



Sustainability Report

2022

*Trusted Solutions
for a Sustainable Future*

Table of Contents



Sustainability Report 2022

1 Introduction

- 4 Letter from Our CEO
- 6 Energy Recovery at a Glance

2 Materiality and Strategy

- 8 Goal Progress
- 9 Ratings and Recognition
- 10 Teamwork and Collaboration
- 11 Stakeholder Engagement
- 12 United Nations Sustainable Development Goals Alignment

3 Environmental Management

- 14 Goal: Align with TCFD by 2024
- 23 Goal: ISO 14001 Certification by 2022
- 25 Goal: Reduce Scope 1 and 2 GHG emissions intensity 65% by 2026



4 Products and Customers

- 30 Goal: Deliver Products and Solutions Customers Can Trust
- 31 Goal: Double Emissions Reductions from Our Products by 2025
- 32 Continuous Improvement and Product Innovation
- 33 Desalination
- 37 Wastewater
- 39 CO₂ Refrigeration

5 Employees and Community

- 43 Goal: Develop Workforce to Deliver Sustainable, Diversified Growth
- 49 Goal: Provide a Safe Working Environment
- 52 Social Investment

6 Governance

- 56 Board of Directors
- 60 Policy Updates
- 61 Cybersecurity

7 Content Index

- 63 TCFD
- 64 SASB
- 66 GRI
- 68 Performance Tables

1 Introduction

About This Report

We are pleased to present Energy Recovery's ("we," "our," "Energy Recovery," or "the company") fourth annual Sustainability Report, which describes our efforts and performance for our fiscal year 2022 from January 1, 2022, to December 31, 2022, and includes all company operations worldwide, unless otherwise noted. We have also incorporated select examples of our initiatives to date in 2023. This report outlines our multipronged approach to enhance the sustainability of Energy Recovery and our customers' operations. Included throughout this report are disclosures containing relevant, industry-specific data and information aligned with the Sustainability Accounting Standards Board (SASB) framework. We have also included select disclosures aligned with the Global Reporting Initiative (GRI) framework and the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. We are proud members of the International Financial Reporting Standards (IFRS) Sustainability Alliance. Content within this report should not be considered a substitute for the financial and other material information provided in Energy Recovery's periodic filings with the Securities and Exchange Commission (SEC). Detailed footnotes regarding data presented throughout this report are located in the Content Index and Performance Tables starting on [page 63](#). The term "materiality" or "material" used herein is not defined per the Supreme Court's definition and that enforced by the SEC. For questions about this report, please contact sustainability@energyrecovery.com.

Forward-Looking Statements

The statements included in this report are made in an effort to share our views on our sustainability initiatives with our key stakeholders, and to further enhance our collective understanding of ESG issues. Certain matters discussed in this report are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements are based on information currently available to us and on management's beliefs, assumptions, estimates, or projections and are not guarantees of future events or results. Because such forward-looking statements involve risks and uncertainties, changes in circumstances, and assumptions that are difficult to predict and are often beyond our control, our actual results may differ materially from the predictions in these forward-looking statements. All forward-looking statements are made as of today, and we assume no obligation to update such statements, whether as a result of new information, future events, or otherwise. You should not place undue reliance on any forward-looking statement. Factors that could cause actual results to differ materially from those described in forward-looking statements can be found in this report, in the company's filings with the SEC, and disclosures available on our corporate website. The company does not undertake to update forward-looking statements to reflect the impact of circumstances or events that arise after the date the forward-looking statements were made.



