

Globally, there is a concerted effort to transition towards a sustainable future, with nations uniting to achieve net zero emissions by 2050. This commitment extends beyond emissions to encompass initiatives to improve material efficiency, responsibly manage water and waste resources, promote circular economy principles for the end-of-life reuse of materials and reduce impacts on biodiversity. Advancements are occurring in specific sectors of the economy, yet substantial progress is required. This underscores the need to accelerate the adoption of clean technologies and foster ongoing innovation.

Achieving a sustainable transformation of the global economy within three decades demands an unparalleled level of collective determination, creativity, cooperation and dedication. Critical sectors such as manufacturing, transportation, construction and the food supply chain are central to this shift. The materials and energy infrastructures underpinning these sectors are swiftly evolving towards sustainably sourced materials and increasingly electrified systems with cleaner and more renewable energy sources.

The recent COP28 summit in Dubai, UAE, emphasized the urgency to accelerate efforts and renew commitments towards this shift. Key outcomes included the UAE Consensus resolution to double the improvement rate of energy efficiency and to triple the expansion of renewable energy resources by 2030.

As a major technology enabler, Emerson's extensive automation advances industries towards a net zero future. The greatest contribution we can make to global sustainability lies in empowering our customers with our solutions and expertise, enabling them to achieve their environmental goals. Our comprehensive suite of technologies, knowledge and client partnerships is increasingly vital for enhancing efficiency and reducing carbon emissions in sectors that are challenging to decarbonize. As a corporation, our focus is on delivering these solutions while advancing our sustainability initiatives and reducing emissions.



Learn more about Emerson's participation in COP28 in the [Greening With](#) section, [pages 84-95](#)

Mike Train, Chief Sustainability Officer, presenting on Emerson's sustainability journey at Emerson Exchange in Düsseldorf.

## Overview

### Emerson's Environmental Sustainability Goals

Emerson recognizes the importance of setting ambitious targets to build a more sustainable business and contribute to a more sustainable global economy. Here, we provide a clear overview of our objectives.

#### By 2030

##### **Net Zero Operations**

Emerson is committed to a 90% reduction in greenhouse gas (GHG) emissions across Scopes 1 and 2, alongside a 25% reduction in Scope 3 emissions across our value chain, both compared to 2021. These near-term 2030 emissions targets were approved by the Science Based Targets initiative (SBTi) in 2022.

##### **Energy Efficiency and Renewable Energy Goals**

To support the Net Zero journey within our own operations, Emerson has also set additional targets:

To procure 100% of our electricity from renewable sources. Significant strides have been made towards this goal, reflecting our dedication to reducing our carbon footprint and supporting renewable energy.

To reduce energy intensity by 35% across our global operations, compared to a 2021 baseline. This goal expands on our achievement of surpassing the initial 25% energy intensity reduction target well ahead of schedule, underscoring our ongoing commitment to energy efficiency.

#### By 2045

##### **Net Zero Value Chain Emissions**

Emerson established a target to reach net zero GHG emissions across Scopes 1, 2 and 3, compared to a 2021 base year. This requires an absolute reduction of GHG emissions of at least 90%, with high-quality carbon neutralization measures for any residual emissions that cannot be abated, aligning our approach with ambitious climate science standards.

#### By 2032

##### **Operational Zero Waste To Landfill**

In 2022, Emerson set a target to achieve zero waste to landfill from our manufacturing facilities by 2032, using 2022 as the fiscal base year. This is tailored to align with local conditions and regulatory requirements.

#### Science Based Targets initiative (SBTi)



In fiscal 2022, the SBTi approved our near-term 2030 emissions targets. SBTi also approved Emerson's long-term net zero targets as being consistent with levels required to limit global average temperature rise to 1.5°C.

### Emerson's Portfolio Change Impact on Environmental Sustainability

In 2023, Emerson significantly reshaped its position as a global automation leader with key portfolio changes, including the finalization of the Copeland transaction (formerly known as Climate Technologies) and the additions of Flexim and Afag. Along with our successful AspenTech partnership and the early fiscal 2024 acquisition of NI, we have created a unified automation portfolio that supports our customers through digital transformation, energy security, sustainability and decarbonization. These strategic moves have significantly impacted our environmental sustainability metrics and strategies.

About 99% of Emerson's GHG emissions up to fiscal year 2022 came from the Copeland business, reflecting the major role of their long-lived electrical compressor technologies in heating, cooling and refrigeration globally. From now on, Emerson will report its equity share of Copeland's emissions under Scope 3, Category 15. [Learn more about Emerson's Scope 3 GHG emissions inventory in the Net Zero Value Chain section.](#)

The environmental performance of Test & Measurement, Afag and Flexim will not be included in this year's report. Their contributions will be incorporated after a full year of ownership, as we work to align our reporting with our evolving portfolio and sustainability goals.

# Creating a Culture of Sustainability to Promote Change and Drive Progress

Setting targets for greenhouse gas emissions, energy efficiency and waste, alongside leveraging our product portfolio to enable our customers' progress across various industries, has defined Emerson's shared vision for environmental sustainability. Our leadership's commitment is visible in the development of organizational structures, resource allocation, investments and the integration of sustainability into our operational and strategic management processes. Yet, we recognize that achieving a net zero economy more broadly requires daily informed actions and decisions by everyone in our organization and across our value chain.

Our employees are the core of our culture, and together, we have the collective responsibility to drive Emerson's sustainability goals. Cultivating a culture of sustainability is an ongoing

journey that demands focus, learning, commitment, action and the resolve to improve daily. Transforming our purpose statement and sustainability targets into a culture embraced by everyone, from the Board of Directors to new hires, is a challenging endeavor. It's essential that this sustainability-focused culture guides daily employee activities, decision-making and collaboration throughout the organization.

Across Emerson, employees actively contribute to sustainability in many ways, from driving energy efficiency improvements in our operations and supporting customers on their sustainability efforts, to collaborating with external experts on innovative solutions and engaging governments on key policy discussions. The conviction of our people for sustainability is ultimately what shapes our culture and drives our broader impact in the world.

## Our Environmental Sustainability Framework

Emerson utilizes a framework that groups our environmental sustainability efforts into three broad pillars: Greening Of Emerson, Greening By Emerson and Greening With Emerson. This strategic framework continues to guide our sustainability programs and strategies. It has also been instrumental in our communications, resonating well with a broad audience of stakeholders for its ease of understanding and recall. It remains a cornerstone in how Emerson conceptualizes and conveys our dedication to sustainable progress.



The following sections are organized according to this framework:



### GREENING OF

*How we improve our internal environmental sustainability performance.*



### GREENING BY

*How we support and enable our customers' decarbonization and environmental sustainability efforts.*



### GREENING WITH

*How we foster collaboration among stakeholders.*



For more information please refer to [Emerson's Environmental Sustainability webpage.](#)



# Greening Of Emerson: Driving Net Zero Operations

**We are working to improve internal environmental performance across our global business.**

## Advancing Transparency and Governance in Sustainability

At Emerson, we approach sustainability by focusing our efforts on areas where we can make the greatest impact. This philosophy steers our initiatives in key areas such as reducing greenhouse gas emissions, optimizing energy use, minimizing waste and conserving water. It shapes our efforts to effectively drive progress and meet our environmental objectives.

In our commitment to transparency in reporting our climate strategy and advancements, Emerson proactively shares its climate-related information by participating in the CDP (formerly known as the Carbon Disclosure Project). Since we set our initial emissions reduction target five years ago, our performance in the CDP evaluations has consistently improved. In 2023, we were proud to maintain an A-rating in the Climate Change category, echoing our achievement from the previous year. Additionally, Emerson has been recognized on the CDP's Supplier Engagement Leaderboard for a second year, placing us in the leading 8% of companies evaluated for supplier engagement regarding climate change.

We are convinced that openly tracking and communicating our progress fosters trust and showcases effective strategies that can inspire others in their pursuit of sustainability. Therefore, we annually publish our environmental data, net-zero ambitions and strategies to achieve these goals in our sustainability report and through CDP disclosures.

For further details on the frameworks that inform our report content, including the Global Reporting Initiative (GRI), CDP, Task Force on Climate-Related Financial Disclosures (TCFD), Sustainability Accounting Standards Board (SASB) and the United Nations Sustainable Development Goals (SDGs), refer to the [Reporting section](#).

Emerson recently established a more formalized sustainability reporting governance framework. This is in anticipation of meeting the diverse range of sustainability disclosure regulations being introduced globally, including the EU's Corporate Sustainability Reporting Directive (CSRD) among others. This effort is marked by robust cross-functional collaboration involving key departments such as external financial reporting, internal audit, sustainability, legal, IT and HR, underscoring

the comprehensive approach we are taking to ensure compliance and leadership in sustainability governance. [Refer to the Corporate Governance section](#) for more information on Emerson's ESG oversight and ESG reporting governance structure.

As a leader in the global marketplace, Emerson is committed to excellence in operations and to promoting sustainable business practices that make a tangible difference, not only within our own operations but also for our suppliers and customers worldwide. Embedding sustainability into our corporate strategy, management and day-to-day operations is fundamental to our business ethos.

Emerson's [Global Environmental Management and Sustainability policy](#) articulates the guiding principles that are integrated into our internal environmental management practices and performance standards. This policy is reviewed, and the revised version published, on an annual basis.



Please refer to [Emerson's 2023 Climate Change CDP Report](#) for more information.

**CDP**  
A- rating on  
Climate Change

**CDP**  
Supplier Engagement  
Leader

**SBTi**  
Approved near-term and  
long-term net zero targets

**TCFD**  
Report in alignment with  
TCFD guidelines:  
[see our response here](#)



## Greening Of Emerson

### Environmental Sustainability Leadership Founded on Strong Governance

Emerson takes its commitment to environmental sustainability seriously and has established a strong governance structure to help ensure accountability and progress. Mike Train, Emerson's Senior Vice President and Chief Sustainability Officer, leads the company's environmental sustainability strategy and oversees the Environmental Sustainability Steering Committee. Mike reports directly to Emerson's President and CEO Lal Karsanbhai and regularly presents to the Board of Directors on Emerson's sustainability initiatives.

In 2023, Emerson restructured its Board committees, introducing a [Technology and Environmental Sustainability Committee](#) to further enhance its oversight of issues such as product cybersecurity, technology, innovation and the Company's environmental sustainability policies and programs. This Committee is updated regularly on regulatory and public policy trends related to environmental sustainability that may impact the Company's overall business strategy.

[For more information on Emerson's Board Oversight of Company Strategy and Risk Management, See the Corporate Governance section](#)

Under Mike's leadership, Emerson's Environmental Sustainability Steering Committee is active in coordinating environmental sustainability-related activities and initiatives across the company's global value chain. This committee connects the priorities of our Board, leadership team and colleagues around the world and includes representatives from all functional areas of the company. This includes Emerson's executive leadership and management teams, sales and strategy planning, legal, finance and accounting, operations, information technology, human resources, marketing, supply chain, technology, engineering, governmental affairs, internal audit and investor relations. The aim is to widely integrate environmental sustainability into the company's business.

Recent committee activities include:

- An update of the climate scenario analysis conducted to identify and quantify physical climate risks as identified by the TCFD that are most important to Emerson's business.
- The deployment of Emerson's internal carbon valuation in our capital appropriation processes.
- The implementation of Emerson's Zero Waste To Landfill strategy across manufacturing facilities.
- The establishment of a Responsible Sourcing Committee that is tasked with driving Emerson's responsible sourcing program, including environmental, social and governance aspects across our supply chain activities.

## Environmental Sustainability Leadership

Beyond this, we also drive action on focused topics through more specialized groups. For example:

- The **Energy Sourcing Committee** acts as a focal point for reviewing opportunities and engaging in more active sourcing of renewable energy. This group has representatives from sustainability, supply chain, finance and legal functions and works closely with our businesses to evaluate and implement renewable energy purchases. We also utilize third-party energy specialists who are active in energy markets and aware of emerging opportunities.
- The **Scope 3 Emissions Data Governance Group** is responsible for reviewing any improvements or changes to calculation methodologies, data sources, internal controls and reporting efforts. This group has representatives from all relevant functions involved in external reporting and the data preparers touching our value chain emissions, from supply chain and logistics to sales and operations.
- The creation of a cross-functional **Carbon Border Adjustment Mechanism (CBAM) steering committee** to establish data and reporting processes working with our suppliers and operations teams.

- The establishment of a working group tasked with integrating key product sustainability considerations and guidelines into Emerson's new product development process and design practices.

In coordination with the Board, Emerson leadership compensation programs in 2023 utilized a metrics-based approach incorporating both financial and sustainability targets with a focus on greenhouse gas emissions reductions and human capital management goals. These metrics are reviewed regularly and updated according to progress. Doing so helps drive alignment and culture change across our organization.

Achieving large-scale progress for a global company necessitates integrating environmental sustainability into our management process and, ultimately, into our culture. At the facility operations level, we have a sustainability team and leader at all major sites worldwide. These employees lead our local environmental sustainability efforts, which include reducing energy use and resulting greenhouse gas emissions, and our existing programs for managing water use and responsible waste disposal.



Over 60 volunteers from Emerson's Manila team participated in a coastal clean up as part of our Earth Month Ecochallenge.



## Greening Of Emerson

### Climate Scenarios Guide Our Long-Term Business and Risk Management Strategies

In fiscal 2022, Emerson performed a climate scenario analysis to identify the climate-related risks and opportunities that could be important to Emerson's business. The analysis considered risks and opportunities related to the transition to a lower-carbon economy and to the physical impacts of climate change. Although scenarios are not predictions of the future, this assessment helped us better understand how climate change could impact our business. It also showed us how we can successfully transition to a lower-carbon economy and mitigate climate-related effects.

#### Transition Risks and Opportunities

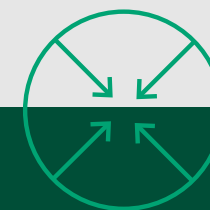
Emerson worked with a third-party risk modeling services provider and followed the Task Force on Climate-related Financial Disclosures (TCFD) recommendations to assess a range of future climate-related scenarios. The analysis included two emissions pathways.

For the low emissions pathway where the world successfully transitions to a net zero energy system, Emerson used the IEA's Sustainable Development Scenario for transition impacts in a well-below-2-degrees future. For the high emissions pathway, the IEA Stated Policies Scenario was used for transition impacts.

In the low emissions scenario, a shift in preferences toward lower emissions technologies is expected to create key transition risks and opportunities. As important energy transition solutions such as renewable electricity, biofuels, hydrogen, energy storage, carbon capture and storage, carbon removal, materials circularity, electrification and smart grid systems are developed, we expect Emerson's existing energy and chemicals-based automation activities will be impacted.

Emerson automation technologies and expertise enable these newer energy transition solutions. We modeled the energy and chemicals related automation revenue impact of both the IEA Stated Policies Scenario (high emissions) and the IEA Sustainable Development Scenario (low emissions) from 2021-2040 to assess the impact of the transition. Note that non-energy and chemical related automation revenue such as life sciences, food and beverage, pulp and paper and factory automation were treated equivalently in both scenarios.

The IEA scenarios incorporate assumptions regarding population, long-term global economic growth, energy demand and the level of each energy resource expected to fulfill demand. In the high emissions scenario, the estimated compound annual growth rate of automation revenue from 2021 to 2040 is 3.4%. In the low emissions scenario in which the world economy makes substantial progress toward net zero, the estimated compound annual growth rate of automation revenue is 3.1%. Although many assumptions are necessary for the scenario analysis modeling process, one takeaway is that automation plays an increasingly important role in the energy transition. Emerson technologies are ideally positioned to support these transition activities. We will continue to innovate and shape our portfolio to support these critical energy transition solutions.





### Climate Scenarios Guide Our Long-Term Business and Risk Management Strategies

#### Physical Risks

In 2024, the physical risk analysis was updated to assess physical risks to our business operations over a range of time horizons and future climate-related scenarios.

For the low emissions pathway, the Intergovernmental Panel on Climate Change’s Shared Socioeconomic Pathway (SSP) 1-2.6 was used for physical impacts – the most optimistic temperature scenario aligning with a temperature increase of about 1.5 degrees Celsius. For the high emissions pathway, the SSP 5-8.5 scenario was used – the most pessimistic scenario aligning with a temperature increase of about 4.3 degrees Celsius.

As the impacts of climate change can manifest over varying time horizons, the exercise assessed the potential impact to Emerson’s facilities and operations of 12 acute and chronic perils over 5-year increments between present-day and 2050. Across these two climate scenarios and future time horizons, Emerson estimated the physical impacts on the organization, at the asset level, based on the geospatial coordinates of facilities, leading scientific climate models and predictive modeling methodologies.

Using the assessment’s outputs, tropical cyclone risk in the East Asia & Pacific region was identified as a higher risk relative to other regions due to the potential increase in frequency and severity. While we have facilities in this region, our mitigation strategies including global diversification of our facilities and regional production capabilities minimizes any potential impact to company operations.

In addition, Emerson has well-developed emergency response programs and contingency plans to manage these types of risks, and the cost of managing them is included in the scope of the company’s insurance program.

Moving forward we will continue to periodically refine our scenario analysis assessment and methodologies. Given the iterative nature of climate scenario analyses, we expect improvements in best-practice approaches, models and data quality over time. We will integrate these assessments into our strategic planning, merger and acquisition activities, product design strategies and enterprise risk management frameworks as we advance our own net zero goals and support customers in their activities. These efforts are expected to help strengthen our resilience and adaptation to climate change.





## Greening Of Emerson

### Net Zero Operations Update

#### Emerson Continues to Accelerate Emissions Reduction Progress

In 2019, Emerson announced a goal to reduce Scope 1 and 2 greenhouse gas emissions intensity by 20%. The original goal was normalized to sales across our entire global manufacturing footprint by 2028, compared to our 2018 baseline. We successfully exceeded this target in 2022, six years early, thanks to substantial enhancements in energy efficiency and increased sourcing of renewable electricity.

Achieving Emerson's initial target of reducing greenhouse gas intensity by 20% helped Emerson's teams aim for a more ambitious 90% reduction in absolute Scope 1 and 2 emissions by 2030 from the 2021 baseline. As we strive to meet this goal, we will continue focusing on energy efficiency and renewable electricity sourcing, along with Scope 1 emission abatement strategies.

Emerson has achieved a steady decline in total energy consumed, normalized to sales (i.e. energy intensity), over recent years thanks to

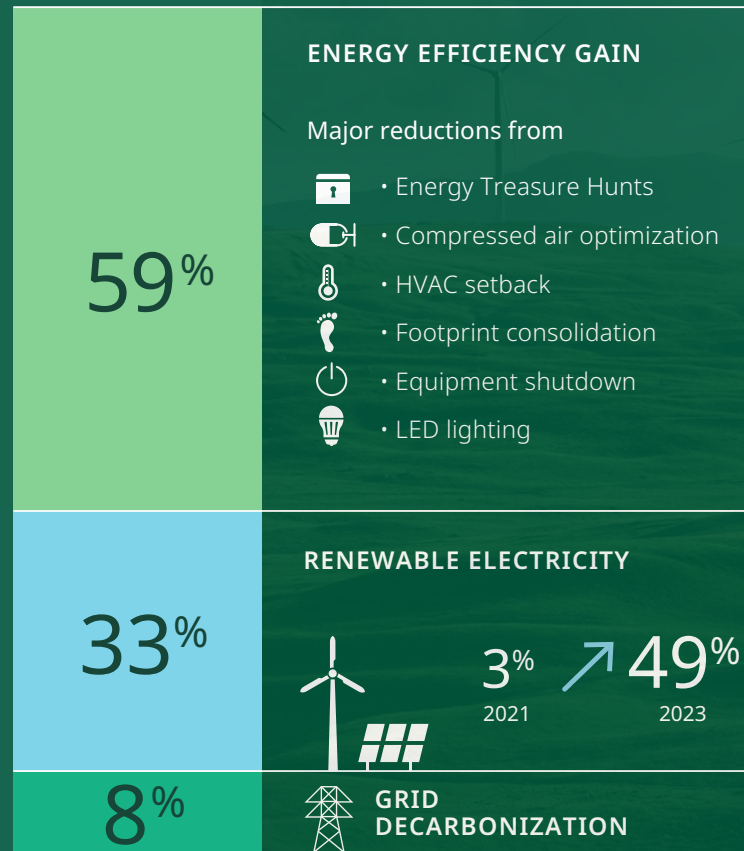
our commitment to energy efficiency across our operations. We previously announced a target to reduce our energy intensity 25% by 2030, compared to a 2018 baseline. This baseline year, although different from our more recent science-based net zero emissions target baseline, was chosen to align with Emerson's first greenhouse gas intensity reduction goal and recognize our global teams for the efficiency gains they had historically achieved.

We are proud to announce that we have surpassed the 25% energy intensity reduction target well in advance of the 2030 deadline, achieving a 41% reduction from the original 2018 baseline in 2023. As evidence of our continued commitment to energy efficiency, we are expanding our target and updating to a more ambitious 2021 base year, challenging our global operations to reduce their energy intensity 35% by 2030. We look forward to reporting progress on this revised energy intensity target in the years to come.



For more information please refer to [Emerson's 2023 CDP Climate Change Questionnaire](#).

### NET ZERO OPERATIONS PROGRESS – SOURCE OF EMISSION REDUCTIONS SINCE 2021





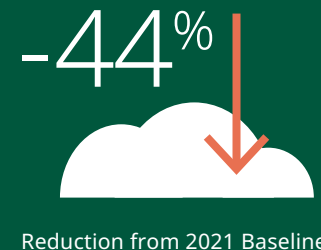
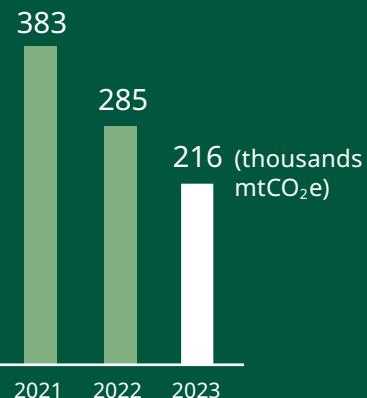
Greening Of Emerson

# Scope 1 and 2 Emissions Data

Progress towards 2030 Net Zero Operations

## SCOPE 1 AND SCOPE 2 EMISSIONS

### MARKET-BASED



### MARKET-BASED EMISSIONS INTENSITY



Emerson's full Scope 1 and Scope 2 emissions reporting includes all sites within our operational control including manufacturing and non-manufacturing facilities (e.g. distribution centers, headquarter buildings, sales offices, service centers) along with mobile emissions from leased or owned vehicles, aircraft and fugitive emissions from leaked refrigerants. Our total greenhouse gas emissions for fiscal year 2023 included 190 major energy consuming facilities reporting actual energy usage data as well as the 383 remaining facilities under Emerson's operational control. Where primary activity data was not available, we have made estimations based on square footage, site use and other factors.

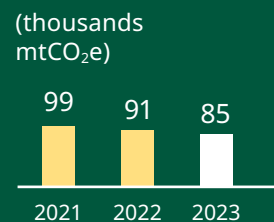
Noteworthy revisions to historical energy consumption and emission data previously reported for fiscal years 2018-2022 were driven by the divestiture of the Climate Technologies (now called Copeland) and InSinkErator businesses along with improved energy data availability for our leased vehicle fleet.

ERM CVS has been engaged by Emerson to provide limited assurance for the 2023 GHG emissions dataset disclosed in this report. ERM CVS's full assurance statement, including opinion and basis of opinion, is available on page 204.

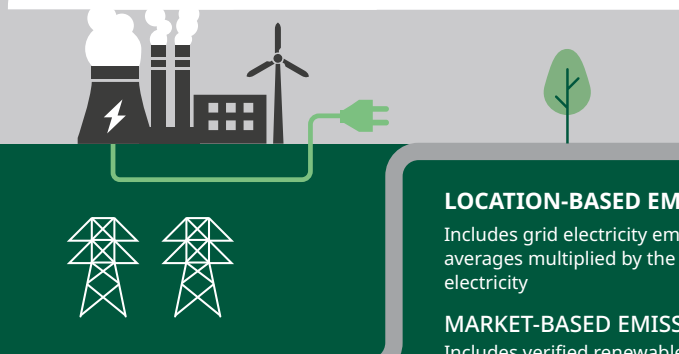
### SCOPE 1



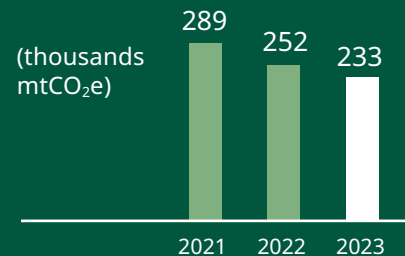
### SCOPE 1 GHG EMISSIONS



### SCOPE 2



### SCOPE 2 GHG LOCATION-BASED



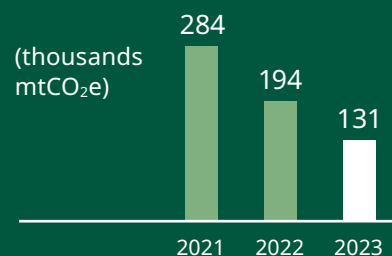
### LOCATION-BASED EMISSIONS

Includes grid electricity emission factor averages multiplied by the total purchased electricity

### MARKET-BASED EMISSIONS

Includes verified renewable energy purchases

### SCOPE 2 GHG MARKET-BASED



### Greening Of Emerson

#### Net Zero Operations – 2030 Roadmap

There are four key levers in Emerson’s roadmap for achieving net zero emissions across our operational footprint: energy efficiency improvements, renewable electricity sourcing, Scope 1 emissions abatement through electrification and low carbon fuels and neutralization. Emerson can most directly control the first three levers and consequently that is where we have centered our efforts to date. Neutralizing carbon emissions through a combination of high-quality technological and nature-based solutions will be considered for

residual emissions consistent with threshold limits set by the Science Based Targets Initiative.

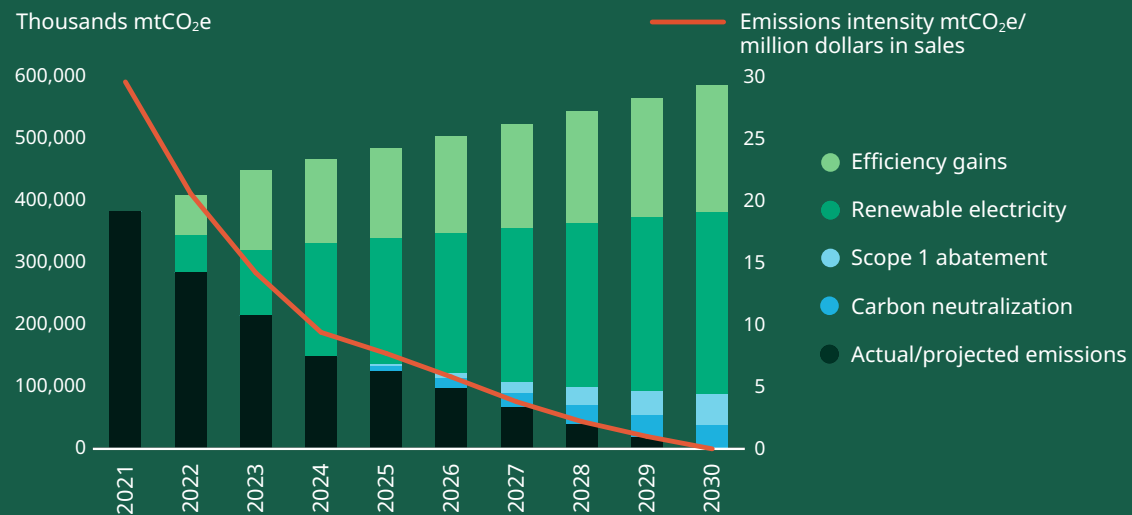
The chart below provides our anticipated emissions profile and projected impact of the four strategies to achieve our 2030 net zero operations target.

Energy efficiency has historically been foundational to Emerson’s strategy in reducing emissions, and it will continue to be a focal point of our decarbonization roadmap into the future. Renewable electricity sourcing is now playing an increasingly important role in reducing our carbon footprint.

Given the proportional split between our Scope 1 and Scope 2 emissions, we expect renewable electricity to continue driving significant emission reductions. Scope 1 abatement projects are currently being piloted in multiple world areas and will be scaled up once proofs of concept have been validated.



#### 2030 NET ZERO EMISSIONS ROADMAP



Greening Of Emerson

**Energy Treasure Hunt Program Continues to Drive More Energy Efficiency**

Energy Treasure Hunts continue to serve as a successful driver of Emerson’s progress on energy efficiency. These multi-day events are facilitated by a trained energy expert and include participation from a local team representing diverse functional groups. Groups begin by evaluating the operation on a low production day to determine how energy is being managed, and then the same process is repeated on a high production day to understand energy flows and opportunities. Energy and associated emission reduction opportunities are then reviewed, prioritized and documented to share with local and business unit-level leaders. Repositories of Treasure Hunt results are made available to stakeholders across the company to enable collaboration and best practice sharing.

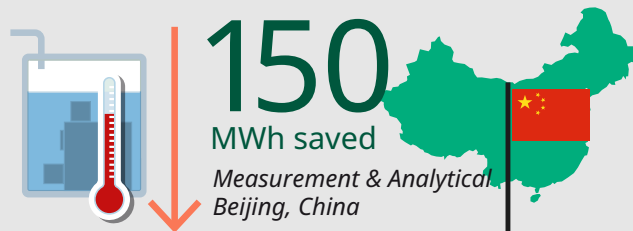
We typically identify 10–15% in energy savings opportunities during an Energy Treasure Hunt, and use the enthusiasm generated to invigorate our cultural transformation around sustainability. Not only are event participants empowered to identify future decarbonization opportunities at their site, but they now have the required training and experience to support Energy Treasure Hunts at other Emerson facilities. This “train the trainer” approach to scaling up our energy management program has driven extensive coverage and participation: Emerson teams have now completed Energy Treasure Hunts at more than 70 unique, global facilities, representing over 60% of our manufacturing emissions footprint.

**ENERGY EFFICIENCY PROJECT HIGHLIGHTS**

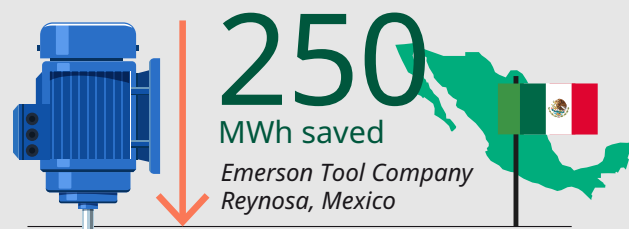
**BUILDING AUTOMATION SYSTEM INSTALL**



**WASH PROCESS REDESIGN**



**VARIABLE SPEED MOTOR RETROFITS**



**Unlocking Energy Efficiency Opportunities**

Emerson’s facility in Dammam, Saudi Arabia conducted an Energy Treasure Hunt that identified a combination of low-cost savings and impactful capital investment opportunities. This event was facilitated by our Middle East & Africa based energy experts with virtual support from the Enterprise Sustainability team to review findings and validate saving calculations. Noteworthy opportunities from this event included LED lighting retrofits, lighting sensor installation, compressed air leak detection and set point adjustments to optimize HVAC energy consumption.

Dammam, Saudi Arabia







Delhi and Pune, India

### Championing Energy Efficiency Across Global Operations

Pallavi Sachan and Bakul Purohit are Emerson India's Green Team Network Coordinators, leading sustainability initiatives and championing the Greening Of program locally. For several years, they have facilitated Energy Treasure Hunts, educated staff on Emerson's sustainability goals, and promoted best-practice sharing while ensuring active Green Teams in all facilities. Bakul has led sustainable renovations in Maharashtra for Indian Green Building Council certification, and Pallavi has engaged with renewable energy providers to identify high-impact sourcing options and in doing so aid Emerson India's energy transition.

## Greening Of Emerson

### Renewable Electricity

Emerson is committed to sourcing 100% renewable electricity across our global operations by 2030. We continue to make steady progress in expanding our renewable electricity coverage through both grid sourcing and onsite generation. In 2023, renewable electricity accounted for 49% of our aggregated global power consumption. The company's overall transition to renewable electricity is overseen by the Energy Sourcing Steering Committee, ensuring a uniform approach consistent with the technical criteria issued by the Climate Group's RE100 initiative.

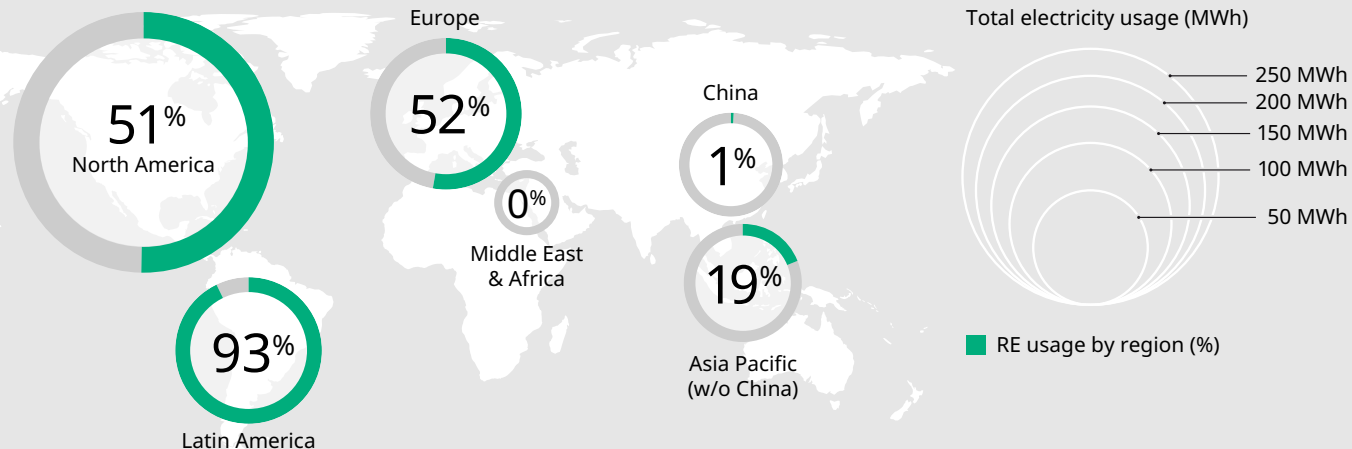
#### Grid-Sourced Renewables

Emerson continues to effectively transition to grid-sourced renewable electricity in North America and Europe, markets that historically have

offered more favorable renewable supply levels. For example, a recent collaboration between our Measurement & Analytical operation in Minneapolis, Minnesota, and its local utility provider Xcel Energy resulted in a green tariff agreement that will provide locally sourced renewable power to the site for several years to come. Significant progress was also made in 2023 with Emerson cementing an agreement to source 100% renewable electricity across all Mexico operations. Looking ahead, we have turned our focus towards sourcing renewable electricity for our core operations in the Middle East and Asia Pacific. Emerson recently engaged a third-party advisor to analyze the availability of supply and cost expectations in these key markets, and ultimately develop a transition roadmap in line with our broader 2030 renewables target.

### RENEWABLE ELECTRICITY COVERAGE BY WORLD AREA

**49%**  
of all purchased electricity worldwide was renewable





## Renewable Electricity

### On-Site Renewable Generation

We continue to invest in onsite renewable electricity generation across our global facility footprint with over 10 MW of installed capacity presently available. We have identified preferred onsite solar developers in multiple world areas to streamline our vendor selection process and accelerate the rate at which these projects are commissioned. Furthermore, Emerson has published a Sustainable Building Standards document stipulating that all greenfield construction and existing facility expansion projects will evaluate onsite renewable generation options as part of their design process. We will continue prioritizing and expanding our onsite renewable portfolio in the years to come.



Emerson's Discrete Automation factory in Songjiang, China, installed a 0.3 MW capacity rooftop solar array which provides approximately 15% of the site's total annual electricity supply. The project also serves as benchmark for other, similar onsite solar investments to be made at Emerson China operations in the future.



Emerson's Actuation Technologies operation in Fiorenzuola, Italy installed a 0.9 MW capacity solar array which provides approximately 30% of the site's total annual electricity usage. This car park solar array is the first of its kind for the company, providing dual benefits of renewable electricity supply and covered parking for the site's employees.



## Greening Of Emerson

### Scope 1 Emission Abatement Through Electrification and Low-Carbon Fuels

Our Scope 1 footprint primarily results from the combustion of fuel in company facilities, either in manufacturing processes or comfort space heating, as well as mobile vehicles owned or leased by Emerson.

#### Electrification

In addition to energy efficiency measures, Emerson continues to implement decarbonized solutions to convert from combustion-based to electrified processes. We are actively assessing investment opportunities for electrifying process and comfort heating systems and have begun piloting these approaches at select operations, considering technologies such as heat pumps and electric boilers. In parallel, we are mapping Scope 1 energy flows across the organization, which will enable the development of comprehensive electrification strategies tailored to specific end-use applications.

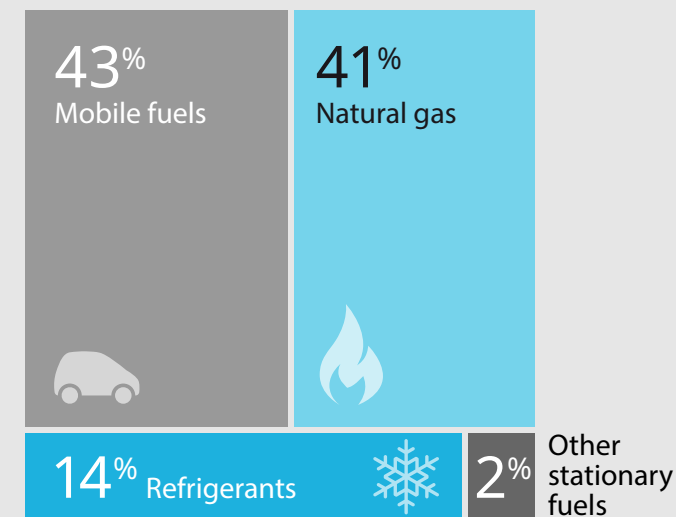
#### Alternative Fuels

We believe alternative fuels such as hydrogen, renewable natural gas and other biofuels have a role to play in the energy transition. Alternative fuels can serve as a bridge solution in situations where complete electrification of thermal processes by 2030 is cost prohibitive or constrained due to inadequate utility infrastructure or renewable electricity supply. We are engaging with protocol organizations, project developers and value chain partners to evaluate the feasibility of fuel-switching opportunities aligned to net zero standards.

#### Electric Vehicles

2023 marked a critical first step in electrifying our global vehicle fleet, as internal policies were updated to allow electric vehicle (EV) and hybrid vehicle (HV) options to Emerson employees in multiple world areas and across vehicle grades. EVs and HVs now compose 12% of our global vehicle fleet, a year-over-year increase of more than 70%. To support this transformation, Emerson teams have identified preferred suppliers for EV charging infrastructure to expedite negotiation and on-site installation timelines. We intend to replicate regional leased vehicle policies to all world areas as EV technology and local charging infrastructure continue to develop.

#### SCOPE 1 EMISSIONS BREAKDOWN







## Scope 1 Emissions Abatement

### Assigning a Carbon Value to Drive Incremental Decarbonization Investments

Emerson uses an internal carbon price to place a monetary value on carbon emissions and evaluate the financial and environmental impacts of capital investments. This analysis is fully integrated within our traditional valuation process and is now mandatory for investments that affect energy consumption or emissions in a meaningful way. Carbon valuations play a crucial role in allowing us to understand and prioritize opportunities that generate the highest emission reductions, factoring in expected, future decarbonization costs.

We considered university research, benchmarked existing carbon markets around the world and ran a series of internal pilot investment analyses to determine an appropriate internal carbon

price. Emerson’s Chief Financial Officer and Chief Sustainability Officer assess the carbon value annually against current prices and historic trends of actively traded carbon markets worldwide. For 2024, the internal carbon price has been set at \$90 per metric ton of carbon dioxide equivalent (mTCo<sub>2</sub>e).

### Neutralization Through Technological Solutions

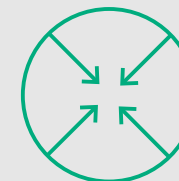
An important component of achieving Emerson’s net zero targets is the implementation of high-quality emission neutralization tactics. For such commitments to make a meaningful impact at scale, we support the principle that the offsetting of GHG emissions should not be prioritized over mitigation efforts. Neutralization activities should only be implemented to remove residual emissions that organizations cannot otherwise reduce.

Emerson’s neutralization strategy is informed by the Oxford Principles for Net Zero Aligned Carbon Offsetting, with the aim that the carbon removal solutions we ultimately rely on to meet our net zero targets are not only high quality but also additional, measurable, verifiable and characterized by a low-risk of reversal. These principles will guide our selection of carbon removal projects and technologies.

Emerson takes into account industry best practices and the latest expert recommendations into our carbon neutralization strategy. We will regularly review our carbon removal approaches, adapting these strategies as necessary to maintain alignment with evolving scientific understanding and regulatory frameworks. Emerson products are also currently used by industry-leading providers of technology-based offsets, and we remain focused on supporting the wider deployment of industrial-scale neutralization solutions.

### Emerson’s New Office in Manila Guided By Emerson’s Sustainable Building Standards

Emerson recently consolidated several offices into a single shared services facility in Manila, Philippines. Working with local real estate partners, a building with a LEED Gold Certification was selected as the location for the new office, containing several unfinished floors that were then fitted out according to Emerson’s Sustainable Building Standards. The space was among the first in Emerson to be redesigned to enable flexible seating arrangements in support of our global hybrid work policy, such that building systems across entire zones or floors can be powered down when occupancy is low. Other features such as LED lighting, automated shading, centralized control systems and ample greenery help ensure both a human-centric and environmentally sustainable facility.



## Greening Of Emerson

### Driving Toward Zero Waste to Landfill

#### How We Think About Waste: The Circular Economy and the Waste Hierarchy

In 2023, Emerson embarked on a mission to achieve zero waste to landfill by 2032, aiming to divert 90% of operational waste from our manufacturing facilities away from landfills and incinerators by this target year, with efforts commencing from a 2022 fiscal year baseline. This initiative is designed to comply with local conditions and regulations, adopting a flexible and conscious approach.

Our commitment to zero waste to landfill is defined in accordance with recognized certification programs and industry standards, such as the Zero Waste International Alliance, necessitating a minimum diversion rate of 90% from landfill and incineration.

The concept of zero waste aims to minimize the disposal of waste into the environment, while the circular economy model seeks to enhance this approach by establishing closed-loop systems that retain raw materials within the economic cycle. At Emerson, we adopt the waste hierarchy framework as a foundational strategy to progress towards a circular economy.

Our strategy organizes waste management practices hierarchically, focusing on extending the useful life of products and reducing waste production. This approach is encapsulated in the widely recognized waste hierarchy 'Reduce, Reuse, Recycle,' which extends through five key stages: Prevention, Reuse, Recycling, Recovery and Disposal.

By organizing waste management strategies from most to least environmentally beneficial, it facilitates the selection of practices that are grounded in scientific understanding. Employing the waste hierarchy as our guiding framework therefore enables our teams to make better decisions by systematically prioritizing actions based on their environmental impact.

#### Diving Deeper into Emerson's Generated Waste

Two years ago, we enhanced our approach to waste management at Emerson by standardizing data collection and internal reporting processes. This initiative was aimed at improving quality checks, unifying the terminology for waste streams across the company and obtaining a more granular visibility of our waste data worldwide. To facilitate this, we leveraged our internal data collection software tool, already in use across our manufacturing sites. This effort was an improvement on our existing systems and practices, ensuring more accurate and consistent data across all locations. The data generated, now serves as the reference against which we measure our progress.

## Zero Waste to Landfill by 2032

*Our goal is to achieve zero waste to landfill in our manufacturing operations by 2032, from a 2022 base year, wherever this is compatible with local conditions and regulations.*





### Zero Waste to Landfill



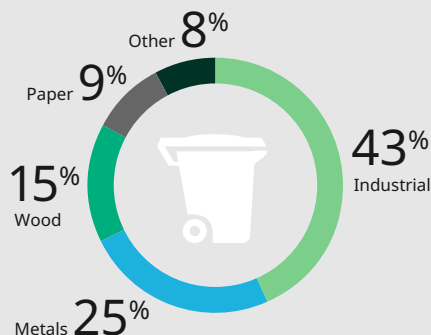
In fiscal year 2023, the waste diversion rate at our manufacturing sites reached 56%, an improvement from the 49% recorded in fiscal year 2022. This increase in our diversion rate, adjusting for changes in our business portfolio, was achieved by transitioning waste from traditional landfill disposal to more sustainable recycling methods.

We categorize waste as either hazardous or non-hazardous in accordance with local regulations at each manufacturing facility. Predominantly, due to the nature of our operations, the vast majority of waste we produce is non-hazardous. In fiscal year 2023, we produced 52 kilotons of non-hazardous waste, accounting for 95% of our total manufacturing waste. The remaining 5% of total waste, 3 kilotons, is hazardous waste which is made up of items such as solvents and solvent mixtures, oils and paint related waste.

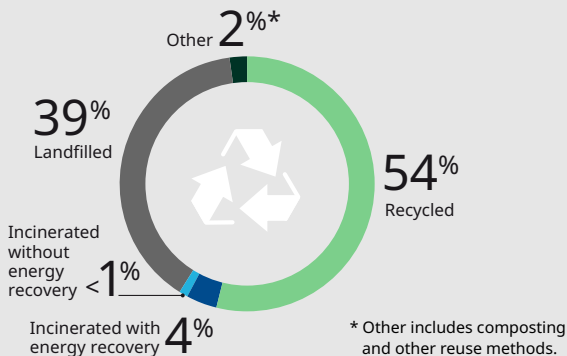
### HAZARDOUS AND NON-HAZARDOUS BREAKDOWN



### NON-HAZARDOUS BY WASTE TYPE



### NON-HAZARDOUS BY TREATMENT



### Integrating Technology into Waste Management Efforts

In Costa Rica, our team has implemented a strategic initiative to enhance waste management processes through technology. We developed a specialized automated waste tracking application, accompanied by the installation of shared tablets for our cleaning personnel on each floor of our buildings. These tablets serve as a digital tool for the daily logging of waste data, ensuring timely and accurate waste tracking.

This system facilitates the automatic updating of a localized dashboard, which efficiently categorizes and quantifies waste types and volumes generated. This technological advancement marks a significant improvement over our previous method, where waste data was collected on a monthly basis, leading to challenges in accuracy and visibility.



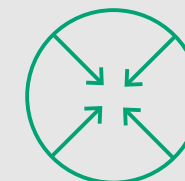


## Greening Of Emerson

### Taking Action Toward Zero Waste

Establishing a waste management strategy is beneficial for multiple reasons. By minimizing waste generation, we conserve resources, enhance operational efficiency, reduce costs, lower greenhouse gas emissions, mitigate environmental pollution and contribute to global biodiversity conservation efforts.

A key element of Emerson's environmental sustainability strategy is fostering a zero-waste mindset and culture across the organization. To achieve this, we have identified five pivotal areas that are crucial to our progress.



#### 1. INTERNAL SYSTEMS

In the fiscal year 2023, we enhanced our processes and programs, aiming to streamline our approach to waste management. We implemented a more robust waste data collection process across all manufacturing sites and updated our fiscal 2022 baseline dataset to stay in line with our current portfolio.

Additionally, we finalized a detailed Waste Management Plan, which outlines our waste management procedures and data collection protocols. To support these efforts, we introduced a Waste Management Playbook. This playbook, along with additional materials, is designed to guide on-site waste assessments, fostering a proactive stance on waste reduction and minimization.

#### 2. CERTIFICATION PROGRAMS

In our pursuit of achieving zero waste across our global manufacturing operations, we are exploring external certification programs that align with our waste management goals. Our strategy involves an assessment of various certifications, identifying those that best fit the diverse nature of our operations and the different regulatory frameworks we operate under. The objective is to select a certification provider whose standards resonate with our operational dynamics and sustainability ethos, and which provide sites with recommendations for best practices tailored to their local conditions and regulatory environments.

#### 3. EMPLOYEE ENGAGEMENT

We have expanded our educational initiatives to emphasize the significance of achieving Zero Waste to Landfill and the criticality of accurate waste data. By establishing a regular schedule of training sessions and creating resources focused on waste reduction, we aim to instill a culture of zero waste among our site personnel. This cultural shift is pivotal in driving our progress toward more sustainable operations.

#### 4. ENGAGING SUPPLIERS

We are actively pursuing strategies to reduce and ultimately eliminate waste from incoming packaging materials supplied by our vendors, including wood, plastic, paper and cardboard. In instances where waste cannot be completely avoided, our focus shifts to identifying alternative uses or ensuring the recyclability of these materials, thereby diverting them from the waste stream.

#### 5. ENGAGING WASTE MANAGEMENT PROVIDERS

In collaboration with our waste management partners, we aim to evaluate various treatment strategies to minimize landfill waste. This involves enhancing segregation techniques at the source, providing specialized training for our employees and leveraging alternative waste disposal solutions. Our waste management providers play a crucial role at the facility level, delivering comprehensive waste services that align with our objective of responsible waste management.

### Greening Of Emerson

#### Water Management and Biodiversity

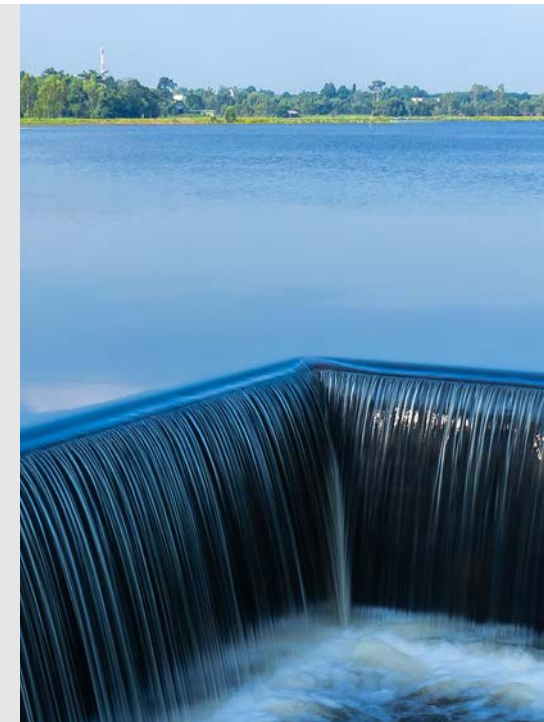
##### Water Management

Ensuring sustainability of water resources is an essential component of responsible resource stewardship. As populations grow and urbanization accelerates, the strain on worldwide water reserves is steadily mounting. Attaining water sustainability involves a range of methods and endeavors, including proficient utility administration, strategic planning for sustainable water infrastructure and responsible use of underground freshwater resources.

Although most of our manufacturing procedures are not heavily reliant on water, we oversee water

management practices throughout Emerson's operations. Our manufacturing facilities monitor and report water usage quarterly. Through data analysis, we can identify avenues for reducing consumption. We can also reduce consumption by equipment changes and operating and maintenance procedures. Some of our best practices for equipment replacement include installing high- and low-pressure nozzles and retrofitting hoses with spring-loaded shutoff nozzles. Some operating and maintenance procedures we use include detecting and repairing leaks and identifying single-pass discharges that could potentially be recirculated into a process.

One impactful water savings project was the installation of a Zero Liquid Discharge system at Emerson's facility in Talegaon, India. This system collects used process water and cleans it via a series of evaporators, ultrafiltration membranes and reverse osmosis plants, returning the treated effluent nearly to a potable state to be safely reused in process applications without risk to operator safety or product quality. The treatment process reduces the facility's annual freshwater requirement by over 20 megaliters – the equivalent to 8 Olympic-sized swimming pools.