Letter from Our CEO

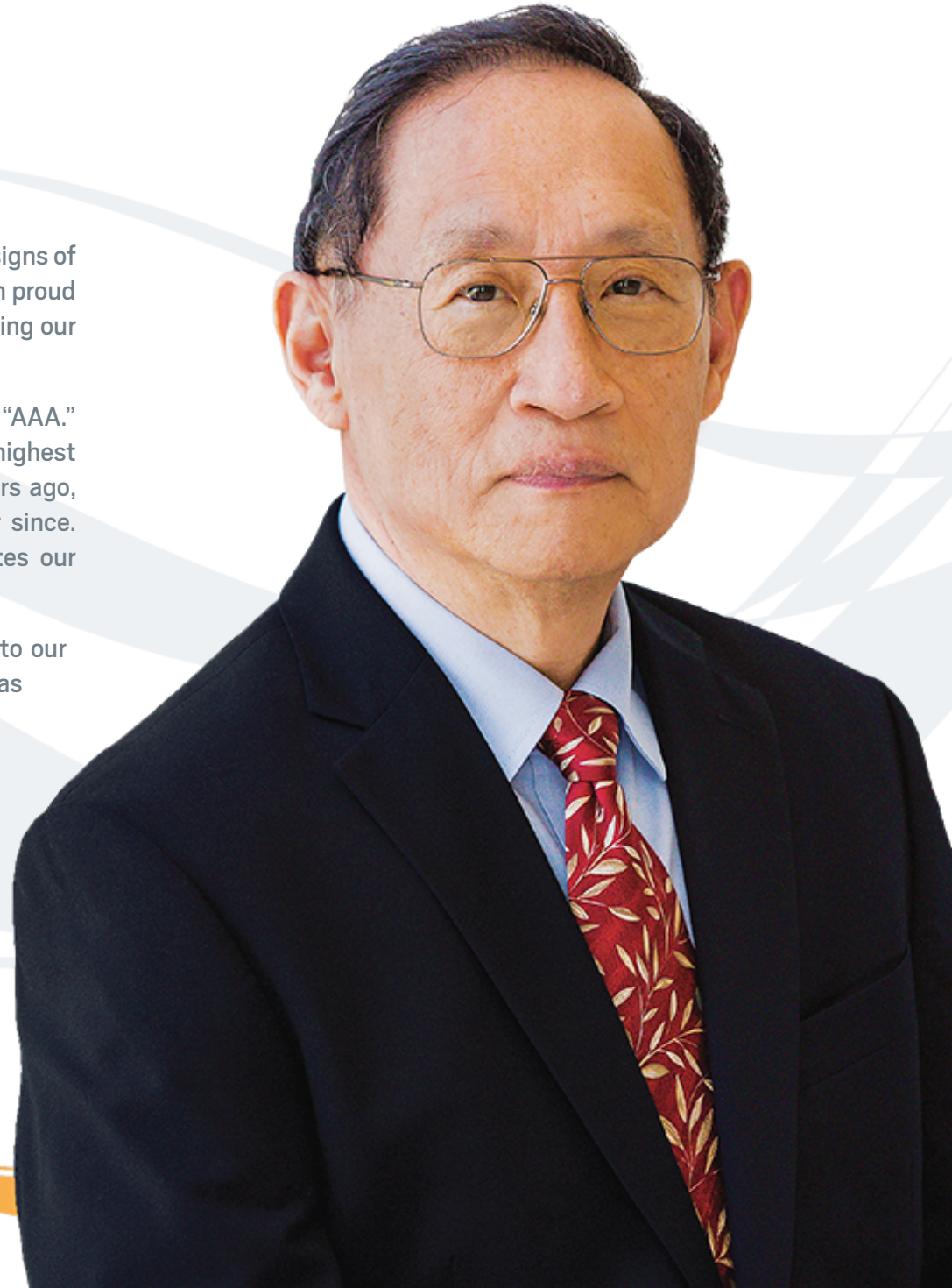
Dear Fellow Stakeholders,

This year marks our fourth Sustainability Report, and we are seeing clear signs of success and maturation. As we navigate a rapidly evolving landscape, I am proud to share the strides that we have made over the past year towards achieving our environmental, social, and governance objectives.

In 2023, MSCI upgraded our ESG rating from “AA” to its highest rating of “AAA.” This latest update from July 4 also placed Energy Recovery as the highest performing company in MSCI’s Industrial Machinery industry. Three years ago, we received a “BBB” rating, and our ratings have improved every year since. This independent recognition of our work is welcome and demonstrates our commitment to consistent, measurable improvement.