#### WATER PURCHASED



Emerson's water usage in megaliters, as reported by our manufacturing facilities worldwide.

A **3%** reduction in purchased water in 2023 is attributed to water use reduction projects at our facilities.



## Water Management and Biodiversity

### Biodiversity

Recent developments have underscored the importance of embedding biodiversity considerations into corporate strategies. The United Nations Biodiversity Conference (COP15), concluding with the Kunming-Montreal Global Biodiversity Framework, set a landmark agenda for reversing biodiversity loss by 2030. This framework emphasizes biodiversity's vital role in underpinning economic systems and global sustainability, proposing comprehensive targets for ecosystem conservation, land restoration and the integration of biodiversity considerations into business operations.

In line with these global developments and our stakeholders' expectations, Emerson recognizes the need to improve our understanding of the interaction between our operations and the natural world, and to take action where this interaction is deemed relevant. In 2024, we conducted an initial biodiversity assessment of the proximity of Emerson facilities to ecologically-sensitive areas globally. We evaluated the potential impact on Mean Species Abundance (MSA), ecosystems and ecosystem services, using area definitions developed by internationally recognized institutions, such as the GLOBIO4 dataset (from the Netherlands Environmental Assessment Agency) and RESOLVE Ecoregions dataset (from the UN Environment Programme World Conservation Monitoring Centre) and the Global Human Modification dataset (from the Nature Conservancy and Conservation Science Partners).

Based on the assessment, and considering only the location characteristics of our assets, 2% of Emerson's facilities globally are within a 5km radius of areas with high Mean Species Abundance (MSA), highly intact and protected ecosystems and significant ecosystem services. As disclosure requirements and assessment methodologies in the biodiversity landscape evolve and become standardized, we will continue to refine this assessment.

Looking ahead, we will evaluate the development of action plans to address our impact on biodiversity and nature where deemed appropriate, considering the size and scope of those facilities. This could include incorporating evaluation standards for future locations to assess biodiversity impact in our sustainable building standards or implementing site management plans for locations deemed to be in or near identified ecologically-sensitive areas.

*i The global network of Ramsar Sites includes coastal and inland wetlands of all types in all six Convention on Wetlands regions.*

## Environmental Compliance

### Environmental Compliance Approach

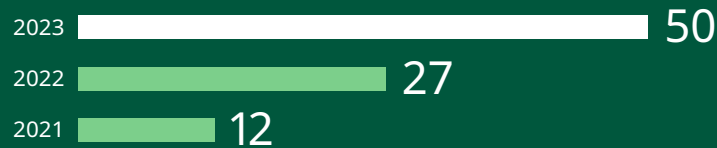
Meeting environmental compliance involves following regulations that govern different environmental aspects. By adopting best practices and adhering to environmental laws, we aim to improve our carbon footprint, reduce waste and safeguard water resources. Compliance also greatly influences our business practices, promoting increased operational efficiency and profitability. Our environmental compliance efforts extend to managing emissions, adhering to wastewater regulations and ensuring responsible waste disposal.

We maintain compliance with relevant environmental laws and regulations through a company-wide standardized program aimed at preventing pollution and environmental damage. In some cases, these practices go beyond local regulatory requirements, helping to mitigate risks and reduce long-term operating costs. Emerson's commitment to environmental management and sustainability is evident through a policy that outlines the guiding principles shaping our approach to environmental compliance and sustainability.

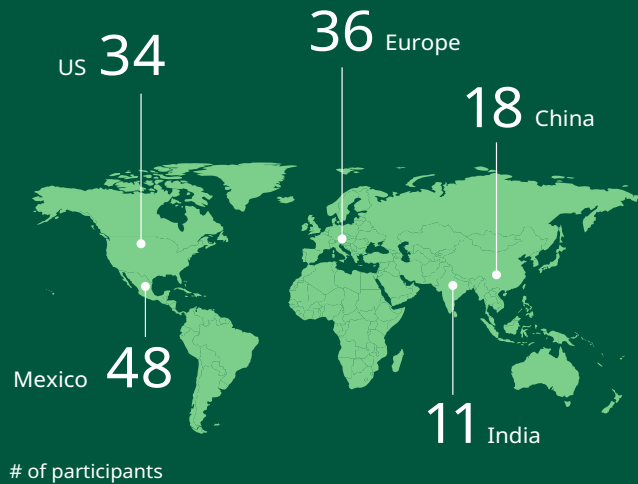




**NUMBER OF ENVIRONMENTAL AUDITS**



**ENVIRONMENTAL COMPLIANCE TRAININGS**



**Environmental Compliance**

**Environmental Compliance Training**

As a leader in environmental sustainability, Emerson consistently organizes training initiatives for our plant environmental managers, business unit environmental coordinators and essential personnel globally. Training programs are created to address the unique requirements of each region where our facilities are located. The training sessions include best practices for waste reduction, energy conservation and various compliance topics. Throughout fiscal year 2023, we conducted both in-person and virtual training sessions across all world areas, with a total participation of 147 individuals.

**Environmental Facility Inspections and Incidents**

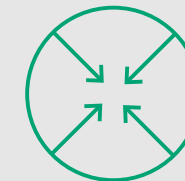
Emerson facilities undergo routine inspections conducted by environmental authorities in the regions where we operate. The majority of inspections conducted by authorities do not result in monetary fines, penalties or citations. In cases where fines or penalties were imposed, the associated costs have been minimal relative to the size of our operations. During fiscal year 2023, our facilities underwent inspections or reported incidents to environmental regulators on 21 occasions globally. In the same fiscal year, Emerson incurred monetary fines totaling less than \$5,000.

**Environmental Auditing**

Emerson’s environmental compliance management includes regular third-party environmental compliance audits conducted at our manufacturing sites. These audits involve independent auditors thoroughly inspecting the facilities and reviewing environmental records to assess compliance with regulations and overall environmental management practices.

As part of our risk management process, in years when third-party audits are not scheduled, local management teams conduct self-assessments to verify compliance with environmental regulations. Oversight of this process is provided by our enterprise environmental compliance team. In fiscal 2023, we performed 50 environmental audits.

In addition to compliance audits, we conducted energy audits pursuant to Article 8 of the European Union Energy Directive for our applicable sites. Based on our applicability assessment, we conducted 17 energy audits in the EU in 2023.



## Greening Of Emerson

### Net Zero Value Chain Progress

#### Emerson's Estimated Scope 3 Indirect Emissions

For many organizations within our sector, Scope 3 emissions constitute the most significant portion of their emissions. These generally encompass a broad range of indirect activities throughout their value chain that are not directly owned or controlled by the company itself.

In 2023 fiscal year, there was a notable transformation in Emerson's emissions profile as we continued to advance our technology portfolio. Although the Scope 3 emissions from the electrical consumption of our long-lived products and the procurement of upstream materials continue to be considerable, the extent of their impact has shifted.

Where once the downstream use of our products represented over 99% of our emissions profile, the current distribution is more balanced among various Scope 3 categories. For our remaining portfolio, approximately 75% of emissions are now attributed to the use of our products, while material purchases and logistics operations contribute around 20%. The complete Scope 3 footprint for fiscal 2023 is shown in the accompanying table shown on [page 52](#).

An important update in our sustainability reporting involves Scope 3 Category 15, which covers emissions from investments where Emerson does not have full operational control. Following the sale of a majority interest of our Climate Technologies business, now named Copeland, we no longer report their full inventory (including Scope 1, 2 and 3) as part of Emerson's

emissions operational footprint. Instead, we now report only the share of emissions corresponding to our remaining investment under Scope 3 Category 15, reflecting a more accurate portion of our investment-related emissions. This category now also includes Emerson's emissions share related to our investment in AspenTech.

#### Enhancing Our Scope 3 Emissions Footprint Data and Calculations

As established by the industry standards detailed in the Greenhouse Gas (GHG) Protocol guidance, Scope 3 carbon footprints are primarily derived from estimated calculations. These calculations combine direct primary data with various models, insights from experts, informed assumptions and secondary data obtained from business partners and external parties. We will therefore continue to enhance the granularity of our Scope 3 emissions reporting process over time.

In 2021, Emerson presented its initial Scope 3 greenhouse gas emissions inventory, laying the groundwork for measuring future progress. Since this initial publication, we have diligently pursued enhancements in both our data granularity and our calculation methodologies for our primary emissions categories.

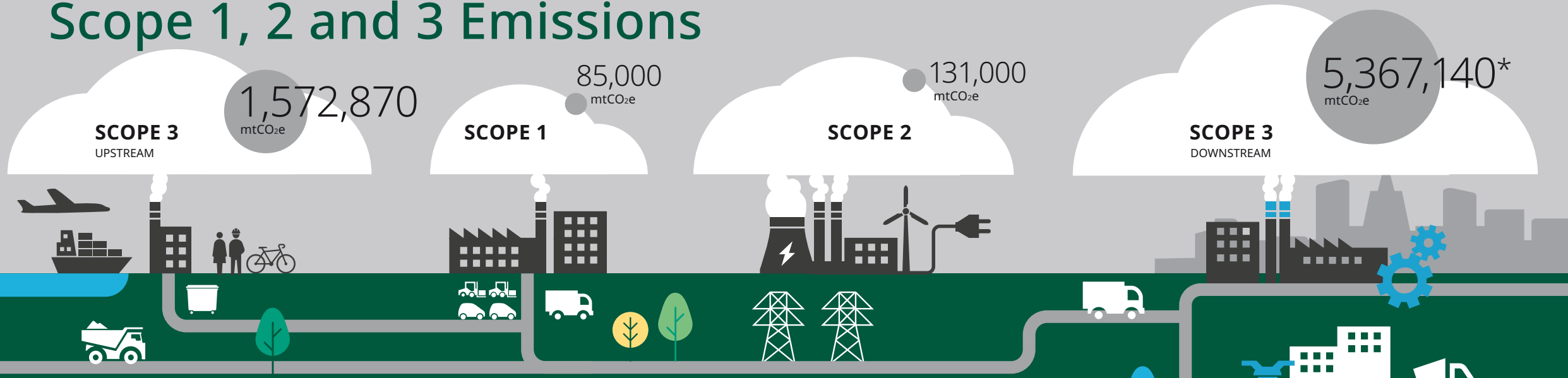
Calculating Scope 3 emissions broadly requires two types of data: activity data, which represents the level of activities leading to greenhouse gas emissions (e.g., watts of electricity used, or kilograms of material purchased); and information about emissions factors that convert these quantified activities into reportable emissions.





Greening Of Emerson

# Scope 1, 2 and 3 Emissions



Indirect emissions from Emerson's value chain that occur before the product or service reaches our facilities, such as the extraction and production of purchased materials, or the transportation and distribution of our products.

Direct emissions that occur from sources that are controlled or owned by an organization

Indirect emissions associated with the purchase of electricity, steam, heat, or cooling.

Indirect emissions related to the use and end-of-life treatment of Emerson products, after they have been sold, and those from investments associated with Emerson's financial activities.

STRATEGIES

- Responsible Sourcing Program
- Decarbonizing Logistics

- Energy Efficiency
- Grid Sourced Renewables
- On-site Renewable Generation
- Vehicle Fleet Electrification

- Process and Comfort Heat Electrification
- Alternative Fuels
- Carbon Neutralization

- Decarbonization of the Grid
- Sustainable Design of Products and Packaging

\* This number excludes Scope 3 Category 15.



### Net Zero Value Chain Progress

The table to the right summarizes the calculation approach for each of the relevant Scope 3 categories in our footprint.

This year we continued to improve the data and methodology of our key emissions categories by refining emissions factors, collecting more granular product data across our portfolio, reducing the use of proxies where possible, widening the coverage of products or activities included and refining key assumptions.

Today, Scope 3 emissions measurement and reporting continues to be an evolving field. Collective improvements still need to happen to ensure that the reported data can provide meaningful information to key stakeholders. Given the shared nature of Scope 3 emissions and the distributed ownership of the underlying data, we will need further collaboration across value chain partners to have more actionable and comprehensive data sets.

View our Scope 3 emissions footprint and additional emissions data on [page 198](#).

### FISCAL YEAR 2023 ESTIMATED SCOPE 3 EMISSIONS AND CALCULATION APPROACH\*

CATEGORIES		Metric Tons of CO <sub>2</sub> e	% of Total Footprint	CALCULATION METHODOLOGY
Purchased Goods and Services and Capital Goods	Category 1+2	1,041,730	<1%	Our total direct and indirect spend is aggregated into standard vendor sector categories. The spend in each category is multiplied by sector-specific cradle-to-gate emission factors.
Upstream Fuel and Energy Related Activities	Category 3	75,600	- %	The activity data used to quantify these activities' emissions are the quantity consumed of each energy type, such as electricity or natural gas. This is then multiplied by emission factors for upstream purchased electricity, upstream purchased fuels and transmission and distribution losses.
Upstream Transportation and Distribution	Category 4	288,930	- %	Data on the tonnage and mileage, by transport mode, for Emerson-managed and paid distribution is collected at a shipment level. The resulting ton-mile for truck, ocean, air and rail are then multiplied by the specific emission factors. Emissions for parcel are obtained directly from logistics providers.
Waste in Operations	Category 5	20,840	- %	Collecting primary waste data from manufacturing sites and estimating waste for sales offices representing <20% of the footprint.
Business Travel	Category 6	50,650	- %	Primarily collect data directly from travel agencies and vendors. This includes air travel, rental car, rail travel and hotel stays. Activity data includes passenger miles and hotel nights.
Employee Commuting	Category 7	95,120	- %	Primary data on employee headcount and working days obtained from human resources databases. Data on distance and transport modes collected via employee surveys in key Emerson locations.
Downstream Transportation and Distribution	Category 9	44,100	- %	Representative sample of customer shipping data on the weight, mode and distance traveled.
Use of Sold Product	Category 11	5,301,700	3%	Collect primary activity data on units sold and location for over 95% of the portfolio emissions. Power use and running hour data is largely obtained from product specification sheets, more sophisticated use-phase models or from life cycle assessments. Estimated lifetime information is obtained through internal and external expert knowledge.
End-of-life Treatment	Category 12	21,340	- %	Representative sample of primary data in the form of product weights and assumptions about the end-of-life treatment for its products.
Investments	Category 15	197,208,000	97%	Calculated at a screening level using an average emission factor for the investment sector for which the specific investment is in or obtaining the total emissions from the reporting company and allocating the appropriate percentage.

\* Scope 3 category 10 is negligible, categories 13 are 14 are not applicable.

## Net Zero Value Chain Progress

### Scope 3 Emissions Reporting Documentation and Governance

Following the guidance of the GHG Protocol and the U.S. Environmental Protection Agency (EPA), we regularly update Emerson’s Emissions Inventory Management Plan to document and manage the quality of our greenhouse gas emissions inventory. This is the record of the data sources, collection and calculation methodologies, assumptions, systems and internal controls used to prepare our emissions data for internal and external reporting.

The Scope 3 Data Governance Group at Emerson is tasked with the oversight of our Scope 3 emissions calculation and reporting. This team reviews any enhancements or modifications to our calculation methodologies, data collection sources, internal controls and reporting protocols. Part of this group’s objectives is the continuous enhancement of appropriate internal controls, which provide additional assurance that the data collection, calculation and documentation processes continue to operate effectively.

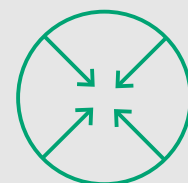
### Progress Toward our Scope 3 Emission Targets

While Scope 3 emissions as defined by the GHG Protocol are not directly controlled by the reporting company, we recognize there is still an opportunity to influence these emissions and work with others to find effective ways to reduce them.

In the fiscal year 2023, despite a 10% increase in sales, Emerson observed a reduction in its Scope 3 emissions, reflecting improvements in both upstream and downstream emissions from the previous year. This decline is attributed to multiple factors. Notably, while the overall expenditure on purchased goods and services (under Category 1) rose, the company increased spending on commodities with lower carbon intensity, such as manufacturing and miscellaneous services, and reduced expenditure on higher carbon intensity commodities, like primary metals. Consequently, this shift towards less carbon-intensive purchases led to a decrease in transportation and its associated emissions (Category 4).

Additionally, we saw a reduction in Category 11, use of sold products. Outside of the investments in our customers facilities is the largest proportion of the Emerson Scope 3 footprint. Regardless of the IEA grid electricity emissions factors increasing in countries we sell into, we saw a reduction of 4.3% in 2023 from the base year of 2021.

More details on the strategies that will help us drive progress in our Scope 3 indirect emissions are described in the following sections, including the development of more sustainable product and packaging designs, our engagement with strategic supply chain partners and the advocacy for greener electricity grids.



### Scope 3 Emission Targets

#### Catalyzing Engagement Across our Value Chain

Several key segments of our supply chain, including the steel, electronics and plastics sectors, are recognized as particularly challenging to decarbonize. These sectors will require the adoption of renewable energy sources, the integration of recycled materials, the transition to electrification and the creation of cutting-edge technologies that can replace fossil fuels in high-heat production processes. Working collaboratively is crucial for fostering advancements across our supply chain.

To this end, Emerson continues to engage our suppliers to discover and implement the most effective strategies and practices to diminish our shared carbon footprint. Throughout the past year, we have continued to evolve several communication channels to share Emerson’s responsible sourcing expectations and best practices with our strategic suppliers. An approach that has proved effective over the past couple of years, has been the integration of sustainability into supplier summits across all world areas. To expand our reach to a broader set of suppliers, this year we launched Emerson’s Quarterly Responsible Sourcing webinars. For more information on our supplier sustainability engagements see [page 158](#).

Knowing that our upstream Scope 3 emissions are approximately six times greater than our operational emissions, we understand that embarking on this same journey with our own suppliers is key for measuring and achieving real progress.

The chart to the right shows a cradle-to-gate representation of Emerson’s business segments. This is inclusive of the Scope 1 and 2 emissions, as well as the Scope 3 product-related upstream categories, such as material purchases, logistics and waste in operations<sup>1</sup>. The emissions intensity factor shown on the table is measured in metric tonnes of CO<sub>2</sub> equivalent per 1000 USD in sales.

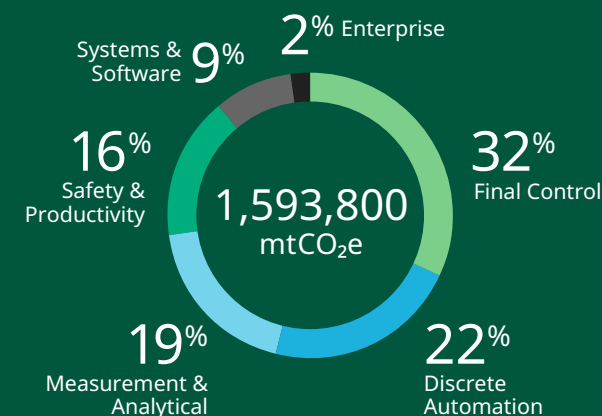
We are sharing this data publicly in this format for the first time, recognizing its importance to our customers. By transparently providing the GHG emissions data associated with our products and solutions, we enable our customers to gain a better understanding of the emissions we are accountable for. This, in turn, helps them demonstrate tangible progress as we collectively strive to mitigate these emissions.

For Emerson, however, the largest contribution to our total emissions comes from Scope 3 Category 11 – the downstream energy use of our products, constituting the Scope 1 and 2 emissions of our customers. This is primarily due to the volume and long lifetimes of our products, which in many cases can exceed 20 years of operation. Collaborating with our customers becomes crucial in this context, as any progress they make in reducing their Scope 1 and 2 emissions can translate into downstream emission reductions for Emerson.

### CRADLE TO GATE CARBON EMISSIONS BY BUSINESS SEGMENT

Scope 1, 2 and product-related upstream Scope 3 emissions (Categories 1, 3, 4 and 5)

Business Unit	Emissions (mtCO <sub>2</sub> e)	Intensity (mtCO <sub>2</sub> e/Sales \$K)
Discrete Automation	344,400	0.13
Final Control	514,000	0.13
Measurement & Analytical	310,800	0.09
Safety & Productivity	247,400	0.18
Control Systems & Software	142,800	0.05
Enterprise	34,400	



<sup>i</sup> AspenTech’s GHG emissions are not included in these numbers. For more information on their Scope 1 and 2 emissions please refer to their annual ESG report: <https://www.aspentech.com/en/resources/report/aspentech-2022-2023-environmental-social-and-governance-report>



## Scope 3 Emission Targets

### Promoting Decarbonization of the Grid

Despite being the largest contributor to global CO<sub>2</sub> emissions, the power sector is leading the transition toward net zero emissions. The sector's pivotal role is underscored by the surge in electric vehicles and heat pumps, reflecting electricity's growing importance in transport and heating. Last year, renewables showed remarkable progress, accounting for 83% of new capacity. In 2022, the share of installed power generation from renewables reached 40% worldwide, after the biggest annual renewables increase ever, led by China, the EU and the United States, as reported by the International Renewable Energy Agency (IRENA).<sup>i</sup>

Amidst a global energy crisis and soaring energy costs, electricity demand still managed to increase by nearly 2%. The EU's consumption dropped due to these factors, coupled with a milder winter, whereas India and the United States saw a rise in demand. China's growth was tempered by its COVID-related policies.

In 2022, CO<sub>2</sub> emissions from electricity generation reached new heights, up by 1.3%, albeit more slowly than in the previous year. The International Energy Agency (IEA)<sup>ii</sup> highlights a small decline in global electricity CO<sub>2</sub> intensity, from 464 to 460 gCO<sub>2</sub>/kWh. In Europe, CO<sub>2</sub> intensity increased due to less hydropower and nuclear output, prompting a return to conventional power sources to help ensure supply. These trends are important because they impact Emerson's electricity-driven GHG emissions footprint. This includes not only the emissions from our own facilities but also those arising from the energy used by our customers while operating our products over their entire lifetimes.

<sup>i</sup> IRENA World Energy Transitions Outlook 2023 Report: <https://www.irena.org/Digital-Report/World-Energy-Transitions-Outlook-2023>

<sup>ii</sup> IEA World Energy Outlook 2023 Report: <https://www.iea.org/reports/world-energy-outlook-2023>

Looking forward however, the IEA projects a substantial decrease in emissions by about 10% per year through 2025. This outlook expects coal and gas use to decline, while renewable and nuclear power are growing. Nuclear energy is set to grow nearly 4% annually until 2025, outpacing pre-2020 growth rates. This progress should be reinforced by recent commitments from COP28. Over 130 governments pledged to work together to triple the world's installed renewable energy generation capacity by 2030 and to collectively double the global average annual rate of energy efficiency improvements from around 2% to over 4% every year until 2030.

From our end, at Emerson, we have continued to leverage our technologies to assist our customers in enhancing the efficiency of renewable and alternative energy sources such as wind, solar, hydro, Renewable Natural Gas and nuclear power. With our extensive global footprint and specialized expertise in the energy generation and distribution fields, Emerson is strategically equipped to actively contribute to the expansion of cleaner electricity capacities globally. Such efforts are integral to our commitment to reach net zero emissions in our operations (Scope 1 and 2) by 2030 and to cut our Scope 3 emissions by 25% by the same year, using 2021 as the reference point.

During fiscal 2023, Emerson continued to collaborate with external entities, including the Clean Energy Buyer's Association and RE100, to foster the broader adoption of clean and renewable energy across the globe. The *'Greening With'* segment of this report delves deeper into Emerson's use of its technical acumen and international presence to champion policy changes that can drive down emissions across a broad range of industrial sectors.

### Measuring the Carbon Footprint of Products

Industries at the core of sustainability advancements depend on our technology to improve their environmental performance. The momentum behind clean energy transitions is prompting the development of new, targeted automation solutions at Emerson, particularly in emerging sectors such as hydrogen production and distribution, battery storage and the integration of renewables into power grids worldwide. Learn more about Emerson's technologies and capabilities on [page 62](#).

Driving reductions across Emerson's entire spectrum of Scope 3 emissions, presents a challenging yet rewarding opportunity to innovate our product designs. By adopting a holistic view that considers the entire lifecycle of our products, we are positioned to target key areas of impact. This approach not only focuses our efforts on where they can be most effective but also prevents the shifting of environmental impacts across different stages of a product's life.

To underpin this strategy, Emerson employs Life Cycle Assessments (LCA – according to ISO 14040-44 standards), a quantitative tool that assesses the carbon footprint of our products at each stage of their lifecycle, also known as cradle-to-grave. Through LCAs, we pinpoint emission hotspots from the raw material stage through to the end of the product's life, providing essential insights that guide our product development strategy. These insights are critical to shaping a product development strategy that adheres to Emerson's commitment to environmental sustainability.

## Scope 3 Emission Targets

To further enhance data integrity and facilitate emissions reduction efforts, over the past year we focused on implementing these LCA practices uniformly across the company. Standardization is crucial for accurate data analysis and enables strategic decisions that support our sustainability objectives.

In response to the complex task of modeling the carbon footprint of a diverse product range, Emerson is actively improving our expertise and integrating advanced software solutions. We have successfully applied these tools to key product lines and are aware of the significant effort required to apply them to our entire portfolio of 100,000 products. Despite the challenges in data collection and analysis, we are dedicated to making consistent progress. Our aim is to provide actionable environmental data to our customers and assist our teams in achieving continuous environmental performance enhancements.

### Improving Sustainable Design of Products and Packaging

Carbon footprint calculations are integral to refining our product design process, enabling us to concentrate on modifications that have the most substantial environmental impact. In line with these efforts, we are updating Emerson's New Product Development (NPD) guidelines to include sustainability considerations from the initial stages of ideation, supporting the development of products that are sustainable by design.

According to the Greenhouse Gas (GHG) Protocol guidance, Category 11 emissions from the use of sold products must be calculated using a forward-looking view, by accounting for the full lifetime of a product. Emerson's portfolio predominantly comprises products with an operational longevity extending between 10 to 20 years. Recognizing the scale of our impact, we are committed to advancing the energy efficiency of our products and adhering to energy efficiency and emissions reduction standards. In cases where the potential for energy efficiency enhancements is constrained, it is deemed environmentally beneficial to prioritize the extension of a product's lifespan. This approach, despite increasing emissions within our downstream value chain, aligns with sustainable environmental practices.

The sustainability of our product packaging is an important focus area. Packaging is essential for the secure transport and delivery of our products and components globally, ensuring they arrive in optimal condition. This is particularly relevant for industrial products that must perform critical functions. Consequently, we often design our packaging specifically for individual products that have widespread applications. With increasing customer demand for environmentally friendly packaging, we are continuing to explore, test and adopt more sustainable packaging options.

## Measurement & Analytical High-Pressure Hydrogen Coriolis

In 2023, Emerson embraced the challenge of developing a more sustainable High-Pressure Coriolis flow meter for the emerging hydrogen economy. Our team engineered a more compact, energy-efficient meter covering an expanded range of fueling applications. The Micro Motion HPC020 design resulted in a 15% greenhouse gas reduction by optimizing manufacturing processes. Additionally, its reduced weight and size cut shipment-related emissions. The Emerson team collaborated with various global institutions, including NREL and NIST in the US, as well as Metrology Institutes in Asia and Europe, to validate the high-precision hydrogen measurement capabilities of the HPC-Series under stringent process conditions, ensuring its resilience against hydrogen embrittlement and durability across numerous filling cycles.

Currently delivering hydrogen meters to 25 countries worldwide, this new product line helps to enable dispensing companies to deliver hydrogen safely and quickly into powered industrial equipment, passenger vehicles and large commercial transport vehicles.



The Micro Motion HPC-Series has been part of the first dispenser to receive metrological certification in the Netherlands and Emerson's partnership with the European Union's RHeadHY project provides Coriolis flow measurement technology to develop the future generation of heavy-duty truck refueling stations. Read more about the RHeadHY project in the Greening With section on [page 91](#).



## Greening Of Emerson

### Employee Engagement: Transforming Our Culture to Align with Sustainability Goals

Driving climate action requires a paradigm shift in our approach to virtually every aspect of our professional and personal lives. Society's increased awareness of our actions' repercussions on the environment is reshaping the global perspective on business. Meanwhile, younger generations now demand that companies increase transparency and spearhead initiatives for a sustainable future.

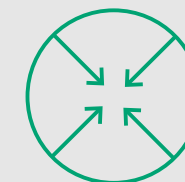
At Emerson, we view environmental challenges as opportunities for innovation and culture transformation. We are committed to equip our workforce with the essential knowledge and skills they need to face the challenges of the 21st century. We provide opportunities for each employee to feel deeply and personally connected to our purpose of making the world more sustainable.

#### Investing In Our Workforce through Formal Training and External Expert Perspectives

Although increasingly important, sustainability remains a complex subject. A full understanding requires knowledge of science and technology, as well as an appreciation for the interconnectedness of events and processes at a global scale.

A global environmental sustainability course, covering topics such as carbon emissions, energy systems and renewable electricity, is available for Emerson employees wishing to take in-depth training. In 2023, thanks to an initiative by our regional leaders to spread awareness of this training opportunity, over 8,600 Emerson employees have voluntarily completed at least one of the six 30-minute e-modules available. This number is five times larger than last year – a tremendous result demonstrating the increased interest of our employees in the topic.

Additionally, our community of Sustainability Aficionados, a group of employees who have signed up to receive regular news and insights on the topic, has grown to over 2,230 members over the last year. Our flagship program of Emerson Environmental Sustainability Webinars has brought speakers from organizations such as the International Energy Agency, Imperial College London and the World Steel Association, as well as from Emerson customers and suppliers who are leaders in the energy transition, including Tenova and DHL. Through these events we provide an external perspective to our employees, which helps develop invaluable insights they can use to advance Emerson's Greening Of and Greening By initiatives.



Emerson Cluj team partners with CERT Transilvania to plant trees as part of Emerson's Earthmonth Ecochallenge activities.



## Employee Engagement

### Driving Impact with Emerson's 9 Sustainable Choices

Faced with the intricate and vast environmental issues of our time, many people feel they lack the knowledge to help drive positive change. This year, Emerson introduced the 9 Sustainable Choices, a straightforward framework empowering employees to personally contribute to both Emerson's and the world's sustainability goals. These Choices are crafted to amplify individual impact, foster a connection to Emerson's purpose and provide a practical response to the question, 'What can I do to help?'

The 9 Choices are: Save Energy, Use Clean Energy, Buy Responsibly, Go Circular, Accelerate Innovation, Green Your Diet, Mind Your Travel, Respect Nature and Learn and Share. The compilation of this list was informed by consulting United Nations and other science-based, research-backed frameworks, such as the [Good Life Goals](#) and the [UN's 170 actions to combat climate change](#).

In addition to offering a framework for individual employee action, this year, we made strides to integrate sustainability into the employee experience. We developed resources for onboarding new team members and assisting managers in encouraging their direct reports to establish sustainability goals within the formal goal-setting and performance review processes.

### Empowering Our People to Act through Emerson's Global Green Teams Network

One of the key differentiators of Emerson's employee value proposition is the opportunity to have an impact on both the global and local levels. Our Global Green Teams Network empowers employees to play an active role in driving sustainability in their local contexts, while sharing best practices with teams from other parts of the world.

In April 2023, as part of Earth Day celebrations, Emerson once again took part in the Earth Month Ecochallenge. This global digital event motivates individuals to adopt science-based, sustainable behaviors in their daily lives.



# 9 SUSTAINABLE CHOICES

<b>1</b> Save Energy	<b>2</b> Use Clean Energy	<b>3</b> Buy Responsibly	<b>4</b> Go Circular	<b>5</b> Accelerate Innovation	<b>6</b> Green Your Diet	<b>7</b> Mind Your Travel	<b>8</b> Respect Nature	<b>9</b> Learn And Share

## Employee Engagement

As the presenting sponsor, Emerson rallied over 4,200 employees<sup>i</sup> to join the challenge, contributing to a record-breaking 17,100 participants organized by Ecochallenge.org. Participants earned points for environmentally beneficial actions such as engaging in cleanups, tree planting, installing energy-efficient lighting and home energy audits. The total estimated CO<sub>2</sub> saved by Emerson employees was over 312 tons, a testament to the significant environmental impact of our united efforts.

Over the last year, more than 120 teams were established across our facilities worldwide. Team leaders and members developed a framework for Green Team action based on three pillars: Individual Action, Collective Impact and External Outreach. Through this framework, we recognize the power of our Green Teams to change individual behavior, improve collective practices at their offices or facilities and bring Emerson's sustainability expertise to the local community.

A Global Green Teams Council was also established, led by our enterprise sustainability team and joined by environmental, health and safety (EHS) directors and sustainability enthusiasts from across our business groups and world areas. The Council meets quarterly to coordinate employee engagement programs, report project updates and share best practices.

To learn about Employee Resource Groups (ERGs), please go to the section on [Diverse People, Working Together](#).

*i This figure includes employees from the Emerson business previously known as Climate Technologies, now known as Copeland.*

### Manila, Philippines

#### Incentivizing conscious behavior

The local green team developed the Green Leaf program, in which employees earn points towards rewards by making sustainable choices like carpooling or saving energy at home.



### Twin Cities, United States

#### Sustainable facility upgrades

The local green team organized a waste collection event at the office in partnership with a local recycling company and recovered 6,783 lbs of electronics waste, thus contributing to resource circularity.



### Baku, Azerbaijan

#### Nature protection efforts

The local green team conducted a beach cleanup in a seaside national park, and contributed to planting 500 trees by cooperating with a local government agency.



EXTERNAL OUTREACH



COLLECTIVE IMPACT



INDIVIDUAL ACTION



## Employee Engagement

### Recognizing Our Team's Efforts with Environmental Sustainability Awards

Emerson's Environmental Sustainability Awards acknowledge exceptional projects accomplished by teams that accelerate our sustainability progress. These annual awards encompass three categories aligned with our strategic framework: Greening Of, Greening By and Greening With Emerson. In its third edition, this year we received a total of 74 outstanding submissions across our operations worldwide. This remarkable response highlights the ongoing dedication of our teams and the pride they take in contributing to Emerson's global sustainability journey.

Alongside the Awards program, in 2023 Emerson launched the company-wide Sustainability Report Photo Contest, calling on employees to submit photographs capturing natural landscapes, clean energy technologies or Emerson people and facilities. The Photo Contest recognizes the exceptional creativity and artistic flair of our people by publishing the best entries in our annual Sustainability Report. This year, we received 300 photos from over 130 employees, which were evaluated by a selection committee. The Contest winners, together with other breathtaking photographs, enrich the pages of this report.



Emerson team participates in a clean up at the West Bull Creek Greenbelt in Austin, Texas.



## Employee Engagement



### Greening Of Award

#### Emerson Beijing “Green Leap” Program

In 2023, Emerson’s Beijing factories initiated the “Green Leap” program to advance local sustainability efforts, dividing the Green Team into four groups dedicated to specific initiatives: Greening Of, Greening By, Greening With and Culture Promotion. These efforts led to a significant reduction in energy intensity, aided by deploying Emerson technology that helped lower energy use. The program also achieved a 53-ton reduction in solid waste through paperless processes and packaging improvements, and hosted events with local charities, drawing over 5,000 participants. This team proactively exchanges sustainability best practices with several other Emerson facilities. This comprehensive approach demonstrates Emerson’s action-oriented focus on sustainability and strong engagement with employees and their families.



### Greening By Award

#### Sustainability Collaborative Engagement with Braskem Idesa

Emerson collaborated with Braskem Idesa, a Brazilian-Mexican petrochemical joint venture, to help them develop a strategic roadmap aimed at achieving their net zero emission targets. Over two years, the companies worked together to design this roadmap, engaging in detailed analysis of specific projects including energy management and process optimization. Together, we created a marginal abatement cost curve and reassessed new technologies and projects to meet Braskem Idesa’s 2028 and 2050 goals. Selected projects have begun to be implemented, setting a clear path towards more sustainable operations over the next four years.



### Greening With Award

#### Engagement with UAE Ministry of Climate Change and Environment on the way to COP28

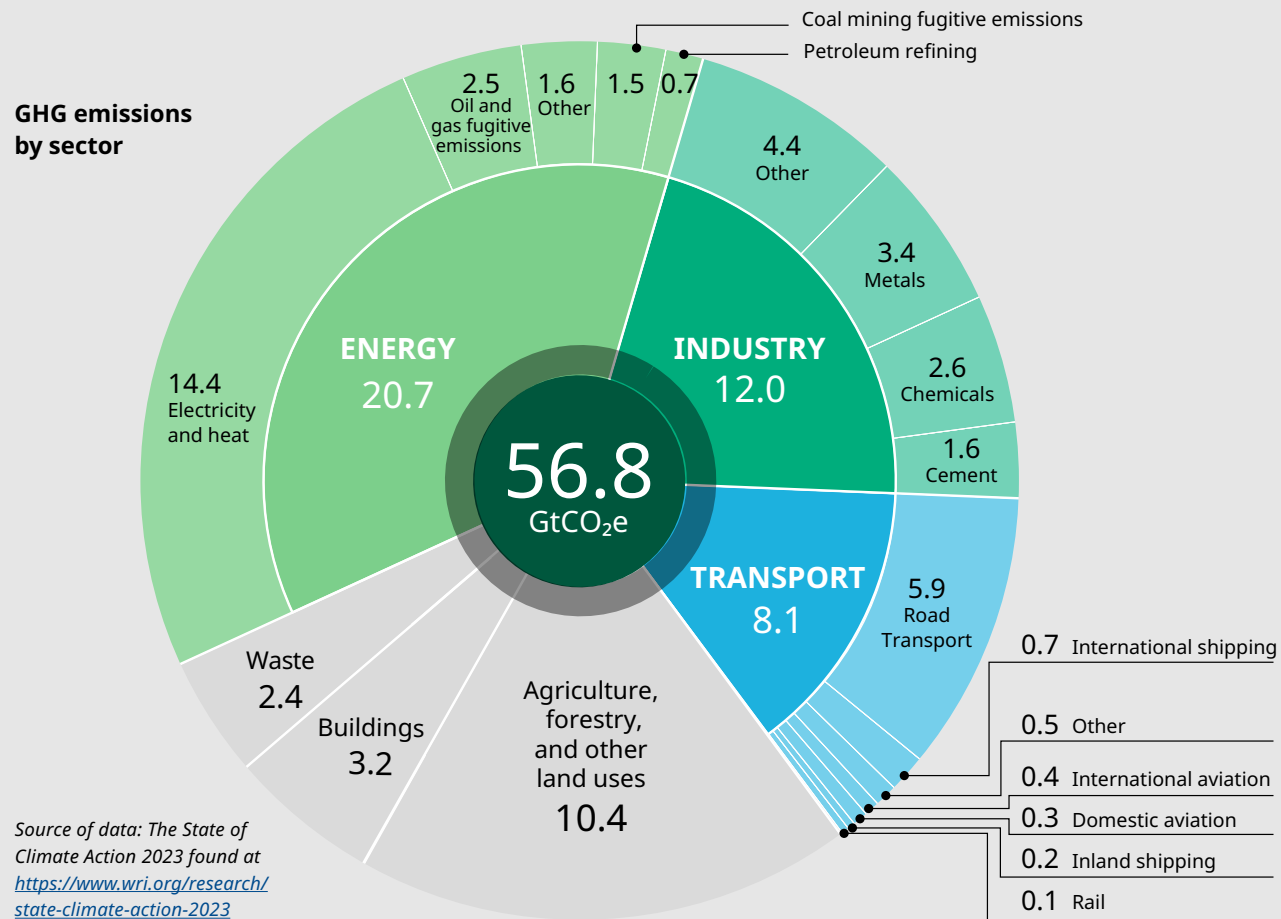
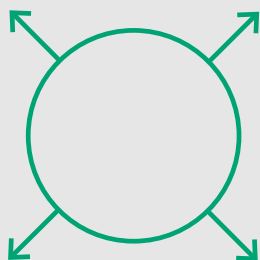
Over the last two years, the Emerson team in the United Arab Emirates established a strong relationship with the country’s Ministry of Climate Change and Environment. Emerson participated as an advisor, partner and solution provider at the national dialogues for climate ambition, and was also invited to join the CSO UAE Network. Through those engagements, Emerson offered perspectives with the government on topics such as waste management, the circular economy and digitalization for Net Zero. These engagements paved the way towards Emerson’s contribution to COP28 in Dubai, where we participated in the Sustainable Innovation Forum and were invited to join the Industrial Transition Accelerator. For more information on Emerson’s participation in COP28, refer to [pages 93-94](#) in the Greening With section.

# Driving Sustainability Across Essential Sectors: Greening By Emerson

In this section, we now shift our focus to explore Emerson’s role in enabling the emission reductions and environmental sustainability improvements of our customers.

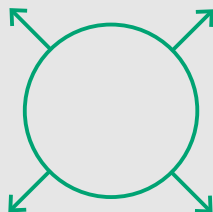
## Understanding the Bigger Picture on the Sources of Carbon Emissions

In 2021, the world saw nearly 57 gigatons of greenhouse gas emissions, with more than half originating from energy production, along with the manufacturing of bulk materials and chemicals. The remainder of emissions primarily derives from transportation, 14%, buildings, 6%, and agriculture, forestry and other land use, 18%. Although the energy sector is leading in decarbonization efforts, it remains the largest contributor, accounting for 36% of global emissions. The highest impact comes from electricity and heat generation.



## Understanding the Bigger Picture on the Sources of Carbon Emissions

The manufacture of essential bulk materials and chemicals – including cement, metals, plastics and ammonia – accounts for over 20% of global greenhouse gas emissions. The primary production of steel releases under 2 kilograms of CO<sub>2</sub> per kg of steel on average<sup>i</sup>. This arises from the sector’s heavy reliance on coal and other fossil fuels to run high-temperature, energy-intensive reactions. In 2021, coal constituted about 75% of the energy used globally for steel manufacturing<sup>ii</sup>. The chemical industry, with its diverse products and processes, demands substantial energy, leading to a broad spectrum of emissions from both energy consumption and chemical reactions. In 2021, around 70% of chemical production relied on oil or natural gas, resulting in 1 kg of plastic generating 4.6 kg of CO<sub>2</sub> emissions. More than half of this figure is due to the embedded carbon in plastics, which, if incinerated at the end of life, releases these stored emissions.



<sup>i</sup> Material Economics (2019), *Industrial Transformation 2050 – Pathways to net zero Emissions from EU Heavy Industry*.

<sup>ii</sup> International Energy Agency (2023) – *Energy Technology Perspectives*

Amidst these challenges, the global shift toward integrating climate objectives with energy security and industrial strategies highlights the economic opportunities in diversifying clean energy supply chains. Notable initiatives across various regions, including the United States’ Inflation Reduction Act and the European Union’s Fit for 55 package and REPowerEU plan, underscore the pivotal role of clean energy investments, which reached \$1.4 trillion in 2022. This now represents 70% of the growth in the total energy sector investment.

The current pace of progress, however, is not fast enough to align with the world’s 2050 net zero emissions target, which is why accelerated innovation, collaboration and investment is so important. In fact, many of the technologies needed to get to net zero by 2050 are not available at scale today. Moving from prototype to commercialization has usually taken 20 to 70 years, with large-scale process technologies taking the longest time. Bringing new technologies and solutions to market before 2050 will therefore require a significant acceleration to shorten innovation cycles.



Emerson President and Chief Executive Officer Lal Karsanbhai presenting Emerson’s Environmental Sustainability framework during Emerson Exchange in Dusseldorf, Germany.

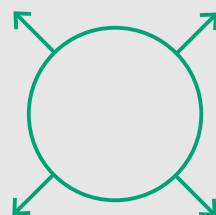


### Greening By Emerson

## Innovation Through Collaboration Is the Key to a Net Zero Economy

As a leading global automation supplier, Emerson is in a unique position to positively impact the net zero ambitions of industrial, municipal and manufacturing organizations around the world. Our software and technology innovations backed by deep application expertise provides the tools and know-how to convert vision into action.

We are privileged to be considered a trusted automation partner by leading customers in various industries. Our relationships often start with meaningful conversations about potential opportunities, leading to collaborative efforts to identify and prioritize actions that can make a real difference both now and in the future. Together, we develop an actionable roadmap to achieve lasting success, reflecting our dedication to operational excellence and environmental responsibility.



In 2023, Emerson hosted an executive **Sustainability Leadership Summit** at Houston's Rice University. Energy and materials companies, new start-ups, government agencies and academia came together to share their strategies for accelerating the transition to net zero. Attendees stressed the urgent need for innovations, investments and larger-scale proofs that can help drive emissions reductions and operational efficiency utilizing electrification, carbon capture and hydrogen solutions.

**Emerson Exchange Immerse 2023** in Anaheim, California introduced industry leaders to how advanced automation technologies and software are enhancing sustainability and accelerating the energy transition by digitalizing workflows and enabling remote collaboration between project managers, automation experts and control system engineers.

Our **Green Innovation Days**, held across various global cities, gathered industry experts to explore pioneering and integrating sustainable solutions into existing infrastructure. These discussions emphasized automation's crucial role and showcased tangible examples of enhancing project and operational performance.

*Innovation wall at Emerson Exchange where customers add input on their sustainability challenges and solutions.*

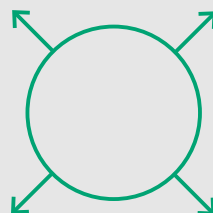
### Innovation Through Collaboration Is the Key to a Net Zero Economy

Across all these activities, automation is a critical enabling capability that makes it easier to measure, control and optimize in the pursuit of maximizing resource efficiency, enhancing energy efficiency, assuring safety and minimizing waste and emissions. Emerson has a broad portfolio of digitalization and automation technologies, expertise and global reach to enable progress for our customers.

In some cases, our technologies are utilized to digitally transform existing operations in chemicals, power generation, mining, life sciences, water management, food and beverage and traditional energy. In other cases, Emerson technologies are being used as the digital foundation for emerging industries such as biofuels, renewable energy, hydrogen, carbon capture, energy storage, new bio-based materials and recycling and circularity efforts with materials such as batteries and plastics.

Our solutions support the environmental sustainability progress of our customers in four strategic areas:

- 1 ENERGY SOURCE DECARBONIZATION,
- 2 ENERGY AND EMISSIONS MANAGEMENT,
- 3 ELECTRIFICATION AND GRID SYSTEMS,
- 4 CIRCULARITY AND WASTE REDUCTION.



#### GREENING BY PILLARS

## 1 ENERGY SOURCE DECARBONIZATION

Low-carbon power (solar, wind, hydro, nuclear, biomass)

Low carbon fuels (biofuels, biogas, LNG)

Hydrogen and hydrogen-based fuels

## 2 ENERGY & EMISSIONS MANAGEMENT

Emissions monitoring and control

Carbon capture, utilization, storage and removal

Advanced controls, analytics and simulation

## 3 ELECTRIFICATION & GRID SYSTEMS

Smart grid and network management

Energy transport and storage

Workforce safety and productivity

Critical minerals (value chain)

## 4 CIRCULARITY & WASTE REDUCTION

New molecules production (Bio-based materials)

Materials and minerals recycling and circulation

Water and waste management

## Greening By Emerson

### Creating a Roadmap to Sustainable Operations

As companies advance their aspiration toward Net Zero, moving from promise to progress, they often face a fundamental, perplexing challenge: adapting operating practices to achieve a deeper level of performance in environmental sustainability – which often comes at a cost – while continuing to deliver on expectations of profitability for business sustainability.

As with most transformative change, it is crucial to begin with a clear set of objectives and a deep understanding of what is possible. Emerson's experience helping customers across all industries, around the world, brings a disciplined approach through our Sustainability Roadmap Workshops.

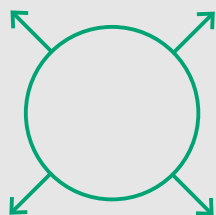
Assembling a cross-functional team of subject matter experts, Emerson facilitates a process that uncovers a wide range of opportunities for achieving sustainability, quantifying not only how each potential project could contribute to CO<sub>2</sub> reduction, but also how they could contribute to financial sustainability. We analyze operating performance, down to the asset level. Our experience applying advance automation across every industry around the world allows Emerson to identify root causes of energy inefficiencies and excess emissions and identify effective ways to correct them. With the right approach, many of the decisions and action intended to reduce CO<sub>2</sub> can have a positive impact on the bottom line, helping to justify investments.

Every customer, every site and every situation are different. Likewise, no two Sustainability Roadmaps are the same. Emerson co-creates each roadmap with customers, sensitive to the customer's readiness and priorities. Implementation flexibility is built into the process, allowing each organization to move at their pace, as their business and culture define.

**Qatar Chemical Company (Q-Chem)**, a Qatar based division of Qatar Energy, engaged Emerson in a Sustainability Roadmap Workshop to reduce energy consumption and overall carbon footprint of facilities at Mesaieed and Ras Laffan. A scientific model-based approach using the AspenTech Fidelis platform was used to build the roadmap of priority actions. Across more than 30 assessments, Emerson and Q-Chem identified 45 measurable actions for achieving energy and emissions reduction plus utilization of green energy, including 12 "quick wins", aligned to Q-Chem's QNV 2030 Sustainability Vision.

### Braskem Idesa Works with Emerson to Drive Operational Excellence, Achieve Sustainability Goals

Braskem Idesa, a joint venture between Brazil-based Braskem and Mexico-based Idesa, set out to reduce more than 300 tons of CO<sub>2</sub> by 2028. Working jointly with Emerson through our Sustainability Roadmap process, Braskem identified nearly 50 potential projects which automation could help deliver. By understanding both the environmental and economic impact for each, Braskem could prioritize the workstreams to maintain their financial performance while making measurable progress on CO<sub>2</sub> reductions. Braskem is ahead of schedule, with a net reduction of 198,200 tons of CO<sub>2</sub> by 2024.







**ENERGY SOURCE  
DECARBONIZATION**

Low-carbon power  
(solar, wind, hydro,  
nuclear, biomass)

Low carbon fuels  
(biofuels, biogas, LNG)

Hydrogen &  
hydrogen-based  
fuels

**Expanding the World's Supply  
of Low Carbon Energy**

At the core of the climate change challenge is the question of how much energy is consumed and our dependence on fossil fuels. The energy sector is responsible for 36% of global greenhouse gas emissions today. Reaching the world's 2050 net zero goals involves a fundamental shift to renewable and clean energy sources such as wind, solar, hydroelectric, geothermal, nuclear and biofuels, as well as a transition to cleaner energy vectors, such as hydrogen or ammonia. In the near term, and particularly in developing countries, it will also involve substituting coal with more lower-carbon natural gas options.

Transitioning to renewable and cleaner energy sources, along with the electrification of end-use applications, are cornerstone strategies for decarbonizing the economy. In 2023, global electricity production from low emissions sources such as nuclear, solar, wind and hydropower, set new records and these sources are expected to provide nearly all of the growth in global electricity demand through 2026. Looking ahead, the International Energy Agency believes the world is on course to add more renewable capacity in the next five years than has been installed since the first commercial renewable energy power plant was built more than 100 years ago<sup>i</sup>.

<sup>i</sup> International Energy Agency (2023): [Renewables 2023 – Analysis and forecast to 2028](#).



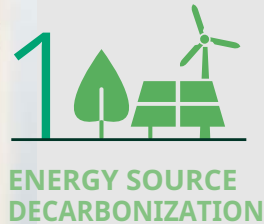
**A Digital Approach to Wind Farm Maintenance**

Emerson and AspenTech are collaborating with Saras, a Sardeolica subsidiary, to enhance its wind farms along the Italian coast, which produce 250 gigawatt hours of electricity annually. Through digital maintenance, employing sensors, data analytics and AI, AspenTech's MTell solution has already improved cost efficiency by 10% and boosted power output. Projects are ongoing to automate wind power transformers, further enhancing maintenance efficiency and reliability.



**Reliable Electrical Solutions for Solar and  
Wind Installations**

Klaue has become a key player in the renewable energy sector, offering electrical connection solutions to the solar and wind industries. Emerson's expertise provides specialized tools and materials for critical electrical components, ensuring safe, reliable and efficient integration across solar parks and wind turbine installations. Klaue's products, known for their precision and durability, meet the stringent safety standards required in both wind turbine assembly and solar energy operations, supporting the robust electrical infrastructure essential for optimal energy production.



ENERGY SOURCE  
DECARBONIZATION

### Expanding the World’s Supply of Low Carbon Energy

Not all processes can be electrified as easily, however. New solutions will likely be needed to reduce emissions in hard-to-abate sectors. In the manufacturing industry, innovations will be required to help decarbonize chemical reactions and high-heat industrial processes, particularly for steel and cement.

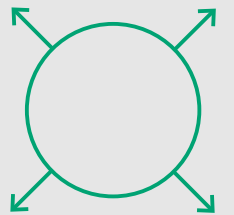
In the transportation sector, electric aircraft or vessels currently face challenges in traveling extensive intercontinental distances due to the limited range, high weight and low energy density of existing battery technologies. For maritime shipping and aviation, low-carbon liquid and gaseous fuels present the most viable decarbonization alternatives, as they possess energy densities on par with traditional fossil fuels.

Hydrogen, ammonia and e-methanol are the more promising options being explored as drop-in substitutes for existing maritime diesel fuels and liquefied natural gas. In aviation, these low-carbon fuels, or e-fuels, are more commonly known as sustainable aviation fuels (SAFs).

New, cleaner energy source alternatives must overcome two primary obstacles. First, is scaling up production to levels that can effectively replace traditional energy sources. The second is fostering confidence in future demand and constructing the supportive infrastructure needed for widespread adoption. In some instances, making use of existing infrastructure, like gas distribution systems, can provide an interim solution to tackle both issues.

Emerson’s broad automation portfolio and deep industry expertise play a significant role in supporting leading energy providers around the world, whether in generating electricity for homes and businesses or in advancing the use of lower carbon fuels within the transportation industry. Digitalizing processes and integrating advanced software and simulation models help to unlock innovation opportunities and reduce risk.

New integrated control system architectures facilitate remote asset management, breakdown information silos and drive efficiencies across operations. From wind farms to biofuel refineries and hydrogen plants, many are seizing the opportunity to modernize, and greenfield projects today are “born digital” from the ground up.



## Energy Source Decarbonization

### Sustainable Aviation Fuels (SAFs): Clearing Greener Transportation for Take Off

About 2-3% of annual global greenhouse gas emissions are tied to the use of aircraft for passenger and freight purposes<sup>i</sup>. Despite its modest contribution to global emissions, it is one of the most challenging sectors to decarbonize, and its emissions share is projected to grow over the next decade.

Sustainable aviation fuels (SAFs) are essential for mitigating the environmental impact of the aviation industry. SAFs, which serve as direct replacements for conventional fossil-based jet fuel, are derived from renewable sources such as biological waste oils, agricultural byproducts and forestry residues. These fuels, which are compatible with existing aircraft engines, can reduce emissions throughout their lifecycle by up to 80% compared to traditional jet fuels<sup>ii</sup>. SAFs can also lead to lower emissions of air pollutants, including sulfur oxides and particulate matter.

Currently jet kerosene predominates in aviation fuel consumption, with SAFs accounting for less than 0.1% of the total. Forecasted production is projected to satisfy only 1-2% of jet fuel demand by 2027. Achieving the International Energy Agency's (IEA) Net Zero scenario goal of increasing the SAF share to 10% by 2030 requires a marked increase in production capacity. This objective requires the introduction of supportive regulatory policies, such as fuel taxation and the creation of low-carbon fuel standards. Launched in 2021 by the U.S. Department of Energy, the SAF Grand Challenge sets goals for the country's SAF production, aiming for 3 billion gallons by 2030 and escalating to 35 billion gallons by 2050<sup>iii</sup>.

Advanced automation technologies are crucial in facilitating the growth of sustainable aviation fuels. Emerson's smart instrumentation and integrated control systems offer more precise profiling of the carbon intensities associated with various feedstocks. This precision makes it possible to fine-tune processes, ensuring consistent product quality. Advanced sensors and software play a pivotal role in monitoring for potential issues, such as unusual vibrations or corrosion, that could harm equipment and elevate operational risks.

AspenTech's energy management software is ideal for optimizing resource use, minimizing waste and enhancing efficiency throughout a facility. This contributes to lowering the carbon intensity of sustainable aviation fuels and improving production efficiency. Analytics and data management systems are invaluable for boosting performance and fulfilling reporting obligations to regulatory bodies like the EPA, which demands accurate carbon intensity documentation for fuel certification.

<sup>i</sup> IEA. 2022. "Greenhouse Gas Emissions from Energy, as Modified by the Joint Research Centre." <https://www.iea.org/data-and-statistics/data-product/greenhouse-gas-emissions-from-energy-highlights>

<sup>ii</sup> IATA Factsheet: <https://www.iata.org/en/iata-repository/pressroom/fact-sheets/fact-sheet---alternative-fuels/>

<sup>iii</sup> Whitehouse Biden Administration Advances the Future of Sustainable Fuels in American Aviation Factsheet: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/09/fact-sheet-biden-administration-advances-the-future-of-sustainable-fuels-in-american-aviation/>

### DG Fuels Selects Emerson to Automate New SAF Plant

Emerson was recently chosen to provide automation for DG Fuels' \$4.2 billion, low-emission SAF production facility in St. James Parish, Louisiana, due for completion in 2027. Through a proprietary conversion technology, this plant will convert agricultural and timber waste into 180 million gallons of SAF annually. DG Fuels entered into a multiyear contract with Air France KLM, committing to supply 30,000 tons of SAF annually, positioning it as one of North America's most significant SAF projects under development. Emerson's advanced sensing and control systems, equipment monitoring and production optimization software will enable the safe, reliable and sustainable performance of the facility.





## Energy Source Decarbonization

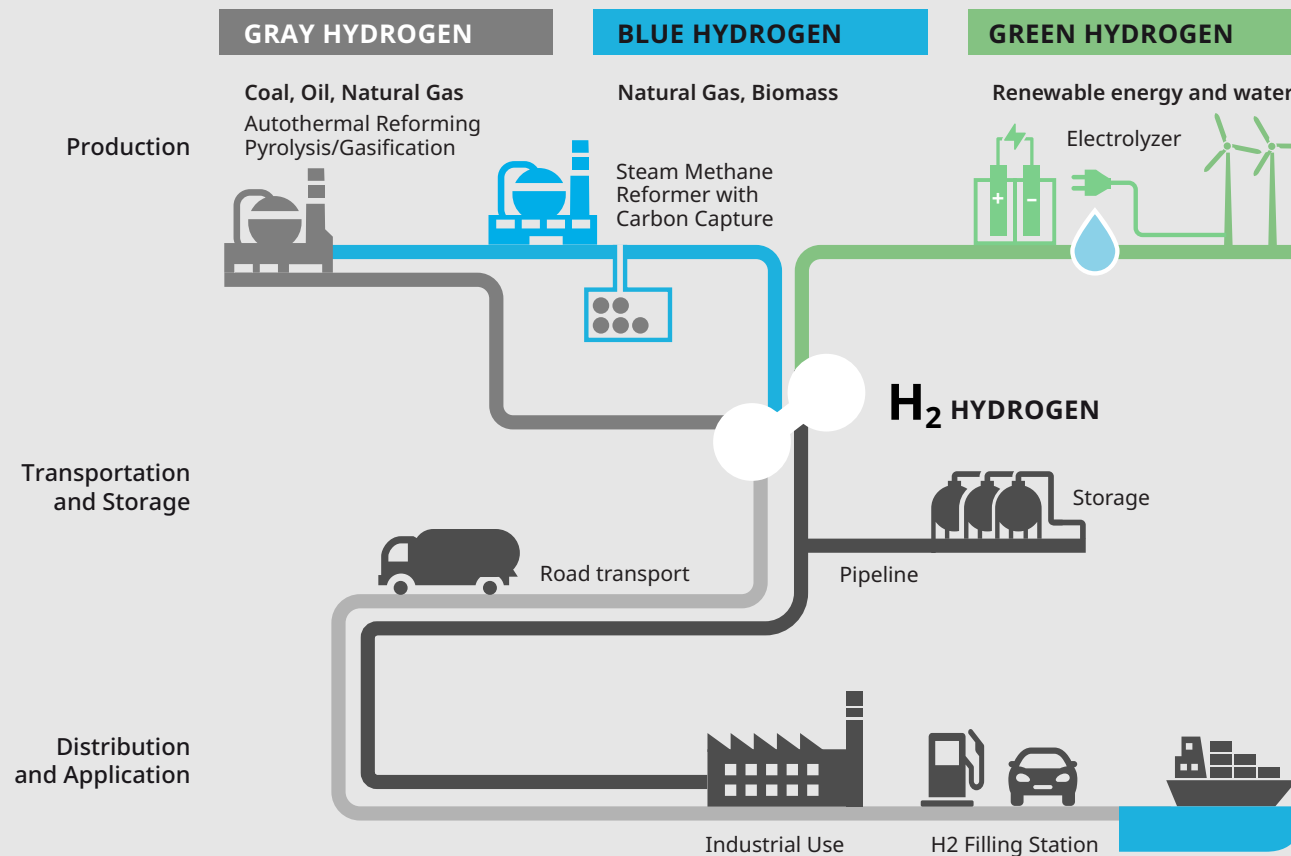
### Optimizing the Hydrogen Value Chain

Hydrogen and hydrogen-based fuels, such as ammonia, are pivotal energy carriers to decarbonize hard-to-abate sectors, such as heavy industry and long-distance transport, where few alternatives exist. Significantly increasing global production capacity through electrolysis and other low-carbon methods is vital for the anticipated surge in hydrogen demand. Announced projects indicate over 230 gigawatts of electrolysis capacity will be operational by 2030, requiring a 300-fold increase in deployment within the next seven years, according to the Hydrogen Council. To align with 2050 energy system requirements, production capacity will need to scale up by a factor of 6,000.

Achieving such exponential growth demands robust project execution skills, a continuous drive for innovation and a comprehensive understanding of the hydrogen value chain, encompassing production, storage, distribution and usage. Hydrogen's unique properties and the high pressures required for its handling systems present specific challenges.

Hydrogen electrolyzer projects are scaling up, improving collective knowledge of the technology and how to deploy it. Manufacturers are creating larger capacity electrolyzers, which, when combined, power renewable hydrogen production. Concurrently, hydrogen from natural gas, enhanced by carbon capture and storage technologies, is being introduced industrially, taking advantage of pre-existing infrastructure. This expansion is crucial for accelerating hydrogen use in sectors like transportation, agriculture, construction, mining and steel and cement manufacturing. Advancements in fuel cells and dispensing systems are also improving in terms of safety, efficiency and affordability, promoting wider adoption.

### HYDROGEN VALUE CHAIN





### Cavendish Pushes the Electrolysis Envelope

Australian startup Cavendish Renewable Technologies (CRT) has developed an innovative method of industrial-scale anion exchange membrane (AEM) electrolysis for use in green H<sub>2</sub> production. CRT has also pioneered a unique fuel cell design for direct conversion of green ammonia to electricity, which uses less energy than converting ammonia back into hydrogen before electricity is produced. Emerson's expertise, software and automation technologies are helping companies like CRT get to the finish line. "Our electrolysis and ammonia technologies will allow green hydrogen prices to compete with fossil fuels. Collaborating with Emerson will jump-start the adoption of hydrogen and help meet global net zero goals faster," says CRT CEO Ani Kulkarni, Ph.D.

## Energy Source Decarbonization

### Advancing Hydrogen with Automation

Emerson has a track record developing hydrogen management solutions. We are continuously expanding our capabilities with new technologies to support advanced hydrogen production, transportation, blending systems and measurement and dispensing methods. Emerson's technology and software portfolio for hydrogen includes automation solutions for production, transmission and consumption that help ensure safe, reliable operations, lowering the cost of energy consumed during production. Intelligent field instrumentation and advanced data networking, combined with the power of data analytics, delivers predictive insight to optimize hydrogen production and utilization operations. Our Final Control products, meanwhile, help maintain safe containment and flow management in high-pressure, severe service hydrogen applications.

### Harnessing Waste as a Lower Carbon Energy Resource

One of the more interesting areas of sustainable innovation is the effort to make energy from sources of waste. Renewable natural gas (RNG) is making it possible to decarbonize conventional natural gas use cases. Waste management companies are investing in ways to harness the methane that emanates from landfills. Methane is a prime target of environmental regulations worldwide due to its extremely high global-warming potential as a greenhouse gas – up to 36 times that of carbon dioxide. RNG systems capture methane generated from landfills and anaerobic digesters connected to agricultural activities and upgrade it to a high-quality low-carbon biogas that can be injected into existing natural gas pipelines. This solution leverages existing pipeline infrastructure to deliver biogas to points of traditional use instead of letting methane escape to the atmosphere.

Emerson's project engineering and execution expertise, combined with our comprehensive automation technology and software portfolios, are helping clean energy leaders commercialize these new biogas resources. Modular injection skids can receive, process and analyze biogas to confirm that it meets specifications, blend it with a required odorant, measure the energy content for custody accounting systems and inject it into a pipeline, all with a single operational unit.



Please learn more about [Emerson's Hydrogen solutions.](#)



**ENERGY SOURCE  
DECARBONIZATION**



## ENERGY & EMISSIONS MANAGEMENT

Emissions monitoring & control

Carbon capture, utilization, storage & removal

Advanced controls, analytics & simulation

### Managing Energy and Emissions Efficiency in Existing Operations is Critical

While we accelerate the development and adoption of cleaner energy sources, it is important to simultaneously manage known emissions resulting from existing production processes while finding hidden emissions leaks in equipment and other infrastructure.

The effort to double the rate of increase in global energy efficiency from 2% to 4% gathered momentum in 2023. The IEA estimates that if realized, this increase could account for 50% of CO<sub>2</sub> reductions by 2030. Analysis shows that only a third of the energy input into our systems effectively powers desired activities, such as heating homes, refrigerating medicines, powering vehicles, or fueling industrial processes. The rest is lost through inefficiencies in transportation, conversion processes, waste and poor management. Minor improvements in energy efficiency can significantly impact future energy requirements as well as present demand.

Automation plays a key role in providing the measurement, control, analytics and optimization activities that better inform energy usage and uncover opportunities for efficiency. Emerson works with customers all over the world using these and other technologies to tackle the efficiency challenge head-on:

#### Combustion and Process Optimization

Process units like boilers and furnaces continuously consume a significant amount of energy. Advanced process control in Emerson's DeltaV and Ovation automation platforms combined with energy analytics, software modeling and automation equipment, such as intelligent sensors and valves, can optimize combustion processes and enhance efficiency. Saudi Aramco, for example, recently saw meaningful energy cost reductions and associated emissions savings by implementing Emerson's energy management solutions.

#### Steam Leak Detection

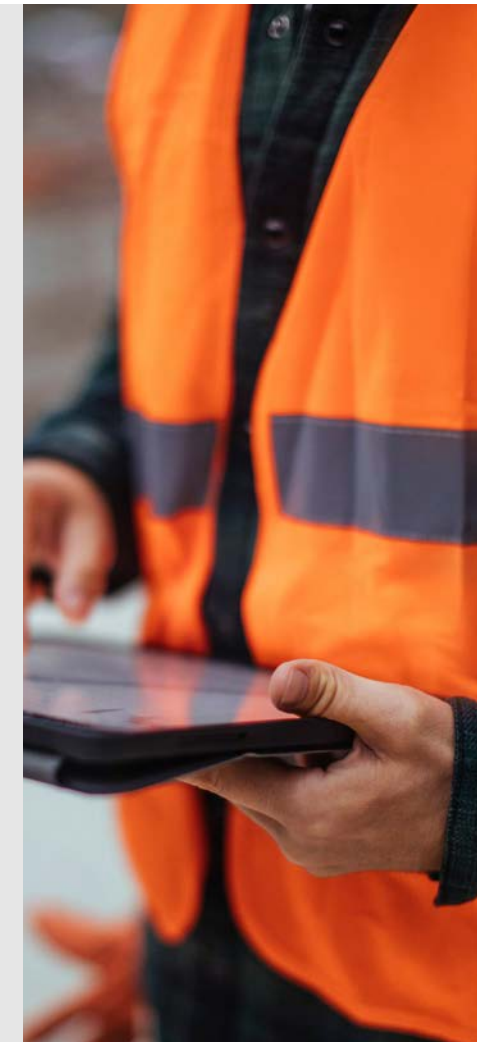
Steam, essential in many plants for providing pressure and heating, often leaks undetected. Emerson offers a novel acoustic sensor and software solution that can 'hear' leaks and notify maintenance personnel of a potential problem. Companies like Denka have seen as much as a 7% energy savings simply by dynamically assessing their steam equipment with acoustic sensors and remote monitoring services.

#### Improving Heat Exchanger Performance

A common challenge is the fouling of plant heat exchangers, reducing production performance and increasing maintenance costs and energy usage. Chevron has implemented real-time, cloud-enabled heat exchanger fouling detection solutions from Emerson and is targeting broad deployment across their facilities worldwide.

#### Improving Use of Compressed Air

As part of our "floor-to-cloud" factory automation portfolio, Emerson's AVENTICS™ pneumatic sensors and Industrial Internet of Things-enabled software architecture monitor compressed air flow in real-time to identify leaks, optimize pneumatic processes and improve air flow efficiency. Utilizing this technology, Colgate achieved a 15% energy reduction in toothpaste and toothbrush packaging lines, anticipating broader benefits with expanded implementation.





### Equinor: Achieving Carbon-Efficient Production in the North Sea

Norwegian energy company Equinor chose Emerson to provide operational support services for its pioneering Martin Linge oil and gas facility in the North Sea. The \$7.3 billion mega-project includes a production platform and anchored floating storage and offloading vessel. These facilities are powered with electricity from onshore sources via the world's longest alternating-current undersea cable, helping to reduce carbon emissions by 200,000 tons per year. Emerson's cloud engineering services and digital twin technologies played a crucial role in the successful delivery of the platform and safely achieving initial production, drastically reducing travel requirements and saving energy in the process.



## Energy and Emissions Management

### Detecting and Preventing Emissions

Fugitive emissions, primarily composed of methane, present a significant challenge, particularly in the oil and gas sector. These types of emissions stem from leaks, vents, or other unintended releases in pressurized systems during operations, including extraction, production, processing, storage and transportation. Despite accounting for an estimated 5% of global greenhouse gas emissions, their elusive nature makes them difficult to quantify, causing a critical gap in emissions reduction efforts.

Addressing methane emissions is particularly critical, given its high global warming potential. Importantly, tackling industrial fugitive emissions is a cost-effective strategy for GHG reduction, as long as available technology is leveraged for immediate impact. The IEA estimates that the investment required by 2030 to implement all abatement measures in the oil and gas sector amounts to less than 2% of the industry's 2022 income<sup>i</sup>.

Emissions management technologies are being utilized to detect, measure and prevent leaks with advanced methods and operate with more efficient combustion processes. Over 60% of fugitive emissions come from leaky valves, which is why more than half of a plant's fugitive emissions can be eliminated by servicing, updating and replacing valves. Emerson offers a number of valve technologies that can address this challenge.

<sup>i</sup> International Energy Agency (2023) - *The Imperative of Cutting Methane from Fossil Fuels*

Enhanced valve designs, including highly efficient stem sealing systems, higher flow capacities and packing for temperature variations, meet or exceed some of the most stringent emissions requirements. In addition, advanced real-time monitoring of pressure relief valves and storage tanks can help identify and minimize releases.

Many operators are also using electric valve actuators as a suitable fit for certain pneumatic applications to avoid bleed into the atmosphere where possible. Our recently introduced Fisher™ easy-Drive™ 200R Electric Actuator, which is tailored for heavy industries like oil and gas, can operate in remote and harsh environments. Unlike pneumatic actuators, which emit atmospheric gases upon operation, the electric 200R eliminates control-related emissions, enhancing uptime, performance and environmental compliance. Its features include easy installation and calibration, low energy usage, operation in extreme temperatures without requiring additional heating, fail-safe positioning in the event of power loss and remote monitoring and configuration capabilities.



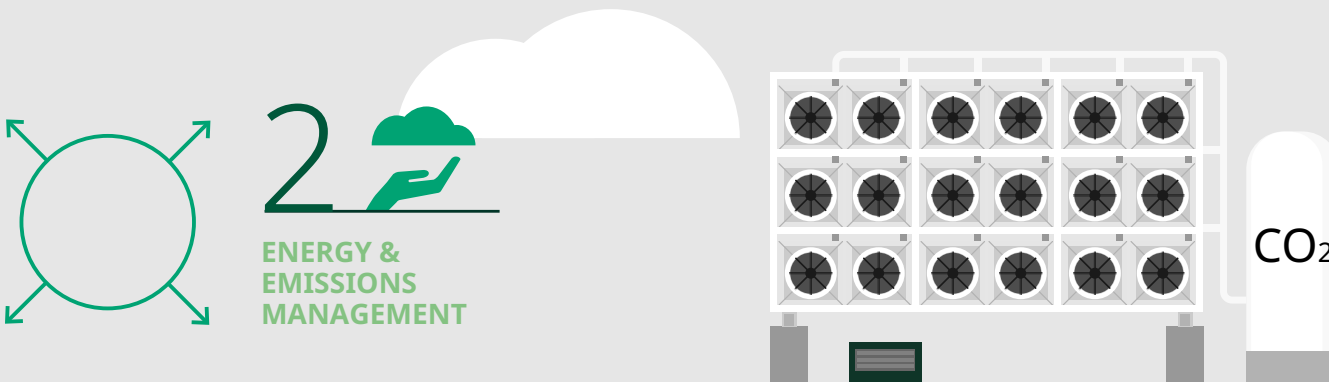
**ENERGY & EMISSIONS MANAGEMENT**

### Energy and Emissions Management

#### Carbon Capture and Storage

The development and implementation of carbon capture and storage systems is growing significantly. According to the Global Carbon Capture and Storage Institute<sup>i</sup>, there are 392 projects in development as of July 2023, representing a 102% year-on-year increase. These projects are located all over the world with the US, UK, Canada, China, Norway, Australia and Saudi Arabia leading the way of the 37 countries with announced developments. Policy and regulatory frameworks around the world have reached a historic high, encouraging the development and investment in these projects as one of the major levers in their sustainability roadmaps.

Emerson's portfolio supports the various stages of the carbon capture and storage value chain, from capture and purification to compression and liquefaction to transportation and geologic storage.



<sup>i</sup> Global CCS Institute (2023), *Global Status of CCS – Scaling through 2030*.



#### Santos Streamlines Custody Transfer of Captured CO<sub>2</sub>

Australian energy company Santos Limited is working with Emerson to automate a major part of its flagship carbon capture project. When completed, it will safely and permanently store up to 1.7 million tons of liquid carbon dioxide every year in depleted natural gas reservoirs near Moomba. Custody transfer and fiscal metering of injected CO<sub>2</sub> are critical, both for regulatory compliance and to precisely measure revenue streams. Santos uses fully integrated metering skids engineered by Emerson and commissioned onsite, complete with analytic control systems, valves and instrumentation. These smart skids enable Santos to accurately track carbon credits while taking advantage of new geologic storage opportunities and the company's decades of exploration and production experience.

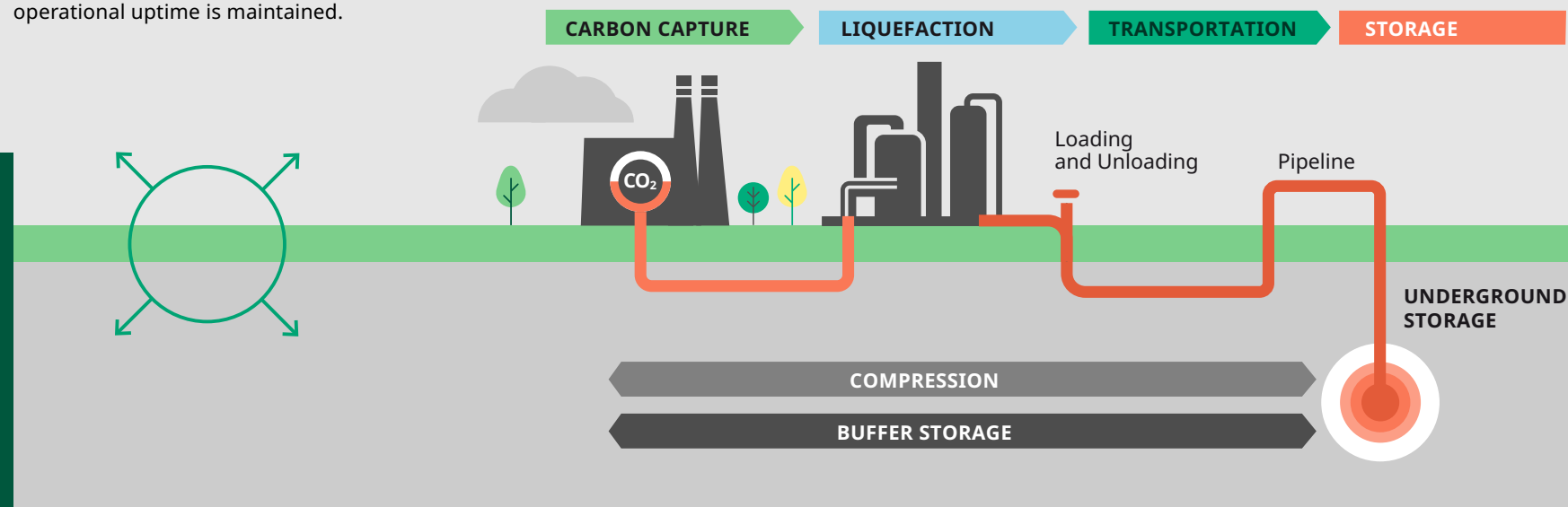
## Carbon Capture and Storage

**Capture and purification** of CO<sub>2</sub> is an energy-intensive but critical first step in the process, ensuring that CO<sub>2</sub> can be transported and stored without damaging piping, equipment or the environment. Ensuring high-purity CO<sub>2</sub> requires sensing, measurement and software technologies to profile and separate gas waste streams, eliminate contaminants and prepare CO<sub>2</sub> for transport. Emerson and AspenTech provide advanced engineering and modeling tools, automation measurement and controls and energy optimization software to improve performance this critical first phase, including the lowering of energy costs and improvements in CO<sub>2</sub> yield. The accurate accounting of CO<sub>2</sub> recovered is also important for regulatory reporting, taxes and incentives.

**Compression and liquefaction** of CO<sub>2</sub> is required to transport purified CO<sub>2</sub> to its ultimate destination. When compressed or liquified, CO<sub>2</sub> achieves a physical state that can behave like liquid, gas or a “supercritical” state that is both gas and liquid. Equipment like pumps and compressors are critical to compression and liquefaction. Emerson’s asset health portfolio aids in the condition monitoring and health of these assets, ensuring highly reliable operation through early detection of equipment wear, corrosion detection and timely maintenance practices. Protecting the health of these assets help to ensure that CO<sub>2</sub> can reach and maintain the desired state for transmission, and maximum operational uptime is maintained.

**Transportation** of CO<sub>2</sub> requires maintaining a stable state of pressure and temperature. Preventing pipeline corrosion and damage to piping and equipment is critical to system integrity, while also achieving highly accurate fiscal accounting. Emerson’s measurement solutions deliver precise, accurate monitoring and control of process and equipment, providing the data needed by advanced software to properly manage the process.

**Permanent storage** of CO<sub>2</sub> typically requires various forms of automation and software to support the reservoir management process. Emerson measurement and control systems along with geological science and engineering tools from our industrial software partner AspenTech can help support these crucial installations.







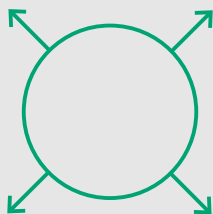
**ELECTRIFICATION & GRID SYSTEMS**

Smart grid & network management

Energy transport & storage

Workforce safety & productivity

Critical minerals (value chain)



**Electrifying the Energy Transition from End to End**

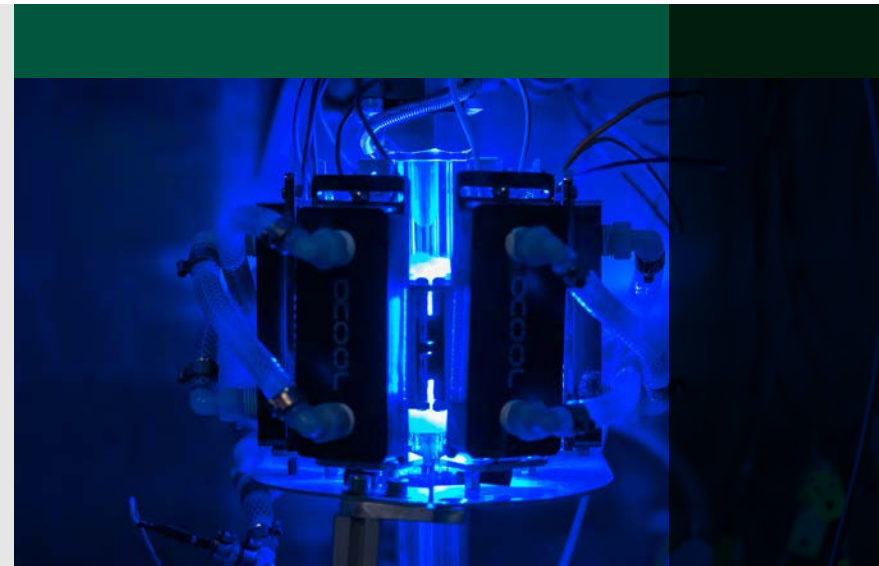
Renewables, particularly solar and wind, have grown rapidly over the past decade, but electricity still makes up only a fifth of global energy use. This underscores the need to integrate renewables into transportation and heating for the clean energy transition, from heat pumps in buildings to electric vehicles. Electrification is pivotal for emission reduction and decarbonizing supply chains, with electricity demand projected to more than double, accounting for over half of total energy consumption by 2050<sup>i</sup>.

Electrification goes beyond simply generating more electricity; it embodies the shift from hydrocarbon-dependent activities to those powered by electric energy. This transformation is rapidly gaining momentum across diverse industrial sectors, serving as a cornerstone strategy to phase out conventional fuels, reduce emissions and energy consumption and advance the deployment of large-scale battery storage solutions, among others.

<sup>i</sup> International Energy Agency (2023) - [Energy Technology Perspectives](#)

**Industrial Electrification**

Meanwhile, electrification is pioneering advancements in sectors previously considered beyond its reach, notably within the energy-demanding realm of chemical manufacturing. Industries that have long relied on high temperatures for chemical reactions – essential for creating resins, adhesives, coatings and plastics – are now seeing the advent of innovative, renewable electricity-powered processes. Pioneering efforts by companies like Syzygy Plasmonics are at the forefront of this transformation, leveraging light-driven reactions to overhaul traditional industrial methods, thereby illuminating a sustainable path forward.



**Syzygy Plasmonics: Shining a Light on Clean Reactor Technology**

Syzygy Plasmonics is leading the effort to electrify the carbon-intensive chemical reactions used in hydrogen, methanol and fuel production. The Houston-based company recently developed, scaled and integrated its core technologies, incubated at Rice University, into a universal photocatalytic reactor platform. On its own, the reactor could eliminate up to 1 gigaton of greenhouse gas emissions by 2040. Emerson is serving as Syzygy's automation partner providing control systems, data analytics software, process simulation technology, field instrumentation and final control valves for Syzygy's pilot reactor projects in North Carolina, California and South Korea, where the collaboration will focus on streamlining and scaling the process.

## Electrification and Grid Systems

### Transportation is EVolving One Electron at a Time

Electrification is already reshaping the transportation landscape, from urban electric bikes and cars to heavy-duty electric freight trucks. Remarkably, the adoption of electric vehicles (EVs) in the light-duty fleet represents a unique global success story. Over the past five years, the penetration of EVs in light-duty vehicle sales has surged at an average annual growth rate of 65%, capturing 10% of global sales

in 2022<sup>i</sup>. Innovations in battery technology are fueling this evolution, broadening the horizons for electric transportation.

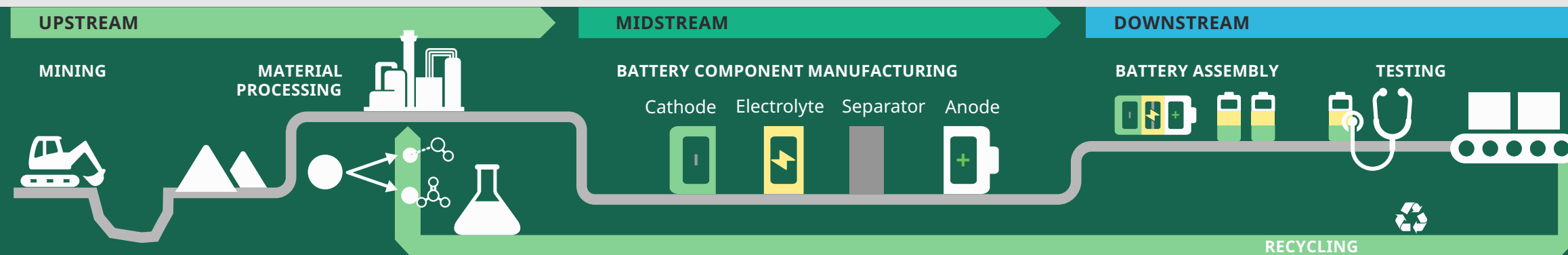
With the five leading car manufacturers projecting annual sales of 15 million electric vehicles by 2025, the industry will require a significant increase in battery production capacity. To keep up with demand and establish a reliable and scalable supply chain, investment in

lithium mining and refining, battery component manufacturing, battery cell production and recycling is growing rapidly. High-quality batteries are essential not only for the electrification of passenger vehicles but also for utility-scale electricity storage, personal electronics and other devices.

Transitioning from traditional electrical storage solutions to cutting-edge clean technologies hinges on the ability to manage costs and quality.

Digital automation technologies streamline vehicle production and delivery, aligning with market demand while enhancing workforce productivity.

Emerson's suite of automation solutions, software and expertise helps optimize workflows and enhance efficiencies throughout the battery value chain, ensuring a seamless flow from production to recycling:



- Leveraging our mining and metals expertise, we empower customers to safely and efficiently extract essential metals, fulfilling EV production demands.

- Our chemical processing proficiency enables the extraction of materials meeting stringent quality and cost standards.

- With our discrete automation solutions, clients achieve precise assembly of battery cells, modules and packs for consistency and efficiency.

- Emerson's Test and Measurement portfolio (formerly NI) offers advanced testing of battery assemblies under demanding conditions, ensuring durability and performance.

- At a battery's lifecycle end, our automation capabilities in metals and chemical processing aid in the safe recovery of valuable components, supporting circularity-focused customers in repurposing materials.

<sup>i</sup> Global Electric Vehicle Outlook 2023. Paris: IEA. <https://www.iea.org/reports/global-ev-outlook-2023>.

## Electrification and Grid Systems

### Lithium Mining

Producing lithium at scale requires significant new infrastructure, made possible by automation from the mining pit through the concentration plant, to the refinery and on to the battery factory. Apart from general-purpose process automation, many specialized solutions that go beyond core process control are also required.

Advanced automation technology helps optimize lithium extraction from the mineral spodumene, or brine, by improving recovery rates, maintaining product quality, minimizing equipment downtime, reducing energy costs and ensuring safe operations. Innovations include advanced sensing with neural and fuzzy control to prevent chute blockages and production losses, model predictive control for mill speed to optimize energy use and increase lithium recovery and improved hydrocyclone classification to prevent issues like roping and plugging.

Additionally, better flotation cell reagent control can enhance lithium recovery by 2% and reduce costs by minimizing reagent use. Vibration monitoring and predictive analytics help avert unexpected downtime of critical machinery, while valves equipped with anti-cavitation trim enhance reliability, tackling erosion and cavitation problems effectively.



Please refer to [Emerson's Electric Vehicle Batteries webpage](#) and Emerson's Lithium [E-book](#).

### Korea's Circular Economy Boosts the Battery Supply Chain

Korea's largest lithium-ion battery recycler, SungEel HiTech, is collaborating with Emerson on a new resource center that will support a stable global supply of materials for EV manufacturing. Emerson is providing a suite of advanced automation solutions for a full-scale recycling plant under construction at the Gunsan Hydro Center. Our instrumentation and valve solutions will facilitate the company's proprietary hydrometallurgical process for maximizing lithium recovery. The complex will contribute to overall global battery production capacity by supplying raw materials for about 400,000 electric vehicles each year.







### California Utility Manages Solar Power with AspenTech Software

The Sacramento Municipal Utility District (SMUD) services a 900-square mile area with 650,000 residential and business power customers. In response to unprecedented growth of distributed energy resources in the district, which now produces more than 280 megawatts of clean power from 20,000 solar generating systems, SMUD uses AspenTech's IntegraDERMS™ software to assess and manage the impact of DERs on its distribution grid. The project is part of California's broader DER action plan, since SMUD's grid is connected to the North American transmission network. As new efficiency measures and automation innovations quickly transform the clean energy market, DERs programs provide SMUD with an excellent opportunity to offer affordable, valuable new services to customers.

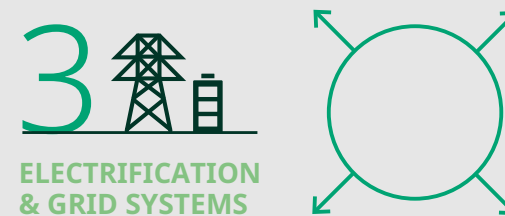
## Electrification and Grid Systems

### Smart Grids Keep the Lights On, Everywhere

Handling the expected rise in global electricity demand means building smarter, more resilient, more sustainable power grids. This is especially true in developing economies, where investment in generation, transmission and distribution management is needed to serve quickly expanding infrastructure. Since safety and reliability are top concerns, today's energy management software tools provide real-time network stability analysis, automatic voltage control, equipment outage planning, load forecasting and operator training capabilities. Distribution software, meanwhile, monitors networks, controls routing systems, manages outages, dispatches repair crews and helps integrate renewable and distributed generation.

Distributed energy resources (DERs), such as rooftop solar panels, windmills and grid connected batteries, are changing the way electricity is made, traded and consumed. Without updated grid management strategies, however, DERs can pose both challenges and opportunities for utilities. Power quality and voltage issues, for instance, can threaten grid reliability and damage transformers, capacitors and other critical assets. At the same time, DERs leverage consumer investments to achieve broader decarbonization goals while distributing demand, supplementing the work of utilities.

As residential customers increasingly adopt smart home devices such as thermostats and appliances, more opportunities become available to optimize the efficiency of the entire grid. Emerson's smart grid solutions, including the Ovation Green control system portfolio, can help harness the unpredictable nature of distributed energy into more predictable, reliable power using demand forecasting and network-wide analytics. Renewable and distributed energy resources are being more seamlessly incorporated into the traditional energy mix, maximizing efficiency from generation to delivery. Meanwhile, more utilities are taking advantage of grid management solutions to improve system reliability and reduce overall energy costs.



# 4



## CIRCULARITY & WASTE REDUCTION

New molecules production  
(Bio-based materials)

Materials & minerals recycling & circulation

Water & waste management

### Extending the Useful Life of Natural and Man-Made Resources

The circular economy is another important strategy in the transition to net zero. Circularity minimizes the extraction of resources and encourages the reuse and recycling of materials, thereby reducing emissions and environmental impact. Central to this approach are the principles of eliminating waste and pollution, and maintaining the circulation of products and materials at their highest value. By ensuring materials remain in use, whether as products, components, or raw materials, the circular economy envisions a future where nothing becomes waste, preserving the intrinsic value of resources and aligning closely with net zero objectives.

At the same time, harnessing the economic and environmental benefits of converting waste into usable resources presents practical challenges. Traditional methods like methane recovery from landfills are not highly efficient, and difficulties can arise in waste segregation, transportation and the development of economical disassembly and processing techniques. Nonetheless, recent advances in automation are enabling circular businesses to improve the reusability of resources, maximize yields and minimize emissions and costs, contributing to a viable commercial path towards net zero.

### Converting Plastic Waste into Renewable Feedstock

Emerson collaborates with various industries to enhance water stewardship, recycle critical materials from spent batteries and transform biological feedstocks like wood chips into valuable products such as plastics. Bio-oil, also called bio-crude, is a prime example. Austria-based OMV Group's patented chemical recycling method, which converts plastic waste into pyrolysis oil, is creating a replacement for fossil resources in many carbon-intensive industrial processes. The innovative recycling technology converts end-of-life plastics that would otherwise be landfilled or incinerated. The resulting bio-oil is used to produce high-grade sustainable plastics. OMV pioneered this chemical recycling technology for plastics over a decade ago.

Emerson and AspenTech have partnered with OMV Group to streamline its supply chain and production processes. AspenTech's software and expertise are key to OMV's initial focus on optimizing renewables, enhancing operational data analysis and developing an integrated view of feedstock. Despite the technical challenges of transforming waste biomass into high-value products, automation enables the production of renewable feedstock from non-food-competing biomass streams, such as agricultural residue, wood matter and municipal waste.

### Enabling Producers to Meet Global Sustainable Plastic Packaging Regulations Profitably

To comply with regulations, packaging producers are encouraged to adopt materials and processes that minimize energy consumption and CO<sub>2</sub> emissions, increase renewable material content and reduce waste. Emerson's Branson ultrasonic plastic welding technology offers a solution to meet these challenges. Customers in the food and beverage space rely on this technology for the precision and cleanliness needed to enable the production of contaminant-free packages. As a result, more than one quarter of the liquid food packaging products around the world utilize Emerson's Branson ultrasonic welding solutions.

Ultrasonic technology achieves a high quality seal with lower energy use, using brief operations to form seals, unlike the continuous power demand of heat sealing. It enables precise control over welding, resulting in thinner, stronger seals using less plastic. Ultrasonic welding allows for significant savings on energy and materials, reduces rejection rates and supports the effective handling of bio-plastics and recycled or mono-materials



Learn more about Emerson's solutions for packaging producers [here](#).



## HaloSep: Transforming Hazardous Waste into Power

Swedish technology firm HaloSep's recently commissioned plant for optimization, research and technology (PORT) in Gothenburg uses a novel regime of specialized scrubber fluids to efficiently recycle fly ash from incinerated household waste. Any salts and metals not recycled as raw material for construction or manufacturing go to energy recovery, providing heat and electricity without the emissions and cost of long-range transportation. Emerson designed and implemented a scalable control system architecture at the PORT facility, working closely with HaloSep to develop unique procedures to treat fly ash with highly variable chemical compositions.



## Circularity and Waste Reduction

### Waste-to-Energy: Using It Instead of Losing It

Recovering materials from complex waste streams significantly supports the low-carbon economy, with over 2,600 waste-to-energy plants globally processing 460 million tons of municipal waste each year. Around 2-5% of this incinerated waste turns into fly ash, a hazardous byproduct containing heavy metals and other contaminants, traditionally disposed of in landfills at a high environmental and economic cost.

The waste-to-energy sector is now exploring advanced recovery methods to extract more valuable materials from waste, relying on a precise balance of energy efficiency and waste processing throughput to enhance environmental benefits. Thermal energy is generated, more high-value raw materials are recycled for manufacturing, and many thousands of tons of waste are diverted from landfills every year.

In support of these efforts, we are collaborating with our customers to implement automation strategies that leverage the latest in digital plant technology. By integrating control systems with smart sensors and edge-to-cloud computing, we aim to streamline data sharing across departments, overcoming information barriers. This adoption of new automation techniques is crucial for scaling waste-to-energy operations.



**CIRCULARITY  
& WASTE  
REDUCTION**



## Circularity and Waste Reduction

### Leveraging Automation for Green Steel Production

Steel is a critical component of modern economies, with demand projected to rise in the coming decades. Balancing this increasing demand with the need to cut emissions and maintain competitiveness poses significant challenges for the industry, which accounts for approximately 7% of the energy sector's CO<sub>2</sub> emissions, including process emissions.

The industry must shift from traditional blast furnace methods to lower-carbon alternatives such as direct reduced iron (DRI) processes and electric arc furnaces (EAF) to reduce CO<sub>2</sub> emissions. Transitioning to green steel will involve significant capital investment, making it imperative to focus on efficient project execution and process optimization. Manufacturers are using Emerson's advanced digital solutions to enhance the safety and efficiency of DRI processes. Our distributed control systems, energy management and asset performance technologies help green steel plants reduce operational costs, improve sustainability and achieve a faster return on investment.

One of the key hurdles faced by steelmakers is variability in the quality and availability of raw materials, especially when incorporating recycled materials or transitioning to lower-carbon feedstocks. This variability can affect the consistency and quality of the steel produced, demanding more flexible and adaptive production processes.

Emerson's suite of solutions addresses these challenges by enabling more precise control over production processes, optimizing the use of raw materials and ensuring compliance with environmental standards. For example, Emerson's advanced sensors and control systems allow for real-time monitoring and adjustments to the production process, accommodating variations in material quality and optimizing energy use. Accurate measurements and optimized process control are also essential in tackling the challenges of green steel production, from managing high-temperature environments in EAFs to ensuring reliable gas detection in DRI processes. By focusing on automation from the design phase through to commissioning, Emerson supports the steel industry's journey towards a more sustainable and profitable future.



**CIRCULARITY  
& WASTE  
REDUCTION**



Learn more about Emerson's role in enabling the transition to green steel [here](#).

## Circularity and Waste Reduction

### Innovations in Sustainable Seawater Desalination

Despite 70% of the Earth's surface being covered by water, the predominance of saltwater renders it unsuitable for direct consumption or agriculture without desalination. Growing populations and the expanding needs of industrial sectors are amplifying the demand for freshwater, spotlighting desalination as a critical solution. With more than 21,000 desalination plants operational globally in 2022 and expectations for rapid sector growth<sup>i</sup> the emphasis on efficient water-energy management is becoming more pronounced, especially in the Middle East where desalinated water production could increase exponentially by 2040<sup>ii</sup>.

The primary challenge in seawater desalination lies in its energy-intensive nature and the corrosive properties of saltwater, which necessitates advanced, energy-efficient technologies to mitigate environmental impacts. This is particularly relevant in areas reliant on carbon-intensive energy, where desalination significantly contributes to greenhouse gas emissions. A typical desalination process includes several stages, from pre-filtration of solids to acidification and heating in an evaporator for condensation into fresh water. This method is prone to issues like scale and corrosion, demanding precise control and maintenance to achieve sustainability and efficiency.

Emerson's suite of corrosion-resistant valve trims and highly accurate analytical instruments are designed to optimize the desalination process. These innovations not only support the production of potable water but also contribute to industrial applications, such as steam production for electricity generation.

<sup>i</sup> Marc-Antoine Eyl-Mazzege and Élise Cassagnol, "The Geopolitics of Seawater Desalination", *Ifri*, September 2022.

<sup>ii</sup> International Energy Agency (2019) article "Desalinated water affects the energy equation in the Middle East": <https://www.iea.org/commentaries/desalinated-water-affects-the-energy-equation-in-the-middle-east>

### Tackling the Water Challenges of the Mining Sector

Demand for minerals is surging worldwide, fueled by the growing population, increased communications networking and rapid electrification as part of the push to support sustainability solutions. The need for critical minerals such as lithium, cobalt, graphite, copper and iron ore will require significant increases in global production capacity. In regions with significant mining activities, efficient water management is essential for profitability, as the industry often becomes the primary local water consumer. Mining companies face the dual challenge of optimizing water and energy use while managing remote operations and ensuring the safety of personnel.

Emerson is addressing many of the critical water management challenges faced by the mining sector. Using our experience in industries dealing with corrosive environments, we offer insights into corrosion resistance and process control, enabling the mining sector to efficiently manage water use, mitigate saline water's impact on operations and enhance sustainability.

Emerson's advanced corrosion-resistant technologies and analytics software, including wireless sensors, flow meters and valves, support mines in optimizing water usage, improving operational efficiency and complying with regulations. Automation further contributes to pump reliability, slurry flow control, waste reduction and better power usage visibility, driving operational efficiency and reducing environmental impacts.

One global mining company implemented Emerson's machinery health monitoring system to deliver online condition monitoring at a mineral ore site, allowing it to implement a more prescriptive maintenance program that realized \$6 million in annual savings. As the mining industry aggressively phases in more renewable energy sources, maintaining a stable power supply to meet operational demand will also be critical. Our automation technologies make it easier to manage and dispatch power from local microgrids as well, further improving sustainability at the enterprise level.



# Collaborating for a More Sustainable World: Greening With Emerson

## Bringing our technical perspective and global reach to collaborate with key stakeholders to discuss the way forward.

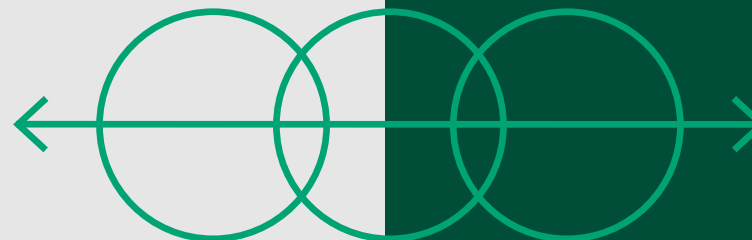
To drive the transition to a lower carbon economy and better circularity across the systems that we depend on for daily life, it is essential that Emerson engages across our entire value and points of influence. We believe that working in partnership with government, industry, research and other leading organizations is critical to achieving our collective sustainability objectives.

We are bringing our unique technical expertise and global presence to engage and dialogue with governments and policy groups, research institutions, NGOs, industry associations and communities on the path toward a more sustainable future. These collaborations frequently include meaningful conversations on innovation, policy options, scaling of novel solutions and formulating essential strategies to achieve a net zero world.

Emerson's collaboration efforts are driven by three main strategies:

1. ENGAGING GOVERNMENTS AND INDUSTRY GROUPS.
2. COLLABORATING WITH LEADING RESEARCH AND EDUCATIONAL INSTITUTIONS.
3. CONVENING LEADERS AND COMMUNITIES.

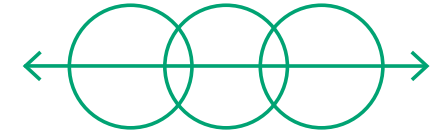
[Page 85](#) provides a detailed overview of Emerson's global partnerships and collaborations.