As a company, we deliver energy efficiency and operational profitability to our customers. We anticipate that our pressure exchanger technology will act as a key enabler in the transition to more sustainable forms of refrigeration and wastewater treatment, just as it accelerated the adoption of reverse osmosis solutions in desalination. Today, we help our customers across water and refrigeration prevent 17.2 million metric tons of carbon emissions from entering the atmosphere every year, while saving \$5.9 billion in energy expenses.

Applying those same principles of sustainability and operational profitability to our own operations is vital to achieving our company’s growth goals by 2026.



As we lay out in this report, embedding sustainability into our business strategy has improved our operations and helped to prepare us for the future.

We continue to make clear progress on the objectives we first laid out in our 2020 report, and all our high-level goals have either been achieved, are on track, or are demonstrating progress. We see our sustainability objectives as a way to maintain competitive advantage and ensure resiliency in our operations.

At the end of 2022, our Environmental Management System (EMS) was certified to the internationally recognized ISO 14001 standard. By applying this rigorous standard and audit system to our EMS, we are committing to making continuous improvements and holding ourselves accountable. As a next step, we have established a goal to reduce our emissions intensity by 65% by 2026 from a 2021 baseline.

Internally, we are seeing signs that our commitment to sustainability and employee wellbeing is resonating with our employees. In 2023 we once again participated in the Great Places to Work survey and were certified as a Great Place to Work for the second year in a row. Many of the sustainability and safety initiatives that we have put in place in the last year were suggested by employees, which you will see reflected in the stories shared in this report. In addition, we are seeing high levels of employee engagement in safety hazard reporting, a sign that we are succeeding in cultivating a strong safety culture.

We have also made steady progress towards our goal of aligning with the recommendations set by the Task Force on Climate-related Financial Disclosures (TCFD). In last year's report, we published our scope 1-3 emissions for the first time.

This year, we continued to work with a third-party advisor to conduct a rigorous assessment of our climate-related business risks and opportunities and have summarized their potential impacts and our approach in this report. This process has been an important vehicle to assess and prepare for potential vulnerabilities in our operations and evaluate the opportunities that the transition to a low-carbon economy presents our business. As our next step, we will conduct a quantitative scenario analysis to better understand the potential financial impact of these risks and prioritize any necessary investments into mitigation efforts.

Our TCFD work is part of our broader focus on evolving our sustainability efforts as our business evolves, which is why we are embarking on another materiality assessment in late 2023. Similar to the process we undertook in 2020, we will be consulting a wide cross-section of stakeholders including employees, customers, and shareholders to assess their perspectives on which sustainability topics are material to our business. We will then use this insight to refresh our current goals and develop new ones.

Energy Recovery's role in helping our customers achieve reliable, sustainable operations across a range of industries is a source of pride for my team and me. We are equally proud of the progress within our own four walls. With our sustainability strategy in place, we are well-positioned to be resilient in a changing world and ensure a stable foundation for growth.