Greening With Emerson

Collaborating to Accelerate Climate Action



AMERICAS

EUROPE

ASIA & MEA

AMERICAS		EUROPE		ASIA & MEA	
Government & Policy	Innovation & Industry	Government & Policy	Innovation & Industry	Government & Policy	Innovation & Industry
Carbon Management Canada	UN Global Compact	European Clean Hydrogen Alliance	Resource Efficiency Collective (University of Cambridge)	Australian Hydrogen Council	Dii Desert Energy/MENA Hydrogen Alliance
Energy Policy Research Foundation Inc. (EPRINC)	Clean Energy Smart Manufacturing Innovation Institute (CESMII)	European Raw Materials Alliance (ERMA)	Sustainability Association (Institute for Manufacturing)	H2 Korea (Hydrogen Korea)	Nanyang Technological University Singapore
U.S. Environmental Protection Agency (EPA)	National Renewable Energy Laboratory (NREL)	France Hydrogene	United Kingdom's Future Industrial Resource Efficiency Strategy (UK FIRES)	Republic of Korea Ministry of Trade, Industry and Energy	The Energy and Resources Institute (TERI)
U.S. Department of Energy (DOE)	Texas A&M University	UK Hydrogen and Fuel Cell Association	EnTranCe (Netherlands)	U.S. India Strategic Partnership Forum	Indian Institute of Technology Bombay
Clean Energy Buyers Association	The University of Texas	The Conference Board – Corporate Responsibility & Sustainability Council (EU)		Hydrogen Fuel Cell Association of Singapore	Monash University
The Conference Board – ESG Center – Corporate Citizenship Community	H2Peru				Singapore Polytechnic
	H2Ar				Korea Hydrogen Industry Association (KHIA)
	Hydrogen Alliance of Costa Rica				Korea Wind Energy Industry Association
	California Hydrogen Business Council				Korea Battery Industry Association
	Canadian H2 Fuel Cell Association				Tongji University
	Ocean and Climate Innovation Accelerator				Tsinghua University

## Greening With Emerson

### Engaging with Governments and Industry Groups

In recent years, we have worked to identify key organizations that we believe are effective for change and promoting best practices. We are active members of several organizations specifically dedicated to climate action and the collective achievement of shared decarbonization goals, such as:

- The **UN Global Compact**, the world's largest corporate sustainability initiative, with over 17,000 participants from 160 countries.
- **Business Ambition for 1.5°C** partnership, which unites businesses committed to a science-based target in the near term and a clear net zero goal in the long term.
- **RE100** and the **Clean Energy Buyer's Association (CEBA)**, which bring together global corporations committed to sourcing 100% renewable electricity.
- The **EPA's Energy Star Partnership**, where like-minded companies collaborate to share energy efficiency best practices.
- The **U.S. Department of Energy's Better Climate Challenge**, a network of industry leaders that have committed to working with the DOE to plan for their organizations' future success.

#### How we engage:

- We meet with government officials and policymakers worldwide in an effort to understand their priorities and the technical obstacles encountered in creating new regulations and policies.
- We provide government agencies, policymakers and standards bodies with relevant technical perspective and expertise.
- We work with industry groups to exchange best practices, discuss shared challenges and promote the accelerated adoption of sustainable technologies.
- We participate in international forums and initiatives to advance global sustainability concerns and encourage collective action.



### Emerson Policy Engagement

In the United States, Emerson works with the Department of Energy, the Environmental Protection Agency, state governments and trade associations to promote sustainability investments and access to critical supply chains required for broader-scale adoption of energy-efficient technologies. Similarly, we connect with governments around the world to discuss sustainability roadmaps and ways Emerson's knowledge can be helpful. Recent discussions have focused on industrial decarbonization, hydrogen production and distribution systems, energy efficiency requirements and critical mineral availability.

Emerson continues to be engaged in various European policy initiatives, primarily as part of the European Union's Green Deal, a package of policy initiatives aimed at making the EU climate-neutral by 2050. We employ a proactive and collaborative approach to engage with governments, sharing practical considerations and ideas for implementation. We engage in dialogues with both EU-level policymakers and Member State officials to help inform how digitalization and automation technologies can support their respective energy transition objectives.

An example of this is Emerson's support in evaluating the EU Measurement Instruments Directive. The aim is to better facilitate the progress of the energy transition and support various industries in achieving their net zero goals.

In other parts of the world, we have proactively engaged government agencies on important roadmap topics such as carbon sequestration, decarbonization approaches for hard-to-abate industries, critical skills development, materials supply chains, global product standards and cybersecurity strategies for critical infrastructure.

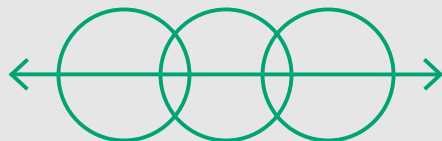


### Engaging with Governments and Industry Groups

#### Advocating to Promote Grid Decarbonization

Emerson has taken an active role as members of the Clean Energy Buyers Association (CEBA) and Climate Group's RE100 since formally announcing our Net Zero targets in 2022. Our association with these groups adds to the broader demand signal for clean energy alongside many of the world's largest industrial and commercial power consumers. Emerson representatives have engaged in CEBA's programming in the past year by attending their annual summit and completing boot camp training courses. Additionally, we have joined CEBA's supply chain activators community to better promote the organization's resources to our value chain partners and accelerate decarbonization efforts in this space.

Emerson considers RE100's technical criteria in our renewable electricity sourcing decisions to advance the development of incremental capacity in the regions where we operate. Each year we report our renewable electricity transition progress to RE100 through the CDP Climate Change Questionnaire.



#### Accelerating the Deployment of Hydrogen

Emerson actively participates in several local hydrogen groups and alliances worldwide focused on advancing hydrogen as a clean energy solution. An overview of the associations that we are part of is shown to the right.

Over the past year, Emerson Korea has continued to lead the hydrogen equipment committee of The Korea Hydrogen Industry Association (KHIA). This work includes leading research and development projects with the Korea Marine Equipment Research Institute, organizing a major hydrogen solution seminar, participating in policy and regulatory dialogues and joining the Hydrogen Town project in the city of Ulsan as part of the country's effort to build a hydrogen industry hub.

In Europe, Emerson has continued to be active in a number of national-level hydrogen groups. An example is our engagement in the German Mechanical Engineering Industry Association's (VDMA) P2X4A, or "Power to X for Applications," working group. As a member, Emerson communicates its viewpoints on key issues and participates in technical standards discussions. In 2023, Emerson had the opportunity to provide its technical perspective on the utilization of digital twins to scale technologies effectively as part of Germany's "H2-Giga" hydrogen research project. This is a public-private partnership funded by the Federal Ministry of Education and Research (BMBF) in Germany dedicated to developing the serial production of electrolyzers.

#### Hydrogen Organizations

##### AMERICAS

- H2AR in Argentina
- H2 Perú
- Hydrogen Alliance of Costa Rica
- California Hydrogen Business Council
- Canadian H2 Fuel Cell Association

##### EUROPE

- EU Horizon Europe Program – Clean Hydrogen Partnership
- European Clean Hydrogen Alliance
- France Hydrogène
- Norwegian Hydrogen Association
- UK Hydrogen and Fuel Cell Association (UK HFCA)
- VDMA P2X4A

##### ASIA & MEA

- Australian Hydrogen Council
- Hydrogen and Fuel Cell Association of Singapore (HFCAS)
- Korean Hydrogen Convergence Alliance (H2KOREA)
- The Korea Hydrogen Industry Association (KHIA)





## Engaging with Governments and Industry Groups

### Participation in Standards Development

Emerson is actively engaged with others in the development of technical standards in areas of automation, including instruments, digital communication, automation software, cybersecurity and many others. We frequently participate in specialized technical committees and working groups, providing industry knowledge and on-the-ground experience to help establish industry standards and drive operational excellence forward.

As new industry sectors develop and evolve, Emerson has engaged in helping to shape the development of sustainability-focused standards. An example of this is Emerson's engagement in the development of standards to support the rapidly evolving hydrogen value chain. In Europe we continue to participate in the European Committee for Electrotechnical Standardization's (CENELEC) working group on industrial valves for mixed gas-hydrogen or pure hydrogen applications and networks (CEN/TC 69/WG 19). This involvement allows us to incorporate diverse stakeholder perspectives, gain specialized knowledge and cultivate a network of hydrogen service experts.

Building on this foundation, Emerson has contributed to the creation of a new application standard for hydrogen-specific industrial valves. This standard, which can be voluntarily used by valve suppliers, is aimed at enhancing safety and efficiency. It addresses critical areas such as low-temperature service, hydrogen environmental embrittlement, hydrogen-induced cracking, high-temperature hydrogen attack and fatigue from cyclic loads. By sharing insights and learnings from these international engagements internally, Emerson fosters a culture of innovation and collaboration, extending its impact on global hydrogen safety and efficiency standards beyond its direct contributions.

Emerson also contributed to the development of the International Organization for Standardization's (ISO) Net Zero Guidelines (IWA 42), commissioned by Our 2050 World, a global collaboration to accelerate action toward net zero through standards.

Through these engagements we hope to bring a practical and global perspective to the discussions, leveraging our deep technical expertise and our long-standing experience working with our customers across a broad range of industry sectors.



## Greening With Emerson

### Collaborating with Leading Research and Educational Institutions

Emerson invests in research and development capabilities as we strive to solve our customers' challenges in transitioning to a sustainable, low-carbon economy. Our engineers work to develop new products to support emerging sustainability markets, such as renewable energy, hydrogen, battery value chains, or new methods of plastic recycling, as well as for existing sectors facing new challenges, such as steel, mining, power, or chemicals. But achieving a net zero future will require the development and deployment of innovative technologies at an unprecedented scale and speed. For this reason, Emerson works closely with a number of researchers and educators around the world.

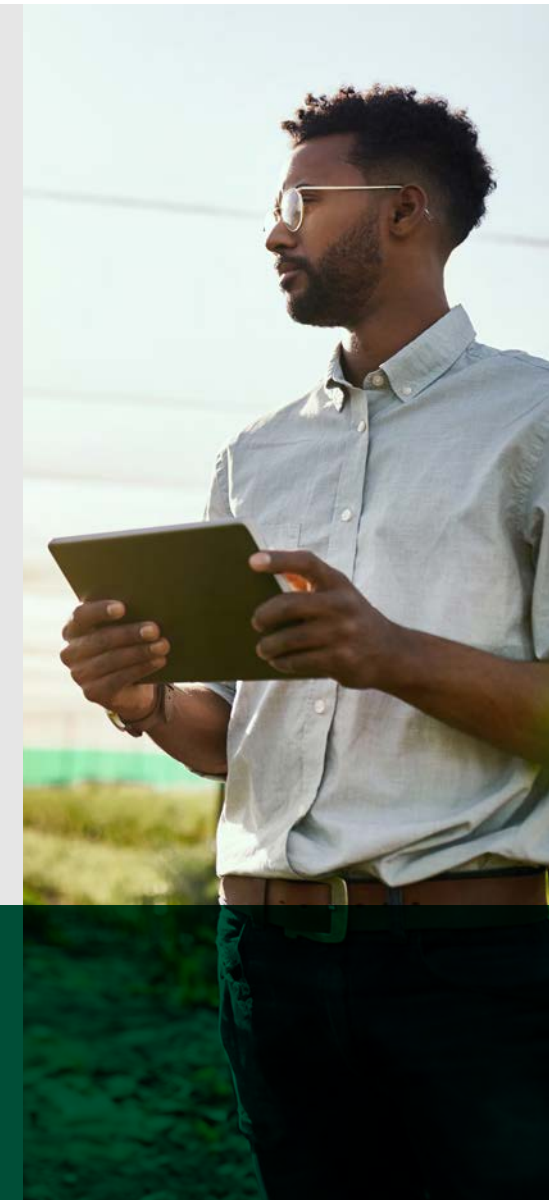
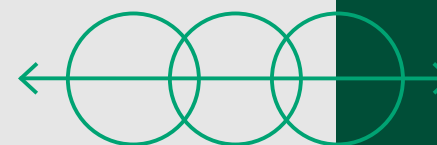
#### How we engage:

- Sponsoring long-term research to drive innovation in key sustainability topics through partnerships with universities and research institutions.
- Supporting and mentoring early-stage startups to gain insights on emerging technologies, adjacent markets and industry disruptors.
- Providing leading edge test & measurement automation capabilities used by leading research organizations to manage their test and validation lab processes.
- Engaging in short-term research projects with university students to complement their research with our industry perspective.
- Participating in public-private research consortia where we work with multiple stakeholders to develop new sustainability practices and thought leadership.
- Inviting external experts to share recent trends and innovative technologies with our employees and share our own expertise with our community more broadly.

### Partnership and Knowledge Sharing with the University of Cambridge

Emerson continues to collaborate with multiple groups at the University of Cambridge. We are sponsoring a PhD student in the Resource Efficiency Collective (a research initiative within the Department of Engineering), who is collaborating with our controls and software business to develop new artificial intelligence techniques based on reinforced learning to optimize energy use. Every year, we also co-supervise the dissertation of students in the University's engineering department, exploring key themes for industrial decarbonization like Scope 1 emissions abatement or green steel procurement.

Finally, we continue to be an active member of the Sustainability Association within the Institute for Manufacturing (IfM). Thanks to this community of practice, we have exchanged best practices with companies in diverse sectors, such as automotive, construction and agriculture, for accelerating progress toward net zero in manufacturing.



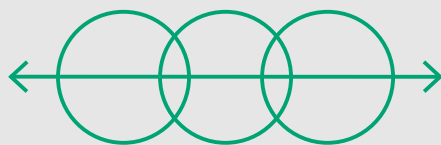


### Collaborating with Educational Institutions

#### Supporting the Scale-Up of Emerging Technologies

Emerson's culture of innovation not only includes collaborating and organically developing technologies that solve customers' most challenging problems, but also seeks and scales great innovations from start-ups and other companies. This section showcases a selection of Emerson's ongoing efforts in Europe and North America. While not exhaustive, it is representative of the spectrum of initiatives we are spearheading to drive sustainability innovation.

In Europe, Emerson is actively participating in a number of research projects funded by the European Commission that aim to investigate and publish data driven science. This work focuses on the requirement for developing the infrastructure necessary to adopt hydrogen production and utilization as fuel gas, and enhance reliable measurement and accountability of CO<sub>2</sub> for the purpose of tracking and controlling emissions.



#### Emerson Joins Greentown Labs as a Terawatt Partner

In 2023, Emerson became a Terrawatt Partner at Greentown Labs, the largest climate-tech incubator in North America. Greentown Labs brings together startups, companies, investors, policymakers and many others with a focus on scaling climate solutions. As part of this alliance, our automation portfolio of intelligent sensors, final control devices, software and analytics, combined with deep domain expertise, is available to Greentown members to help them commercialize and scale their innovations. Emerson will forge connections with the incubator's community of climate-tech startups, gain access to curated and customized events and participate on Greentown's Industry Leadership Council, which provides strategic guidance to the incubator.



#### Emerson's Test & Measurement Business Contribute to Understanding the Ocean's Impact on Climate Change

Oceans play a central role in governing the climate. As society faces the effects of rising seas, extreme weather and disrupted ecosystems, understanding the links between the oceans and our climate is critical. NI, which is now Emerson's Test & Measurement business, joined a consortium in 2022 that was originally created by Analog Devices and the Woods Hole Oceanographic Institute to support such research. The \$1 million contribution that Test & Measurement allocated across four years will support researchers and engineers through grants to create technologies that support data collection and improve our understanding of the ocean and its role in climate evolution.



Read more about the project [here](#).



### Collaborating with Educational Institutions



Building upon our commitment to accelerating the deployment of hydrogen value chains, Emerson's involvement in the RHeaDHy project has seen significant advancements since last year. In September 2023, the RHeaDHy consortium convened its first General Assembly at ENGIE Lab CRIGEN. This gathering was an important moment for all partners, marking the first six months of our collaborative efforts under the EU project. It offered an invaluable opportunity to discuss the substantial progress made, including the completion of technical work and addressing potential challenges that could impact future developments.

Significant milestones achieved include the finalization of new component designs by all consortium members. A notable highlight is the scheduled production of prototype components in 2024, moving us closer to realizing our vision of high-pressure hydrogen refilling stations for heavy-duty vehicles.

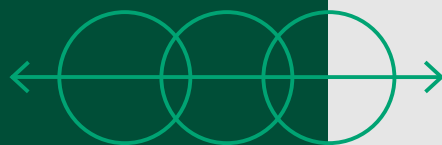
The consortium has also validated the layout for a comprehensive station network to efficiently distribute hydrogen, alongside fruitful discussions on interface systems, controllers and compliance with ISO and SAE norms. Emerson's investment in innovative solutions, including new instrumentation and valves, continues to play a crucial role in this pioneering project, setting new benchmarks for the hydrogen mobility market.

Beyond this, Emerson is an active contributor within the H2FlowTrace consortium that was recently granted funding from the European Commission. This funding aims to establish primary standards for the hydrogen infrastructure that will support the pathway to meet European Green Deal targets. Moreover, Emerson serves as a consulting partner in the International Oil and Gas Producers work group. This collaboration is dedicated to formulating a unified global standard for selecting instruments suited for low-carbon applications. These applications encompass hydrogen, CO<sub>2</sub> and other key commodities.



For more information please refer to the [RHeaDHy project webpage](#).

The RHeaDHy consortium convened at its first General Assembly at ENGIE Lab CRIGEN.



## Collaborating with Educational Institutions

### Improving Technical Skills and Knowledge through Sustainability Training

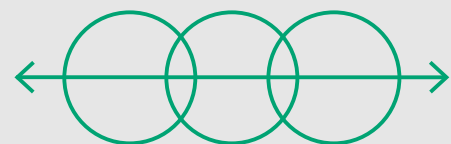
Emerson is helping to advance sustainability education and innovation by collaborating with expert organizations and higher education institutions. In 2022, Emerson entered a formal partnership with Singapore Polytechnic to help upskill students and employees from over 30 companies from the energy, chemicals and pharmaceutical sectors. Delivered over two years, this program is helping to close critical skills gaps and harness advanced digital technologies to reduce emissions and energy consumption.

The [Centre for Environment Sustainability and Energy Efficiency \(ESEE\)](#) at Singapore Polytechnic offers comprehensive training and consultancy in decarbonization and sustainability practices, including energy efficiency, carbon accounting and sustainability reporting. Our collaboration extends to industry-leading programs aimed at embedding business sustainability strategies and achieving net zero ambitions through technological solutions and best practices sharing.

To enhance workforce capabilities, the Energy & Chemicals Training Centre (ECTC) also provides specialized courses like the Certificate in Chemical Process Operation and Control (CPOC). To date, over 200 employees from the chemical and biopharmaceutical industries have benefited from this training course.

In 2022, Emerson contributed acoustics and corrosion sensors to the ECTC, supporting process safety engineering training for National University of Singapore (NUS) Master of Science students. This donation aims to illustrate the practical use of technology in monitoring the condition of equipment and pipelines, helping to optimize maintenance and facilitate forward planning for replacements.

Emerson’s focus on the key principles of energy engineering is demonstrated through our corporate membership with the Association of Energy Engineers (AEE). Our employees attend regional and international conferences annually to reinforce foundational knowledge, explore industry trends and share best practices. Multiple Emerson engineers have also successfully completed AEE’s intensive, full-week Certified Energy Manager (CEM) training and certification program, ensuring that subject matter experts are available throughout the company.



The Centre For Environmental Sustainability And Energy Efficiency (ESEE) at Singapore Polytechnic



## Greening With Emerson

### Convening Leaders and Communities

In the past year, we have interacted regularly with key stakeholders, hosting sustainability-focused events and meetings with our investors, customers, suppliers and other business partners. Open dialogue with these stakeholders influences the actions we take and how we communicate with them to enhance sustainability transparency and accountability.

#### How we engage:

- Hosting sustainability-focused events with customers to understand their priorities and the technical challenges faced as they work to deliver on their sustainability and net zero targets.
- Organizing sustainability-focused meetings with strategic suppliers to share best practices and communicate Emerson's sustainability goals and expectations.
- Facilitating open discussions with employees and connecting them to information and tools that they can leverage to take action internally and in local communities.
- Participating in technical conferences, trade shows and other events, where sustainability enabling technologies and solutions are showcased and challenges are discussed.
- Joining global, multi-stakeholder forums, where we advocate for accelerated sustainability action, share sustainability innovations and strive to forge cross-sector partnerships.

### Advocating for Climate Action in Global Forums

Emerson continues to support Paris-aligned climate action and policies on the global stage. Through participation in international climate dialogues, Emerson aims to drive forward-thinking solutions that address critical environmental challenges, contributing to global efforts in combating climate change.

In 2023, Emerson presented an innovation exhibit in the Expo City Green Zone of COP28, under the Ministry of Industry & Advanced Technology's patronage. The exhibit highlighted technologies designed to decarbonize traditional industries while accelerating emerging energy sectors like hydrogen, biofuels and electrification.

Emerson leaders, including Chief Sustainability Officer, Mike Train and Middle East and Africa President Mathias Schinzel, participated in multiple events to advance the global discourse on sustainability and the key role businesses like Emerson play in shaping the future. These events included:

- **Student Energy Summit 2023** delved into the pivotal role of youth in the energy transition. This was the world's largest youth energy event, organized by New York University Abu Dhabi under the theme of 'Reimagine the Future of Energy.'
- **Climate Action's Sustainable Innovation Forum 2023**, part of several panels to discuss how data, digitalization and AI can be used to accelerate business models that support sustainable circularity.



Student Energy Summit at COP28 in Dubai

*“ In the face of the climate challenges that define our times, I strongly advocate for the empowerment of the next generation through STEM education. At COP28, it became increasingly clear that innovative engineering is not just a choice but a necessity for developing sustainable energy solutions. Our youth's expertise and fresh perspectives are the keys to unlocking a diverse and resilient energy future. ”*

**Mathias Schinzel,**  
Middle East and Africa President



### Climate Action’s Sustainable Innovation Forum

For a third year, our Chief Sustainability Officer, Mike Train, participated in the Sustainable Innovation Forum hosted by Climate Action at the UN Climate Change Conference, at COP28 in Dubai.



Mike Train, Chief Sustainability Officer, at the Sustainable Innovation Forum in Dubai during COP28.

## Convening Leaders and Communities

- **Reuters Energy Transition MENA event** where Emerson shared actionable insights on how to put automation to work optimizing for more sustainable operations in pursuit of decarbonization.
- **The Global Manufacturing and Industrialization Summit** featured Emerson speakers at a panel discussion on how innovations in renewable energy can power a net zero economy.
- **The Industrial Transition Accelerator (ITA) launch**, in which Emerson participated, took place under the leadership of the COP28 Presidency, UNFCCC and Bloomberg Philanthropies and was hosted by the Mission Possible Partnership (MPP).

Before COP28, Emerson took the United Arab Emirates’ Climate-Responsible Companies Pledge, an initiative by the Ministry of Climate Change and Environment aimed at enhancing private sector participation in the UAE’s Net Zero 2050 Strategic Initiative. As a signatory, Emerson is dedicated to embedding climate action into our business strategies, including reporting greenhouse gas emissions, creating science-based emission reduction plans and collaborating with the UAE government to support their 2050 net zero goal. The pledge also emphasizes an inclusive strategy, involving youth, women and vulnerable groups in formulating net-zero objectives.

In 2023, as part of our role as an advisor to the UAE Ministry of Climate Change and Environment and in recognition of ongoing contributions to innovation and technology, Emerson was invited to join a number of initiatives, including:

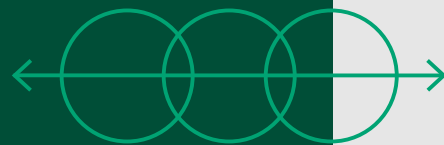
- **The CSO UAE Network** is the first platform for chief sustainability officers leading sustainability initiatives in the UAE’s public and private sectors.
- **COP28 Changemakers Majlis** is a discussion forum designed to bring together a curated group of personally and professionally diverse individuals to openly discuss specific climate challenges and identify actionable solutions.
- **The Industrial Transition Accelerator (ITA)** is an initiative launched to catalyze decarbonization across heavy-emitting sectors where Emerson provides its technical perspective as an automation provider. This gives our employees opportunities to engage in multiple ITA activities as the group works to advance tools and strategies for projects and programs in specific countries.



Learn more from [Mike’s interview at the Sustainable Innovation Forum](#).



Emerson Cluj celebrates International Women and Girls in Science.



## Convening Leaders and Communities

### Driving Engagement in Our Local Communities Worldwide

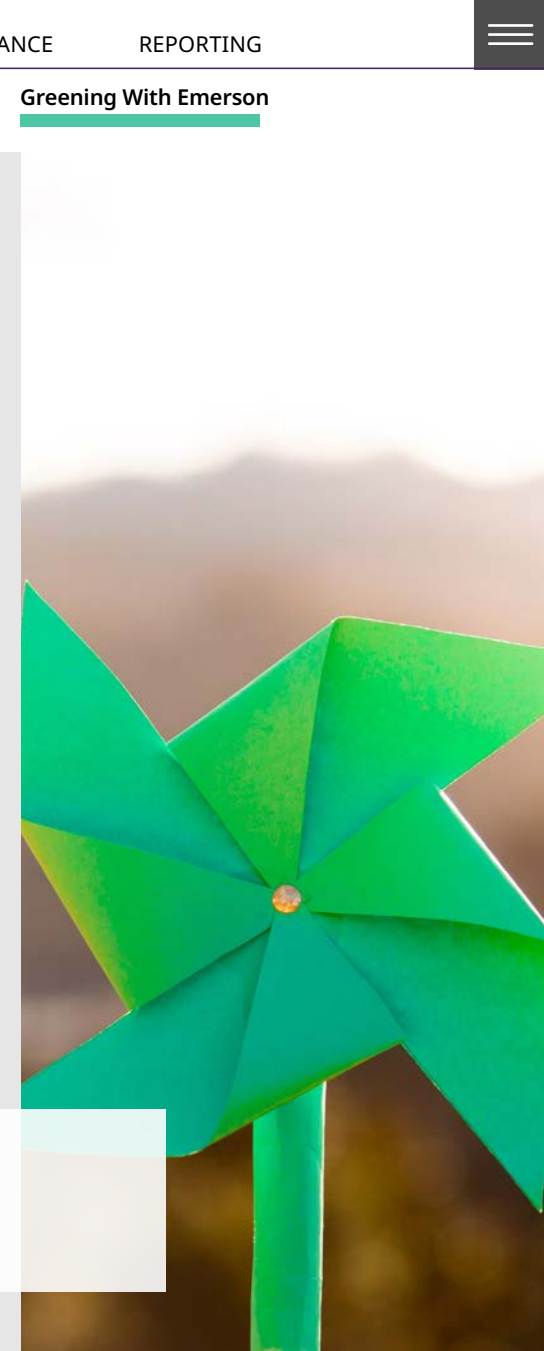
In addition to collaborating with our business partners and international organizations, Emerson’s Greening With strategy emphasizes the importance of outreach and engagement with local communities. Our global presence and technical expertise in the clean energy transition enable us to better understand how citizens from varying socio-economic and cultural contexts think about sustainability and the impact of climate change.

Emerson’s Green Team in Austin has taken a lead in community involvement this year. To celebrate Emerson’s “We Love STEM” campaign, the team curated an educational day filled with enriching activities, designed to captivate and educate young minds from kindergarten to third grade. The event began with a video on climate change, leading to a discussion on weather events, home sustainability and wind energy. Enhancing the educational experience, the Green Team introduced a hands-on challenge inviting students to construct pinwheel toys. Utilizing box fans as an analog for wind currents, the exercise served as a practical lesson in the principles underlying effective wind turbine design, fostering an early appreciation for renewable energy technologies.

Greening With Emerson is our global strategy to engage, advocate and exchange knowledge with key stakeholders. These collaborations support the large-scale deployment of innovative low-carbon solutions and enhance our understanding of technical, economic and policy challenges. Accelerating these early-stage projects is crucial for quickly validating their potential to contribute to a net zero future.



To learn more about Emerson’s Green Teams network, please refer to [pages 58-59](#)





# Social *Responsibility*

At Emerson, we are building an environment where our people are inspired and empowered to reach their fullest potential, creating value for themselves, our company and our world.

## IN THIS SECTION:

- Overview
- Building an Empowering Culture
- Legacy of Innovation
- Challenging, Purposeful Work
- Diverse People, Working Together
- Limitless Growth
- Global and Local Impact
- Workplace Safety



# Social Responsibility Highlights

## EMPLOYEE ENGAGEMENT

Launched **leadership development toolkits** for people managers.

Enhanced **career development** resources.

Conducted first company-wide pulse check survey to assess employee sentiment.

## DIVERSE PEOPLE, WORKING TOGETHER

Progressed our goal of **doubling the representation** of women globally and U.S. minorities in leadership positions by 2030.

Established **annual summit** for employee resource groups to maximize impact across company culture.

## TALENT DEVELOPMENT

Attracted and developed **top talent** through our differentiated Engineers in Leadership, MBA Leadership and Co-op and Internship programs.

Enhanced learning programs to continue to equip employees with **key knowledge and skills** and help leaders foster inclusiveness and innovation.

Implemented **company-wide wellbeing programs and policies**.

## WORKFORCE DEVELOPMENT AND CORPORATE PHILANTHROPY

Partnered with hundreds of universities and colleges to foster effective training solutions, elevate technical and professional skills and **provide employment opportunities** to students.

Pledged **\$200 million** over 10 years, focusing on education equity in the communities where we operate.

Provided employees in need with grants from the **Support Our People Fund**, established to help with natural disaster, death of a family member, or impact to primary residence.

## WORKPLACE SAFETY

Goal to continuously work toward **zero recordable injuries**.

In fiscal 2023, more than **80% of Emerson's workforce**, spanning across all company locations worldwide, was engaged in a robust health and safety dialogue through formal joint management-worker Health and Safety (H&S) committees.

Achieved year-over-year reductions of **36%** in first aid cases and **23%** in recordable injuries.



Views from Grays Peak, CO  
Photo by Basanta Shrestha | Emerson Employee

# Building a Culture of Empowerment

**Together we are creating a culture that emphasizes our company's values, amplifies the voices of our employees and enables them to maximize their potential.**

At Emerson, our people are at the center of what we do, and they are foundational to our value creation strategy. Through their expertise, abilities and passion for their work, our employees power our company to solve the world's most complex challenges. In turn, we recognize the importance of empowering our employees with a culture that enables them to be their authentic selves, feel valued and grow. This is our responsibility to our employees. As we continue to build such an environment across our company, we look to their invaluable insights and perspectives to help guide our actions and shape our culture.

## Employee Engagement Drives Action

This past year saw the launch of our Your Voice Counts listening strategy. This approach simultaneously amplifies the voices of our employees and enables Emerson's leaders to better understand employee sentiment and where to focus their actions. As part of this strategy, more than 85% of our employees participated in Emerson's first company-wide employee engagement survey, registering an overall engagement score of 78%. This score is a measure of how employees feel about their experiences working at Emerson, as determined by employee feedback across four areas: intention to stay at the company, pride in the organization, sense of personal accomplishment and willingness to recommend Emerson as a great place to work.

In addition to engagement data, employees provided valuable feedback in the form of more than 244,000 written comments, helping further identify areas of importance to them. In response to this feedback, leadership initiated a cadence of efforts intended to cultivate a diverse, equitable and inclusive environment with direct support for our people managers. Efforts included the launch of leadership development toolkits for our people managers focusing on inclusion, innovation, collaboration and change leadership – all key areas identified through our employee engagement survey. These new toolkits, part of our broader leadership development framework, are designed to equip people managers with practical tools and resources for

driving discussions and fostering optimal work environments within their own teams. We're also delivering more career development resources and increasing access to internal opportunities that can help employees grow professionally and develop their skills. Early enhancements include a global, simplified internal application guide, a new career opportunity-focused internal site with on-demand training videos and other resources, and an improved internal careers portal.

Building upon the positive momentum generated from our employee engagement survey, we followed up eight months later with our first company-wide "pulse check" survey to help assess the impact of resulting actions taken across



### Employee Engagement Drives Action

the company. As part of our overall continuous listening strategy, these pulse checks are intended to quickly measure employee sentiment through a shorter survey process.

For our first pulse check, we measured employee familiarity with numerous engagement survey actions and collected data that helped us determine overall engagement trends. More than 39,000 employees responded, and we saw moderate increases across three of four engagement questions. The pulse check also indicated that a significant majority of our employees and their managers were engaging in important dialogue about survey results, what those results meant to their teams, and how to further improve the work environment at Emerson.

### Bringing our Employee Value Proposition to Life

In 2022 we introduced Let's Go, Emerson's first-ever employee value proposition (EVP), inviting our global workforce and potential hires to join in making the world healthier, safer, smarter and more sustainable. More than a simple rally cry, the EVP is a cornerstone of our culture, helping us communicate, celebrate and hold ourselves accountable in delivering the experiences that define what it means to work at Emerson.

This year, we continued to activate our EVP among our employee base by further defining it across five key cultural areas: Legacy of Innovation; Challenging, Purposeful Work; Diverse People, Working Together; Limitless Growth; and Global and Local Impact. Collectively, these five areas form our differentiated employee experience and bring our EVP to life.

By substantiating our progress and achievements in each of these areas, we are strengthening Emerson's culture and enabling our EVP to be considered at every touchpoint of the employee lifecycle and experience – from our HR programs to the actions of our leaders, behavioral norms and physical work environment. The following pages explore these areas in more detail.



To all the thinkers, doers and connectors. All the disruptors, innovators and value-creators. Let's go. We want you to join us in our bold aspiration to make the world healthier, safer, smarter and more sustainable.

Together, we are building a global community of smart, dedicated people who thrive when everyone feels welcomed, trusted, celebrated and empowered to solve the world's most complex problems – for our customers, our communities and the planet.

At Emerson, our people are at the center of what we do. So, let's go. Let's think differently. Learn, collaborate and grow. Seek opportunity. Push boundaries. Be empowered to make things better. Speed up to break through.

# Let's go, together.



# Legacy of Innovation

**As a global innovator, Emerson is continuing to build on its storied tradition of solving the most complex challenges facing the world.**

Innovation is in our DNA. For more than 130 years, Emerson's groundbreaking technologies have enabled manufacturers in the world's most essential industries to become safer, more efficient and more productive. We've built a rich legacy of innovation, but as perpetual problem solvers, we're far from done. We're invigorating innovation across our entire automation portfolio, especially in the areas of disruptive measurement technology, software-defined automation, self-optimizing asset software and sustainability solutions. Emerson's automation technologies and software are helping even more manufacturers reach their goals by ensuring food safety, getting medical treatments to market faster and reducing harmful emissions and waste.

## Building a Culture of Innovation

Endless curiosity to do things in better, bolder ways. Rigorous discipline to serve all stakeholders. Resolute commitment to our purpose. These are universal employee attributes at Emerson. They are the reasons why we give our people the freedom to explore, create and collaborate and why we encourage them to innovate as a collective. To drive a spirit of innovation across the company, we took actions throughout 2023 that engaged employees at all levels:

### Introduction of a Global Definition of Innovation

Innovation at Emerson is something that creates value. Fostering innovation is critical to Emerson's value creation strategy. It ensures we remain relevant in our markets, create unparalleled products and deliver competitive solutions for our customers. Within Emerson, innovation can occur across all roles and ranges, from small improvements to paradigm shifts for the industries we serve.

- **Sustaining Innovation** (minor or major revisions) – small, yet meaningful improvements in products, processes, services and other aspects of our business.

- **Breakthrough Innovation** (new to the business) – more than mere improvement, this type of innovation is characterized by new, meaningful changes in our business, enabling Emerson to enter established markets for the first time while producing a substantial, competitive edge for the company or its customers.
- **Transformative Innovation** (new to the world) – often the introduction of technology, processes or ways of working that creates an entirely new market, transforming the way people live and work.

### Launch of Innovation Talks Series

To celebrate and share best practices for innovation at Emerson, a new, on-demand video series of conversations known as Innovation Talks was made available to employees. The series features leaders throughout Emerson detailing how their businesses and teams are innovating every day – from discussions of mindset to management to the processes and tools they utilize.



## Building a Culture of Innovation

### Deployment of an Innovation Toolkit

As part of Emerson's focus on innovation and broader leadership development framework, a full-service toolkit developed to help drive innovation across the company was distributed to 8,000 people managers. The toolkit featured easy-to-use, practical tools and resources designed to integrate into daily activities and help managers cultivate an innovative environment among their teams.

### Collaboration with Customers and Partners

At Emerson, we hold ourselves responsible for not only helping customers solve current problems, but also anticipating future obstacles. And through our deep domain expertise, we quickly unearth our customers' pain points and provide direction to address them, gather and incorporate customer input and collaborate to develop holistic solutions that drive business results.

Our Emerson Exchange sessions, User Driven Enhancement Program, human-centered design exercises and partnerships with industry groups and universities enable us to better understand and support our customers.

Recent examples of our collaboration with customers and partners include:

- [Tesla working with Emerson](#) to derive better value from data collection through modeling and simulation, digital twins, data analytics and machine learning.
- Biotech leader [Genentech's integration of several Emerson platforms](#) as part of validation processes that trimmed plant completion from five or more years to two and half.
- [Novo Nordisk's deployment of Emerson's Real-Time Modeling System](#) in the expression, engineering and formulation processes for its therapeutic proteins and peptides products.
- [DG Fuels selection of Emerson's advanced sensing and control technologies](#) to produce sustainable aviation and diesel fuels at scale and help decarbonization efforts.
- [CPS Energy's work with Emerson to modernize its SCADA system](#) and boost the performance and reliability of its gas distribution for its customers.



Legacy of Innovation



Named Among  
"America's Most Innovative  
Companies" (2023) by  
Fortune Magazine



Named IoT  
Breakthrough 2023  
"Industrial IoT Company  
of the Year"

Top 100  
Global  
Innovator  
2023

Clarivate™

Named Among  
Clarivate™ Top 100 Global  
Innovators (2023)

## Building a Culture of Innovation



### DeltaV Live Team Honored with Emerson's Technology Award

Through its Technology Award, Emerson annually recognizes one organization within the company that demonstrates outstanding creativity, originality and problem-solving prowess by developing a state-of-the-art solution with proven financial results. This year's recipient was the team responsible for the development of the DeltaV™ Live platform.

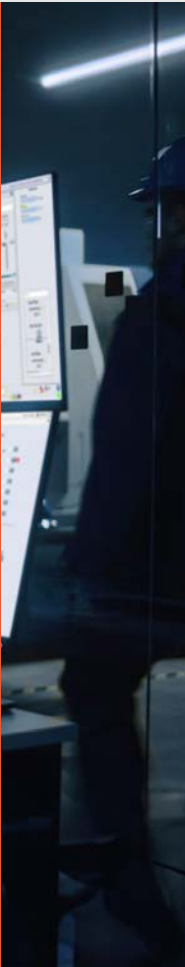
DeltaV Live is Emerson's built-for-purpose operations visualization software platform that provides a high-performance operations experience in a simple, intuitive and customizable format. As the most advanced DeltaV human machine interface ever developed, it is helping manufacturers optimize performance through increased productivity, situational awareness and simplified graphics configuration.

As an award recipient, the DeltaV Live team was recognized for the success of its differentiated solution, excellent program execution and furthering Emerson's value creation mission. The team was formally honored at Emerson's global leadership session, where it was presented with the award.

"As technology continues to shape our industry, it is crucial to recognize and celebrate the exceptional contributions of our team members who drive innovation and excellence," said Peter Zornio, Emerson's Chief Technology Officer.

DeltaV Live made Emerson's DeltaV distributed control system the first DCS to natively support HTML5 graphics and one of the most adaptive and advanced digital DCS platforms in the world. This key differentiator provides a futureproof foundation for ubiquitous use on any device, including mobile devices, giving users the flexibility to choose the right platform for their needs to run their plants more safely and effectively.

One of the more powerful features of DeltaV Live is that it provides a single operations visualization console that maximizes situational awareness. Users have the flexibility to easily and securely integrate web content directly in operator graphics. This integrated console reduces the need for other stations in the plant, eliminating costs of equipment, such as monitors and keyboards and cybersecurity concerns associated with maintaining these other systems.







*Ramsey Cascade in the Great Smoky Mountains  
Photo by: Rick Smith | Emerson Employee*

# Challenging, Purposeful Work

**Across the globe, we're effecting meaningful change through our advanced technologies, industry-leading expertise and insatiable curiosity about the world around us.**

At Emerson, our purpose is to drive innovation that makes the world healthier, safer, smarter and more sustainable. It's a collective call-to-action, and across a number of critical areas, we're actively engaged in work that is positively impacting our world.

- **Healthier.** [Enabling Vital Vaccines and Treatments](#): Emerson has helped the world's largest pharmaceutical companies fast-track research, development and delivery of lifesaving medicines, including COVID-19 vaccines.
- **Safer.** [Creating Safer and Optimized Plants](#): Emerson has pioneered digital twin technology that provides a real-time, digital replica of live plants that continuously updates with changing operating conditions, allowing operators to test new processes before going live and to train workers on safe operations.
- **Smarter.** [Introducing Wireless to Industrial Environments](#): Emerson's industrial wireless technologies combined with smart sensors have provided the foundation for cloud-based applications, remote monitoring and industrial IoT programs of today.
- **Sustainable.** [Accelerating Decarbonization Efforts Across the Globe](#): As manufacturers seek more sustainable operations, Emerson's digitalization and automation technologies are being used to digitally transform existing operations and as the digital foundation for emerging industries.

Each day, our purpose is brought to life by the challenging, purposeful work of our employees - a defining characteristic of our culture that is present across a multitude of roles.



### Michalle Adkins

#### Director of Life Sciences Strategy, Systems & Software

*"Emerson has been an amazing place for me to grow both personally and professionally. I have had the opportunity to work with different cultures across the globe, learning more about cross-culture communications in the process. I have had the privilege to be a consultant, lead a team of consultants and lead our local Women's Impact Network employee resource group chapter. In my role as director of life sciences strategy, I am working with industry organizations, customers and sales to provide industry insight to our internal teams who are delivering technologies and solutions that meet the industry's current and future needs. Deploying our technology solutions enables Emerson's life sciences customers to bring new products to market faster and consistently manufacture quality products. I find this to be motivating, purposeful and challenging work as we develop and implement technologies that help make the world a healthier place."*



### Alejandro Barreto

#### Chief Software Engineer, Test & Measurement

*"At Emerson, I am one of the technology leads for artificial intelligence (AI) within Test & Measurement's Technology and Innovation Office. Over the next few years, AI will fundamentally transform our lives. Our work is at the forefront of this revolution, bringing AI to the test and measurement industry. Each day, I come to work thinking about what I can do to empower domain experts at our customers' organizations to solve the world's most challenging science and engineering problems and further enhance the products we rely on every day to be safer, more reliable and efficient. We are pushing the boundaries of what is possible with AI, but we are also leading the way in the development of best practices, ensuring that AI is used effectively and responsibly in the critical physical systems that make the world go round. I get to work with some of the smartest, most fun people in the world. There's not a day that goes by that we don't learn something new as we co-discover our future and the technology that will shape it."*



Challenging,  
Purposeful Work



## Challenging, Purposeful Work



### Nils Beckmann

Director, Engineering Controls & Software,  
Intelligent Automation Solutions

*"I joined Emerson six years ago, drawn by its commitment to innovation and the opportunity to tackle complex technical challenges. My role centers on the standardization of solutions and on technological enablement across the Discrete Automation group at Emerson. My team supports the group with smarter connectivity and data analysis, contributing to the intelligence of our offerings and the organizations overarching strategies. We focus on two critical areas: sustainability and overall equipment effectiveness. Our efforts boost machine productivity, enhance performance and minimize waste, aligning with sustainable practices for us and our clients. This role is exciting, as it blends technological innovation and challenges with impactful corporate goals."*



### Kelly Flores

Full Stack Cloud Engineer, Systems & Software

*"As a cloud engineer in platform engineering, my role revolves around the development of a robust platform tailored to support cloud-native applications for teams at Emerson. This involves not only crafting, implementing and managing scalable, dependable cloud infrastructure solutions but also facilitating the deployment and management of containerized applications to empower Emerson teams in harnessing the full potential of cloud technology. What truly sparks my passion is the opportunity to pioneer innovation within the company, harnessing cutting-edge cloud technologies to enhance efficiency and provide impactful solutions to our customers. Being part of a company that places a premium on sustainability and resource conservation aligns with my personal values, making my work more significant and fulfilling."*



## Challenging, Purposeful Work



### Denka Wangdi

#### Sales Director, Growth and Sustainability

*"We work in industries that are complex, and to be part of the solution for these industries, you must understand them and their challenges. Emerson understands these industries; we've served the chemicals, refining, life sciences and LNG industries for decades. More than ever, these industries' customers need energy security, affordability, reliability and sustainability. We're helping them achieve their goals with our innovative, digital technologies that improve overall efficiency. As sales director, I get to be a part of the solution, supporting customers who are responsible for providing energy security to the world. The opportunity to help advance this critical industry is truly exciting, and I inherently believe if we put our customers at the center of our universe, we can leave the world a better place than when we inherited it. Vital to this effort is the fact that innovation knows no rank at Emerson. I'm honored to work with colleagues who consistently push the envelope and challenge each other to do better."*



### Megan Wiens

#### Instrument Connectivity & Innovation Product Manager, Measurement Solutions

*"As connectivity and innovation product manager, I get to help shape and implement new product technologies across the organization, which often means solving problems by doing things that haven't been done before. This requires being well attuned to the challenges our customers face so that we're solving the right problems and providing truly valuable solutions that make their jobs easier and safer. Beyond my daily work, I've also found opportunities to make a difference in my local community through Emerson. A favorite of mine has been organizing and supporting annual STEM Day events for children and their families. It's so rewarding to create this positive environment for kids – especially young girls – to experience the joy and excitement of STEM. It's exciting to see where the industry is headed, and it's even more exciting to get to play a part in shaping its future."*



# Diverse People, Working Together

**We know the power of diverse people, working together, and we stand unified in building a culture that values the unique perspectives and experiences of all our employees.**

For more than a century, Emerson has built the products that propel the world, but it's our employees who, in turn, propel Emerson. They are a global team of bright and ambitious individuals, from a multitude of backgrounds, working together to challenge the status quo, generate new ideas and deliver truly impactful solutions to our customers. Collectively, they help form an inclusive company culture that is essential to our value creation strategy. Ensuring and evolving this culture is paramount.

We believe that diversity, equity, inclusion, belonging and fairness drive innovation and growth. We're committed to aligning words with actions, ensuring every individual thrives in an environment that truly values diversity.

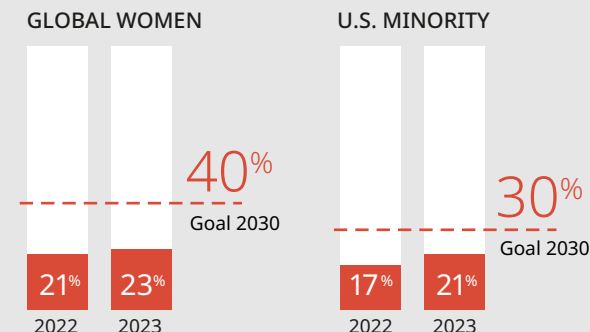
## Diversity, Equity and Inclusion Goals

In 2021, Emerson announced a longer-term diversity target to double the representation of women globally to 40% of its leadership, and U.S. minorities to 30% of its leadership by the year 2030. We continue to progress this goal.

In fiscal 2023, a comprehensive assessment of our existing DEI strategy was conducted, resulting in the identification of three areas of focus considered foundational to the continued building of a diverse, equitable and inclusive culture at Emerson:

- 1. Sourcing and Selecting Diverse Talent**  
 Driving progress towards Emerson's goal of elevating the representation of women globally and ethnically diverse employees in the United States by helping leaders leverage inclusive talent acquisition processes, diversity reviews, DEI dashboards, and new technologies that improve inclusive hiring practices and job description language.
- 2. Engaging and Retaining Diverse Talent**  
 Establishing a DEI community of practice to advance our global DEI strategy at local levels and leverage best practices across the organization; integrating DEI considerations into Emerson's annual employee engagement survey and talent-management programs, including measuring employee belonging sentiment at scale; launching inclusive leadership workshop and toolkit series for people leaders.
- 3. Developing an Inclusive and Connected Organization**  
 Fostering our employee resource groups (ERGs) by aligning their efforts to a single global strategy and establishing partnerships between our ERG and business efforts to continue championing culture change.

## LEADERSHIP REPRESENTATION



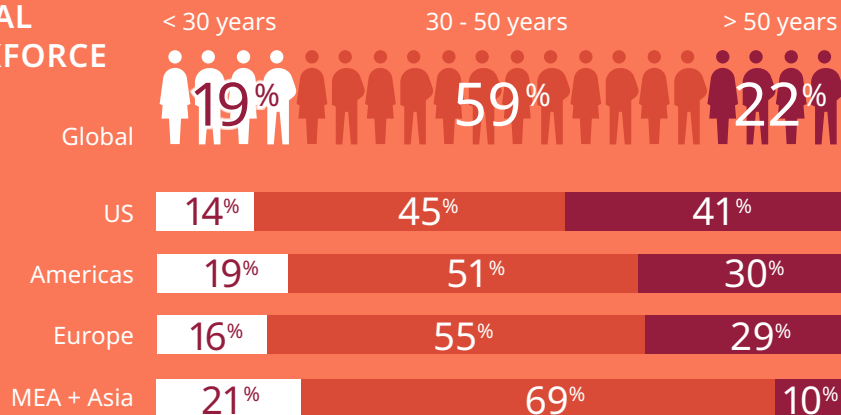
\* Leadership is defined as individuals at the director level and above.



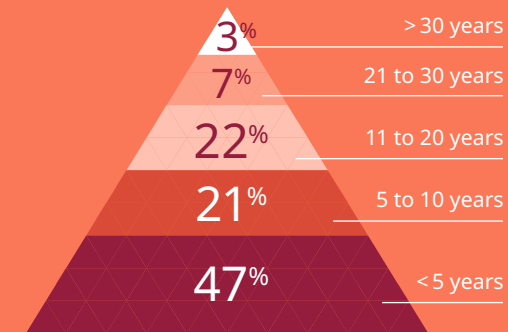
Diverse People, Working Together

# Workforce by the numbers

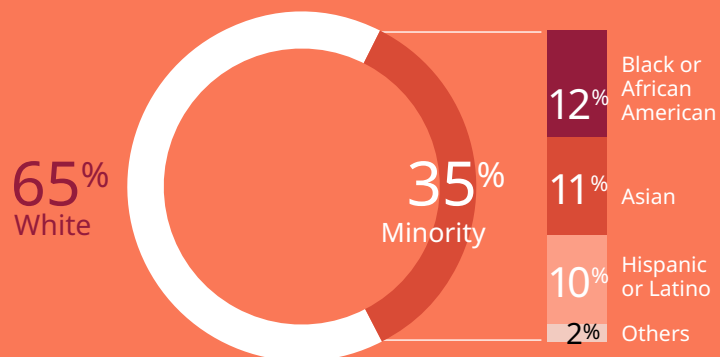
## GLOBAL WORKFORCE AGE



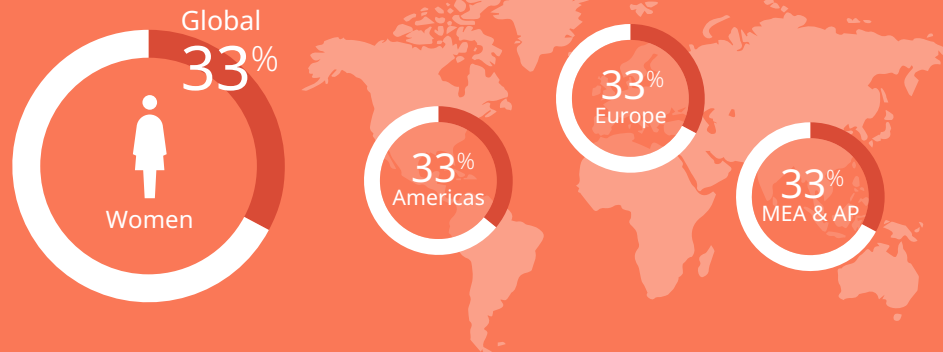
## YEARS OF SERVICE IN GLOBAL WORKFORCE



## TOTAL US WORKFORCE MINORITY BREAKDOWN



## WOMEN REPRESENTATION IN WORKFORCE



## GLOBAL WORKFORCE VOLUNTARY TURNOVER



Global data reflects countries that are included in our human resources information system and excludes countries not yet transitioned onto the core system. Minorities include: Asian, American Indian or Alaska Native, Black or African American, Hispanic, Native Hawaiian or Other Pacific Islander and two or more races. This data is presented on Emerson's fiscal year calendar.



## Diverse People, Working Together

### Elevating Underrepresented Groups

To maintain our edge in relevance, competitiveness and innovation, we strive for our workforce to reflect the diverse fabric of the communities we serve. Our team encompasses a broad spectrum of roles, including hardware and software developers, project managers, supply chain experts, finance and legal professionals, sales and service teams, operations specialists, compliance officers, human resources personnel, marketers, IT experts and engineers. Securing and nurturing top talent throughout our organization is paramount for our enduring success.

We continue to expand our pipeline of qualified diverse talent through intentional outreach and sourcing programs. Our inclusive recruitment process and tools enable us to check unconscious biases in our selection process with candidate-funnel metric reviews. Through targeted recruitment endeavors, we actively seek to augment the pool of diverse candidates, both internally and externally, thereby enriching our talent pipeline.

#### Women

Our recruiting efforts at universities and professional organizations aim to attract women with degrees in engineering, human resources and business administration (MBA) programs. Emerson remains a strong supporter and advocate of the Society of Women Engineers (SWE), the world's leading organization dedicated to the advancement of women in engineering. We actively participate in SWE conferences and job fairs to support and recruit women with engineering expertise. In addition, Emerson participates in the Women in Leadership Institute, which is sponsored by the Society for Human Resource Management.

#### U.S. Minorities

We continue our focus to increase the racial and ethnic diversity across our team. This year, specific recruitment efforts at a number of career fairs aimed to identify qualified candidates for entry and executive-level positions from U.S. minority groups. With help from our Black Employee Alliance Employee Resource Group, Emerson representatives connect directly with potential candidates and share various career opportunities available at Emerson. We also partner with organizations such as the National Society of Black Engineers (NSBE) and the Society of Hispanic Engineers (SHPE). We continue to strategically increase our participation and representation at national conferences to promote key opportunities available across the company.

#### People with Disabilities

We recognize that employees succeed when they can bring their whole selves to work. Through education and allyship, Emerson is a welcoming employer of people with visible and invisible conditions, and people who care for others with disabilities. As we continue to explore inclusive practices of a welcoming employer, we have partnered with several leading organizations in the disability inclusion space. Through these partnerships with organizations such as The Starkloff Institute, the Center for Disability Inclusion (CDI), Neurodiversity in the Work Place (NITW) and Disability: IN's Neurodiversity @Work Roundtable, Emerson recognizes disability inclusion as an important part of its culture journey.

#### LGBTQ+

For the third consecutive year, Emerson continued its strong presence at the Out for Undergrad (O4U) engineering conference, which connects high-achieving students who identify as LGBTQ+ with leading corporations in the United States focused on creating welcoming and affirming workplace environments. Emerson hosted O4U's MOSAIC event, which kicked off the conference and provided 60 LGBTQ+ students from underrepresented populations the opportunity to tour Emerson's Shakopee facility and connect with Emerson employees. Additionally, Emerson's Pride ERG participated in other activities throughout the conference, including a career fair. In recognition of its active engagement, Emerson was honored with the InVested with O4U award for significantly impacting O4U throughout the last five years.

#### Military Veterans

Emerson provides post-military job opportunities for veterans through veteran-focused MBA recruiting events and foundation partnerships. We also work with Hiring Our Heroes, a nationwide effort to connect veterans, service members and military spouses with meaningful employment opportunities.



Diversity Panel at Emerson Exchange Europe 2024

## Diverse People, Working Together

### Building an Inclusive Environment

Inclusion is a core part of our broader culture transformation efforts. We continue to engage employees in new and exciting ways that encourage connection across differences through dialogue and recognition, and by fostering our employee resource group community – which serves as the heartbeat for where employees most distinctly experience a sense of belonging.

#### Culture Dialogue Sessions

Launched in 2022 as part of company-wide efforts to drive awareness and interaction, culture dialogue sessions were conducted across the organization again in 2023. These sessions, in which every business group participates, are designed to encourage inclusive conversations and provide input to senior leadership about the current state of Emerson's culture and its ambitions and aspirations.

#### Unconscious Bias Training

Launched in 2014, this program helps participants recognize and understand the potential negative impact of unconscious bias in the workplace. Designed as an interactive, practical course, this training provides employees with opportunities to brainstorm and practice ways to counter the unintended consequences of unconscious biases. To date, more than 47,000 employees have participated in this training.

### Employee Resource Groups Summit

In support of its employee resource groups (ERGs) and to recognize exceptional efforts in building a diverse, equitable and inclusive culture, Emerson has established an annual summit for ERG leaders to collaborate, exchange insights and align their strategy planning to further maximize impact across company culture. The summit also provides an opportunity for Emerson's leadership to work with ERG leaders who aim to foster inclusion, engage through development opportunities and champion underrepresented communities through awareness and advocacy. During the summit, ERG standouts are honored and recognized for their accomplishments at an official recognition dinner and awards event.

### Employee Resource Groups (ERGs)

Emerson has built a robust network of ERGs that support its focus on inclusion. Passionate volunteers from across the organization lead these groups at both the company and regional levels and are sponsored by Emerson's executive leadership. These ERGs have grown organically from the ground up and now have more than 13,000 members. ERG membership is available to all employees, including those that join the organization to support others as allies.



For More Information please refer to [Emerson's Diversity, Equity & Inclusion webpage](#).



## Diverse People, Working Together

### Asian & Pacific Islander Alliance

The Asian & Pacific Islander Alliance (APIA) was launched in May 2021 to create a network among Emerson Asian and Pacific Islander employees and their allies. The group aims to support employees in their personal and professional growth, provide a platform to amplify voices and serve as a channel for all colleagues to learn about the culture, history and experiences of Asian and Pacific Islander colleagues. APIA now numbers more than 1,200 members across 11 chapters in North America and Europe.

### Black Employee Alliance

Having grown to more than 800 members across 8 chapters, globally, the Black Employee Alliance provides a support network for Black colleagues and enables opportunities to drive strategic recruiting, retention and advancement initiatives. It actively partners with professional organizations such as the National Society of Black Engineers and the National Black MBA Association and with Historically Black Colleges and Universities (HBCUs) and other universities at the local level. Outreach activities in 2023 included participation in the NSBE 49th Annual Convention and the conducting of mock interviews with HBCU students to support their professional development.

### Diverse Abilities

The Diverse Abilities ERG encourages awareness around perceived impairments and disabilities in and outside of the workplace. In 2023, the group continued to build upon the success of its 2021 inaugural year, partnering with other ERGs at Emerson and working to highlight allyship and intersectionality in the disability community. As part of its efforts, Diverse Abilities engaged the Center for Disability Inclusion as a business partner to support employee recruitment, advancement and retention by fostering a diverse and inclusive culture for individuals with disabilities and other conditions. Through its work, the group is creating an environment in which Emerson's businesses and colleagues support one another to achieve their potential through education and shared life experiences.

### Mosaic

A multicultural platform with more than 1,350 members and 18 chapters globally, Mosaic fosters community for people working away from their home location. Its mission is to promote strategic retention of talented individuals with diverse cultural and ethnic origins, while supporting their career growth and creating meaningful connections among colleagues. Through Mosaic Connect platform as well as its Onboarding Buddy Program, Mosaic assists with assimilation in Europe, the Middle East, Africa and North America. In addition, Mosaic hosts Cultural Competency Workshops that focus on increasing the awareness of cultural differences and traits.



## Diverse People, Working Together

# Pride

The Pride employee resource group works closely with the LGBTQ+ community and its allies to foster a diverse and inclusive company culture. The group focuses on intersectionality and allyship initiatives through its Ally Week celebration and LGBTQ+ trainings, with more than 4,000 employees across Emerson participating in trainings to date. During Pride Month, employees from 42 countries gathered to celebrate Emerson's LGBTQ+ employees. Pride has 18 chapters, with more than 1,000 members.

# Somos

Supporting initiatives on behalf of Emerson's Hispanic and Latin American employees, Somos has more than 1,600 members globally across 12 chapters. Somos works to continuously improve recruitment, retention and development of Latin Americans and Hispanics at Emerson through professional development opportunities, mentorship, networking and leadership opportunities and giving back to Latin American and Hispanic communities.

# Veterans Resource Group

The Veterans Resource Group raises awareness of the value U.S. military veterans bring to Emerson, with 13 chapters and more than 650 members. The group offers mentorship opportunities for veterans to translate their military experience into commercial skills and learn more about various career paths at Emerson. Local chapters also host several fundraising events and celebrations to recognize veterans and their sacrifice for the United States.

“My hope is every LGBTQ+ employee feels comfortable being out at work without judgement of who they are. To accomplish this goal, Pride has a strong focus on ally education, where we turn allies into advocates, and has programming that celebrates all our different identities. I am touched with every employee that is comfortable to be out – bringing their spouses to company events or sharing that they use Emerson's transgender healthcare benefits. The passion of our LGBTQ+ employees and their allies never ceases to impress me. Over the years I have seen not only employees come out but also their identities celebrated. There is always work to do, but our ERG is here to support our LGBTQ+ employees and their allies.

Maddie Neu (she/her),  
Pride Global Chair



Diverse People, Working Together

# Women's Impact Network

The Women's Impact Network (WIN) provides support, professional development, leadership and networking opportunities for female employees globally. Emerson's largest ERG with more than 6,000 members and 97 chapters, WIN celebrated its 10-year anniversary in 2023. Throughout its tenure, WIN has worked to advance women through webinars, professional development and leadership opportunities within the ERG as well as attracting a new generation of women through partnerships with the Society of Women Engineers and universities around the world. WIN's contributions have helped Emerson rank #15 among the top companies to work for by Woman Engineer Magazine.



## Women's Impact Network Celebrates 10th Anniversary

Marking a decade of providing support and networking opportunities for women employees at Emerson, the Women's Impact Network (WIN) ERG celebrated its 10th anniversary in 2023. Through its activities, outreach and resources, WIN helps attract, develop and retain women at Emerson by elevating their visibility and empowering them to achieve their career goals. Since beginning as a small group of 20 members in 2013, WIN has grown to become a more than 6,000-member-strong ERG with nearly 100 chapters across the company, globally. Throughout that time, WIN has served as a source of inspiration, encouraging all employees to take more meaningful actions that positively impact Emerson's teams and communities and further contribute to the creation of a more inclusive and equitable workplace.



"I am honored to be part of such an incredible organization," said Janine McCormick, WIN global chair. "Celebrating 10 years of Women's Impact Network in 2023 and our decade-long efforts of working to attract, develop and retain women at Emerson was a great milestone. I am proudest of our chapters and members around the world who are the lifeblood of our ERG. Their passion and dedication to our mission is what drives our ERG and has allowed us to grow, succeed and thrive over the years."

## Diverse People, Working Together

### Emerson Employees Making an Impact

#### First-of-its-kind Event Examines Culture Transformation in Information Technology

Fully embracing Emerson's ongoing culture transformation, IT employees at the company's Middle East headquarters in Dubai opened their doors to colleagues from Romania, France and the United Kingdom as part of a two-day conference fostering innovation through diversity, equity and inclusion. The event, which was the first of its kind at the Dubai site, focused on culture within Emerson IT, how IT can support Emerson's roadmap for culture transformation and how enhanced collaboration can create value for the company. "We never had something like this focusing on DEI or the culture in Emerson IT, so helping start this conversation is amazing – and this is just the beginning," said Mani Priyanka, IT Service Delivery Specialist in Dubai. "The level of support we received both locally from our leaders and from our colleagues who came to Dubai was heartwarming and very rewarding."



#### New Program Aims to Increase Women Innovators at Emerson

Recognizing the value of women innovators, Emerson's innovation and IP team in India organized a program aimed at increasing representation of women inventors in the company by helping them further develop their problem-solving skills. The program "WE (women employees) Innovate" was joined by 50 women employees across 12 units in India who came together to offer new ideas and solutions for addressing several existing challenges. Their collective work resulted in 25 technical and process improvements with direct impact on technology advancement and work efficiency. "Diversity in innovation unlocks vast business potential, and I believe the achievements and problems solved through the WE Innovate program can have a global impact on Emerson's products and processes," said Nilesh Puntambekar, Innovation and Intellectual Property Manager for India & South East Asia.





## Emerson Employees Making an Impact

### Emerson's Women's Impact Network Earns Seventh Consecutive Mission Award

For the seventh consecutive year, Emerson's Women's Impact Network (WIN) has been honored by the Society of Women Engineers (SWE) with its Mission Award. Through these awards, SWE recognizes groups that embody SWE core values and demonstrate continuous improvement and growth as they work to achieve the society's strategic goals. At Emerson, WIN provides support, professional development, leadership and networking opportunities for employees across the organization. As an award recipient, Emerson's WIN was recognized at this year's WE23, the world's largest conference for women in engineering and technology. The Society of Women Engineers strives to recognize the successes of SWE members who enhance the engineering profession and advocate for women in engineering through contributions to industry, education and the community.



### Cultural Heritage Celebrated with Second Annual Asia Pacific DEI Week

Continuing to strengthen and shape a culture where all employees feel valued for their unique experiences and perspectives, Emerson held its second annual "DEI Week" across its Asia Pacific locations. The event celebrated culture and employees who have championed diversity, equity and inclusion through the organization. Sponsored by Emerson's Asia Pacific DEI Council, the weeklong event featured a variety of activities, including Ethnic Day, where employees shared their cultural heritage; Educational Day, created to explore more about DEI through book reading and video viewing; a Mind & Body Wellness Day to promote holistic health for employees; and an Appreciation Day honoring DEI champions and heroes.

"In 2022, in support of Emerson's vision of shaping a more inclusive culture, we thought of celebrating the DEI spirit for a whole week," said Swati Jain, senior manager and DEI council member. "Last year, we celebrated the second DEI Week in all Emerson offices of Asia Pacific. "This has helped in increasing our employees' awareness of the culture of belongingness that we are building."



## Emerson Employees Making an Impact

### InnovateHERs Community Launches to Support Women in IT

The InnovateHERs community was launched this past year at Emerson with the intent of unifying and creating opportunities for women employees engaged in information technology (IT) roles. The community, which is open to all genders, serves as a platform for members to network, connect with leaders in the organization and benefit from learning opportunities such as training and masterclasses. Throughout the year the group sponsored several activities, including a “Get to Know our IT Leaders” event where attendees learned about the inspiring journeys of many leaders in the organization. In addition, InnovateHERs conducted “50 Ways to Fight Bias,” a two-hour interactive workshop that tackled the most common types of biases in the workplace. As part of its efforts, the community also held a learning session titled “What’s Your Vision,” where participants worked on defining their vision and translating it into an actionable plan.

“Our InnovateHERs community is cultivating a strong sense of belonging among women IT professionals at Emerson and helping them in their career journeys,” said Alejandra Sanchez, InnovateHERs chairperson.

*InnovateHERs*  
Women in IT



### Emerson’s Mosaic Buddy Program Enhances Onboarding Experience

To enhance the onboarding experience of new employees across the globe, Emerson’s Mosaic ERG launched a program in 2023 to help new joiners better acclimate to the company and their local surroundings. The Mosaic Buddy Program is designed to familiarize employees with company culture, work environments and various aspects of their role. In the process, it’s also fostering stronger connections among colleagues. Through the program employees who have moved to another location, within the same country or internationally, are paired with Mosaic Buddies who help them better understand local culture and business etiquette and serve as a source of advice. In addition, Mosaic ERG works with human resources and the Emerson Mobility Team to facilitate the transition of employees and their families.

“Mosaic Buddy Program is really a good initiative,” noted Anand Kumar, who utilized the program as part of his onboarding. “This helped me fit into the organization and feel supported during onboarding. It also helped me to get acquainted with all the essential information like workplace culture, company policies, perks and benefits and unfamiliar tasks. This program helped me be more comfortable at work. The conversations I had with my buddy were fruitful.”



# Limitless Growth

**We are creating a global community of passionate, dedicated people who are rewarded and empowered to solve the world's most complex problems.**

Emerson believes talent is a differentiator and foundational to value creation. That's why we're cultivating an environment where our people can continuously develop and apply their skills in meaningful ways. Our aim is to develop, engage and inspire employees so that they reach new heights for themselves, their teams and the company. It's our commitment to ensuring a journey of limitless growth for each person at Emerson.

Throughout the past year, we have continued to formalize our talent philosophy, engaging leadership across the company to align on management principles fundamental to the execution of this strategy. We believe that prioritizing high performance enables us to outperform our competition, and we are actively installing a framework through which we attract, develop and retain deep and broad talent across Emerson. As we develop this culture, we are committed to ensuring a diverse, equitable and inclusive work environment that empowers our people to be their authentic selves and encourages them to grow. Across roles and functions, we're working to ensure access to training and development opportunities designed to help our employees maximize their potential. We are emphasizing accountability for individual and team performance as well as for developing the next generation of talent. Imperative to our efforts is the recognition and rewarding of employees who exhibit the highest levels of performance and demonstrate our desired mindsets, norms and behaviors.

## Attracting Talent

Attracting top talent and fostering a diverse workforce is essential to achieving our desired business outcomes and overall success. We value our employees' widely varied experiences, backgrounds and perspectives and recognize the importance of diversity in driving innovation, collaboration and execution. That's why we strive to attract a wide variety of qualified, exceptional applicants. We hold our management and hiring teams accountable for ensuring a diverse pipeline of candidates throughout the recruitment process for each position, and we review our job descriptions and postings for inclusive language using an integrated software package. Additional information on our efforts to attract and retain diverse talent is found in the [Diverse People, Working Together section of this report](#).



Limitless Growth





## Limitless Growth

### Managing and Developing Talent

Our people seek learning experiences every day, whether in current or future roles, learning from peers and mentors, or through formal in-person and virtual learning experiences. Emerson is creating a world-class talent experience that leverages empowering management processes and continuous learning opportunities that inspire employees to be their best. Our learning ecosystem is fueled by relationships between employees seeking new learning experiences and people managers shaping new experiences.

Emerson’s learning methodologies are carefully blended to meet strategic needs and learners’ preferences. Modular micro-learning journeys, which support performance and develop skills, are integrated throughout the employee lifecycle. These journeys are complemented with immersive virtual or in-person learning experiences designed to accelerate the development of strategic skills.

Emerson uses a holistic approach to employee training and development, the “70/20/10 Learning and Development Framework.” Under this framework, work experiences account for 70% of an employee’s development. Through this intentional design, the majority of learning happens in the flow of work via assignments, action learning activities, structured conversations and reflection moments. Relationships, feedback, peer learning, mentoring and leaders-led coaching conversations represent 20% of development. These key interactions support knowledge transfer, sharing of experiences and self-awareness, contributing to each other’s learning journeys and building internal networks. Formal learning programs account for the remaining 10% of development, equipping employees with new knowledge and skills. Specifically, new programs and modular workshops have been introduced to help leaders foster inclusiveness among their teams and create a safe environment where learning transfer is maximized.

### Cultivating Wellbeing Among Talent

Wellbeing at Emerson is an approach to performance and productivity that includes programs, policies and practices aligned with the company’s “Support our People” goal. When wellbeing is embedded in company culture, employees feel safe, supported and engaged; leaders are equipped to address employee needs; teams work well together; and health is discussed holistically and nonjudgmentally. Emerson recognizes four pillars of health – physical, mental, financial and social – and offers benefits, policies, programs and training to support each.

**Emerson’s Wellbeing Mission:**  
Support the wellbeing of our people so they can drive innovation that makes the world healthier, safer, smarter and more sustainable.



## Cultivating Wellbeing Among Talent

### Engineers in Leadership

We aim to hire the best technical talent to help our company solve the world's toughest challenges. The Emerson Engineers in Leadership Program offers recent engineering degree recipients a unique opportunity to gain experience in a range of functional roles and assignments, including engineering, product development, supply chain, operations and sales and marketing. Participants in this program rotate across multiple world areas, business units and functions to gain a broad understanding of our company. In 2023, EIL participants were embedded across Emerson businesses in Singapore; Austin, Texas; Cluj, Romania; and Boulder, Colorado.



**Alex Dobbins**  
EIL Class 9 – 2022

*“The most rewarding part of the EIL program, for me, has been the opportunity and challenge to take on projects that are vastly different from my past work experiences. Though daunting at first, these pursuits have allowed me to gain valuable organizational knowledge, as well as confidence in my abilities. I believe that these experiences will serve me well in my future development at Emerson.”*



**Jennifer OrtegaSalazar**  
EIL Class 9 – 2022

*“This program not only nudged me out of my comfort zone with varied projects in different business units but also granted me the invaluable experience of working in a different world area. The EIL program has proved to be an amazing opportunity to kickstart my professional journey, setting the stage for a promising career within Emerson.”*



**Bamidele Oluwadare**  
EIL Class 9 – 2022

*“The Engineers in Leadership Program opened my eyes to the possibilities of where I can take my career. It gave me the opportunity to work in a different world area and with several business units, which encouraged me to grow in both my work and personal life. I’ve gained an incredible network and a valuable experience that will prepare me for future leadership roles.”*



**Kate Jarvis**  
EIL Class 9 – 2022

*“The part of the program that was the most impactful to me was the ability to sample across several job functions, business units and locations. I was able to gain a great perspective on Emerson’s diversity as a business, and it has given me a great foundation to build my career on going forward.”*



## Cultivating Wellbeing Among Talent

### MBA Leadership Program

Emerson's MBA Leadership Program is designed to cultivate the skills of participants during an intensive four-year rotational program, which offers diverse experiences designed to develop future leaders of the company. The program provides opportunities for participants to establish global networks, receive mentorship and career support from executives and participate in enriched professional and personal development activities. To fully immerse program participants in Emerson's businesses, each participant undertakes two assignments in two different locations. During this time, participants are expected to work directly with Emerson senior executives in an effort to develop their leadership skills while contributing to the company's success.



**Catherine Perseghin**  
MBA Class of 2022

*"Since joining Emerson, I've experienced abundant opportunities for both my professional and personal development. My current role has pushed me to find creative solutions to meaningful, everyday challenges. One of the most significant benefits I've gained from the MBA Leadership Program is the incredible network of talented and hardworking individuals worldwide, including my mentors, sponsors and peers. Along with expanding my network, the impactful work has led me to various stretch assignments such as serving as the chair for our youth STEM education event. This not only broadened my skillset but also allowed me to contribute to Emerson's purpose. I eagerly anticipate advancing my career and embracing the next challenge within the business."*



**Logan McDivitt**  
MBA Class of 2023

*"My participation in the Emerson MBA Leadership Program has been a unique and transformational experience. During my internship and now as a full-time employee on Emerson's Strategic Planning team, I have had the privilege to work closely with senior organizational leaders on projects critical to Emerson's future. From supporting Emerson's growth platforms to performing comprehensive market analyses, I have the autonomy to drive impactful projects to influence key organizational objectives. Additionally, the program has allowed me to build my network and given me an appreciation for Emerson's global footprint through frequent collaboration with colleagues outside of the United States. Perhaps most significantly, I have been provided with a supportive and collaborative community of peers, mentors and program alumni who have taken an active interest in my career and leadership development."*





## Cultivating Wellbeing Among Talent

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### Co-Op and Internship Experience

For years, Emerson has invested in university relations. Across the organization, our businesses are empowering, and engaging with, future leaders to bring top talent into our organization through a variety of university relations programs. For example, the Process Systems & Solutions Co-Op & Internship Program allows students to receive hands-on training while working on real-world, innovative projects that directly contribute to the business and the world around us. By working alongside industry leaders, students prepare for graduation and discover their passion for making the world healthier, safer, smarter and more sustainable.

### Tanvi Deshpande Returning intern

*“My experience at Emerson as a software development engineering intern was truly remarkable. Throughout the internship, I acquired numerous skills under the guidance of my mentors and manager. At first, I was nervous, but my team’s welcoming atmosphere and constant support quickly put me at ease. I felt comfortable asking questions and seeking clarification whenever needed. Being given a real-world project was incredibly fulfilling, as it provided me with hands-on experience and insight into team dynamics. I’ve made wonderful memories and gained skills I will carry with me into the future. The collaborative environment fostered at Emerson allowed me to grow both personally and professionally, and I am eager to continue this journey as I return for another summer as a software development intern.”*

### Board of Directors Engagement Teams

Launched in fiscal 2022, this program provides opportunities for ascending leaders to directly engage Emerson’s Board of Directors on important global business challenges and strategies. This process exposes the Board to a wider set of the company’s leaders while simultaneously providing participants a high-quality development opportunity. As part of this program, leaders are paired with others from across the organization, connecting with individuals from different businesses, functions and geographies. Members of the Office of the Chief Executive serve as executive sponsors, actively coaching and guiding program participants. The interaction between leaders and the Board of Directors facilitates meaningful discussions about global challenges and the actions that can be taken to shape Emerson’s response. For example, groups have discussed the importance of social responsibility for businesses and proposed a framework for Emerson to approach the topic and drive programs in the communities it serves.

## Cultivating Wellbeing Among Talent

### Rising Leaders Program

Emerson's Rising Leaders Program is a high-impact learning experience designed to accelerate the development of nominated leaders and prepare them for larger and more complex leadership challenges in the future. To date, the program has served 600 leaders across Emerson. Throughout a 12-month journey, participants meet both face-to-face and virtually to explore leadership topics including self-awareness, mindset, authenticity, inclusion and community leadership. Participants work in Action Learning Teams to examine real business issues facing Emerson and are given the opportunity to present their ideas to senior leaders. One key success factor of the program is the involvement of executives; each Action Learning Team is assigned a resident executive who supports, coaches and champions the team. This level of engagement helps to elevate learning, growth and development.



**Luciane Coutinho**  
Petrobras Account Director, Brazil

*"Participating in the Rising Leaders Program at Emerson has been a truly transformative experience for my career. Through the program, I am gaining essential knowledge and skills that will empower me to tackle bigger challenges with confidence and effectiveness. The opportunity to connect with a global network of talented professionals has broadened my perspective and propelled my professional growth. I am extremely grateful for this opportunity and eager to continue contributing to Emerson's success as a more prepared and engaged leader."*



**Nadine Brown**  
Vice President of Global Marketing,  
Branson

*"The Rising Leaders Program was a fantastic leadership development experience that I am very grateful for. It helped me gain excellent insights that enhanced my ability to lead myself and others more effectively and authentically. I also built meaningful relationships with a diverse group of peers and mentors that strengthened my network and expanded my view of work, life and leadership. Overall, the program was an amazing growth opportunity that reinforced my commitment to making a difference, reaching my full potential and helping others do the same."*



**Abhijeet Bhargaw**  
Finance Director, Middle East and Africa

*"At Emerson, we strongly believe in supporting our people, which puts emphasis on employee development. Participating in the Rising Leaders Program was an enriching experience that contributed greatly to my personal growth and professional development. One of the most fulfilling aspects was collaborating with fellow leaders and mentors from various departments within Emerson. This program provided me with opportunities to tackle real-world business challenges while also honing my critical thinking skills to envision possibilities for our future as a global organization. Challenging myself and stepping out of my comfort zone during this process enhanced my journey in becoming a rounded and inclusive leader."*



## Cultivating Wellbeing Among Talent

### Regional Leadership Development

As a global company, Emerson understands the importance of regional and local leadership development programs. To complement our programs and frameworks, Learning and Leadership Development teams nurture locally meaningful programs that address the needs of specific world areas.

**Asia Collaborative Engagement Program** is an experiential learning forum that provides top talent in Asia Pacific an opportunity to work on cross-functional projects that create incremental value to our business, gain exposure to senior leaders and grow their professional network.

**Europe Business Academy** is based on experiential learning, continuous feedback and mentorship. Participants experience intentional professional and personal development activities with in-person sessions focused on sales and marketing, operations, finance and leadership.

**Middle East and Africa Phoenix Program** is a program that enables leaders to partner with executives in an effort to identify growth and execution levers that contribute to the longer-term strategy and vision of the world area. Participants work together in project teams to develop and present action plans that enable the achievement of these objectives.



**Augusta Coman**  
Senior Manager, IT Service Provisioning

*"I had a great learning experience at the Emerson Business Academy! The panel discussions, workshops and keynotes from Emerson leaders were eye-opening, shedding light on how Emerson is organized to deliver value to our customers. The opportunity to meet an enthusiastic group of people in person, outside of my usual stakeholders, and enjoy the networking events was highly appreciated. We had great support and a safe learning environment created by our coaches and business contacts who volunteered their time and attention for our development."*



**MS Prakash**  
Vice President, Africa

*"Participating in the Phoenix program has been a transformative journey, aligning seamlessly with Emerson's commitment to talent development. The emphasis on experiential learning and collaborating closely with leaders to identify growth and execution levers has proven invaluable. Working within project teams, addressing real-world business challenges within Emerson during the program, has enabled me to make meaningful contributions to our organizational growth and allowed me to develop and present action plans aimed at achieving strategic objectives, providing a hands-on perspective on the intricate connection between strategy and execution. This program has not only enhanced my leadership skills but also equipped me with practical insights, empowering me to make tangible contributions to our organization's success. I am confident that the lessons learned will play a pivotal role in driving both my personal growth and our collective success at Emerson."*







## Limitless Growth

### Unlocking High Potential: Our Approach to Reviewing Performance

Aligned with Emerson's values and goal to "Support Our People," our Performance and Development Planning Process helps enable our employees to reach their greatest potential by driving effective development and performance and career discussions throughout the year.

As part of this process, employees are encouraged to leverage Emerson's digital platform for setting goals and driving career and performance conversations. This process of goal identification enables employees to better understand how their individual goals contribute to the company's broader business objectives and, in turn, drives employee engagement.

To further support our workforce with this process, a digital toolkit has been deployed with materials on setting actionable goals and evaluating performance. Within this toolkit are resources to train managers on how to measure performance in a way that is objective and without bias. Employees are encouraged to own their performance and development planning process by identifying competencies for development, setting annual goals and being open to feedback. Our expectation of our leaders is that they create opportunities for their teams to continuously develop as well as provide continuous, honest and actionable feedback. Managers are coached and encouraged to adopt a two-way feedback model to demonstrate their ability and willingness to seek and receive feedback.

### Integrating Wellbeing Into the Employee Experience

This past year marked the first full year of Emerson's wellbeing initiatives. Recognizing that a focus on wellbeing benefits the company and its employees, Emerson's program featured a variety of offerings. A Wellbeing Champions Network was launched and now includes 135 employees who are activating local programming at their sites. During May, Mental Health Awareness Month, 600 employees globally participated in a Mental Health Awareness Basics course, and Mental Health First Aid training has produced dozens of first-aiders across the enterprise. On World Mental Health Day in October, more than 1,000 employees joined Emerson's inaugural mental health mini-conference, a three-day event during which internal and external speakers led engaging discussions on resilience, mindfulness and physical health.

## Integrating Wellbeing Into the Employee Experience

### Labor Relations

We respect our employees' right to freedom of association in choosing labor organizations to represent them. We collaborate with the unions, works councils and employee associations that represent many of our employees to maintain positive relationships. In the United States, approximately 3.5% of our workforce was part of a union in fiscal 2023. Worldwide, approximately 25% of our employees are represented by an employee representative organization, such as a union, works council or employee association. Due to our strong relationships with these entities, there were no strikes or work stoppages at any of our sites in fiscal 2023.

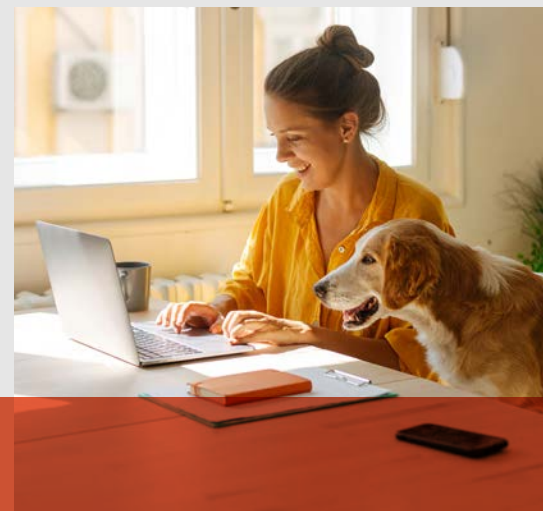
Our annual meeting with the European Works Council was collaborative and constructive. Management presented on a variety of topics, including several business overviews, sustainability, diversity and inclusion, artificial intelligence and data privacy. These presentations led to invigorating conversations where positive input and ideas were shared by all parties. The Memorandum of Minutes from these discussions were distributed to employees throughout Europe.

### Wages and Benefits

At Emerson we strive to retain and grow an exceptionally talented global workforce. Our company value "Support Our People" is reflected in efforts to provide competitive wages and benefits in the markets where we operate worldwide. Our compensation practices comply with applicable wage laws and international standards, including those relating to minimum wages, overtime compensation and legally mandated benefits. Documentation of payment details is provided through pay stubs or similar written communication in a timely manner. In the United States, our full-time employees receive a standard benefits package that includes healthcare, life insurance, disability coverage, paid parental leave, access to a retirement savings program and telehealth coverage to simplify connecting to medical resources. Benefits packages for full-time employees in other countries vary in accordance with legal mandates.

### Global Hybrid Working Policy

The dynamic of remote work and flexible time has continued to evolve at Emerson. We have implemented hybrid remote work policies around the world to support employees' pursuit of a healthy work-life balance while creating an environment aligned with Emerson's core value of collaboration. While designed to provide greater flexibility, these policies also consider the need for in-person collaboration to support innovation, professional skills development and company culture. These policies may differ by job duties, world area and local rules and regulations.



### Global Paid Parental Leave

At Emerson we understand the importance of work-life integration and strive to provide comprehensive benefits that resonate with the diverse needs of our workforce. Having a healthy work-life balance and ample family time is critical to everyone's wellbeing. Emerson recently enhanced its offerings to assist employees in their unique family formation journeys. Globally, employees can utilize a Parental Bonding, Childbirth Recovery and Adoption Primary Caregiver (PCA) benefit that provides four weeks of paid leave to bond with a new family member, in addition to eight weeks for recovery from childbirth and eight weeks for adoption primary caretakers. In the United States, Emerson also provides fertility treatment, breast milk storage and shipment services for nursing parents on business travel as well as adoption and surrogacy expense reimbursement.



## Integrating Wellbeing Into the Employee Experience

### Employee Assistance Program

Our global Employee Assistance Program offers a variety of resources to make sure our employees are supported in challenging times. The Emerson Cares initiative houses the Support Our People Fund, which is dedicated to providing financial assistance for any Emerson employee in need due to reasons such as natural disaster, damage to primary residence, or death of employee or family member. Under the Emerson Cares umbrella, this fund joins our existing Employee Assistance Program, which we expanded globally to provide all employees with mental health resources.

### Discrimination and Harassment

Emerson values the contributions of all employees and does not tolerate any discrimination or harassment. All employees are required to attend annual ethics training that reinforces this. Emerson is an equal opportunity employer that recruits, hires, trains and promotes people in all job classifications without regard to sex, race, color, religion, national origin, age, marital status, political affiliation, sexual orientation, gender identity, genetic information, disability or protected veteran status. We do not condone any form of discrimination or harassment. We provide training for supervisors and managers to enhance employee relations and help ensure compliance with all applicable laws.

### Human Rights

As members of the United Nations Global Compact, Emerson respects and promotes human rights in all of our business operations worldwide. This entails specific attention to challenging issues and activities as outlined in the values and principles of the Compact, including:

- **Humane Treatment**

We do not allow or condone any form of harsh or inhumane treatment, including sexual harassment, sexual abuse, corporal punishment, mental or physical coercion or verbal abuse, nor do we allow managers to threaten treatment of this nature.

- **Prohibition of Forced Labor**

We strictly prohibit the use of any forced, bonded, indentured, involuntary prison labor or other compulsory labor in our policies and operations. Similarly, we require our suppliers to comply with this same policy. Our policies comply with regulations, such as the UK Modern Slavery Act of 2015. Emerson fully supports these and other efforts to eradicate human trafficking worldwide.

- **Prohibition of Child Labor**

We do not allow the use of child labor in any of our facilities or businesses, and all of our employees must be of an appropriate age, as defined by applicable laws. In some cases, we support legitimate workplace apprenticeship and internship programs that conform with laws and regulations. We also prohibit our suppliers from employing anyone under the local legal working age.

Emerson's [Global Human Rights Policy](#) is designed to establish global standards related to human rights and labor for all employees, suppliers, third parties and other business partners, and to ensure compliance with those expectations.

Covered in the principles that we expect Emerson employees and its business partners to adhere to are: Equal Opportunity, Non-Discrimination and Non-Harassment, Health and Safety, Forced Labor and Human Trafficking, Child Labor, Employment Standards, Working Conditions and Compensation, Freedom of Association and Responsible Sourcing.

This policy is informed by, among other things, the International Bill of Human Rights, the OECD Guidelines for Multinational Enterprises, the United Nations Guiding Principles on Business and Human Rights, the Ten Principles of the United Nations Global Compact and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work.

Operating our worldwide business following these standards is imperative to ensuring that Emerson represents the highest ideals of ethics and integrity – for each other and the customers, industries and communities we serve.





## Integrating Wellbeing Into the Employee Experience

### Virtual Summit Explores Future of Learning at Emerson

With a focus on enhancing learning among its workforce, Emerson's global Learning and Leadership Development Community participated in a virtual learning summit this year aimed at exploring the future of learning technologies and skills. The summit provided more than 100 participants the opportunity to learn about best practices, align on foundational learning principles, share experiences and insights and hear from learning experts who presented across business units and world areas. To celebrate the event, and as part of a company-wide sustainability emphasis, summit participants inaugurated the "Let's Learn Forest," planting 100 seeds.

"This summit was a celebration of learning, sharing and the incredible spirit of our Learning Practitioners & Allies Community at Emerson," noted Cristina Querze, Director of Learning and Leadership Development. "The level of engagement was inspiring and the conversations that took place during the event helped peers from around the world connect and galvanize plans for continued learning."

### New Program Helps Employees Define Career Strategies

In an effort to help its employees in their professional growth journeys, the Systems and Solutions business launched the Aiming Ahead Career Development Program. This new program provides participants with a structured, supportive framework that enables them to engage in a career development training curriculum throughout a seven-month period. Participants range from individual contributors to managers and in some instances, directors in new roles. Through this program they engage in experiential, collaborative learning experiences that address real organizational challenges while also helping each participant to define career strategies and plans. Direct and indirect leadership skills are cultivated, aligning with Korn Ferry Leadership Architect competencies. The knowledge and training acquired during the program are subsequently applied in preparation for a conclusive presentation to an executive panel.

"For individuals not in leadership positions, this program helps them decide if they want to pursue a leadership path or explore alternative options, and for those already in leadership roles, it equips them to fulfill their responsibilities more effectively," said Joe Rollins, Solutions Learning Development Manager.



## Integrating Wellbeing Into the Employee Experience

### Emerson in Mexico Awarded Social Responsibility Badge for Sixth Straight Year

For the sixth consecutive year, Emerson has been honored with the title of Socially Responsible Company in Mexico by the Mexican Center for Philanthropy and the Alliance for Corporate Social Responsibility. The award recognizes Emerson’s unwavering dedication to integrating social value into its operations across all levels of the organization. As noted in the award announcement, through voluntary and transparent initiatives, Emerson prioritizes the wellbeing of its stakeholders, reflecting a profound understanding of its role in society. This distinction is the outcome of a rigorous evaluation process that evaluates social responsibility across multiple dimensions, including environmental stewardship, social impact and corporate governance. Emerson’s consistent demonstration of excellence in these areas underscores its holistic approach to business management, which prioritizes sustainability, both economically and environmentally.

### Emerson India Honored as Best Employer

In recognition of its HR best practices, Emerson’s India office has been named recipient of the Maharashtra State-Best Employer Brand Award for 2023. The award honors top organizations in Maharashtra, India for their achievements in various areas of importance such as talent management, recruitment techniques, employee engagement, rewards and recognition, diversity and inclusion and employee wellbeing. The award, which is endorsed by the World Federation of Human Resources Professionals and CHRO Asia, was formally conferred upon Emerson at a ceremony in Mumbai hosted by World HRD Congress. World HRD Congress aims to acknowledge leaders contributing to economic growth and promote knowledge exchange and networking for a resilient future.



“ We were humbled to receive the prestigious Maharashtra State Award for continuous efforts in driving people priorities, enhancing our culture of inclusion and belonging, and delivering value. It’s our constant endeavor to continuously listen to employee feedback, drive transformation, embrace and deliver on our ethos of ‘Support Our People,’ and create a differentiating employee experience at Emerson. ”

Anil Bhatia,  
Vice President and Managing Director, India



# Global and Local Impact

**From the customers we serve to the communities in which we live, we're making a positive impact on both a global and local scale.**

As a leading provider of automation technology and software, Emerson is advancing the world's most essential industries, but we recognize and embrace our responsibility to drive meaningful change at all levels. Our workforce development programs are equipping current workers with the knowledge and skills to adapt to new technologies. Our investments in educational initiatives are helping develop the next generation of big thinkers. Our employee resource groups are driving goodwill outreach in local communities across the world.

## Workforce Development

Emerson has long supported efforts to train the next generation of innovators and strengthen the skilled trades workforce by updating and enhancing the skill sets of workers across industries to match the evolving market and latest technological trends. Our initiatives to support workforce development include training and educational programs using our technologies and the support of hundreds of universities and technical colleges around the world that provide academic training.

Emerson offers technical and professional training in a variety of formats that suit our customers' unique needs and adhere to the highest quality standards for delivering the best possible learning experience. Through our trainings, workers are empowered to integrate new technologies into their work environments and proficiently leverage these technologies to enhance productivity and drive innovation.

## Emerson Education Services

It is essential new and existing employees have access to quality educational services and training that help ensure operations run safely, reliably and efficiently as possible. Emerson Education Services provides all aspects that lead to a quality training experience for our customers.

To meet the varying consumption preferences of our customers worldwide, Emerson Education Services offers a full range of training solutions from virtual to blended to in-person courses. Contractors, wholesalers, end-users and original equipment manufacturers across industries can participate in free, live and recorded training on Emerson's products. Using Emerson's MyTraining portal, customers can access integrated education solutions in one convenient place, searching for classes and registering and tracking their training. In addition, the functionalities in MyTraining can complement a company's learning management system, resulting in a more robust way for employers to oversee employee training.

# 12,430

*customers participated  
in our training program  
during fiscal 2023.*





## Workforce Development

### University and Technical College Programs

Emerson partners with hundreds of universities and colleges worldwide to provide the curriculum, products and training needed for students to succeed in the industries of tomorrow. A few examples include:

#### Technical University of Cluj-Napoca and Babeş-Bolyai University

Emerson continues to cultivate a close relationship with representatives and students from these institutions, collaborating on activities that support the Cluj, Romania educational environment. These include special projects for students, mentoring programs and increased access to the latest industry technologies with the intent of preparing the professionals of tomorrow. Last year Emerson inaugurated a new technical laboratory at the Chemical Faculty and modernized the existing one at the Technical University with the latest Emerson technologies and solutions for automation.

#### University of Wisconsin-Stout

Emerson's safety and productivity business has partnered with the University of Wisconsin-Stout for the past three years through a sponsored Industrial Design Studio that allows students to gain real-world experience, from research to final design solutions. Emerson's funding has supported the university in making space improvements as well as equipment upgrades to the design studio. In addition to supporting students' academic development, this partnership has provided an avenue for students to join Emerson through internships and full-time employment.



### Corporate Philanthropy

Emerson's corporate philanthropy is strengthening our communities and creating a more equitable future for all through charitable contributions, employee volunteerism and nonprofit partnerships. Recognizing the importance of corporate citizenship, Emerson cultivates, encourages and engages in a variety of philanthropic efforts across the company.

This past year, \$626,000 was donated on behalf of our employee matching gifts program, which matches full-time, U.S.-based employees' donations to 501c3 nonprofits, up to \$10,000 per year per employee. Emerson also awarded 170 college scholarships to children of employees through National Merit and Emerson's scholarship programs. In fiscal 2023, Emerson and the Emerson Charitable Trust made contributions totaling \$22 million to nonprofit organizations, educational institutions and for the company's scholarship and teacher recognition programs.

### Our Commitment to Education Equity

Recognizing that all students deserve access to a quality education regardless of race, gender or resources, Emerson began concentrating its focus on educational organizations in 2021, specifically those serving under-resourced students in early-education and grades K-12. Building on its 50-plus-year, \$324-million legacy of charitable giving, Emerson that same year announced a 10-year, \$200M commitment to education equity, with a focus on early and elementary education. Since that time, a growing percentage of Emerson's budget has been dedicated to this initiative. In 2023, 66% of the budget was directed to education organizations or programming, up from 42% in 2022 and 27% in 2021. We expect this percentage to grow in 2024 and beyond as we progress towards our \$200M goal.

*Emerson has pledged*

**\$200** million

*over 10 years, focusing on education equity in the communities in which we operate.*

### Support Our People Fund

Emerson launched the Support Our People Fund in 2021, named after the company's core value of "Support Our People," to aid employees facing financial hardship. The fund is financed through annual support from the Emerson Charitable Trust and individual employee donations. In 2023, 32 employees across eight countries received a grant from the fund, for purposes of natural disaster, death of a family member, or impact to their primary residence. The fund also enables the activation of Immediate Response Programs designed to assist employees in getting to safety quickly in qualified disasters. During the unrest in Ukraine in 2022, the Emerson senior leadership team led efforts to fund immediate needs for Ukraine-based employees. In the past year, employees were also able to support colleagues affected by the conflict in the Middle East through the fund.

## Global and Local Impact

### Emerson Employees Making an Impact

#### Emerson Supports Local Education in Mexico and the Philippines

As a global leader, Emerson recognizes its responsibility to support its surrounding communities across the world. In the past year we continued our charitable efforts in Mexico and the Philippines. In Mexico City, Emerson sponsored a secondary school's computer laboratory, donating 40 computers and furniture for its students. In recognition, the school named the new computer laboratory the Emerson Lab. In addition, Emerson hosted a STEM Day for the school's students, where they had the opportunity to tour the Emerson site and learn about the importance of science, technology, engineering and mathematics.

In the Philippines, a group of Emerson volunteers participated in the Brigada Pagbasa Project, a reading advocacy program that helps children enrich their reading skills. Complementing this effort, they also donated books to help foster improved reading proficiency and comprehension among children. In another nearby school, Emerson donated laptops and supplies such as bags, notebooks and books for schooling needs.



#### Asian & Pacific Islander Alliance Helps Create Inclusive Libraries

In an effort to help schools and libraries build and maintain robust Asian-American youth literature collections, Emerson's Asian & Pacific Islander Alliance (APIA) employee resource group recently worked with the Very Asian Foundation, St. Louis Chapter, on the May Book Project. The May Book Project, which was inspired by St. Louis high school students encouraging schools to feature more Asian American literature, is a vetted, high-quality and free resource to help libraries support readers. Through the project, APIA organized a book donation drive and book read event. About 250 books were donated by APIA to the libraries of St. Louis Public Schools. As part of awareness efforts, APIA also held a book read event at Woerner Elementary School, followed by a panel discussion with high school students at Ritenour High School.

"We are raising national awareness of the need to create inclusive libraries, give readers access to up-to-date Asian-American youth literature and provide funding to donate books to at-need libraries," said Helena Wu, APIA global chair.

As a testament to the success of the event, APIA again held a May Book Project in Minneapolis in 2024. Emerson also served as a corporate sponsor of the Very Asian Youth Concerts in St. Louis this past April to help empower AAPI youth and raise further awareness of the need to create inclusive libraries.

#### Emerson Volunteers Reach Out to Seniors in Singapore

A group of Emerson volunteers of different professions, cultures and backgrounds recently came together for a heartwarming outreach mission in which they visited senior citizens at the TOUCH Senior Activity Centre in Wellington Circle, Singapore. TOUCH Community Services is a not-for-profit charity organization that empowers seniors to lead fulfilling lives as they learn to stay physically active and socially connected. The organization manages five Active Aging Centers (AACs) located in Ang Mo Kio, Geylang Bahru, Wellington and Yishun. It was a meaningful and rewarding day for the seniors and Emerson volunteers as they played games intended to sharpen thinking through categorization, mathematics and strategy. As part of the visit, Emerson volunteers presented the seniors with gift bags that included National Trade Union Congress vouchers, pillows and pillowcases.

"It's a great but humbling experience," noted Rajeev Gopalakrishnan, Senior Director of Digital Sales, and a volunteer at the TOUCH center. "It feels good when we become part of a caring society and, as always, extending a helping hand to the needy provides innate rewards of self-realization. I'm proud to be part of Emerson and participate in corporate social responsibility activities."



## Emerson Employees Making an Impact

### Emerson Recognized for Helping Provide School Supplies to Children

For helping A Precious Child provide more than 18,000 children with backpacks filled with supplies to start the school year, Emerson has been named 2023 Corporate Challenge Winner by the Colorado-based, non-profit organization. A Precious Child provides children in need with opportunities and resources that empower them to achieve their full potential. As part of its mission, the group serves children and their families challenged by poverty, abuse, neglect or crisis situations. Through its "Fill A Backpack" program, it helps children begin each school year with the tools they need to excel academically. In 2016, A Precious Child began inviting corporations and local community groups to meet the challenge of filling backpacks for children in Colorado. In 2023 Emerson raised additional funds for A Precious Child through employee-led efforts, such as yoga classes held at the Boulder, Colorado office. As a result, thousands of underserved children started their school year better prepared to succeed.



### Emerson Teams With Junior Achievement for Youth Fundraising Event

In support of Junior Achievement's mission to inspire and prepare young people to succeed, Emerson this past year partnered with Junior Achievement (JA) of Southeast Texas to sponsor its "JA Trivia Bowl." The JA Trivia Bowl is the organization's largest peer-to-peer fundraiser. Funds raised support JA's work to provide lessons to young people in financial literacy, career readiness and entrepreneurship. Through its programs, JA engages K-12 students through experiential, hands-on and remote delivery of programs that prepare them for post-secondary education or work transition.



### Emerson Provides Books for Under-Resourced Early Learners

To promote literacy among under-resourced children in north St. Louis County, Emerson partnered with Ready Readers in 2023 in an effort that provided more than 130,000 books to nearly 15,000 children living in the St. Louis area. Ready Readers trains volunteers to connect with early-learning centers and schools in low-income areas through its Storytime Program. This program addresses the intersecting needs of children, teachers and early childhood centers by providing comprehensive support through high-quality books and experiences that reinforce emotional literacy concepts for children and families and build home and classroom libraries. Ready Readers also provides literacy-based curriculum for teachers, highlighting social-emotional development based on the books received through its Storytime Program. Research shows that children living in poverty often start school behind in literacy and social emotional skills. More than 80% of children from low-income families are not proficient readers by the end of third grade, according to national reading assessment data.





## Emerson Employees Making an Impact

### Emerson and Little Bit Foundation Help Meet Critical Needs of Students

Through its partnership with Little Bit Foundation, Emerson is actively working to support 14,000 students in the St. Louis area by helping to meet their basic needs and provide access to health education and intervention, academic assistance and career opportunities. Little Bit Foundation is embedded in school communities, serving students across every grade level. The foundation's work includes providing clothing, socks and underwear, shoes, hygiene products and school supplies. It also offers health and wellness programs in partnership with nursing students and behavioral health therapists. Nutrition programs provide emergency food kits with the assistance of local agencies. Academic support includes books for building students' home libraries and STEM programming as well as college and career readiness programming.

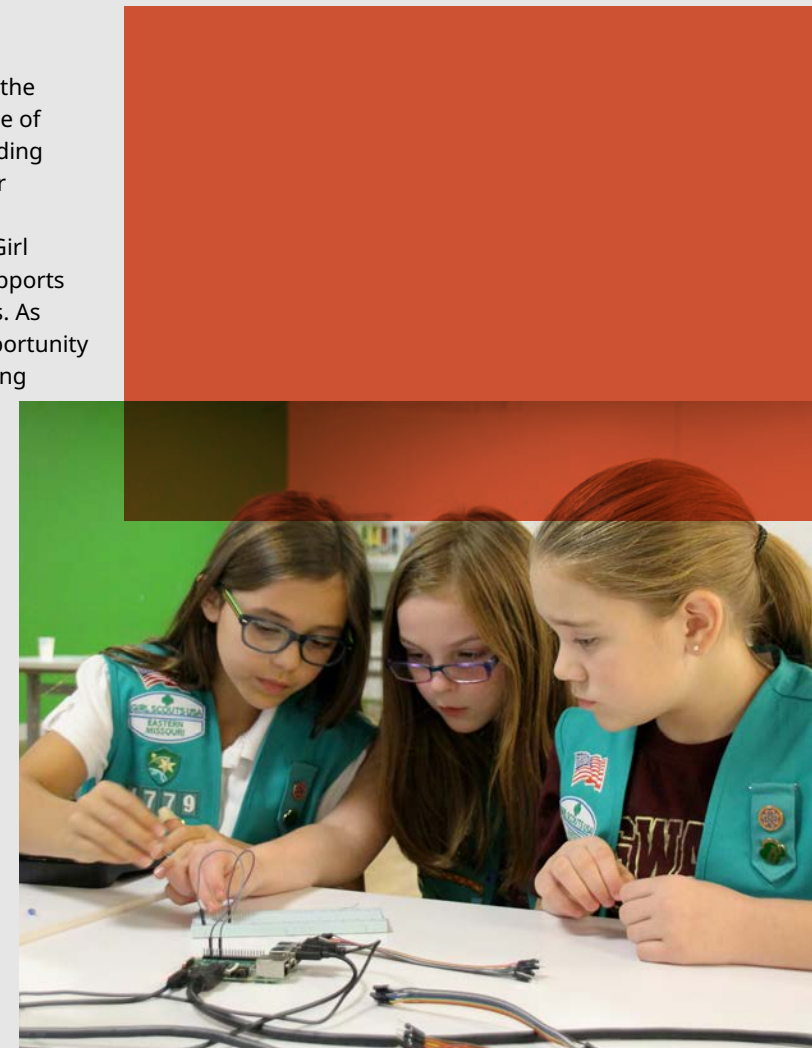
### Emerson and Greater Twin Cities United Way Team Up for 80x3 Program

Recognizing that healthy brain growth is highly dependent on enriching and nurturing experiences, especially within the first three years of life, Emerson is working with Greater Twin Cities United Way in support of a program aimed at ensuring children have a thriving start in their first 1,000 days. The "80x3" program was developed to break the cycle of poverty by delivering trauma-sensitive early childhood care and parent engagement for children in need, prenatal to age 3. The program leverages research and experts in the field of trauma-sensitive care, focusing efforts on neighborhoods in greatest need and doubling down on parent engagement to scale efforts. This initiative spans several childcare nonprofit partners throughout the Greater Twin Cities community, ensuring families and children are prepared to learn and thrive. 80x3 is designed to break barriers in training and coaching, staff recruitment and retention and family navigation by investing in the most effective shared resources at a community level. In its first year, 80x3 has supported 440 families and 100 educators.

### Emerson and Girl Scouts Collaborate on STEM Opportunities

A strong advocate of initiatives impacting the developmental and educational experience of youth, Emerson is continuing its longstanding support of Girl Scouts by joining in its "Her Future is Our Future" campaign. Through the campaign, which is the largest in the Girl Scouts organization's history, Emerson supports developing important STEM competencies. As part of the effort, Girl Scouts have the opportunity to learn about various STEM fields, including robotics, cybersecurity and automotive design. Through the Community Troop Program, these experiences reach under-served areas in the region.

"STEM is all around us; it is important to me that girls embrace STEM as part of their lives, even if they don't end up becoming a doctor or engineer or another STEM-focused career," said Mary Fuller, Girl Scout Program Manager. "The Girl Scout STEM badges allow girls to explore new topics and ideas that they will use in all aspects of their lives, and we are so grateful to Emerson for their continued partnership."



# Workplace Safety

## We are committed to providing a safe place to work for every Emerson employee.

Safety is one of Emerson's core values, and we are committed to continuous improvement when it comes to providing a safe place to work. An efficient, productive organization is a safe organization that is able to protect team members and compete effectively.

Emerson strives to achieve best-in-class health and safety performance through a structured, consistent health and safety program built on several foundational elements. These include utilizing industry best practices promoting safety and health in our communications; consistently following established rules and procedures; using proper safety equipment; reporting; and correcting unsafe acts and conditions.

The objectives of this framework are to:

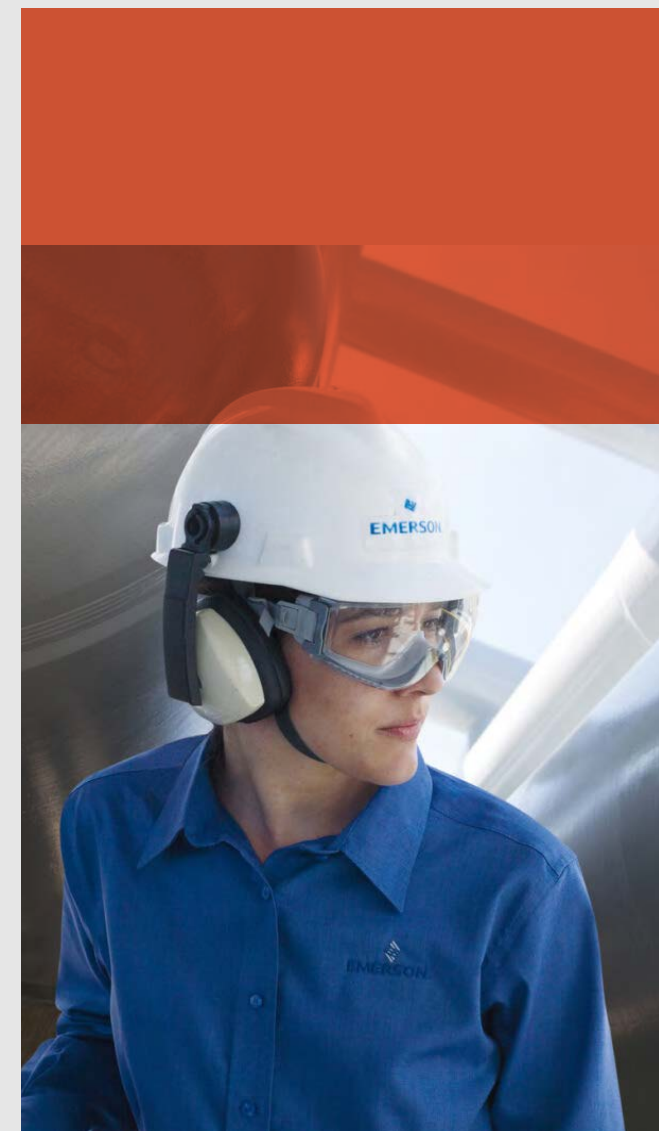
- Provide clear health and safety direction for the organization.
- Ensure the effectiveness and consistency of our EHS management practices.
- Reduce risk through proactive detection and mitigation.
- Reduce adverse impacts on our people, the environment and our communities.
- Drive continuous improvement.

Employee safety and health impact every aspect of our operations and the lives of our employees. To ensure continuous improvement, all Emerson employees must take an active role in the prevention of injuries and accidents. All employees are expected to make decisions in accordance with our Guiding Principles for Environment, Health and Safety and the 12 Lifesaving Behaviors. These critical safety behaviors were developed to help deepen our culture around safety and make safety a way of life.

### Safety Organizational Structure

Our approach to health and safety at Emerson starts at the top. Senior leaders from various functions of the business form the Emerson Corporate Safety Council. The Council is led by our Chief Operating Officer and includes members from across the business representing Safety, Human Resources and Operations. The Council provides governance, oversees safety efforts and communications and meets at least quarterly to help ensure strategic alignment and track progress on safety education, prevention, trends and compliance.

Each major location has a dedicated safety leader and receives direction from their world area or business unit Environment, Health and Safety (EHS) director. Employees are represented in various site-level teams and committees to address health and safety concerns proactively. Safety training is conducted for all operational employees, including management. We continue to use safety leadership training to enhance safety practices, fostering a culture of awareness and responsibility. This proactive approach creates a safer work environment for all employees.



## Workplace Safety

### Risk Management

In fiscal 2023, more than 80% of Emerson's workforce, spanning across all company locations worldwide, was engaged in a robust health and safety dialogue through formal joint management-worker health and safety committees. This metric reflects our commitment to inclusive safety management practices, particularly emphasizing the representation of sites with 50 or more employees. A core expectation is the establishment of an effective communication process between employees and management concerning workplace safety. This concept is often achieved through the formation of safety teams or committees, which are composed of both management and employees. While the size and structure of these teams

may vary to suit the unique needs of each facility, the underlying objective remains the same: to create a broad, representative participation across different departments and shifts while fostering a culture where safety is a collective responsibility.

Emerson mandates that each of its facilities, regardless of operational scale and facility type, adhere to compliance requirements and also strive to exceed them, embedding best practices into the fabric of safety management. In this respect, more than 84% of Emerson's employees work at manufacturing locations that have completed health and safety risk assessments.

### Measuring Performance

Emerson utilizes EHS data management software to facilitate recordkeeping related to EHS activities across the company. Emerson sites use this tool to gather, track and analyze relevant information in the evaluation and mitigation of operational risks. In addition to tracking recordable injuries, the data is also used to document and manage compliance obligations, proactive hazard identification, behavior-based safety observations, audits, inspections, EHS-related meetings, EHS impacts from organizational and facility or equipment changes and risk assessments.

SAFETY IS  
A CHOICE,  
NOT A  
CHANCE

### EMERSON'S 12 LIFESAVING BEHAVIORS



Think Safety



Report Incidents



Assess Risk



Take Action



Know Limitations



Wear PPE  
Personal Protective Equipment



Follow Rules



Clean Up



Observe Warnings



Use Proper Tools



Drive Safely



Escalate if Needed





### Measuring Performance

We also measure many execution-based metrics that serve as key indicators of EHS performance, including audit and inspection results, proactive identification and reporting of hazards, and timely closure of action items. In fiscal 2023, our employees reported over 24,000 risks or safety improvement opportunities that were proactively identified through the normal course of work. Our employees are trained and expected to find these opportunities and are empowered to surface issues and take action. In cases of imminent risk, personnel use stop work authority to mitigate immediate risk. In other cases, action items are developed by local teams to implement appropriate causes and improvements. Our teams also completed nearly 72,000 EHS action items, which were documented and tracked internally. These action items represent specific steps taken to improve safety and prevent incidents.

Emerson's safety culture focuses on employee participation, innovative practices and unwavering leadership dedication to safety. Emerson consistently achieves industry-leading safety results with our focus on continuous improvement. Days away, restricted and transfer (DART) case rates are monitored to measure injury severity. Emerson employees understand the importance of proactive actions to drive prevention, instilling their trust in the organization to support and correct identified opportunities for improvement. We believe zero recordable injuries are achievable and continue to focus on real time data analytics generating proactive solutions, adopting cutting edge technological advancements and maintaining our strong safety foundation built over the past 133 years.



*"We continue to have strong safety values combined with a data-driven, proactive culture of injury prevention. Our success in safety comes from the dedication exhibited by each and every employee. We will not be satisfied until we reach our goal of zero recordable injuries."*



Ram Krishnan  
Chief Operating Officer

*Our dedicated natural disaster alert system has over*

**64,000**  
*employees registered globally.*

Workplace Safety

# Emerson Global Health and Safety Performance



**36%**  
reduction in  
first-aid cases

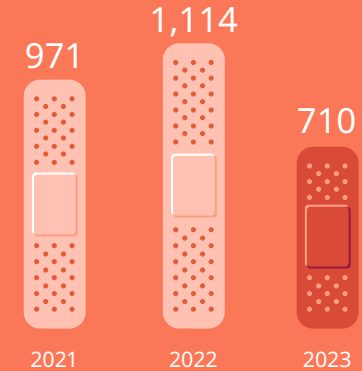
**23%**  
reduction in  
recordable injuries  
compared to FY 2022

## TOTAL RECORDABLE INJURY RATE

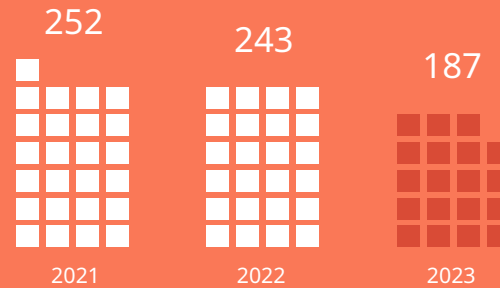


*Number of recordable injuries per 100 full-time workers during a one-year period.*

## NUMBER OF FIRST-AID CASES

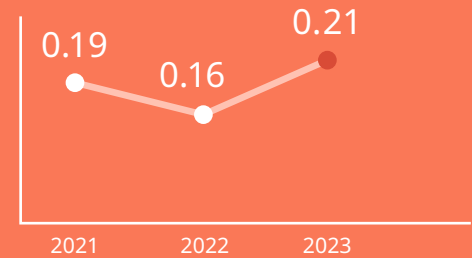


## NUMBER OF RECORDABLE INJURIES



*Injuries requiring days away from work, restricted duty or medical treatment.*

## DAYS AWAY, RESTRICTED, OR TRANSFER (DART) CASE RATE



*Number of lost, restricted or transfer workday cases per 100 full-time workers during a one-year period.*

## Workplace Safety

### I Own Safety Training Program

Emerson’s foundational I Own Safety program is based on safety ownership, which is a mindset that we try to instill within our workforce. By demonstrating awareness and taking proactive steps, employees play a lead role in ensuring that they and their coworkers stay safe at all times. We implement various strategies to develop and maintain the safety ownership mindset, including training workshops, improvement projects and awareness programs.

#### I Own Safety Workshops

The I Own Safety course is a global, five-module training series that explores the state of safety at Emerson and prepares employees to take ownership of EHS performance. The objectives of the sessions are to help ensure employees understand Emerson’s vision for safety and culture, and believe every incident may be preventable. This includes being aware of safe and unsafe elements in their environment, assessing risk to identify opportunities for EHS improvement and taking action to control risks. Emerson sites around the globe utilize concepts from the course to reinforce decision making and safe behaviors across all parts of our business.



#### Safety Moments

Managers around the world are encouraged to include a safety or value moment slide in employee communications, departmental meetings, webcasts or other meetings with more than 10 attendees. Over the years, teams worldwide have developed and shared PowerPoint templates with over 130 safety moments. These slides are designed to help connect Emerson’s 12 Lifesaving Behaviors to everyday situations, scenarios and challenges to remind people to be mindful and “Think Safety” before they decide or act.



#### Guiding Principles for EHS

##### WE TAKE OWNERSHIP

by being informed, empowered and accountable to work safely every day.

##### WE ACT WITH URGENCY

to eliminate or effectively control risks to people, the environment and our communities.

##### WE ACT PERSONALLY COMMITTED

to sustaining an environmentally responsible and injury-free workplace.

**WE BELIEVE EVERY INCIDENT IS PREVENTABLE**





## Workplace Safety

### Safety Improvement Projects

Across the globe, Emerson employees contribute safety and health improvement suggestions, and cross-functional teams work together to generate action plans and implement risk reduction activities. Emerson is intensifying safety efforts by prioritizing engineering control solutions, leveraging automation and the newest technology to enhance safety. This reduces human exposure to risks, limits potential accidents and optimizes processes for increased reliability and overall risk reduction in the workplace. Examples of this include:

- **Automated Guided Vehicles (AGV):** Emerson has employed AGVs to enhance safety by automating material handling tasks. This improves ergonomics and reduces risk.

- **Hand Safety:** Emerson is continuing to focus on hand safety to reduce injuries through initiatives such as risk assessments, tool elimination, automation and improving glove technology.
- **Robot Welding:** We are enhancing safety by implementing robot welding, automating intricate welding tasks. This technology reduces human exposure to hazards.
- **Automated Powder Painting:** Emerson has implemented robotic powder painting at several locations to enhance safety by automating the painting process.

- **Automation:** Emerson is leveraging automation to enhance safety. Automation reduces human exposure to risks, limits potential accidents and optimizes processes for increased reliability and overall risk reduction in the workplace.
- **Self-engaging truck chocks** to help secure trucks before entering to load or unload.
- **Exoskeleton technology** to aid in material handling and reduce ergonomic risks to employees.



Emerson’s annual World Safety Day was held in May 2023. It was celebrated across the globe, including at the company’s actuation manufacturing facilities in Houston, Texas and Mansfield, Ohio; the discrete and industrial site in Almaty, Kazakhstan; and Emerson’s Singapore location. In addition to wearing green to show support for safety in the workplace, sites hosted targeted risk reduction projects, hands-on training activities, safety-related games and community outreach events.

## Workplace Safety

### Site Safety Recognition

In fiscal 2023, we continued our long-standing tradition of presenting awards to Emerson sites that demonstrate outstanding performance in the areas of Safety Leadership, Safety Culture, Safety Programs, Best Practices, Audit/Inspection Routines and Results. Top-performing sites present to the Corporate Safety Council for consideration.

Highlights from the 2023 presentations include:

- **Strong organizational safety leadership** – Senior leadership was directly involved in hands-on risk reduction activities and consistent visibility and communication routines.
- **Strategic Risk Management** – Effective risk management enhances safety by systematically identifying, assessing and mitigating potential hazards, fostering a proactive approach to prevent accidents and helps ensure a secure environment.
- **Continuing Technology** – Technology and engineering controls improve safety by providing real-time monitoring, early warning systems and innovative solutions, enhancing overall risk management and accident prevention across various domains.
- **Robust safety program deployment** – Employees earned high audit and assessment scores and conducted consistent training routines.

### 2023 Emerson Safety Award for Safety Excellence

The Emerson Safety Award for Safety Excellence recognizes those locations that show a commitment to the safety and wellbeing of their employees while upholding a world-class safety culture.

In 2023, Emerson's Flow Controls facility in Szekesfehervar, Hungary, received the Emerson Safety Award. This site stands as a model of our safety culture, which prioritizes employee participation, innovative practices and unwavering leadership dedication to safety. Through active employee engagement in the Safety Committee, collaborative cross-functional teams and initiatives that drive continuous improvement, the site upholds safety excellence. Leadership at the Szekesfehervar site incorporates technologies to help ensure the safety standards in daily operations. The collective commitment at this site underscores the belief that everyone's involvement is essential to the effectiveness of our safety program.







# Governance *and Accountability*

The primary responsibility is to foster the Company's long-term success. This section provides insights into how we apply our governance, ethics and compliance programs in furtherance of this objective.

## IN THIS SECTION:

- [Overview](#)
- [Corporate Governance](#)
- [Integrity and Ethics](#)
- [Supply Chain](#)
- [Cybersecurity and Privacy](#)



# Governance and Accountability Highlights

## CORPORATE GOVERNANCE

The Board of Directors adopted Director term limits and **enhanced its oversight** of cybersecurity, human capital management and environmental sustainability.

The Board **added seven new Directors in the last five years**, underscoring the Emerson Board's commitment to ongoing refreshment.\*

**50%** of Directors are women or persons of color.\*

**2/3** of required Board Committees are chaired by women.

\*Depicts data/information effective August 2024

## INTEGRITY AND ETHICS

Ethics and reporting website and hotline **operated by independent third party** to allow for employee anonymity.

This year Emerson employees completed more than **150,000 regulatory compliance training courses**.

All employees are required to complete our company's **annual ethics training**.

## SUPPLY CHAIN

Working towards Emerson's **Net Zero emissions** across our value chain by 2045 from 2021 baseline.

Trained over **3,700 employees** on the Supplier Code of Conduct and sustainability topics.

Achieved **CDP Supplier Engagement Leader** status for a second year.

## CYBERSECURITY

Key elements of our primary data centers, cloud environments and our enterprise IT organization are **certified under ISO 27001**.

Emerson's Ovation™ technology was awarded **SAFETY Act Certification** coverage in February 2023.



Lake Superior at Hollow Rock, Grand Portage, MN  
Photo by: Daniel E. Vande Vusse | Emerson Employee



# Corporate Governance

**Emerson is dedicated to high standards of corporate governance.**

At Emerson, we take the necessary steps to help ensure our company acts responsibly and in accordance with our stated Purpose. Addressing sustainability and governance issues develops the trust and confidence of our employees, customers, suppliers, communities and shareholders. We operate all over the world and have built a comprehensive approach to all aspects of our governance activities. From our Board of Directors and executive leadership team to our employees and suppliers, we expect those who represent Emerson to uphold a high level of integrity.

## Board of Directors

Members of [Emerson's Board of Directors](#) are elected by shareholders to provide oversight and strategic guidance to senior management. A responsibility of our Board is to foster Emerson's long-term success. In fulfilling this role, each Director must exercise good faith business judgment. Our Board also has responsibility for establishing broad corporate policies, setting strategic direction and overseeing management. Management has responsibility for our day-to-day operations, implementing these policies and strategic direction, subject to Board oversight.

## Board of Directors Policies

Emerson's principles and practices are driven by its Board of Directors, which ensures these foundational elements are shaped by highly independent, diverse viewpoints and deep management expertise. Our Board's operations are guided by the following:

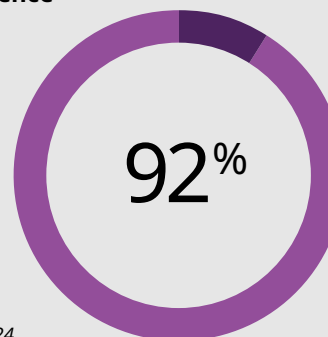
### Independence

The majority of Board members must remain independent and this independence is confirmed at least annually. In our annual Proxy Statement, Emerson publishes how shareholders can communicate with any Director, including the independent Board Chair. Our [Director Independence Standards](#) are contained in Annex II to our Corporate Governance Principles and Practices.

In May 2021, Emerson appointed James Turley as independent Board Chair. Effective August 1, 2024 Emerson's Directors include 11 independent members and one inside member, Emerson's President and Chief Executive Officer Lal Karsanbhai.

### Board Independence

- Employee Directors
- Independent Directors



Effective August 2024





## Board of Directors Policies

### Composition

Board members must bring senior management experience in business, government or other relevant organizations. We seek a diversity of viewpoints and backgrounds on our Board that helps us to understand and anticipate changes in our business environment. Effective August 2024, 50% of Directors are diverse and two of the three required Board Committees are chaired by women.

### Committees

To provide specialized oversight in many areas, Emerson's Board of Directors has five committees: Audit, Compensation, Corporate Governance and Nominating, Executive and Technology and Environmental Sustainability. Required Board Committees are independent pursuant to requirements of the New York Stock Exchange and Emerson's governance documents. More information about our Board Committees is available in the [Corporate Governance](#) section of Emerson.com.

### Audit Committee Financial Experts

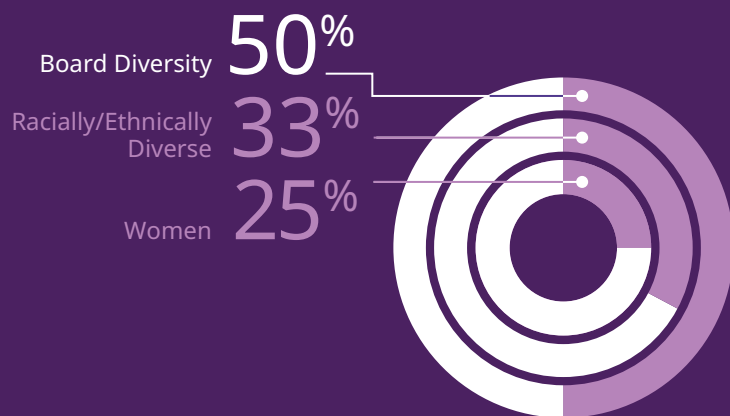
The Board determines annually whether the Company has financial experts serving on the Audit Committee. The Board determined that there are currently three members of the Audit Committee qualified as Audit Committee Financial Experts under Securities and Exchange Commission rules.

#### MORE INFORMATION



Please refer to [Emerson's 2023 Proxy Statement](#).

### Board Diversity\*



### Average Director Age\*



### Required committees chaired by women



\* Depicts data/information effective August 2024.







*Llyn Padarn in Snowdonia, North Wales, UK  
Photo by: Tim Armstrong | Emerson Employee*

## Corporate Governance

### Board Oversight of Company Strategy and Risk Management

#### Board Oversight of Company Strategy

One of the Board's responsibilities is overseeing management's development and execution of the Company's strategy. The Board receives updates from management and engages with management to understand and monitor business objectives, competitive landscape, economic trends and other developments. The Board looks to the expertise of its committees and third-party experts as needed, to inform its oversight responsibilities. The Board was actively engaged in the Company's recent merger and acquisition activities, including the Company's sale of a majority interest in its Climate Technologies business (now named Copeland), the sale of its InSinkErator business and the acquisition of National Instruments (NI).

The Board also has responsibility for oversight of the Company's risk management process. The Board administers its risk oversight both through active review and discussion by the full Board and by delegating certain oversight responsibilities to one of its committees for further consideration and evaluation of specific risks. Each committee reports to the full Board with respect to the committee's risk oversight activities on a regular basis. The Board and/or its appropriate committee receives updates from management to enhance its understanding and oversight of the Company's risk management processes. This process is designed to provide to the Board timely visibility into the identification, assessment and management of critical risks. The areas of critical risk include strategic, macroeconomic

and operational risks. In 2023, the Board restructured its committees by dissolving its Finance Committee, creating a new Technology and Environmental Sustainability Committee and redistributing the responsibilities of the Finance Committee among the remaining Committees and to the full Board. The Board created the Technology and Environmental Sustainability Committee to further enhance its oversight of issues such as product cybersecurity, technology, innovation and the Company's environmental sustainability policies and programs.

With respect to the Board's committees, the Compensation Committee provides oversight for risks associated with its purpose, including, among others, risks related to human capital. The Governance and Nominating Committee provides oversight for risks associated with its purpose, including, among others, risks related to the Company's reputation, matters of shareholder interest, social issues, laws and regulations. The Audit Committee provides oversight for risks associated with its purpose, including, among others, risks related to financial reporting, compliance with laws and regulations, reputational issues and enterprise cybersecurity. The Audit Committee also assists the Board by annually reviewing and discussing with management this process and its functionality. The Technology and Environmental Sustainability Committee provides oversight for risks associated with its purpose, including, among others, risks related to the Company's technology portfolio and the impact of decarbonization.

## Board Oversight of Company Strategy and Risk Management

### Board Oversight of Cybersecurity Risk

The Board directly, or through its appropriate committee, provides oversight of management's efforts to mitigate cybersecurity risk and response to cyber incidents. The Board and/or its appropriate committees receive regular updates on cybersecurity from management and engage in discussions throughout the year, including with subject-matter experts as appropriate, on the function of the Company's overall cybersecurity program, cybersecurity risks, strategies for addressing these risks and the implementation thereof. The Audit Committee has oversight responsibility for the Company's enterprise cybersecurity risks and the Technology and Environmental Sustainability Committee has oversight responsibility for the Company's product security risks. The Board also receives reports on significant cyber events including response efforts, legal obligations and outreach and notification to regulators and/or customers when needed, as well as provide guidance to management as appropriate.

### Board Oversight of Sustainability

Emerson recently amended the charters of its Board committees to emphasize their role in overseeing important public policy and issues of social responsibility, including product safety and environmental and sustainability policies and reporting. The formation of the Technology and Environmental Sustainability Committee also further enhances the Board's oversight of issues such as product cybersecurity, technology, innovation, the Company's environmental sustainability policies and programs.

The Board also amended the charters of its Audit, Compensation and Governance and Nominating Committees to further enhance its oversight of governance and sustainability related risks. The Board directly, or through its appropriate committee, communicates frequently with management to maintain timely visibility. The interaction between the Board, management and focused resources within the Company in providing oversight of risks associated with governance and sustainability is shown on [page 31-33](#).

Lastly, the Board receives regular updates from management on the Company's environmental, health and safety (EHS) program, processes and performance. For more information about Emerson's EHS programs, see [Safety Section].

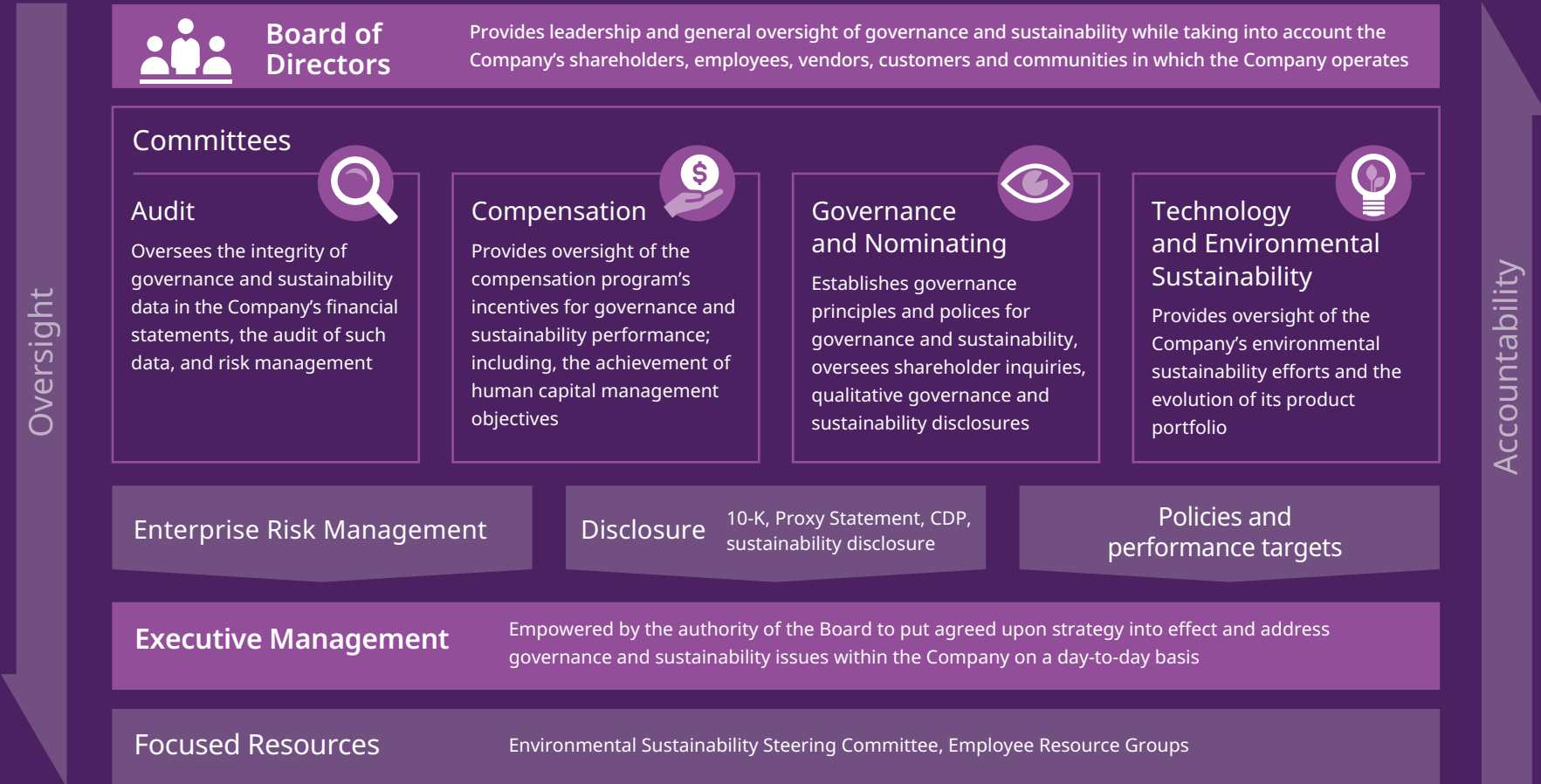
### Sustainability External Reporting Governance

Emerson has recently established a more formalized sustainability reporting governance framework. This is in anticipation of meeting the diverse range of sustainability disclosure regulations being introduced globally. The governance oversight committee includes cross-functional departments such as external financial reporting, internal audit, sustainability, legal, IT and HR underscoring the comprehensive approach we are taking to ensure compliance and leadership in sustainability governance. Key updates are provided to the Audit Committee and the Technology and Environmental Sustainability Committee of the board of directors.



## Board Oversight of Company Strategy and Risk Management

### Board and Committees Structure





## Corporate Governance

### Recent Corporate Governance Actions

The Corporate Governance and Nominating Committee periodically reviews Emerson's governance principles and practices based on feedback from shareholders, industry trends, risks and opportunities. When the Committee determines a change is necessary, it recommends the change to the full Board to approve any required policy amendments. Emerson has recently taken the following corporate governance actions:

#### Board and Committee Refreshment

Emerson is committed to reviewing our Board's composition to ensure that we continue to have the right mix of skills, diversity, background and tenure. Over the past five years, Emerson has added seven new Directors to the Board – four of which are diverse. Effective August 2024, 50% of Directors are women or persons of color and the average Director tenure is 5.2 years.

The Board also reviewed the tenure of the members of the Board on their respective committees and determined a refreshment was appropriate. In 2023, the composition of each of the Board's committees was updated, with seven of the eleven then serving Directors joining new committees as a result. The Board retained tenured members in each committee to maintain continuity while adding fresh perspectives with the addition of new committee members.

### Overboarding

The Company's Governance and Nominating Committee regularly reviews the ability of our directors to fulfill their responsibilities given the time commitment associated with each directorship. In 2022, we amended Emerson's Corporate Governance Principles and Practices to limit all non-employee Directors to serving on three other boards of publicly traded companies. Emerson's named executive officers are limited to serving on one other public board. Additionally, at least annually, the Governance and Nominating Committee reviews the outside commitments of the members of the Board, including their service on other public company boards and any leadership roles on those boards.

### Board Term Limits

Our Board believes that a balanced approach to Director tenure, which includes a mix of longer-tenured directors and newer directors, allows our Board to benefit from the experience of longer-serving Directors as well as the fresh perspectives of newer Directors. In November 2023, the Board enhanced the Company's Corporate Governance Principles and Practices by adopting term limits for all non-management Directors. Non-management Directors may not stand for re-election (i) after the date of such Director's fifteenth anniversary on the Board, or (ii) when such Director's fifteenth anniversary on the Board would occur in the first year of the term for which the Director would be re-elected, unless the Board determines that continued service by a Director would be in the best interests of the Company and waives the requirement to allow the Director to continue serving.

### Board Refreshment\*



### Board Tenure\*



\*Depicts data/information effective August 2024.

### Board Skills

- GLOBAL BUSINESS
- TECHNOLOGY, INNOVATION OR CYBERSECURITY
- LARGE COMPANY CEO OR COO
- FINANCIAL LEADERSHIP OR EXPERTISE
- CORPORATE GOVERNANCE
- OPERATIONAL LEADERSHIP
- INDUSTRY, END-MARKETS AND GROWTH AREAS
- BUSINESS DEVELOPMENT

# Integrity and Ethics

**At Emerson, we expect all employees and leaders to uphold high standards of honesty and ethical behavior in the company and when working with our customers, suppliers and communities.**

To support our ethics and legal compliance processes, we have established clearly defined policies and practices for employees through our Ethics and Compliance Program. The Corporate Governance and Nominating Committee of the Board of Directors oversees the program, using a comprehensive approach through monitoring, investigation and evaluation, with three core functional areas working together: Human Resources, Audit and Compliance and Law.

We communicate our Ethics and Compliance Program to employees through trainings, documentation and reporting channels through which employees are encouraged to escalate questions or concerns. The program is reviewed annually to help ensure consistency with the current business environment and industries in which we operate. We welcome new employees to the program during their onboarding and refresh current employees and leaders on the program through annual training.



The CEO and Senior Financial Officers Code of Ethics can be found at [emerson.com/ethics](https://emerson.com/ethics).

## Employee Code of Conduct

Our [Employee Code of Conduct handbook](#), “The Right Way,” serves as the foundation for how Emerson employees conduct business worldwide. Our Code of Conduct explains corporate policies and identifies support options for employees to ensure they always understand appropriate courses of action, or where to go with any questions or concerns. It helps Emerson ensure all employees understand what’s expected of them and have the tools to put integrity at the forefront of everything we do. This applies to everyone at all levels of our company, all the way up to our most senior leaders.

Available to all employees and the public at [emerson.com/ethics](https://emerson.com/ethics), the latest version has been translated into 23 languages. Supplemental ethics guidelines are also provided to executive officers and members of the Board of Directors to address the special responsibilities of Emerson’s leadership.

To facilitate adherence to the guidelines in “The Right Way,” the handbook is complemented by global and local policies that provide specific answers to questions about the different principles, legal obligations and local practices it covers.

## CEO and Senior Financial Officer Code of Ethics

Emerson places a high priority on maintaining honest and ethical behavior across all levels of the company, from employees to senior leaders. The CEO and Senior Financial Officers Code of Ethics outlines expectations for these leaders, including promoting integrity and providing accurate financial reporting in a timely manner. At Emerson, integrity is not only a foundational corporate value, it is also an ongoing imperative and a daily mindset that drives us forward.



## Integrity and Ethics

### Annual Ethics Trainings

To help ensure comprehension and compliance with Emerson's Employee Code of Conduct, all employees are required to complete our company's annual ethics training. The training is offered in person and online through a new internally developed e-learning module with several interactive components. The new e-learning training will allow more systematic tracking for our remote workforce. Ethics officers for each business unit will continue to certify each year that all employees have received training in compliance with the code.

**MORE INFORMATION**



Please refer to [Emerson's Code of Conduct handbook](#).

### Ethics Hotline and Reporting Process

Integrity is one of Emerson's core values that are fundamental to our company's culture and everyday actions. We succeed as a company when we have uncompromising honest and ethical behavior.

Our ethics reporting program provides employees with an efficient and trusted mechanism by which they can anonymously and confidentially report suspected or actual misconduct, ask questions, or express concerns while protecting their employment status. The program includes policies and controls to safeguard against retaliation of whistleblowers, as well as several avenues to escalate concerns, including our ethics reporting website, ethics hotline, or directly to Emerson compliance leadership. The ethics reporting website and hotline are operated by an independent third party and allow for employee

anonymity and access to reporting in over 30 different languages and local phone numbers in over 35 countries.

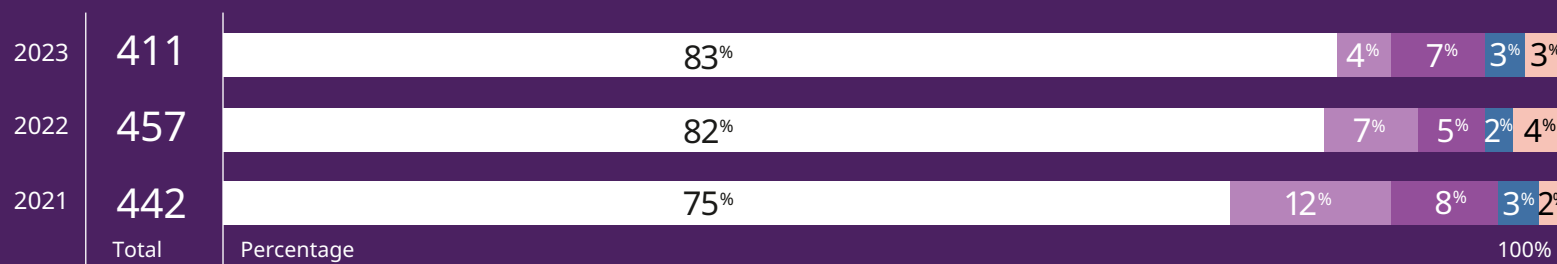
We encourage reporting concerns through our annual ethics training and our readily accessible website and hotline numbers, which are posted in all office locations and on our website. Emerson's Chief Compliance Officer also sends a message to employees each year to remind them of the various reporting channels and the importance of reporting concerns.

Reports of ethics issues are managed and investigated by a limited number of experienced and specialized Emerson management personnel. In addition, an established investigation protocol determines when an external advisory firm should be engaged due to the nature or extent of the allegations. All cases are to be investigated

and closed within 90 days and average a case closure time of 42 days. Significant ethics allegations meeting Emerson's set criteria must be immediately reported to the Chief Compliance Officer and the Chair of the Audit Committee of the Board of Directors.

The case resolution and remedial actions of these cases are reviewed and approved monthly by the Ethics Committee, comprised of senior leadership from compliance, legal, human resources, finance, sustainability and operations. The Ethics Committee review helps ensure consistent and appropriate remedial action. Actions include termination, written and verbal warning, training and awareness and policy and control changes. Examples of these actions are shared with Emerson employees in the annual ethics training program. The case resolution and remedial actions are also reviewed quarterly by the Audit Committee of the Board of Directors.

### Types of Ethics Concerns Reported



Reports per 100 Employees

0.48

0.53

0.51

- HR and Workplace Respect
- Environment, Health, Safety
- Business Integrity
- Misuse or Misappropriation of Corporate Assets
- Accounting, Auditing, Financial Reporting



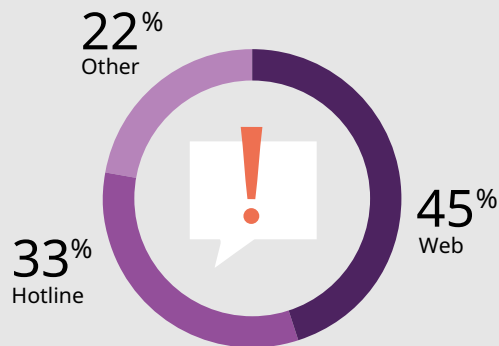
### Ethics Hotline and Reporting Process

We also monitor key reporting data such as the volume of reports made by the number of employees, region and type of allegation, as well as the substantiation rate. This data, regardless of whether the report is substantiated, provides important insights into our culture, concerns of employees, policies and training. We report these trends, along with any related modifications to our program, training and polices, to the Audit Committee of the Board of Directors on an annual basis.

In 2023, 73% of our business integrity claims and financial claims came from named sources, indicating trust in our program. 83% of total claims were related to human resource matters such as workplace civility. This is due to a greater global focus on social issues, focused training on workplace respect and encouraging employees to feel comfortable reporting their concerns. While these claims had a low substantiation rate of 23%, they allow us to address concerns quickly.

The ethics reporting program, reviewed annually by internal and external auditors, is an important tool to address potentially problematic issues timely fashion and ensure we are operating with the utmost integrity.

### Emerson Ethics Reporting Concern Methods



### Emerson Ethics Reporting Process



**73%**  
of our business integrity claims and financial claims came from named sources.



## Integrity and Ethics

### Anti-Corruption Controls

Emerson's anti-corruption program is founded on a comprehensive policy that guides the procedures and the required internal controls with respect to anti-bribery, prohibition of facilitation payments, cooperation with internal investigations, gifts, accurate books and records, anti-money laundering and third-party intermediary due diligence and management, among other related topics. The policy is translated into eight languages and is available electronically to every employee globally.

Emerson has implemented detailed processes intended to prevent corruption across its global operations. Each business unit is required to certify an Internal Control Questionnaire quarterly, which includes anti-corruption controls. Emerson's internal audit team conducts annual on-site anti-corruption audits for specific identified risks, as well as quarterly audits of data analytics procedures.

We also administrate a comprehensive, multi-tiered anti-corruption compliance training program. Our annual anti-corruption training program includes four elements. First, employees globally receive annual ethics training that includes an anti-corruption component. Second, Emerson conducts an online training course for salaried employees and new hires on a three-year cycle. This course is translated into 14 languages, with content refreshed to address new and emerging risks and delivered at the beginning of each 3-year cycle.

Third, salaried employees are required to take functional department training focused on relevant regulatory compliance topics on a 3-year cycle. Finally, several live anti-corruption training courses are provided annually, including detailed training for personnel involved in third-party intermediary due diligence focusing on the due diligence process, anti-corruption compliance risk and bribery red flags.

Our policies and trainings are supplemented by a risk based third-party intermediary due diligence program. Prospective third parties that engage in business with Emerson are required to complete a due diligence process before an order can be processed. Additionally, third parties are screened against real-time data and regulatory requirements, including various sanctions, anti-corruption and money laundering lists. They are subject to internal and external due diligence processes, focusing on locations and intermediaries that operate in high-risk countries and industries.

We continue to refine our program when appropriate. This year, we implemented a fully automated third-party due diligence system that includes enhanced reporting and auditing abilities. We also engage outside experts to perform periodic reviews of our program and have processes to address any identified areas for improvement.

## Integrity and Ethics

### Regulatory Compliance Training

Emerson manages an annual Regulatory Compliance training program globally. The program covers a variety of compliance topics such as Sanctions and International Trade, Anti-Corruption and Third Party Intermediary Due Diligence, Antitrust, Product Environmental Compliance, Environmental, Conflict Minerals, Data Privacy, Product Security and Cybersecurity.

Emerson employees annually complete more than 150,000 compliance training courses through this program.

### Conflict of Interest Evaluation and Reporting

Conflicts of interest are taken seriously at Emerson. Salaried employees complete an annual questionnaire to identify potential conflicts of interest between Emerson and any member of its Board of Directors, officers or employees. All newly reported conflict of interest cases are investigated and acted on within 30 days. This questionnaire is provided in 22 languages and approximately 35,000 Directors, officers and employees responded in fiscal 2023.

### Compliance Risk Oversight

Quarterly, members of Emerson's Compliance Committee meet to discuss new or existing compliance risks based on emerging trends. Emerson regularly engages a third party to review its ethics and compliance program and assess its alignment with U.S. Department of Justice (DOJ) guidelines, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework and other leading practices. The most recent review confirmed that the program is aligned with these practices.

### Areas of Compliance Risk Oversight at Emerson

- Antitrust/Competition Law
- Anti-Corruption
- Anti-Money Laundering
- Conflict Minerals
- Conflicts of Interest
- Cybersecurity
- Data Privacy
- Diversity, Equity and Inclusion
- Environmental
- Ethics Allegations
- Health and Safety
- People Treatment
- Product-Related Environmental Law
- Product Safety
- Records Management
- Trade Compliance

150,000    
annual compliance training courses completed.



# Supply Chain

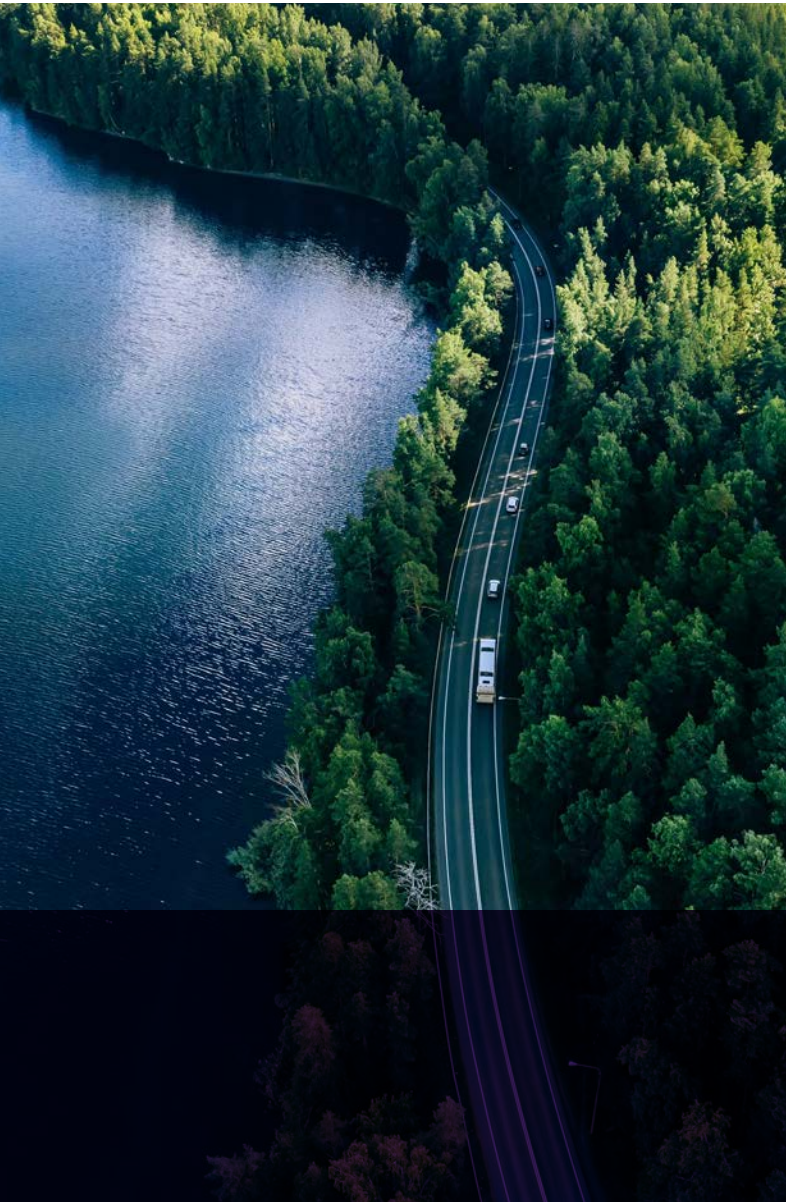
**Secure, resilient and sustainable supply chains are central to the global energy transition. Collaborating with our supply chain partners is therefore essential to drive progress in Emerson's responsible sourcing efforts.**

As a large global business with highly specialized products sized and tailored to customer-specific applications, Emerson manages a complex supply chain. In 2023, Emerson sourced commodities, not limited to plastics, electronics, steel, machined parts and non-ferrous materials, from over 15,000 direct material suppliers. To manage this complexity, we maintain resilient supply chain operations through multi-sourcing, regionalization, digital solutions, an agile logistics network and collaboration with our supply chain partners.

We remain focused on doing our part as a global business leader to drive tangible, sustainable business practices. Therefore, we expect our suppliers to uphold the highest level of integrity toward people, stewardship of natural resources and ethical practices. Our Responsible Sourcing Program is the framework which brings Emerson's causes into a supply chain context. Emerson uses its Responsible Sourcing Policy and Supplier Code of Conduct to guide sourcing procedures and engagements with supply chain partners.

The [Supplier Code of Conduct](#) communicates supplier expectations in alignment with the Responsible Sourcing Framework. A supplier self-assessment survey that targets suppliers who cover a majority of Emerson's direct material spend is used to ensure supplier adherence to the Supplier Code of Conduct. We have received survey responses from suppliers representing 60% of direct material spend.

The [Responsible Sourcing Policy](#) sets expectations for Emerson's supply chain organization to ensure suppliers' sustainability programs evolve with Emerson. We are working with a third-party service to collect GHG emissions data from our top 500 suppliers in 2024.



**RESPONSIBLE SOURCING FRAMEWORK**



**HUMANITY**

Partner with Emerson suppliers who demonstrate a commitment to **integrity, respect, fairness and honesty** to both their employees and the environment.



**INCLUSION**

Ensure **equal opportunities for all** suppliers, including those who reflect the communities where we live and work.



**PLANET**

Reduce our upstream Scope 3 GHG emissions by **25% by 2030** and achieve **Net Zero by 2045**, compared to a 2021 baseline.



**CHAMPION**

Ensure an **adaptable supply chain** network which anticipates evolving regulatory requirements and customer expectations.



**FUTURE**

Develop the **next generation of supply chain leaders** by collaborating and partnering with educational institutions to explore solutions to global challenges.

**Supply Chain**

**Creating a Culture of Responsible Sourcing**

Over 3,000 Emerson employees participate directly in the management of our global supply chain, from strategic materials and energy sourcing for our own facilities to the fulfillment of finished goods for customers worldwide. Together, this group works with over 15,000 suppliers worldwide.

**Implementation of a Responsible Sourcing Policy**

Emerson developed its Responsible Sourcing Policy in 2023, which guides supplier performance management processes by establishing tiered supplier expectations. The minimum standard applies to all suppliers, who must meet Emerson's Supplier Code of Conduct expectations. Emerson's purchase order Terms and Conditions and standard supply agreement explicitly state this minimum standard. The Responsible Sourcing Policy also sets forth evolving supplier expectations toward best practices, which include, but are not limited to providing evidence of actions to risk-mitigate human rights and labor violations and inhumane treatment, to calculate their greenhouse gas emissions and to set emissions reduction targets. Supplier performance and progress in these areas will be measured and incorporated into supplier business reviews and scorecards.

**Responsible Sourcing Steering Committee**

In 2022, the Responsible Sourcing Steering Committee was established to oversee Emerson's Responsible Sourcing Program, integrating environmental, social and governance values into our supply chain processes. The members of this group include supply chain leaders from our businesses and other cross-functional sustainability teams, who meet regularly to review and approve program recommendations on target-setting, communications and incentives for compliance with our Responsible Sourcing Policy.



Find Emerson's Responsible Sourcing Policy [here](#)

Emerson's regional North American Responsible Sourcing Champions met in St. Louis to review supplier sustainability awards nominations and implementation plans for supplier emissions data collection.

## Creating a Culture of Responsible Sourcing

### Responsible Sourcing Champions

The local adoption of Emerson's Responsible Sourcing Program, is driven by Responsible Sourcing Champions from our businesses. They contribute their perspectives on supplier management, influencing processes to engage suppliers on Responsible Sourcing Policy expectations. They coordinate the exchange of supplier sustainability best practices through quarterly Responsible Sourcing webinars, internal playbooks and strategic supplier engagements.

### Training

Ensuring our employees have a consistent understanding of our strategies, expectations, policies and tools enables them to effectively manage the suppliers they work with most frequently, speeding up decision-making and response times. We have trained over 3,700 employees on our Supplier Code of Conduct, Energy Treasure Hunts, Scope 1 and 2 calculations and the use of dashboards to model how purchases of different commodity types influence Emerson's greenhouse gas footprint. By training our supply chain employees on common policies and processes related to Responsible Sourcing risk-mitigation and compliance, we can achieve a well-performing supply chain community. Additionally, we have openly shared our training modules with our Supply Chain partners, supporting them to reach essential sustainability milestones.

### Digital Supply Chain

Emerson's Supply Chain Center of Excellence team is enabling better use of data to support responsible sourcing decisions. This includes information on processes, quantities, raw materials, energy consumption and ethics. Our metric dashboards convert this data into actionable insights for use by our supply chain organization. We collaborate with our suppliers to use these insights to optimize cost, lead-time, quality and emissions.



# 3,700

*employees trained on Supplier Code of Conduct and Sustainability topics.*



## Supply Chain



### Engaging Emerson's Supply Chain Partners to Join our Journey

As part of Emerson's journey to net zero emissions, we have established Scope 3 emissions targets that include the impact of our suppliers. Many of these suppliers provide carbon-intensive commodities, from electricity to steel castings. Our shared mission working with our suppliers is to reduce absolute carbon across the entire supply chain while maintaining material integrity and responsiveness.

#### Greening Together Summits

The road to net zero emissions is a shared one. Our attitude is that we can learn from each other and the more we collaborate, the better and faster we advance. Over the course of three years, we have built an awareness of best practices and techniques for driving sustainable operations, culture and target-setting with suppliers. Through

our in-person Greening Together Summits, we have convened leaders from key suppliers in industries such as electronic components, logistics and transportation, steelmaking, plastics and energy to learn from each other's experiences.

Since 2021, Emerson has hosted six Greening Together Summits, engaging over 40 suppliers who represent about 20% of our direct material

and logistics greenhouse gas emissions. The summits have built a foundation for how we collaborate and accelerate sustainability action with suppliers, which our local businesses will continue to drive. We have seen suppliers rise to action, establishing their own sustainability governance and targets and implementing reduction initiatives.

#### Asia Greening Together Summit

Leaders from 17 key suppliers across Asia joined Emerson for an engaging dialogue on opportunities for sustainability improvements. Representatives from Peekay Steel Castings (P) Limited and Baoshan Iron & Steel Co., Ltd. were among the speakers who shared their experience. Several suppliers who had attended the Greening Together Summit in previous years reported back to Emerson on developments in their Scope 1, 2 and 3 emissions calculations and explained how they implemented energy efficiency programs and renewable energy purchases.





Sustainable businesses need sustainable supply chains. For the second year, Emerson is proud to have earned a place on CDP’s Supplier Engagement Leaderboard for fiscal 2023, recognizing our work in measuring and reducing climate risk in our supply chain. CDP is a not-for-profit organization that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.



### Supply Chain

#### Responsible Sourcing Webinars

In 2023, Emerson launched its Responsible Sourcing Webinar series to communicate its net zero emissions targets in a virtual setting and reach a broader audience of both suppliers and Emerson internal supply chain stakeholders. Purchased goods and services, capital goods and upstream logistics make up a significant portion of Emerson’s Scope 3 footprint. The webinars are hosted on a quarterly basis to foster a community of knowledge-sharing and alignment on supplier expectations and to collect feedback for effective collaboration. Emerson has reached over 290 suppliers through the webinars, discussing the significance of our science-based targets, embedding sustainability into culture and providing an overview of Emerson’s Scope 3 upstream emissions calculations.

#### Greening Logistics

Emerson is actively advancing its strategies to decarbonize logistics, focusing on high-impact initiatives that contribute to our commitment to reduce Scope 3 emissions by 25% by 2030 and achieve a net zero value chain by 2045, using a 2021 baseline. An important strategy involves shifting to more carbon-efficient transportation modes to significantly lower emissions. We’re also collaborating with our logistics providers to understand how they are decarbonizing their fleets through, for example, electrification and the adoption of Sustainable Aviation Fuel (SAF) for aviation.

To foster a collaborative approach, we’ve engaged our logistics partners in our Greening Together Summits, sharing best practices and encouraging joint efforts in environmental sustainability. Our collaboration with strategic partners also extends to data exchange, integrating their emissions data into our performance metrics for greater transparency and accuracy. By focusing on regionalization and mode shift, we’re also reducing transport distances, cost and fuel consumption. These efforts are vital components of Emerson’s strategy to meet its emission reduction targets and lead by example.



“ Collaboration and dialogue with our supply chain partners is critical to Emerson’s target of achieving a Net Zero Value Chain by 2045. ”

Fred Perreand,  
Vice President Global Supply Chain Operations



## Supply Chain



### Emerson’s Suppliers Use Sustainable Materials and Improve Energy and Waste Management

Emerson is working with suppliers, customers and universities to improve its analytical models and find innovative ways to positively impact its net zero emissions and humanity strategies.

#### Supplier Emissions Data Collection

Emerson is utilizing a third-party platform to engage and begin collecting emissions data from our top 500 suppliers, who represent a majority of our Scope 3 emissions from direct materials. In accordance with the Greenhouse Gas Protocol, we are working to enable performance tracking of our supply chain emissions data by transitioning from the spend-based method to the hybrid method. The hybrid method requires the collection of Scope 1 and Scope 2 emissions data directly from suppliers, as well as their upstream emissions, allocating them to Emerson and using secondary data where supplier-specific data is not available.

Collecting supplier-specific data will allow benchmarking of supply chain partners, by tracking emissions reductions at individual companies. This will expand transparency and management of greenhouse gas emissions by our supply chain organization. To support data collection of sufficient quality, Greenhouse Gas Protocol data quality indicators on technological representativeness, geographical representativeness, temporal representativeness, completeness and reliability will be considered.



Refer to the [Net Zero Value Chain Progress section](#) of this report for more information on Emerson’s Scope 3 GHG emissions inventory and progress to date.

*Mt. Pinatubo, Zambales, Philippines  
Photo by: Sheila Marie Villanueva | Emerson Employee*







Supplier engagement has become increasingly important as Emerson Cluj works to improve the sustainability of our packaging solutions. To emphasize our need for sustainable packaging, we have invited suppliers to factory tours, to see firsthand where improvements can be made. Our suppliers have been extremely receptive to our request for more sustainable packaging designs and we have benefited from their expertise throughout the design process. Given the complexity of our products, collaboration has been essential to effectively review packaging solutions. We encourage face to face meetings and visits, where we can test sample designs with our products and discuss improvements. We are working to consolidate suppliers, in order to maintain closer relationships with the most innovative partners and to ensure our alignment on values.



## Emerson's Suppliers Use Sustainable Materials and Improve Energy and Waste Management

### Sustainable Packaging

The Emerson Packaging Council and Enterprise Technology Group formed a Sustainable Packaging Working Group in 2022. One strategic objective of the Working Group is to eliminate single use plastics in our packaging designs by working with local sites to eliminate expanded polystyrene as inner fill in corrugated cartons by utilizing a pressed pulp design and transition to die-cut corrugated inserts in place of thermoformed plastic trays. We also use recycled kraft paper fill in place of foam peanuts or plastic bubble wrap. These projects eliminate waste destined for landfills and also significantly reduce packaging and product costs.

### Conflict Minerals Statement

Emerson supports efforts to end the human suffering and environmental impact that are associated with mining conflict minerals in the Democratic Republic of Congo and adjoining countries, as well as in other conflict affected and high-risk areas. We expect our suppliers and their suppliers to acquire minerals only from responsible sources.

We have been a member of the Responsible Minerals Initiative (RMI), formerly known as the Conflict-Free Sourcing Initiative, since 2014. Through RMI, we have been ensuring responsible mineral sourcing by conducting risk-based reasonable country of

origin inquiries to identify the origin of items known to contain, or with high probability of containing conflict minerals in our supply chain. Relevant suppliers are requested to complete RMI's Conflict Minerals Reporting Template (CMRT), which facilitates disclosure and communication of information regarding smelters and refiners that provide material to a manufacturer's supply chain. Our supplier outreach efforts also include web-based training opportunities and escalation procedures for non-responding suppliers.

Our due diligence measures have been designed to conform, in all material respects, with the due diligence framework presented by The Organisation for Economic Co-operation and Development ("OECD") in the publication OECD (2013) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: Second Edition, OECD Publishing ("OECD Guidance") and the related Supplements for gold and for tin, tantalum and tungsten, including the Final Downstream Report on one-year pilot implementation of the Supplement on Tin, Tantalum and Tungsten.

Our expectations are described in more detail in our [Emerson Conflict Minerals Statement](#) and [Form SD filing](#), which are available at Emerson's website.

Supply Chain



Supplier Sustainability Awards

Recognizing the efforts and initiative of our suppliers is important to incentivizing sustainability action and collaboration in our supply chain. This year, we launched our inaugural Supplier Sustainability Awards, inviting strategic suppliers across all business groups to participate. We were thrilled to see the engagement from our suppliers and to benchmark their performance according to Responsible Sourcing Policy supplier expectations.

We understand that our suppliers are at different maturity levels. We assess on criteria that we consider to be foundational and achievable by suppliers of all sizes and industries. Seven suppliers were recognized for their transparency on Scope 1, 2 and 3 emissions data and targets, communication of unique business challenges, ensuring accountability through internal sustainability governance and for meeting standard supply chain expectations on quality, on-time delivery, lead-time and cost.

Supplier Sustainability Awards

Peekay Steel Castings (P) Ltd  
Final Control

Emerson purchases steel castings from Peekay Steel Castings (P) Ltd, a family-owned business. They have operational emissions reduction targets in the near- and long-term, with quantifiable reduction initiatives not limited to metals recycling and reuse, sand waste recovery, transitions to less carbon-intensive fuels, electrification of forklifts, investments in solar and wind energy and energy efficiency improvements in wastewater treatment operations.

“ We at Peekay, are thrilled by this recognition. Emerson has always driven us towards a more sustainable future as well as overall excellence. We look forward to continue engagement on achieving the Net Zero targets for both our organizations. ”

K.E Shanavaz,  
Joint Managing Director at  
Peekay Steel Castings (P) Limited

Gramm Tek Inc.  
Measurement & Analytical

Gramm Tek Inc. supplies stainless-steel casting and machined parts to Emerson and annually reports Scope 1, 2 and 3 greenhouse gas emissions across all manufacturing sites. They have implemented Lean methodologies to minimize waste and increase wastewater recycling and installed on-site solar panels. They are also advancing their renewable energy procurement strategies and have conducted initial lifecycle assessments for certain products.

Pradeep Metals Limited  
Measurement & Analytical

Pradeep Metals Ltd. provides stainless-steel forgings and machining services to Emerson. Their sustainability program has gained momentum in recent years and they have assessed emissions reduction opportunities covering Scope 1, 2 and 3 emissions. To meet their near-term target for operational emissions, they have entered into Power Purchase Agreement and net metering with their utility provider, for company owned solar and wind installations. They have also achieved energy savings through heat-recovery installations on heat treat gas furnaces and converting forging furnaces from gas to induction.





Supply Chain

Supplier Sustainability Awards

Senior Aerospace Bird Bellows Pressure Management

Senior Aerospace Bird Bellows (SABB) is a manufacturer of mechanical formed bellows, which Emerson purchases in various sizes for pressure relief valves. SABB has approved near- and long-term science-based targets and implemented initiatives to reduce Scope 1, 2 and 3 emissions. Some of these include renewable energy purchasing, engagement with suppliers on greenhouse gas emissions, internal sustainability trainings and an internal carbon price.



Dell Technologies Systems and Software

From servers and virtualization solutions to displays and client devices, Dell Technologies products are used in Emerson projects around the world. Dell has product energy footprint details readily available and continues to provide tools and solutions to increase energy efficiency. They continue to drive responsible manufacturing throughout their operations and supply chain as part of their strategy to achieve their near- and long-term targets approved by the Science-Based Targets Initiative.



Boamax Industrial Co., Ltd Actuation Technologies

Boamax supplies high quality castings to various industries including automotive, oil and gas and locomotive. In addition to being a high performing supplier to Emerson's Actuation North America business, Boamax has also completed and verified their Scope 1 and Scope 2 emissions with a third party and has implemented an energy savings plan for their central furnace.



USCO America Inc DBA Seedsware USA Discrete Automation

Emerson purchases touchscreens from Seedsware USA, a leading global provider. Seedsware merged with DMC Group in 2023, which has published an annual sustainability report since 2017. These reports contain public disclosure of Scope 1, 2 and 3 emissions, risks and opportunities across their value chain and transparency into their sustainability policies and program management.





## Supply Chain



### Emerson Suppliers Are Focused on Integrity, Respect, Fairness and Honesty

Emerson’s values center on the fair, ethical and responsible treatment of people and natural resources. Following Emerson’s Supplier Code of Conduct, we expect all suppliers to support Emerson’s values, especially as they relate to ethics, human rights and the fair treatment of their workforce. Emerson’s purchase order terms and conditions as well as our standard supply agreement explicitly state we expect our suppliers to comply with the Supplier Code of Conduct.

We conduct a self-assessment survey, where suppliers report their performance on these topics. These suppliers represent a majority of Emerson’s direct material spend and are assessed on their adherence to our Supplier Code of Conduct and Responsible Sourcing Policy expectations. We have transitioned our survey cycle from an annual to a bi-annual process, enabling us to assess a larger group of suppliers. In our most recent survey cycle, we received responses from 60% of our suppliers by direct material spend.

#### Ethics

Emerson policies and practices direct employees and business partners to conduct business lawfully and ethically in all commercial interactions. This includes a commitment to anti-corruption practices and preventing the inducement of any undue influence or favor in commercial transactions. To provide a consistent and responsive ethics process, Emerson provides an ethics hotline in more than 37 countries. This allows any person to anonymously report ethics concerns related to an Emerson employee or a business partner.

#### Workforce Safety

Emerson has a strong safety culture and our aim is to ensure that every employee returns home safely each day. The company also encourages its suppliers to prioritize the safety of their employees. As such, Emerson benchmarks safety practices with its suppliers, sharing its standards and providing training. A focus on safe operating conditions is a criterion for doing business with Emerson.



Since 2021, Emerson’s Isolation Valves business has hosted Safety Council meetings with strategic global foundries. The Safety Council meets with suppliers on a quarterly basis, inviting leaders and safety officers to present on their performance and future-looking management plans. Our goal is to collaborate among the workers in our value chain. Discussions on safety-related best practices are also integrated into the onboarding process for these strategic foundries.



### Supply Chain



### Emerson and Our Suppliers Create Inclusive, Diverse Workplaces

Emerson believes strongly in the business impact of providing an inclusive workplace and striving for a diverse workforce. Diverse and inclusive workplaces draw on the strength and contribution of all individuals. Emerson has published targets on representation of women in leadership roles and representation of underrepresented groups in leadership roles in the United States context. We also actively encourage and advocate youth to consider science, technology, engineering and mathematics (STEM) subjects in their educational focus.

Emerson's suppliers range from diverse and small family-run businesses to large enterprises. Our desire for diversity and inclusion within our own organization extends to all parts of our business, the industries we participate in and the communities where we are located. We actively invite our supply chain partners to join us in this same mission to build diverse teams, encourage inclusive work environments and encourage more youth participation in STEM-related education and careers.

Emerson's policies and codes, including our [Global Human Rights Policy](#), [Employee Code of Conduct](#) and [Supplier Code of Conduct](#), lay out the requirements for all our employees, suppliers and business partners to prohibit discrimination or harassment on the basis of race, color, religion, sex, gender identity, sexual orientation, age, disability, national origin, or any other unlawful factor.



For more information on Emerson's Diversity, Equity and Inclusion commitments and initiatives, refer to [pages 107-116](#).





## Supply Chain

### Serving Customers with a Resilient, Agile Supply Chain

Our purpose is fulfilled through our customers and the work they do, such as supplying the world with electricity, heating and transportation fuels, fresh foods, life-saving medicines, safe drinking water and more. Emerson’s portfolio of technologies and software serves as the central nervous system of some of the world’s most productive and important manufacturing facilities. Maintaining a resilient supply chain that supports these companies is a core mission of our supply chain team.

Using a third-party monitoring service, Emerson is monitoring over 2,600 suppliers for a broad spectrum of risks, including financial, natural hazards, geopolitical and man-made risks. We continue to strengthen action plans to mitigate these risks through levers like multi-site sourcing, diversification of suppliers, agile logistics systems and critical inventory buffers.

### Component Lifecycle Management

Given that many of Emerson’s customers operate facilities for multiple decades, they value being able to rely on our products over many years. This can be extremely challenging as some electronic components have frequent product refresh cycles. Emerson proactively tracks electronic component lifecycles using a third-party application, which allows it to address components nearing end-of-life. We continue to improve multi-sourcing by identifying alternative components and work diligently to streamline the new product development process and minimize supply chain disruptions.





### Serving Customers with a Resilient, Agile Supply Chain

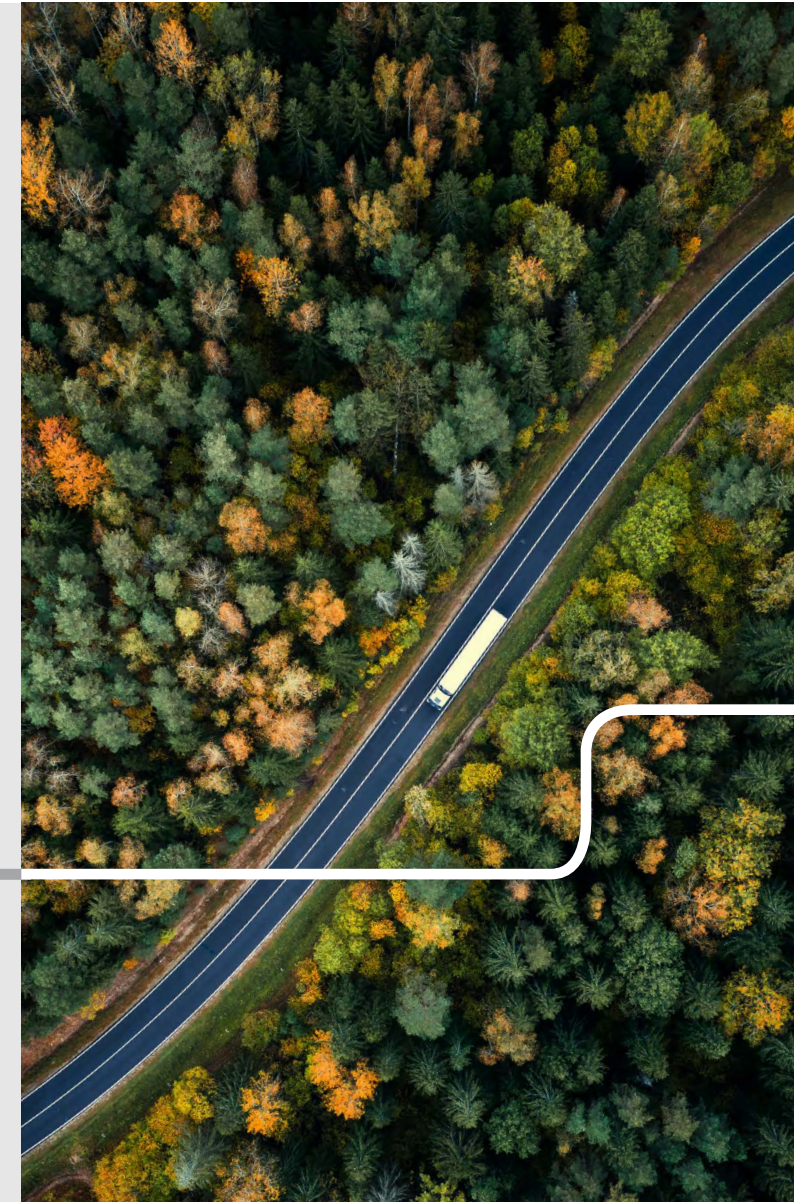
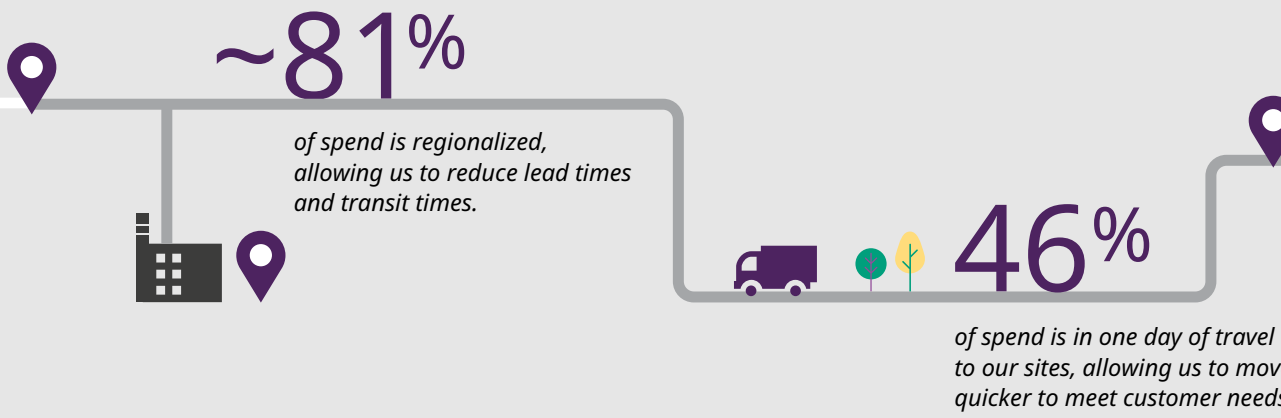


#### Regionalization

By sourcing materials in the same region as our factories and customers, Emerson can be more responsive to customers. The goal is to reduce transit times and reduce the overall carbon footprint of transportation and logistics. We proactively track electronic regionalization risk using a third-party application. Over 81% of Emerson's of material spend is regionalized and 46% of material spend is available within one day of travel to our manufacturing facilities.

#### Supply Chain Visibility

One of the challenges when managing supply chains is having meaningful perspectives on what is happening with Tier 2 suppliers. These are the suppliers that supply our direct suppliers. Challenges in managing our Tier 2 supply chain activities can be one of the biggest drivers impacting inventory shortages. A Supply Chain Visibility Project was launched in fiscal 2022 to improve resiliency and create a predictive data tool for identifying future electronic component excess inventory and shortages. The tool consolidates reporting information from Emerson business units, electronics contract manufacturers and distributors into a single set of dashboards, supporting and providing a more holistic and dynamic view of the electronics supply chain.



## Supply Chain



### Developing the Next Generation of Supply Chain Innovation

Emerson collaborates with educational institutions worldwide, including universities, trade schools and research institutions. The pivotal partnership between industry and academia allows for the exploration of global challenges and integration of commercial realities into the educational process. Emerson works actively with leading schools to engage future leaders on various supply chain innovation initiatives.



#### Carnegie Mellon University | Case Competition

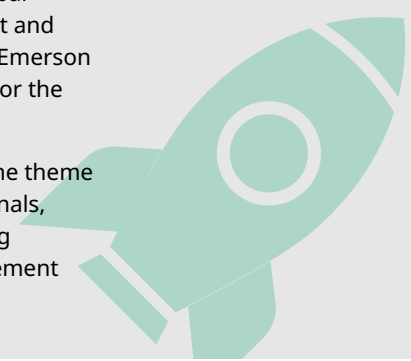
Carnegie Mellon hosts an annual case competition historically recognized by students and faculty for bringing creativity and talent to solve real world business problems. As a sponsor of this competition, Emerson offered a case to test students' analytical problem-solving skills on topics related to reducing lead-times, managing and optimizing inventory levels, ABC parts classifications and strategies to improve material availability and service levels. Top MBA students from universities around the country presented solutions, demonstrating their talent for future recruitment.



#### Washington University in St. Louis | Boeing Center

The Boeing Center for Supply Chain Innovation (BCSCI) at Washington University in St. Louis, Missouri, is a world-class research center in global supply chain management, supply chain finance and risk management and operational excellence. As a member of the BCSCI Board of Directors, Emerson helps shape and contributes to faculty and student research projects for the benefit of industry at large.

Emerson presented at BCSCI's 15th annual industry conference with the theme "Forces Reshaping Global Supply Chains." Joined by industry professionals, faculty and students, we presented on Emerson's Responsible Sourcing strategy, explaining its connection to our Net Zero targets and engagement channels used to foster scalable supplier climate action.





# Cybersecurity

## Empowering our operations and our customers in today's digital environment.

### Enterprise Cybersecurity and Privacy

Emerson is committed to protecting the personal information of our employees, customers and suppliers as well as company information and the information technology supporting the organization. We have adopted a defense-in-depth strategy, leveraging multiple layers of security controls across our systems with a comprehensive set of cybersecurity and data privacy policies and standards.

Emerson operates a global 24x7 incident response capability supported by leading cybersecurity tools that detect and respond to threats as they occur. Our incident response plan and escalation paths are documented and regularly tested. We conduct cybersecurity tabletop exercises, the latest of which was in fiscal 2023. It was moderated by a leading cybersecurity consulting firm and involved both executive and technical stakeholders.

Emerson's Board provides oversight for cybersecurity through delegation to its Audit Committee. Emerson's Chief Information Security Officer, has experience in information technology and information security, particularly in the engineering and technology

industries, provides quarterly briefings on cybersecurity to the Audit Committee. Emerson recognizes that technology, regulations and threats are constantly evolving. In response, we continually assess the cyber program to address these changes. Additionally, Emerson has insurance coverage for various cyber risks.

Emerson has a cybersecurity risk management program designed to establish risk treatment plans and regular monitor risks. Emerson maintains cybersecurity policies and standards aligned with the National Institute of Standards and Technology Cybersecurity Framework to help ensure that our enterprise IT infrastructure, cybersecurity solutions and services

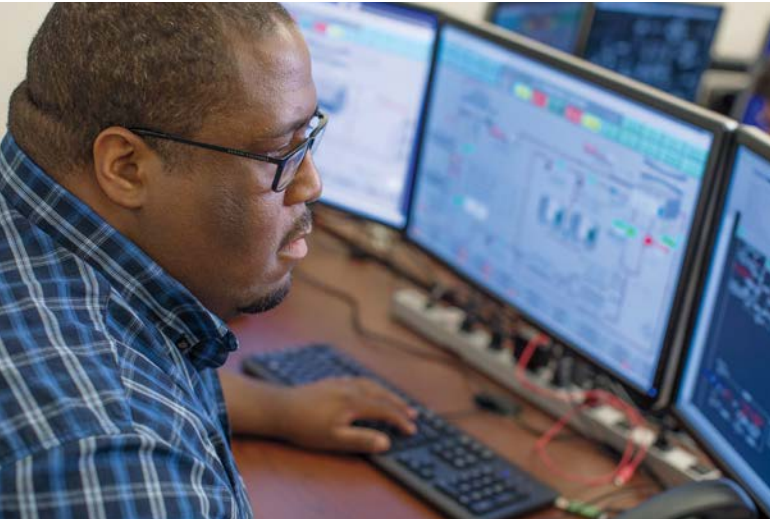
provided to customers remain robust and effective. We routinely engage independent cybersecurity experts to evaluate our cybersecurity maturity and test effectiveness of overall cybersecurity controls.

To test and reinforce Emerson's internal cybersecurity processes, we utilize an accredited and independent third party to audit and certify key elements of our primary data centers, cloud environments and our enterprise IT organization. The audits are conducted according to ISO 27001, an international standard for information security management. For the elements in scope, this ISO 27001 certification is active and in effect.



*Puriscal, Indigenous Reserve, San Jose, Costa Rica  
Photo by: Christian Rojas | Emerson Employee*





## Enterprise Cybersecurity and Privacy

Emerson's Cybersecurity Awareness Team continues to drive a global information security culture through awareness and education programs. It has created company-wide information security policies and procedures, review these regularly and make them electronically available to our employees. The team works closely with subject matter experts to create educational material and communicate best practices to the company through online training, custom video content, simulated phishing attacks and a variety of other targeted touchpoints.

Our knowledge workers are provided with access to digital training in cybersecurity fundamentals on an annual basis. We frequently exercise enterprise-wide simulated phishing campaigns to practice and encourage good security behavior. We are proud to have our employees participate and proactively report suspicious emails related to these simulations.

Emerson's privacy program is led by a global team within the Legal Department which monitors data privacy legislation and works collaboratively with the Cybersecurity team across all businesses and functions. This collaborative approach helps ensure appropriate technical and organizational measures are in place and core privacy practices are followed.



For more information visit the [Cybersecurity webpage](#).

## Product Security

Emerson is committed to developing products that are cyber secure and has adopted the ISA/IEC 62443 standards as a baseline for our secure development lifecycle (SDL) practices. Emerson's Product Security function is organized under our Chief Technology Officer who provides periodic briefings on product security to our Board of Directors through the Technology and Environmental Sustainability Committee to help ensure strong governance of our product security programs across the company.

We have established a product security policy and processes that govern and manage related risk. Depending on the nature of products or services they produce, our businesses may additionally use security frameworks such as U.S. National Institute of Standards and Technology - Cyber Security Framework and the SOC1 and SOC2 assurance framework, including obtaining certifications where appropriate.

In fiscal 2023, a leading cybersecurity consulting firm moderated a limited scope product security tabletop exercise that tested our ability to respond to a product security incident involving both executive and technical stakeholders.

Emerson recognizes that technology, regulations and threats are constantly evolving. In response, Emerson continues to leverage applicable industry-accepted practices and standards, beginning with ISA/IEC 62443 family of standards.

## Product Security

Emerson strives to apply these standards across our portfolio, in our secure development lifecycle execution and in our service organizations to achieve high levels of security in our products, services and solutions. Additionally, we continually assess product security programs across the Enterprise to address these changes. Emerson's Product Security Team continues to drive a global product security culture through established communication channels for collaboration, awareness and training.

Our Secure Development Lifecycle practices typically include various manual and automated security testing regimens applied throughout the lifecycle phases from design, engineering, development, test, integration to delivery of services and support. Additionally, Emerson monitors various industry specific cyber intelligence agencies, supplier and open-source intelligence channels for relative threats and vulnerabilities. Product Security Incident Response Teams (PSIRT) and processes are utilized to evaluate, manage and respond to potential security risks to our product portfolio.

Emerson continues to invest in our Global Product Security program supporting organizational functions, strategic initiatives and governance activities as well as in our product development Cybersecurity Center with a primary mission to support secure development lifecycle practices. We do this through related role-based training, security testing and internal consulting across our product development projects.

We have established commercial relationships with industry leading cybersecurity solution providers to enable delivery of complementary security capabilities that provide our customers with solutions for enabling customers to operate at higher levels of security. Our most critical product development organizations are certified to the IEC 62443-4-1 standard through third-party entities to ensure SDL of our automation products.

Emerson's DeltaV automation platform was the first control system to be certified under ISASecure System Security Assurance (SSA) Level 1. Emerson customers can also request a full system attestation by other certification bodies upon delivery if they choose to do so.

Regarding engineering processes, upon request, Emerson can design, configure and commission DeltaV systems following the guidelines listed in the IEC 62443-2-4 standard. Emerson has earned certification under this standard for DeltaV systems when our engineers assist in the development of control system solutions.





## Product Security

In response to the events of September 11, 2001, the Department of Homeland Security (DHS) established the SAFETY (Support Anti-terrorism by Fostering Effective Technologies) Act of 2002. This evaluates technologies and may designate or certify them as Qualified Anti-Terrorism Technology (QATT). The application and review process is extensive and can take multiple years of engagement with the DHS to achieve designations or certifications, which are effective for five years. Organizations must be able to demonstrate that their technology is effective in preventing terrorism and has a closed loop process for continuous improvement of cybersecurity features and functions of their technologies and business processes.

In February 2023, after 10 months of collaboration with DHS, Emerson's Ovation suite of control system software received Certified QATT status under the SAFETY Act. Emerson selected Ovation as a candidate for this program as it is Emerson's control system designed for power generation industries, which is considered one of the most critical industries by the United States government.

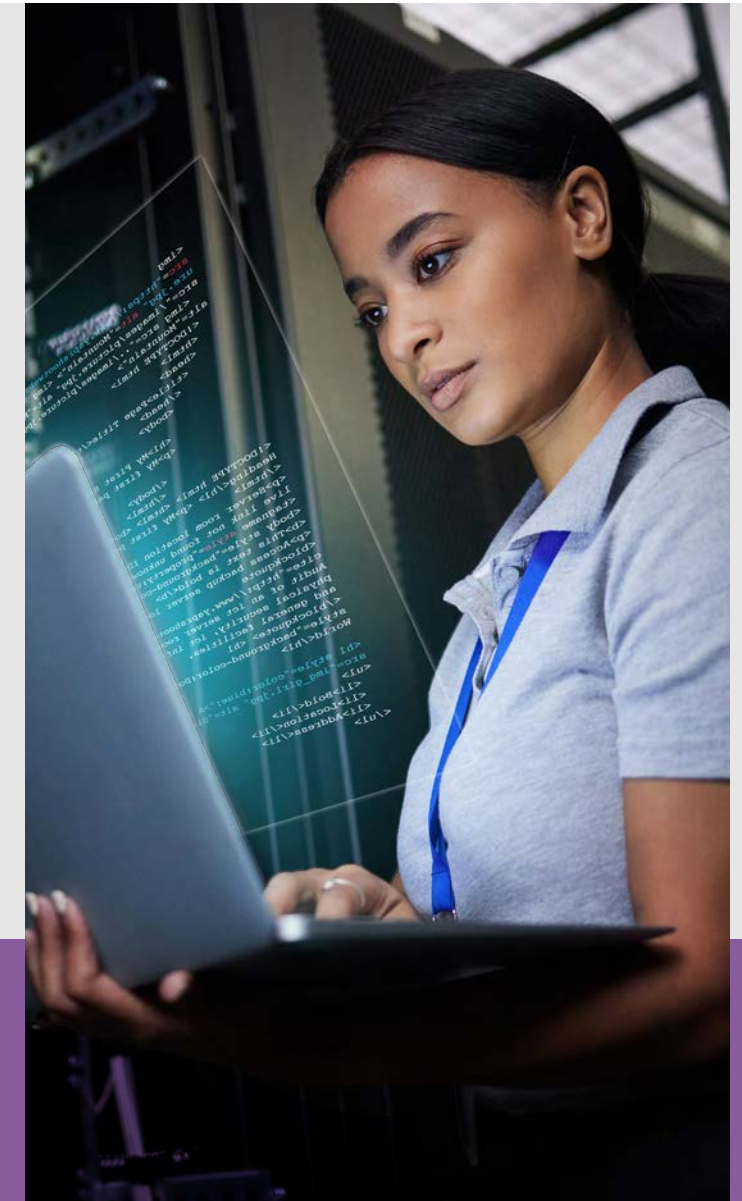
In December 2023, Emerson completed a year-long process to renew certification for IEC 62443-4-1 for development of Ovation products. In September of 2023 Ovation achieved its first IEC 62443-4-2 certification for an embedded device on the OCR1100 controller product. This first-time achievement sets the groundwork for future certification of embedded Ovation products. Ovation continues to add capabilities to support our customers in meeting the needs for IEC 62443-3-3 security level 1 capabilities.

## Key Industry Engagement

[International Society of Automation \(ISA\)](#) – Emerson continues to support and participate in ISA99 (cybersecurity) standards working groups to facilitate cross-industry alignment for related ISA and International Electrotechnical Commission (IEC) standards, like the 62443 series, in our served markets.

[United States Cybersecurity and Infrastructure Security Agency \(CISA\) Joint Cyber Defense Collaboration \(JCDC\)](#) – Emerson continues to support and participate in the JCDC general meetings and sub-team meetings, such as the Pipeline Cyber Collaborative, to advance cybersecurity related initiatives and public-private collaboration.

[BioPhorum](#) – This event is where global biopharmaceutical and device industries can collaborate and accelerate progress for the benefit of all. It consists of twelve forums directing more than 100 workstreams. Emerson is a member of the BioPhorum and continues to support various initiatives including cybersecurity.







# Reporting

This section outlines Emerson's alignment with leading Environmental, Social and Governance (ESG) reporting standards and frameworks, as well as our key sustainability data. Unless otherwise noted, this section covers enterprisewide information and data for fiscal year 2023.

## IN THIS SECTION:

- [UN SDGs](#)
- [GRI Index](#)
- [SASB Index](#)
- [TCFD Index](#)
- [ESG Data](#)
- [Reconciliation Tables](#)

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# UN Sustainable Development Goals



The United Nations Sustainable Development Goals (SDGs) provide a shared blueprint for peace and prosperity for people and the planet, now and into the future. Emerson continues to identify our best solutions to contribute to the SDGs as we aim to address various environmental, social and economic challenges facing our world today. Examples of our actions, programs and the SDGs to which they relate are demonstrated here and throughout this report.



**Goal 3**  
Ensure healthy lives and promote well-being for all at all ages



**Goal 4**  
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



**Goal 5**  
Achieve gender equality and empower all women and girls



**Goal 6**  
Ensure availability and sustainable management of water and sanitation for all



**Goal 7**  
Ensure access to affordable, reliable, sustainable and modern energy for all

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# UN Sustainable Development Goals

## Emerson's Initiatives

	<p><b>Goal 8</b>  <b>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b></p>	<p>Company Profile ..... <a href="#">Page 9</a>                      Value Creation ..... <a href="#">Page 13</a>                      Limitless Growth: Talent Development ..... <a href="#">Page 117</a>                      Global and Local Impact: Workforce Development ..... <a href="#">Page 129</a>                      Integrity and Ethics ..... <a href="#">Page 149</a>                      Workplace Safety ..... <a href="#">Page 134</a>                      Serving Customers with a Resilient, Agile Supply Chain ..... <a href="#">Page 165</a></p>
	<p><b>Goal 9</b>  <b>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b></p>	<p>Emerson Ventures Expands Our Innovation Focus ..... <a href="#">Page 23</a>                      Electrification and Grid Systems ..... <a href="#">Page 76</a>                      Convening Leaders and Communities ..... <a href="#">Page 93</a>                      Emerson and Our Suppliers Create Inclusive, Diverse Workplaces ..... <a href="#">Page 164</a>                      Cybersecurity and Privacy ..... <a href="#">Page 154</a></p>
	<p><b>Goal 10</b>  <b>Reduce inequality within and among countries</b></p>	<p>Discrimination and Harassment ..... <a href="#">Page 126</a>                      Human Rights ..... <a href="#">Page 126</a>                      Corporate Philanthropy ..... <a href="#">Page 130</a>                      Integrity and Ethics ..... <a href="#">Page 149</a>                      Emerson and Our Suppliers Create Inclusive, Diverse Workplaces ..... <a href="#">Page 164</a></p>
	<p><b>Goal 12</b>  <b>Ensure sustainable consumption and production patterns</b></p>	<p>Net Zero Operations Update ..... <a href="#">Page 36</a>                      Driving Towards Zero Waste to Landfill ..... <a href="#">Page 44</a>                      Improving Sustainable Design of Products and Packaging ..... <a href="#">Page 56</a>                      Greening Of: Employee Engagement ..... <a href="#">Page 57</a>                      Energy Source Decarbonization ..... <a href="#">Page 67</a>                      Engaging Emerson's Supply Chain Partners to Join our Journey ..... <a href="#">Page 157</a>                      Emerson's Suppliers Use Sustainable Materials and Improve Energy and Waste management ..... <a href="#">Page 159</a></p>



# UN Sustainable Development Goals






		Emerson's initiatives
	<p><b>Goal 13</b> Take urgent action to combat climate change and its impacts</p>	<p>Greening Of Emerson ..... <a href="#">Page 31</a>                      Greening By Emerson ..... <a href="#">Page 62</a>                      Greening With Emerson ..... <a href="#">Page 84</a>                      Engaging Emerson's Supply Chain Partners to Join our Journey ..... <a href="#">Page 157</a>                      Emerson's Suppliers Use Sustainable Materials and Improve Energy and Waste Management ..... <a href="#">Page 159</a></p>
	<p><b>Goal 16</b> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p>	<p>Discrimination and Harassment ..... <a href="#">Page 126</a>                      Human Rights ..... <a href="#">Page 126</a>                      Corporate Philanthropy ..... <a href="#">Page 130</a>                      Recent Corporate Governance Actions ..... <a href="#">Page 148</a>                      Integrity &amp; Ethics ..... <a href="#">Page 149</a></p>
	<p><b>Goal 17</b> Strengthen the means of implementation and revitalize the global partnership for sustainable development</p>	<p>Greening With Emerson ..... <a href="#">Page 84</a>                      Elevating Underrepresented Groups ..... <a href="#">Page 109</a>                      Global and Local Impact: Workforce Development ..... <a href="#">Page 129</a></p>

# GRI Index

The following information references selected Global Reporting Initiatives (GRI) Standards, a widely used reporting framework on a variety of important topics. The GRI framework provides a structure for organizations like Emerson to communicate the environmental, social and economic impacts of our business. For more information about GRI, please visit [GlobalReporting.org](https://www.globalreporting.org)






Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGS
<b>General Disclosures</b>			
2-1	Organization details	Emerson Electric Co., 8000 West Florissant Avenue, P.O. Box 4100, St. Louis, MO 63136 USA	
2-1	Location of operations	<a href="#">Emerson.com: Contact Us</a> <a href="#">Emerson 2023 Form 10-K: Item 2 - Properties</a>	
2-1	Ownership and legal form	<a href="#">Emerson.com: Corporate Governance (Articles of Incorporation)</a> <a href="#">Emerson 2023 Form 10-K: Subsidiaries of Emerson Electric Co., September 30, 2022</a>	
2-1	Scale of the organization	<a href="#">Emerson 2023 Form 10-K: Item 1 - Business; Item 2 - Properties; Results of Operations,</a> Emerson 2023 Sustainability Report: Emerson At-A-Glance, <a href="#">p.9</a>	
2-2	Entities included in the organization's sustainability reporting	Emerson 2023 Sustainability Report: About this Report, <a href="#">p.2</a>	
2-3	Reporting period, frequency and contact point	Emerson 2023 Sustainability Report: About this Report, <a href="#">p.2</a> ; Fiscal Year 2023 Sustainability Data, <a href="#">p.195</a>	
2-4	Restatements of information	Emerson 2023 Sustainability Report: Emerson's Portfolio Change Impact on Environmental Sustainability, <a href="#">p.29</a> ; Fiscal Year 2023 Sustainability Data, <a href="#">p.198</a>	
2-5	External Assurance	Emerson 2023 Sustainability Report: Scope 1 and 2 Emissions Data, <a href="#">p.37</a> ; Independent Limited Assurance Statement, <a href="#">p.204</a>	
2-6	Activities, value chain and other business relationships	<a href="#">Emerson 2023 Form 10-K: Item 1 - Business</a> <a href="#">Emerson 2023 Annual Report: Letter to Shareholders, p.i</a> Emerson 2023 Sustainability Report: Supply Chain, <a href="#">p.154</a>	

GRI Index (continued)












Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
2-7	Information on employees	Partially reported: 2023 Sustainability Report: Emerson At-A-Glance, <a href="#">p.9</a> Emerson 2023 Sustainability Report: Emerson's Workforce by the Numbers, <a href="#">p.108</a> <a href="#">Emerson 2023 Form 10-K; Item 1 - Business</a>	 
2-9	Governance structure	<a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance, p.14</a> Emerson 2023 Sustainability Report: Corporate Governance, <a href="#">p.143</a> <a href="#">Emerson.com: Corporate Governance (Principles and Practices)</a>	
2-9	Executive-level responsibility for economic, environmental and social topics	Emerson 2023 Sustainability Report: CEO Message, <a href="#">p.7</a> ; Advancing Transparency and Governance in Sustainability, <a href="#">p.31</a>	
2-9	Consulting stakeholders on economic, environmental and social topics	<a href="#">Emerson 2023 Annual Meeting Proxy Statement: Our Board of Directors, p.2; Board and Corporate Governance, p.14</a> Emerson 2023 Sustainability Report: Advancing Transparency and Governance in Sustainability, <a href="#">p.31</a>	
2-9	Composition of the highest governance body and its committees	<a href="#">Emerson.com: Corporate Governance</a> Emerson 2023 Sustainability Report: Corporate Governance (Board of Directors Policies), <a href="#">p.143</a> <a href="#">Emerson 2023 Annual Meeting Proxy Statement: Our Board of Directors, p.2; Board and Committee Operations, p.14-27 (Board Composition)</a>	 
2-10	Nominating and selecting the highest governance body	<a href="#">Emerson.com: Corporate Governance (Principles and Practices)</a> <a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance, p.22 (Nomination Process)</a> Emerson 2023 Sustainability Report: Corporate Governance, <a href="#">p.143</a>	 
2-11	Chair of the highest governance body	<a href="#">Emerson.com: Corporate Governance (Principles and Practices)</a>	







GRI Index (continued)

Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
2-11	Conflicts of interest	Emerson 2023 Sustainability Report: Integrity & Ethics (Conflict of Interest Evaluation and Reporting), <a href="#">p.153</a> <a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance, p.10 (Review, Approval or Ratification of Transactions with Related Persons; Director Independence)</a>	
2-12	Role of highest governance body in setting purpose, values and strategy	Emerson 2023 Sustainability Report: Corporate Governance (Recent Corporate Governance Actions), <a href="#">p.148</a> <a href="#">Emerson.com: Corporate Governance (Principles and Practices)</a> <a href="#">Emerson.com: Corporate Governance and Nominating Committee Charter</a> <a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance (Board Role in Sustainability and Human Capital Management), p.14</a>	
2-13	Delegation of responsibility for managing impacts	<a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance (Board Role in Sustainability and Human Capital Management), p.14</a> Emerson 2023 Sustainability Report: Our Approach to Environmental Sustainability and a Net Zero World, <a href="#">p.28</a> <a href="#">Emerson.com: Corporate Governance (Principles and Practices – Board Oversight of Management)</a> <a href="#">Emerson.com: Corporate Governance and Nominating Committee Charter</a>	
2-14	Role of the highest governance body in sustainability reporting	Emerson 2023 Sustainability Report: Board Oversight of Company Strategy and Risk Management, <a href="#">p.145-146</a> ; Sustainability External Reporting Governance, <a href="#">p.146</a>	
2-15	Conflicts of Interest	Emerson 2023 Sustainability Report: Corporate Governance (Board of Directors Policies), <a href="#">p.143</a> <a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance (Board Leadership Structure) p.16</a>	

GRI Index (continued)

Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
2-17	Collective knowledge of highest governance body	Emerson's Senior Vice President, General Counsel and Secretary briefs the Corporate Governance and Nominating Committee on corporate responsibility topics on at least an annual basis. Emerson 2023 Sustainability Report: Corporate Governance (Recent Corporate Governance Actions), <a href="#">p.148</a>	
2-18	Evaluating the highest governance body's performance	<a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance, (Board, Committee and Individual Director Evaluations), p.12</a>	
2-19	Remuneration policies	<a href="#">Emerson 2023 Annual Meeting Proxy Statement: Executive Compensation, p.29-62</a>	
2-20	Process for determining remuneration	<a href="#">Emerson 2023 Annual Meeting Proxy Statement: Executive Compensation, p.29-62</a> <a href="#">Emerson 2023 Annual Meeting Proxy Statement: Proxy Item No. Advisory Vote on Executive Compensation, p.28</a>	
2-21	Annual total compensation ratio	<a href="#">Emerson 2023 Annual Meeting Proxy Statement: Pay Ratio Disclosure, p.59</a>	
2-22	Statement on sustainable development strategy	<a href="#">Emerson.com: Corporate Governance and Nominating Committee Charter</a> Emerson 2023 Sustainability Report: CEO Message, <a href="#">p.7</a> ; Our Purpose, <a href="#">p.10</a> ; Emerson's Environmental Sustainability Goals, <a href="#">p.29</a> ; Diversity, Equity and Inclusion Goals, <a href="#">p.107</a> ; Board Oversight of Company Strategy and Risk Management, <a href="#">p.145-147</a> ; Climate scenarios guide our long-term business and risk management strategies, <a href="#">p.34-35</a> <a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance (Board Role in Sustainability and Human Capital Management), p.14</a> <a href="#">Emerson 2023 Form 10-K: Item 1A - Risk Factors</a> <a href="#">Emerson 2023 Annual Report, p.5-6</a>	     

GRI Index (continued)

















Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
2-23 2-24	Policy commitments Embedding policy commitments	Emerson 2023 Sustainability Report: Advancing Transparency and Governance in Sustainability, <a href="#">p.31</a> ; Integrating Wellbeing Into the Employee Experience, <a href="#">p.125-126</a> ; Integrity and Ethics, <a href="#">p.149</a> ; Board Oversight of Company Strategy and Risk Management, <a href="#">p.146</a> ; Creating a Culture of Responsible Sourcing, <a href="#">p.155</a>	
2-25 2-26	Processes to remediate negative impacts	<a href="#">Emerson 2023 Annual Meeting Proxy Statement: Communications with the Company and Obtaining Emerson Documents, p.82</a> Emerson 2023 Sustainability Report: Integrity & Ethics (Ethics Hotline and Reporting Process), <a href="#">p.149</a>	
2-28	Membership of associations	<a href="#">Emerson.com: Corporate Governance (Trade Associations &amp; Lobbying)</a> Emerson 2023 Sustainability Report, Collaborating for a Net Zero World: Greening With Emerson, <a href="#">p.84</a>	
2-29	Approach to stakeholder engagement	Emerson solicits and uses feedback from employees, customers, investors and analysts, community leaders, suppliers, regulator and NGOs to understand concerns and impacts of our operations on the environment, the economy and local communities. <a href="#">Emerson 2023 Annual Meeting Proxy Statement: Our Board of Directors, p.2; Board and Corporate Governance, p.14</a> Emerson 2023 Sustainability Report: Collaborating for a Net Zero World: Greening With Emerson, <a href="#">p.84</a> ; Workforce Development, <a href="#">p.129</a> ; Corporate Philanthropy, <a href="#">p.130</a> ; Supply Chain, <a href="#">p.154</a>	
2-30	Collective bargaining agreements	Emerson 2023 Sustainability Report: Limitless Growth: Talent Development (Labor Relations), <a href="#">p.125</a>	



























GRI Index (continued)

Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
<b>Economic</b>			
201-1	Direct economic value generated and distributed	<a href="#">Emerson 2023 Form 10-K: Results of Operations</a>	
201-2	Financial implications and other risks and opportunities due to climate change	<a href="#">Emerson 2023 Form 10-K: Item 1A - Risk Factors, pg. 9</a> <a href="#">Emerson 2023 CDP Response</a> Emerson 2023 Sustainability Report: Corporate Governance (Climate scenarios guide our long-term business and risk management strategies), <a href="#">p.34</a>	
201-3	Defined benefit plan obligations and other retirement plans	<a href="#">Emerson 2023 Form 10-K: Notes to Consolidated Financial Statements: Retirement Plans</a>	
203-1	Infrastructure investments and services supported	Emerson 2023 Sustainability Report: Workforce Development, <a href="#">p.129</a> ; Corporate Philanthropy, <a href="#">p.130</a>	  
203-2	Significant indirect economic impacts	Emerson 2023 Sustainability Report: Workforce Development, <a href="#">p.129</a> ; Corporate Philanthropy, <a href="#">p.130</a>	   
204-1	Proportion of spending	Emerson 2022 Form 10-K: Subsidiaries of Emerson Electric Co., September 30, 2021	
205-2	Communication and training about anti-corruption policies and procedures	Partially reported: Emerson 2023 Sustainability Report: Integrity & Ethics (Anti-Corruption Controls), <a href="#">p.149</a>	
205-3	Confirmed incidents of corruption and actions taken	During the reporting period, Emerson did not experience any incidents of corruption that rose to the level of materiality that would have required disclosure in our periodic reports filed with the SEC.	

GRI Index (continued)
















Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
206-1	Legal actions for anti-competitive behavior, anti-trust and monopoly practices	During the reporting period, Emerson was not identified as a participant in any legal actions alleging anticompetitive behavior or violations of anti-trust and monopoly legislation that rose to the level of materiality that would have required disclosure in our periodic reports filed with the SEC.	
207-1	Approach to tax	<a href="#">Emerson Statement of Tax Principles</a>	
207-2	Tax governance, control and risk management	<a href="#">Emerson Statement of Tax Principles</a>	
207-3	Stakeholder engagement and management of concerns related to tax	<a href="#">Emerson Statement of Tax Principles</a>	
<b>Environment</b>			
301-1	Materials used by weight or volume	Partially reported: Emerson 2023 Sustainability Report: Greening Of Emerson (Measuring the Carbon Footprint of Products), <a href="#">p.55</a>	
302-1	Energy consumption within the organization	Emerson 2023 Sustainability Report: Greening Of Emerson, <a href="#">p.37</a> ; Sustainability Data, <a href="#">p.195</a> <a href="#">Emerson 2023 CDP Response</a>	   
302-3	Energy intensity	Emerson 2023 Sustainability Report: Sustainability Data, <a href="#">p.195</a>	   
302-4	Reduction of energy consumption	Partially reported: Emerson 2023 Sustainability Report: Net Zero Operations Update, <a href="#">p.36</a> ; Greening Of Emerson, <a href="#">p.31</a> ; Sustainability Data, <a href="#">p.195</a> <a href="#">Emerson 2023 CDP Response</a>	   
303-1	Interactions with water as a shared resource	<a href="#">Partially Reported: 2023 CDP Water Security Report</a>	 

GRI Index (continued)

Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
303-3	Water withdrawal	<a href="#">2023 CDP Water Security Report</a>	 
303-5	Water consumption	Partially reported: Emerson 2023 Sustainability Report: Greening Of Emerson (Water Management and Biodiversity), <a href="#">p.47</a>	 
305-1	Direct (Scope 1) GHG emissions	Emerson 2023 Sustainability Report: Greening Of Emerson (Greenhouse Gas Emissions), <a href="#">p.51</a> ; Sustainability Data, <a href="#">p.195</a>	    
305-2	Energy indirect (Scope 2)	Emerson 2023 Sustainability Report: Greening Of Emerson (Greenhouse Gas Emissions), <a href="#">p.51</a> ; Sustainability Data, <a href="#">p.195</a>	    
305-3	Other indirect (Scope 3) GHG emissions	Emerson 2023 Sustainability Report: Greening Of Emerson (Net Zero Value Chain Progress), <a href="#">p. 52</a>	    
305-4	GHG emissions intensity	Emerson 2023 Sustainability Report: Greening Of Emerson, <a href="#">p.51</a> ; Sustainability Data, <a href="#">p.195</a>	    













GRI Index (continued)

Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
305-5	Reduction of GHG emissions	Emerson 2023 Sustainability Report: Greening Of Emerson, <a href="#">p.51</a> ; Sustainability Data, <a href="#">p.195</a>	    
306-2	Management of significant waste-related impacts	Emerson 2023 Sustainability Report: Greening Of Emerson (Driving Toward Zero Waste to Landfill), <a href="#">p. 44</a>	 
306-3	Total waste generated Hazardous and non-hazardous	Emerson 2023 Sustainability Report: Greening Of Emerson (Driving Towards Zero Waste to Landfill), <a href="#">p. 44</a> ; Sustainability Data, <a href="#">p.195</a>	 
306-4	Waste Diverted from Disposal	Emerson 2023 Sustainability Report: Greening Of Emerson (Driving Towards Zero Waste to Landfill), <a href="#">p. 44</a> ; Sustainability Data, <a href="#">p.195</a>	 
306-5	Waste Diverted to Disposal	Emerson 2023 Sustainability Report: Greening Of Emerson (Driving Towards Zero Waste to Landfill), <a href="#">p. 44</a> ; Sustainability Data, <a href="#">p.195</a>	 
307-1	Noncompliance with environmental laws and regulations	Emerson 2023 Sustainability Report: Greening Of Emerson (Environmental Compliance), <a href="#">p.48</a> In fiscal year 2023, environmental regulators inspected our facilities or were notified of incidents on different occasions worldwide. Of these occasions in 2023, monetary penalties totaled 21.	
308-1	New suppliers that were screened using environmental criteria	Partially reported: Emerson 2023 Sustainability Report: Supply Chain, <a href="#">p.154</a>	

GRI Index (continued)















Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
<b>Social</b>			
403-1	Occupational health and safety management system	Partially reported: Emerson 2023 Sustainability Report: Workplace Safety, Measuring Performance, <a href="#">p.135</a>	 
403-2	Hazard identification, risk assessment and incident investigation	Emerson 2023 Sustainability Report: Workplace Safety, Risk Management, <a href="#">p.135</a>	 
403-3	Occupational health services	Partially reported: Emerson 2023 Sustainability Report: Workplace Safety, <a href="#">p.135</a>	 
403-4	Worker participation, consultation, and communication on occupational health and safety	Partially reported: Emerson 2023 Sustainability Report: Workplace Safety, Risk Management, <a href="#">p.135</a>	 
403-5	Worker training on occupational health and safety	Partially reported: Emerson 2023 Sustainability Report: Workplace Safety, I Own Safety Training Program <a href="#">p.138</a>	 
403-6	Promotion of worker health	Emerson 2023 Sustainability Report: Limitless Growth: Talent Development (Wages and Benefits), <a href="#">p.125</a> ; Workplace Safety, <a href="#">p.134</a>	 
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Partially reported: Emerson 2023 Sustainability Report: Workplace Safety, <a href="#">p.134</a>	 
403-8	Workers covered by an occupational health and safety management system	Partially reported: Emerson 2023 Sustainability Report: Workplace Safety (Measuring Performance), <a href="#">p.135</a>	 

GRI Index (continued)




Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
403-9	Work-related injuries	Emerson 2023 Sustainability Report: Workplace Safety (Emerson Global Health and Safety Performance), <a href="#">p.137</a>	 
404-1	Average hours of training per year per employee	Partially Reported: Emerson 2023 Sustainability Report: Greening Of: Employee Engagement <a href="#">p.57</a> ; Greening With: Collaborating with Leading Research and Educational Institutions, <a href="#">p.89</a> ; Limitless Growth: Talent Development, <a href="#">p.117</a>	 
404-2	Programs for upgrading employee skills and transition assistance programs	<a href="#">Emerson.com: Careers (Training &amp; Development)</a> <a href="#">Emerson.com: Investing in People</a> (Learning & Development) Emerson 2023 Sustainability Report: Limitless Growth: Talent Development, <a href="#">p.117</a>	
404-3	Percentage of employees receiving regular performance and career development reviews	Emerson 2023 Sustainability Report: Limitless Growth: Talent Development, <a href="#">p.117</a>	  
405-1	Diversity of governance bodies and employees	Emerson 2023 Sustainability Report: Diverse People, Working Together (Workforce by the numbers, <a href="#">p.108</a> ; Sustainability Data, <a href="#">p.195</a> <a href="#">Emerson 2023 Annual Meeting Proxy Statement: Our Board of Directors (Board Diversity)</a> p.3	 
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Emerson 2023 Sustainability Report: Limitless Growth: Talent Development (Labor Relations), <a href="#">p.125</a> ;	
408-1	Operations and suppliers incidents of child labor	Partially reported: Emerson 2023 Sustainability Report: Limitless Growth: Talent Development (Human Rights), <a href="#">p.126</a> ; Supply Chain (Humanity: Emerson Suppliers Are Focused on Integrity, Respect, Fairness and Honesty), <a href="#">p.163</a>	 



GRI Index (continued)

Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGs
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Partially reported: Emerson 2023 Sustainability Report: Limitless Growth: Talent Development (Human Rights), <a href="#">p.126</a> ; Supply Chain (Humanity: Emerson Suppliers Are Focused on Integrity, Respect, Fairness and Honesty), <a href="#">p.163</a>	
412-2	Employee training on human rights policies or procedures	Emerson 2023 Sustainability Report: Integrity & Ethics (Annual Ethics Training), <a href="#">p.150</a>	 
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Emerson 2023 Sustainability Report: Supply Chain (Humanity: Emerson Suppliers Are Focused on Integrity, Respect, Fairness and Honesty), <a href="#">p.163</a>	
413-1	Operations with local community engagement, impact assessments, and development programs	Partially reported: Emerson 2023 Sustainability Report: Supply Chain (Champion: Serving Customers with a Resilient, Agile Supply Chain), <a href="#">p.165</a>	   
414-1	New suppliers that were screened using social criteria	Partially reported: Emerson 2023 Sustainability Report: Supply Chain (Inclusion: Emerson and Our Suppliers Create Inclusive, Diverse Workplaces), <a href="#">p.165</a> ; (Humanity: Emerson Suppliers Are Focused on Integrity, Respect, Fairness and Honesty), <a href="#">p.137</a>	   
415-1	Political contributions	<a href="#">Emerson.com: Trade Associations &amp; Lobbying</a>	
416-2	Incidents of noncompliance concerning the health and safety impacts of products and services	During the reporting period, Emerson identified no new incidents of noncompliance with regulations and/ or voluntary codes concerning the health and safety impacts of Emerson products and services that rose to the level of materiality that would have required disclosure in our periodic reports filed with the SEC.	

GRI Index (continued)

Disclosure	GRI Standards Disclosure Title	Location/Response	Related UN SDGS
417-2	Incidents of noncompliance concerning product and service information and labeling	During the reporting period, Emerson identified no new incidents of noncompliance with regulations and/ or voluntary codes concerning product and service information and labeling that rose to the level of materiality that would have required disclosure in our periodic reports filed with the SEC.	
417-3	Incidents of noncompliance concerning marketing communications	During the reporting period, Emerson identified no new incidents of noncompliance with regulations and/or voluntary codes concerning the marketing communications of Emerson products and services that rose to the level of materiality that would have required disclosure in our periodic reports filed with the SEC.	
419-1	Noncompliance with laws and regulations in the social and economic area	During the reporting period, Emerson identified no noncompliance with laws and/or regulations in the social and economic area that rose to the level of materiality that would have required disclosure in our periodic reports filed with the SEC.	

# SASB Index

The following disclosure is aligned to the Sustainability Accounting Standards Board (SASB) framework for the sector denoted as “Resource Transformation – Electrical and Electric Equipment (EE).” However, the activity of our company does not fit squarely within one single industry. We have therefore included metrics aligned to other industry sectors we believe would be of interest to our stakeholders. Emerson will continue to evaluate the disclosure of additional topics as these emerge, considering relevance, availability of high-quality data and competitive sensitivities.

Disclosure Topic	Metric	SASB Code	Units	Emerson Metric/Disclosure Location
<b>Greenhouse Gas Emissions</b>	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	RT-CH-110a.1	Metric tons (t) CO <sub>2</sub> e, Percentage (%)	Emerson 2023 Sustainability Report, Emissions Intensity and Greenhouse Gas Emissions, <a href="#">p. 37</a> : 84,685 MT CO <sub>2</sub> e
	Discussion of long-and-short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets and analysis of performance against targets	RT-CH-110a.2	N/A	Emerson 2023 Sustainability Report, Emerson's Environmental Sustainability Goals, <a href="#">p. 29</a> ; Greening Of Emerson, <a href="#">p. 31</a> <a href="#">2023 CDP Climate Change Report</a>
<b>Energy Management</b>	(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable	RT-EE-130a.1 RT-IG-130a.1	Gigajoules (GJ) Percentage (%)	Sustainability Data, <a href="#">p. 195</a> (1) 2,018,660 GJ (560,739 MWh) electricity used (2) 51% grid electricity (3) 49% renewable
<b>Waste &amp; Hazardous Materials Management</b>	Amount of hazardous waste generated	RT-EE-150a.1	Metric tons (t)	Emerson 2023 Sustainability Report, Driving Towards Zero Waste to Landfill, <a href="#">p. 44</a> Total Hazardous Waste 3 kilotons
<b>Water Management</b>	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with high or extremely high baseline water stress	RT-CH-140a.1	Thousand cubic meters (m <sup>3</sup> ), Percentage (%)	<a href="#">2023 CDP Water Security Report, Section W1.2b, 4,169 megaliters withdrawn</a>
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	RT-CH-140a.2	Number	<a href="#">2023 CDP Water Security Report, Section W2.2a, two water-related fines, which are not considered significant</a>
	Description of water management risks and discussion of strategies and practices to mitigate those risks	RT-CH-140a.3	N/A	<a href="#">2023 CDP Water Security Report, Section W3.3</a>



## SASB Index (continued)

Disclosure Topic	Metric	SASB Code	Units	Emerson Metric/Disclosure Location
<b>Product Design &amp; Lifecycle Management</b>	Revenue from renewable energy-related and energy efficiency related products	RT-EE-410a.3	Reporting currency	Emerson 2023 Sustainability Report, Value Creation: The Critical Role of Automation, <a href="#">p. 19</a>
<b>Materials Sourcing &amp; Efficiency</b>	Description of the management of risks associated with the use of critical materials	RT-EE-440a.1	N/A	Emerson 2023 Sustainability Report, Conflict Minerals Statement, <a href="#">p. 160</a> Emerson 2023 Sustainability Report, Implementation of a Responsible Sourcing Policy, <a href="#">p. 155</a>
<b>Employee Health &amp; Safety</b>	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	RT-IG-320a.1	Rate	Emerson 2023 Sustainability Report, Emerson Global Health and Safety Performance, <a href="#">p. 137</a> : 0.28 total recordable rate of injuries
<b>Business Ethics</b>	Description of policies and practices for prevention of: (1) corruption and bribery; (2) anti-competitive behavior	RT-EE-510a.1	N/A	Emerson 2023 Sustainability Report, Anti-Corruption Controls, <a href="#">p. 152</a> <a href="#">Emerson Employee Code of Conduct, Giving Gifts or Other Things of Value and Bribery, p. 9</a> ; <a href="#">Antitrust or Anti-competition, p.14</a> <a href="#">Emerson Business Ethics</a> <a href="#">Emerson Supplier Code of Conduct</a>
	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	RT-EE-510a.2	Reporting currency	SEC Filings: Information on legal proceedings is disclosed in our Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q
	SEC Filings: Information on legal proceedings is disclosed in our Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q	RT-EE-510a.3	Reporting currency	SEC Filings: Information on legal proceedings is disclosed in our Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q
<b>Activity Metrics</b>	Number of employees	RT-EE-000-B	Number	Emerson 2023 Sustainability Report: About This Report, <a href="#">p. 2</a> ; Reporting, <a href="#">p. 172</a> 62,000 employees

# TCFD Index

The table below is a disclosure of Emerson's publicly available climate-related information using the framework developed by the Task Force on Climate-Related Financial Disclosures (TCFD). It contains our responses to each of TCFD's recommendations, as well as the location of these disclosures.

SUMMARY RESPONSE	RECOMMENDED DISCLOSURE	DISCLOSURE LOCATION
<p><b>Governance</b> Disclose the company's governance around climate-related risks and opportunities.</p> <p>The Board of Directors assumes responsibility for the oversight of Emerson's risk management and strategy. The Board administers its risk oversight both through active review and discussion by the full Board and by delegating certain oversight responsibilities to one of its committees for further consideration and evaluation of specific risks.</p> <p>Each committee reports to the full Board with respect to the committee's risk oversight activities on a regular basis. The Board and/or its appropriate committee receives updates from management to enhance its understanding and oversight of the Company's risk management processes. This process is designed to provide to the Board timely visibility into the identification, assessment and management of critical risks. The areas of critical risk include strategic, macroeconomic and operational risks.</p> <p>The formal annual enterprise risk assessment process includes surveys and/or interviews of all business and corporate leaders, as well as the members of the Office of the Chief Executive. For significant risks identified, a mitigation plan is established that includes the person responsible for implementation of the plan and the timeline for completion.</p> <p>In 2023, the Board restructured its committees by dissolving its Finance Committee, creating a new Technology and Environmental Sustainability Committee and redistributing the responsibilities of the Finance Committee among the remaining Committees and to the full Board. The Board created the Technology and Environmental Sustainability Committee to further enhance its oversight of issues such as product cybersecurity, technology, innovation and the Company's environmental sustainability policies and programs.</p> <p>The Corporate Governance and Nominating Committee assists the Board in the oversight of the company's sustainability initiatives, including the company's Environmental, Social and Governance Report, as well as matters related to climate change.</p> <p>Our CEO and Chief Sustainability Officer engage directly with the Board to report progress toward greenhouse gas targets and coordinate with the Board on the development of our net zero ambitions. The Chief Sustainability Officer attends all Board meetings and formally presents to the Board on Emerson's environmental sustainability strategy and key initiatives twice a year.</p> <p style="text-align: right;">&gt; continued next page</p>	<p>a. Describe the Board's oversight of climate-related risks and opportunities.</p> <p>b. Describe management's role in assessing and managing climate-related risks and opportunities</p>	<p>2023 CDP Climate Change Report, sections C1. 1a, C1. 1b</p> <p><a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance p.7</a></p> <p>Emerson 2023 Sustainability Report, Board Oversight of Company Strategy and Risk Management <a href="#">p.145</a></p> <p>2023 CDP Climate Change Report, sections C1.2, C1.2a</p> <p>Emerson 2023 Sustainability Report, Board Oversight of Company Strategy and Risk Management <a href="#">p.145</a></p>

TCFD Index (continued)

SUMMARY RESPONSE	RECOMMENDED DISCLOSURE	DISCLOSURE LOCATION
<p><b>Governance</b> Disclose the company's governance around climate-related risks and opportunities.</p>		
<p>&gt; continued</p> <p>In coordination with the Board, Emerson leadership compensation programs in 2023 utilized a metrics-based approach incorporating both financial and sustainability targets with a focus on greenhouse gas emissions reductions and human capital management goals. These metrics are reviewed regularly and updated according to progress. Doing so helps drive alignment and culture change across our organization</p> <p>Emerson has established a strong governance structure to help ensure accountability and progress. Emerson's Senior Vice President and Chief Sustainability Officer, leads the company's environmental sustainability strategy and oversees the Environmental Sustainability Steering Committee, which meets bi-annually to evaluate the company's sustainability strategy.</p> <p>Under the CSO's leadership, Emerson's Environmental Sustainability Steering Committee is active in coordinating environmental sustainability-related activities and initiatives across the company's global value chain. This committee connects the priorities of our Board, leadership team and colleagues around the world and includes representatives from all functional areas of the company. The aim is to ensure that environmental sustainability is widely integrated into the company's business. The members of the Office of the Chief Executive, which include the most senior leaders of the company, bring the relevant experience essential to developing and executing our climate-related strategies.</p> <p>Our Enterprise Operations Group and Environmental Sustainability Group monitor performance against Emerson's net zero greenhouse gas emission targets. Each business unit measures and tracks its performance on a quarterly basis and reports it to corporate management.</p> <p>Emerson has recently established a more formalized sustainability reporting governance framework. This is in anticipation of meeting the diverse range of sustainability disclosure regulations being introduced globally, including the EU's Corporate Sustainability Reporting (CSRD), the US SEC's climate disclosure rule and California Climate laws among others. This effort is marked by robust cross-functional collaboration involving key departments such as external financial reporting, internal audit, sustainability, legal, IT and HR, underscoring the comprehensive approach we are taking to ensure compliance and leadership in sustainability governance.</p>	<p>a. Describe the Board's oversight of climate-related risks and opportunities.</p>	<p>2023 CDP Climate Change Report, sections C1. 1a, C1. 1b</p> <p><a href="#">Emerson 2023 Annual Meeting Proxy Statement: Board and Corporate Governance p.7</a></p> <p>Emerson 2023 Sustainability Report, Board Oversight of Company Strategy and Risk Management <a href="#">p.145</a></p>
	<p>b. Describe management's role in assessing and managing climate-related risks and opportunities</p>	<p>2023 CDP Climate Change Report, sections C1.2, C1.2a</p> <p>Emerson 2023 Sustainability Report, Board Oversight of Company Strategy and Risk Management <a href="#">p.145</a></p>



TCFD Index (continued)

SUMMARY RESPONSE	RECOMMENDED DISCLOSURE	DISCLOSURE LOCATION
<p><b>Strategy</b> Disclose the actual and potential impacts of climate-related risks and opportunities on the company's business, strategy and financial planning where such information is material.</p>		
<p>Emerson is committed to developing and maintaining sustainable, responsible practices and offerings in its global operations to create value for customers and shareholders.</p> <p>In 2022, Emerson performed a climate scenario analysis to identify the climate-related risks and opportunities that are most material to Emerson's business. The analysis considered two types of risks and opportunities: those related to the transition to a lower-carbon economy and those related to the physical impacts of climate change.</p> <p>Emerson followed the TCFD recommendations and assessed a range of future climate-related scenarios, including a scenario based on the 2015 Paris Agreement objective of limiting global average temperature rise to below 2 degrees Celsius. For the analysis on transition risks and opportunities two emissions pathways were included. For the low emissions pathway, Emerson used the IEA's Sustainable Development Scenario for transition impacts in a well-below 2 degrees future, which is the most optimistic temperature scenario. For the high emissions pathway, the IEA Stated Policies Scenario was used for transition impacts, which is the scenario with the highest temperature increase.</p> <p>In 2024, the physical risk analysis was updated to assess physical risks to our business operations over a range of time horizons and future climate-related scenarios. For more information, please refer to <a href="#">page 35</a>.</p> <p>Based on this risk and opportunity assessment, Emerson has identified the most material risks and opportunities and, where feasible, quantified potential impacts through the use of long-term analysis across a low and a high emissions scenario.</p> <p>As we move forward, we will continue to regularly revise our climate scenario analysis and to refine our assessment methodology. Given the iterative nature of climate scenario analysis process, we expect improvements in best-practice approaches, models and data quality over time. We will integrate these assessments into our strategic planning, M&amp;A activities, product design strategy and enterprise risk management frameworks as we advance our net zero commitments. This will strengthen our market position, business opportunities and resilience and adaption to climate change.</p>	<p>a. Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term</p> <p>b. Describe the impact of climate-related risks and opportunities on the company's business, strategy, and financial planning.</p> <p>c. Describe the resilience of the company's strategy, taking into consideration different climate-related scenarios, including a 2 degrees Celsius or lower temperature rise scenario.</p>	<p>2023 CDP Climate Change Report, Risks and Opportunities, section C2</p> <p>2023 CDP Climate Change Report, sections C2.3a, C2.4a, C3.1, C3.2, C3.3, C3.4</p> <p>2023 CDP Climate Change Report, Business Strategy, section C3</p> <p>Emerson 2023 Sustainability, Climate scenarios guide our long-term business and risk management strategies <a href="#">p.34</a></p>

TCFD Index (continued)

SUMMARY RESPONSE	RECOMMENDED DISCLOSURE	DISCLOSURE LOCATION
<p><b>Risk Management</b> Disclose how the company identifies, assesses and manages climate-related risks.</p> <p>Emerson identifies climate-related risks as those with the potential for substantive financial or strategic impact to our business, operations, revenue, or expenditures that would impact our ability to successfully deliver products to our customers.</p> <p>Emerson considers various climate-related risks as part of an integrated multidisciplinary, company-wide risk management process. The Audit Committee supports the Board in risk management. In addition, business operations include regular monitoring, mitigation and control. Each year, there is a review of the company's climate-related activities, audits and expenditures.</p> <p>In 2022, Emerson undertook a climate risk and opportunity assessment to identify those risks and opportunities, as identified by the TCFD, that are most material to Emerson's business. For each TCFD risk and opportunity, Emerson identified one (or more) Emerson-specific inherent risk(s)/ opportunity(ies) and associated impact(s) across each of the company's business units. The analysis considered two types of risks and opportunities: those related to the transition to a lower-carbon economy and those related to the physical impacts of climate change.</p> <p>We categorized these risks in alignment with our internal Enterprise Risk Management Framework and identified the time horizon in which the most material impact of the risk would manifest. Based on this risk and opportunity assessment, Emerson identified the most material risks and opportunities and, where feasible, quantified potential impacts through the use of long-term analysis across a low and a high emissions scenario.</p>	<p>a. Describe the company's processes for identifying and assessing climate-related risks.</p> <p>b. Describe the company's processes for managing climate-related risks.</p> <p>c. Describe how processes for identifying, assessing, and managing climate related risks are integrated into the company's overall risk management.</p>	<p>2023 CDP Climate Change Report, sections C2.1b, C2.2 Emerson 2023 Sustainability, Climate scenarios guide our long-term business and risk management strategies <a href="#">p.34</a></p> <p>2023 CDP Climate Change Report, sections C2.2</p> <p>2023 CDP Climate Change Report, sections C3 C1.1a, C1.1b, C1.2, C1.2a</p>

# Fiscal Year 2023 Sustainability Data

Reporting year: This table presents information focused primarily on data collected and activities that occurred during Emerson's fiscal 2023 (October 1, 2022 — September 30, 2023) and is reported based on 62,000 employees and 130 manufacturing locations, except where indicated otherwise.

For additional details about organizational boundaries, data collection, assumptions and methodologies regarding 2022 GHG emissions and energy metrics, see [Emerson's CDP 2023 Report](#).

The sustainability metrics included in the table below can also be found in our accompanying sustainability metric (.xlsx) file, including environmental, social and governance metrics.

## Environmental Data

	GRI INDICATOR	METRIC	UNITS	2023	2022	2021	2020	2019
Scope 1 and Scope 2*	305-1	Scope 1 and 2   GHG emissions intensity	mtCO <sub>2</sub> e/Sales \$M	14.2 ▼	20.6	29.6	33.1	35.4
	305-2	Scope 1 and 2   GHG emissions intensity from 2021 baseline	%	(52%) ▼	(30%)	-	-	-
	305-4	Scope 1 and 2   GHG emissions total	mtCO <sub>2</sub> e	215,509 ▼	284,868	383,155	406,502	478,938
	305-5	Scope 1 and 2   Regional GHG emissions breakdown NA	mtCO <sub>2</sub> e	97,439 ▼	121,824	209,637	223,892	271,261
		Scope 1 and 2   Regional GHG emissions breakdown LATAM	mtCO <sub>2</sub> e	9,692 ▼	38,385	38,842	37,050	48,573
		Scope 1 and 2   Regional GHG emissions breakdown EU	mtCO <sub>2</sub> e	36,705 ▼	42,297	42,658	43,509	49,261
		Scope 1 and 2   Regional GHG emissions breakdown MEA	mtCO <sub>2</sub> e	6,926 ▼	14,947	21,259	24,864	22,059
		Scope 1 and 2   Regional GHG emissions breakdown AP w/o China	mtCO <sub>2</sub> e	35,364 ▼	38,031	40,939	49,550	53,161
		Scope 1 and 2   Regional GHG emissions breakdown China only	mtCO <sub>2</sub> e	29,385 -	29,385	29,820	27,637	34,624

\* ERM CV has been engaged by Emerson to provide independent assurance for selected information disclosed in this report. ERM CV's full assurance statement, including opinion and basis of opinion, is available on page 204. For combined Scope 1 + 2 calculations, note Scope 2 market-based emissions were used to calculate the totals.



## Fiscal Year 2023 Sustainability Data (continued)

	GRI INDICATOR	METRIC	UNITS	2023	2022	2021	2020	2019
Scope 1 emissions total*	305-1	Scope 1   GHG emissions total	mtCO <sub>2</sub> e	84,685 ▼	91,318	99,128	100,869	118,340
		Scope 1   GHG emissions by natural gas	mtCO <sub>2</sub> e	34,361 ▼	42,642	49,286	50,589	57,875
		Scope 1   GHG emissions by propane	mtCO <sub>2</sub> e	1,413 ▼	4,259	5,176	5,917	5,894
		Scope 1   GHG emissions by stationary diesel	mtCO <sub>2</sub> e	325 ▼	584	672	761	666
		Scope 1   GHG emissions by residual fuel oil	mtCO <sub>2</sub> e	106 ▼	208	113	62	37
		Scope 1   GHG emissions by kerosene	mtCO <sub>2</sub> e	117 ▼	145	142	117	131
		Scope 1   GHG emissions from mobile sources	mtCO <sub>2</sub> e	36,112 ▲	31,671	30,831	30,575	38,833
		Scope 1   GHG emissions from refrigerants	mtCO <sub>2</sub> e	12,251 ▲	11,809	12,908	12,848	14,904
		Scope 1   GHG emissions from agricultural by products	mtCO <sub>2</sub> e	0 -	0	0	0	0
Scope 2 Emissions *	305-2	Scope 2   GHG emissions total (market-based)	mtCO <sub>2</sub> e	130,825 ▼	193,550	284,027	305,633	360,598
	305-3	Scope 2   GHG emissions total (location-based)	mtCO <sub>2</sub> e	232,636 ▼	251,920	288,766	308,724	360,749
		Reduction in Scope 2   GHG emissions by renewable energy/ total avoided	mtCO <sub>2</sub> e	104,331 ▲	59,084	4,802	3,147	150

\* ERM CV has been engaged by Emerson to provide independent assurance for selected information disclosed in this report. ERM CV's full assurance statement, including opinion and basis of opinion, is available on page 204. For combined Scope 1 + 2 calculations, note Scope 2 market-based emissions were used to calculate the totals.

## Fiscal Year 2023 Sustainability Data (continued)

	GRI INDICATOR	METRIC	UNITS	2023	2022	2021	2020	2019
<b>Energy</b>	302-1	Total energy consumption	MWh	913,594 ▼	1,001,046	1,087,588	1,097,362	1,263,498
	302-3	Energy intensity (MWh / Sales \$M)	MWh / Sales \$M	60.2 ▼	72.5	84.1	89.3	93.4
		Energy intensity reduction compared to 2021 baseline	%	(28%) ▼	(14%)	-	-	-
<i>Stationary Energy by Source</i>		Total Stationary Energy	MWh	198,415 ▼	259,095	300,057	310,803	350,476
		Kerosene use	MWh	453 ▼	563	553	455	510
		Stationary diesel use	MWh	1,282 ▼	2,307	2,652	3,005	2,628
		Natural gas use	MWh	189,584 ▼	235,275	271,931	279,120	319,317
		Residual fuel oil use	MWh	413 ▼	809	441	241	145
		Agricultural byproducts	MWh	0 -	0	0	0	0
		Propane use	MWh	6,682 ▼	20,141	24,480	27,982	27,875
<i>Mobile Energy by Source</i>		Total Mobile Energy	MWh	147,719 ▲	129,512	126,280	124,552	158,049
		Gasoline	MWh	88,100 ▲	76,347	76,737	72,410	79,600
		Diesel	MWh	40,893 ▲	37,066	36,766	34,831	36,997
		Other Fuels (Kerosene, LPG, LNG, Ethanol)	MWh	18,726 ▲	16,099	12,778	17,311	41,452
<i>Indirect Energy by Source</i>		Total Electricity use (Purchased + Onsite Generation)	MWh	560,739 ▼	606,035	654,434	655,502	748,193
		Purchased hot water	MWh	5,973 ▲	5,514	5,842	5,957	5,771
		Purchased steam	MWh	748 ▼	891	975	548	1,008
<i>Renewable Electricity</i>		Total renewable electricity	MWh	277,416 ▲	166,858	16,331	10,925	2,743
		Contracted renewable electricity	MWh	274,453 ▲	165,527	16,194	10,790	2,725
		On-site renewable electricity generation	MWh	2,962 ▲	1,331	137	134	17
		% Renewable Electricity	%	49.4% ▲	27.5%	2.5%	1.7%	0.4%
		Number of locations with 100% renewable electricity	# of Sites	82 ▲	53	9	4	2

## Fiscal Year 2023 Sustainability Data (continued)

	GRI INDICATOR	METRIC	UNITS	2023	2022	2021	2020	2019
<b>Scope 3 Emissions*</b>	305-3	Scope 3   <b>GHG emissions total</b>	mtCO <sub>2</sub> e	<b>204,148,010</b> ▼	241,880,050	244,720,570		
<i>Upstream Scope 3 emissions</i>		Total upstream scope 3 emissions	mtCO <sub>2</sub> e	<b>1,572,870</b> ▼	1,676,810	1,648,170		
		Scope 3   <b>GHG emissions purchased goods &amp; services and capital goods (Category 1+2)</b>	mtCO <sub>2</sub> e	<b>1,041,730</b> ▼	1,093,720	1,112,600		
		Scope 3   <b>GHG emissions upstream fuel &amp; energy related activities (Category 3)</b>	mtCO <sub>2</sub> e	<b>75,600</b> ▼	82,170	87,330		
		Scope 3   <b>GHG emissions upstream transportation &amp; distribution (Category 4)</b>	mtCO <sub>2</sub> e	<b>288,930</b> ▼	338,270	304,510		
		Scope 3   <b>GHG emissions waste in operations (Category 5)</b>	mtCO <sub>2</sub> e	<b>20,840</b> ▼	21,110	19,100		
		Scope 3   <b>GHG emissions business travel (Category 6)</b>	mtCO <sub>2</sub> e	<b>50,650</b> ▲	36,070	18,230		
		Scope 3   <b>GHG emissions employee commuting (Category 7)</b>	mtCO <sub>2</sub> e	<b>95,120</b> ▼	105,470	106,400		
<i>Downstream Scope 3 emissions</i>		Total downstream scope 3 emissions	mtCO <sub>2</sub> e	<b>202,575,140</b> ▼	240,203,240	243,072,400		
		Scope 3   <b>GHG emissions downstream transportation &amp; distribution (Category 9)</b>	mtCO <sub>2</sub> e	<b>44,100</b> ▼	45,960	44,150		
		Scope 3   <b>GHG emissions use of sold products (Category 11)</b>	mtCO <sub>2</sub> e	<b>5,301,700</b> ▼	5,308,100	5,542,500		
		Scope 3   <b>GHG emissions end-of-life treatment (Category 12)</b>	mtCO <sub>2</sub> e	<b>21,340</b> ▼	22,180	19,750		
		Scope 3   <b>GHG emissions investments (Category 15)</b>	mtCO <sub>2</sub> e	<b>197,208,000</b> ▼	234,827,000	237,466,000		
<b>Water Management</b>	303-5	Water Purchased	megaliters	<b>1,659</b> ▼	1,712	1,923	1,588	1,915

\* In fiscal year 2023, we revisited the methodology used to calculate Emerson's Scope 3 emissions. The fiscal year 2021 values were adjusted to reflect the new methodology. As our data collection process continues to mature, the environmental data we report will continue to improve in accuracy and expand in breadth. More information on our Scope 3 emissions data collection and reporting process can be found on page 40. Scope 3 category 10 is negligible, categories 13 are 14 not applicable.



## Fiscal Year 2023 Sustainability Data (continued)

	GRI INDICATOR	METRIC	UNITS	2023	2022	2021	2020	2019
<b>Total Waste Generated</b>	306	Total manufacturing waste	kilotons	55 ▼	57			
		Total hazardous waste	kilotons	3 ▼	4			
		Total non-hazardous waste	kilotons	52 ▼	53			
<i>Non-Hazardous Waste Diverted from Disposal</i>	306-4-a	Total non-hazardous manufacturing waste diverted	kilotons	28 ▲	25			
		Non-hazardous diversion rate %	%	56% ▲	49%			
		Composted	kilotons	1 -	1			
		Recycled	kilotons	26.5 ▲	23			
		Reuse	kilotons	0.5 ▼	1			
<i>Non-Hazardous Waste Diverted to Disposal</i>	306-5-a	Total non-hazardous manufacturing waste for disposal	kilotons	22 ▼	27			
		Incinerated with energy recovery	kilotons	1.9 ▲	1.8			
		Incinerated without energy recovery	kilotons	0.3 ▲	0.2			
		Landfilled	kilotons	19.8 ▼	25			
<i>Non-Hazardous Waste Generated by Category</i>	306-3-a	Waste by category (metal)	kilotons	13 ▲	11			
		Waste by category (wood)	kilotons	8 ▲	6			
		Waste by category (industrial)	kilotons	22 ▼	25			
		Waste by category (other)	kilotons	9 ▼	11			

### Scope 1 GHG emissions from refrigerants

- Emerson began tracking actual refrigerant recharge volumes for comfort and process cooling equipment in 2023. These volumes are used as a proxy for fugitive refrigerants and their respective emissions. Where historic data was not available, current year figures were used to estimate historic values.

### Scope 1 GHG emissions from mobile sources

- Includes emissions from all fuel types shown in Mobile Energy by Source section.

### Scope 2 emissions total (market-based)

- Market-based emissions includes impact of renewable energy purchases.
- Location-based emissions include grid electricity emission factor averages multiplied by the total purchased electricity.

Note that Emerson's emissions reductions targets related to our 2045 net zero ambition, as well as our near-term 2030 goals, use 2021 data as a base year. Emerson has engaged WSP to assist in the development of our Scope 1 and 2 greenhouse gas inventory compilation and to provide guidance and review on the Scope 3 GHG calculations required to align with both the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard) and the Science Based Targets initiative's (SBTi) net zero criteria. WSP is a leading professional services consultancy with a multidisciplinary sustainability, energy and climate change (SECC) team that has advised clients across sectors in greenhouse gas management, climate resiliency, sustainable supply chain and numerous related disciplines for over two decades.

## Fiscal Year 2023 Sustainability Data (continued)

### Social Data

METRIC	GRI INDICATOR		2023	2022	2021	2020	2019	
<b>Workforce Diversity*</b>								
Number of employees	102-8	Number of employees (global)	62,000	▼	81,800	86,700	84,000	88,000
		Number of employees (Americas)	23,000	▼	36,100	38,800	37,000	39,500
		Number of employees (Europe)	16,000	▼	19,300	19,800	19,000	20,500
		Number of employees (Asia Pacific, Middle East, Africa)	21,500	▼	26,400	28,100	28,000	28,000
Gender	405-1	Women in leadership (global, targeting 40% by 2030)	23%	▲	21%	20%		
		Women, percentage of total workforce (global)	33%	-	33%			
		Women, percentage of total workforce (U.S.)	29%	▼	31%	31%	30%	
		Women, percentage of total workforce (Americas)	33%	▼	36%			
		Women, percentage of total workforce (Europe)	33%	▲	32%			
		Women, percentage of total workforce (Asia Pacific, Middle East, Africa)	33%	▲	30%			
		Men, percentage of total workforce (U.S.)	71%	▲	69%	69%	70%	
Minorities	405-1	Minorities in leadership (U.S., targeting 30% by 2030)	21%	▲	17%	16%		
		Minorities, percentage of total workforce (U.S.)	35%	▲	30%	28%	28%	
		Minorities, Asian, percentage of total workforce (U.S.)	11%	▲	8%			
		Minorities, Black or African American, percentage of total workforce (U.S.)	12%	▲	10%			
		Minorities, Hispanic or Latino, percentage of total workforce (U.S.)	10%	-	10%			
		Minorities, Other**, percentage of total workforce (U.S.)	2%	-	2%			

\* In this data set, leadership is defined as individuals at the Director level and above. Global data reflects countries that are included in our human resources information system and excludes countries not yet transitioned onto the core system.  
Minorities include: Asian, American Indian or Alaska Native, Black or African American, Hispanic, Native Hawaiian or Other Pacific Islander and two or more races

\*\* Other Minorities, encompasses American Indian or Alaska Native, Native Hawaiian or other Pacific Islander and two or more races.

## Fiscal Year 2023 Sustainability Data (continued)

METRIC	GRI INDICATOR	2023	2022	2021	2020	2019	
Age Group	405-1	Age group under 30, percentage of total workforce (global)	19%	-	19%		
		Age group under 30, percentage of total workforce (U.S.)	14%	-	14%	13%	12%
		Age group under 30, percentage of total workforce (Americas)	19%	▼	21%		
		Age group under 30, percentage of total workforce (Europe)	16%	-	16%		
		Age group under 30, percentage of total workforce (Asia Pacific, Middle East, Africa)	21%	▲	20%		
		Age group 30-50, percentage of total workforce (global)	59%	-	59%		
		Age group 30-50, percentage of total workforce (U.S.)	45%	-	45%	46%	44%
		Age group 30-50, percentage of total workforce (Americas)	51%	▲	50%		
		Age group 30-50, percentage of total workforce (Europe)	55%	▼	57%		
		Age group 30-50, percentage of total workforce (Asia Pacific, Middle East, Africa)	69%	▼	72%		
		Age group over 50, percentage of total workforce (global)	22%	-	22%		
		Age group over 50, percentage of total workforce (U.S.)	41%	-	41%	41%	44%
		Age group over 50, percentage of total workforce (Americas)	30%	▲	29%		
		Age group over 50, percentage of total workforce (Europe)	29%	▲	27%		
	Age group over 50, percentage of total workforce (Asia Pacific, Middle East, Africa)	10%	▲	8%			
Tenure	405-1	Years of service under 5, percentage of total workforce (global)	47%	▲	46%		
		Years of service 5-10, percentage of total workforce (global)	21%	▼	22%		
		Years of service 11-20, percentage of total workforce (global)	22%	▲	21%		
		Years of service 21-30, percentage of total workforce (global)	7%	▼	8%		
		Years of service over 30, percentage of total workforce (global)	3%	-	3%		



## Fiscal Year 2023 Sustainability Data (continued)

METRIC	GRI INDICATOR		2023	2022	2021	2020	2019
Voluntary Turnover	401-1(b)	Voluntary Turnover (Global)	16%				
		Voluntary Turnover for those with 1 or more years of Service (Global)	9%				
		Voluntary Turnover for those with 5 or more years of Service (Global)	7%				
Health and Safety	403-9	Total recordable rate of Injuries***	0.30 ▲	0.28	0.29	0.34	0.45*/0.58
		Loss or restricted workday case rate	0.22 ▲	0.17	0.17	0.18	0.29
		Recordable injuries***	187 ▼	243	252	290	385*/496
		First-aid cases	710 ▼	1,114	971	1,011	1,523

\*\*\* Excludes an isolated foodborne illness incident at a single global location.

## Governance

METRIC	GRI INDICATOR		2023	2022	2021	2020	2019
Board of Directors	405-1	Number of directors	13 ▲	11	12	12	
		Number of independent directors	12 ▲	10	11	11	
		Number of women	4 ▲	3	3	3	
		Number of men	9 ▲	8	9	9	
		Number of persons of color	3 ▲	2	2	1	
		Percentage woman or persons of color	46% ▲	45%	42%	33%	

# Non-GAAP Reconciliation Tables

2023 UNDERLYING SALES CHANGE	Reported	(Favorable) / Un-favorable FX	(Acquisitions)	Divestitures	Underlying
Final Control	10%	2%	-%	1%	13%
Measurement & Analytical	12%	2%	-%	2%	16%
Discrete Automation	1%	2%	-%	-%	3%
Safety & Productivity	(1%)	-%	-%	-%	(1%)
<b>Intelligent Devices</b>	<b>7%</b>	<b>2%</b>	<b>-%</b>	<b>1%</b>	<b>10%</b>
Control Systems & Software	9%	1%	-%	1%	11%
AspenTech	59%	-%	(60%)	-%	(1%)
<b>Software and Control</b>	<b>20%</b>	<b>1%</b>	<b>(12%)</b>	<b>1%</b>	<b>10%</b>

2023 ADJUSTED SEGMENT EBITA MARGIN	EBIT	EBIT Margin	Amortization of Intangibles and Restructuring and Related Costs	Adjusted Segment EBITA	Adjusted Segment EBITA Margin
Final Control	\$865	21.8%	\$116	981	24.7%
Measurement & Analytical	\$936	26.0%	\$40	976	27.1%
Discrete Automation	\$509	19.3%	\$56	565	21.4%
Safety & Productivity	\$306	22.0%	\$26	332	23.9%
<b>Intelligent Devices</b>	<b>\$2,616</b>	<b>22.6%</b>	<b>\$238</b>	<b>2854</b>	<b>24.6%</b>
Control Systems & Software	\$529	20.3%	\$31	560	21.5%
AspenTech	(\$107)	(10.3%)	\$487	380	36.4%
Test & Measurement	\$285	16.8%	\$74	\$359	21.2%
<b>Software and Control</b>	<b>\$422</b>	<b>11.6%</b>	<b>\$518</b>	<b>940</b>	<b>25.8%</b>

## Independent Limited Assurance Report to Emerson Electric Co.

ERM Certification & Verification Services Incorporated ("ERM CVS") was engaged by Emerson Electric Co. ("Emerson") to provide limited assurance in relation to the selected information set out below and presented in the 2023 Emerson ESG Report (the "Report").

### ENGAGEMENT SUMMARY

<b>Scope of our assurance engagement</b>	<p>Whether the fiscal year 2023 GHG emissions for the following selected indicators are fairly presented in the Report, in all material respects, in accordance with the reporting criteria.</p> <ul style="list-style-type: none"> <li>• Total Scope 1 GHG emissions [metric tonnes CO<sub>2</sub>e]</li> <li>• Total Scope 2 GHG emissions (location-based) [metric tonnes CO<sub>2</sub>e]</li> <li>• Total Scope 2 GHG emissions (market-based) [metric tonnes CO<sub>2</sub>e]</li> </ul> <p>Our assurance engagement does not extend to information in respect of earlier periods or to any other information included in the Report.</p>
<b>Reporting period</b>	1 <sup>st</sup> October 2022 – 30 <sup>th</sup> September 2023
<b>Reporting criteria</b>	<ul style="list-style-type: none"> <li>• Emerson Electric's internal reporting criteria and definitions</li> <li>• The GHG Protocol Corporate Accounting and Reporting Standard (WBCSD/WRI Revised Edition 2015) for Scope 1 and Scope 2 GHG emissions</li> <li>• GHG Protocol Scope 2 Guidance (An amendment to the GHG Protocol Corporate Standard (WRI 2015) for Scope 2 GHG emissions)</li> </ul>
<b>Assurance standard and level of assurance</b>	We performed a limited assurance engagement, in accordance with the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits or Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board. The procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement and consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.
<b>Respective responsibilities</b>	Emerson is responsible for preparing the Report and for the collection and presentation of the information within it, and for the designing, implementing, and maintaining of internal controls relevant to the preparation and presentation of the Report. ERM CVS' responsibility is to provide a conclusion to Emerson on the agreed scope based on our engagement terms with Emerson, the assurance activities performed and exercising our professional judgement.

#### Our conclusion

Based on our activities, as described below, nothing has come to our attention to indicate that the 2023 data and information for the disclosures listed under 'Scope' above are not fairly presented in the Report, in all material respects, in accordance with the reporting criteria.

#### Our assurance activities

Considering the level of assurance and our assessment of the risk of material misstatement of the Report a multi-disciplinary team of sustainability and assurance specialists performed a range of procedures that included, but was not restricted to, the following:

- Evaluating the appropriateness of the reporting criteria for the Report;
- Performing an analysis of the external environment, including a media search, to identify sustainability risks and issues in the reporting period that may be relevant to the assurance scope;
- Interviewing relevant staff to understand and evaluate the management systems and processes (including internal review and control processes) used for collecting and reporting the selected disclosures;
- Reviewing the outcome of internal audit verification of energy data;
- Reviewing a sample of qualitative and quantitative evidence supporting the reported information at a corporate level;
- Conducting an analytical review of the year-end data submitted by all locations included in the consolidated FY2023 group data for the selected disclosures which included testing the completeness and mathematical accuracy of conversions and calculations, and consolidation in line with the stated reporting boundary;
- Conducting an in-person site visit to Emerson Boulder Campus (USA) and Emerson Eden Prairie (USA) facility to review source data and local reporting systems and controls;
- Conducting a virtual site visit with Reynosa facility (Mexico) to review source data and local reporting systems and controls;
- Evaluating the conversion and emission factors and assumptions used;
- Reviewing the presentation of information relevant to the scope of our work in the Report to ensure consistency with our findings.

#### The limitations of our engagement

The reliability of the assured information is subject to inherent uncertainties, given the available methods for determining, calculating, or estimating the underlying information. It is important to understand our assurance conclusions in this context.

#### Our independence, integrity and quality control

EERM CVS is an independent certification and verification body accredited by UKAS to ISO 17021:2015. Accordingly, we maintain a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements. Our quality management system is at least as demanding as the relevant sections of ISQM-1 and ISQM-2 (2022). ERM CVS applies a Code of Conduct and related policies to ensure that its employees maintain integrity, objectivity, professional competence and high ethical standards in their work. Our processes are designed and implemented to ensure that the work we undertake is objective, impartial and free from bias and conflict of interest. Our certified management system covers independence and ethical requirements that are at least as demanding as the relevant sections of the IESBA Code relating to assurance engagements. ERM CVS has extensive experience in conducting assurance on environmental, social, ethical and health and safety information, systems and processes, and provides no consultancy related services to Emerson in any respect.



Heather I. Moore  
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On behalf of:  
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