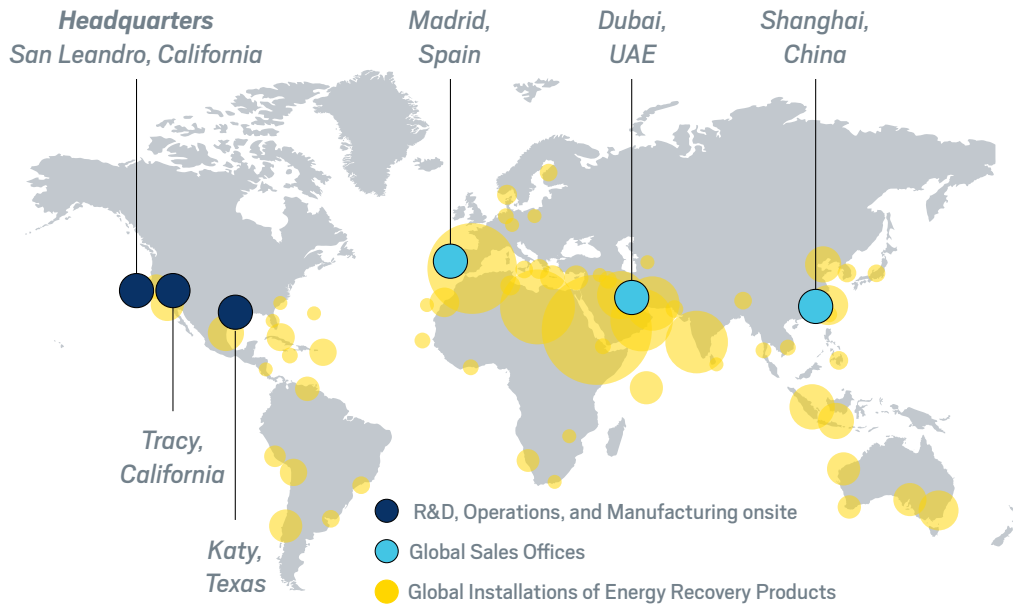


Robert Mao

*Chairman of the Board, President,
and Chief Executive Officer of Energy Recovery*

Energy Recovery at a Glance

Energy Recovery (NASDAQ: ERII) is a trusted global leader in energy efficiency technology. Building on our pressure exchanger technology platform, we design and manufacture reliable, high-performance solutions that generate cost savings and increase energy efficiency across several industries. With a strong foundation in the desalination industry, Energy Recovery has delivered transformative solutions that optimize operations and deliver positive environmental impact to our customers worldwide for more than 30 years. Headquartered in the San Francisco Bay Area, Energy Recovery has manufacturing and research and development facilities across California and Texas with sales and onsite technical support available globally. For more information, please visit www.energyrecovery.com.



2022 Highlights

36.2 TWh *Saved in Electricity Consumption**

17.2M *Metric Tons of Carbon Emissions Avoided**

\$5.9B *Energy Expenses Saved by Customers**

100% *of New Hires Began Receiving Sustainability Training*

Certification to ISO 14001:2015 Environmental Management System

Employees in 12 Countries

\$125.6M *Product Revenue*

2 Materiality and Strategy

Our sustainability strategy is driven by our business objectives and stakeholder feedback, which was a key element in our first materiality assessment in 2020. During that process, we engaged a wide segment of stakeholders including internal leaders, investors, our Board of Directors, and a diverse cross section of our employees to determine the ESG-related topics on which to focus. Based on their input we mapped out several measurable Key Performance Indicators (KPIs) and goals in order to track our progress. A high-level overview of our progress to date on those KPIs can be found in our [Goal Progress Dashboard](#).

This has been an instrumental foundation for our sustainability framework; however, as our business has evolved, we plan to refresh our materiality assessment in 2023. Our aim is to evaluate our priorities, build on successes, and engage key stakeholders once again to ensure that our strategy remains aligned with their concerns and values. The results of our 2023 materiality assessment and any associated updates to our goals will be included in our report next year.



Goal Progress



Achieved and Ongoing



ISO Certification Achieved



On Track

Goal	Target	Status
<u>Report climate-related risk strategy and management aligned with the TCFD by end of 2024</u>		
<u>Double emissions reductions from Energy Recovery products by end of 2025 vs. 2019 baseline</u>		
<u>Certification to ISO 14001 Environmental Management Standard by end of 2022</u>		
<u>Deliver products and solutions customers can trust</u>	Maintain warranty expenses below 1% of total product revenue	
	Maintain zero monetary losses associated with legal proceedings due to product health and safety incidents	
<u>Develop workforce to deliver sustainable, diversified growth</u>	Maintain retention rate above 90%	
	100% of new hires receive sustainability training within 3 months of hire date by 2022	
	Maintain new hire turnover rate below 10%	
	Maintain Great Place to Work survey participation rate above 70%*	
<u>Protect the lives and livelihoods of our employees by providing a safe and healthy work environment</u>	Certification to ISO 45001 Occupational Health and Safety Management Standard	
	Near miss frequency rate	
	Aim towards a total recordable incident rate (TRIR) of zero	
<u>Reduce emissions intensity to 10 MT CO₂e** per million dollars of revenue by 2026 from a 2021 baseline*</u>		

New Goal (as of 2023)

*Goals marked with an asterisk created in 2023. All other goals created in 2020.

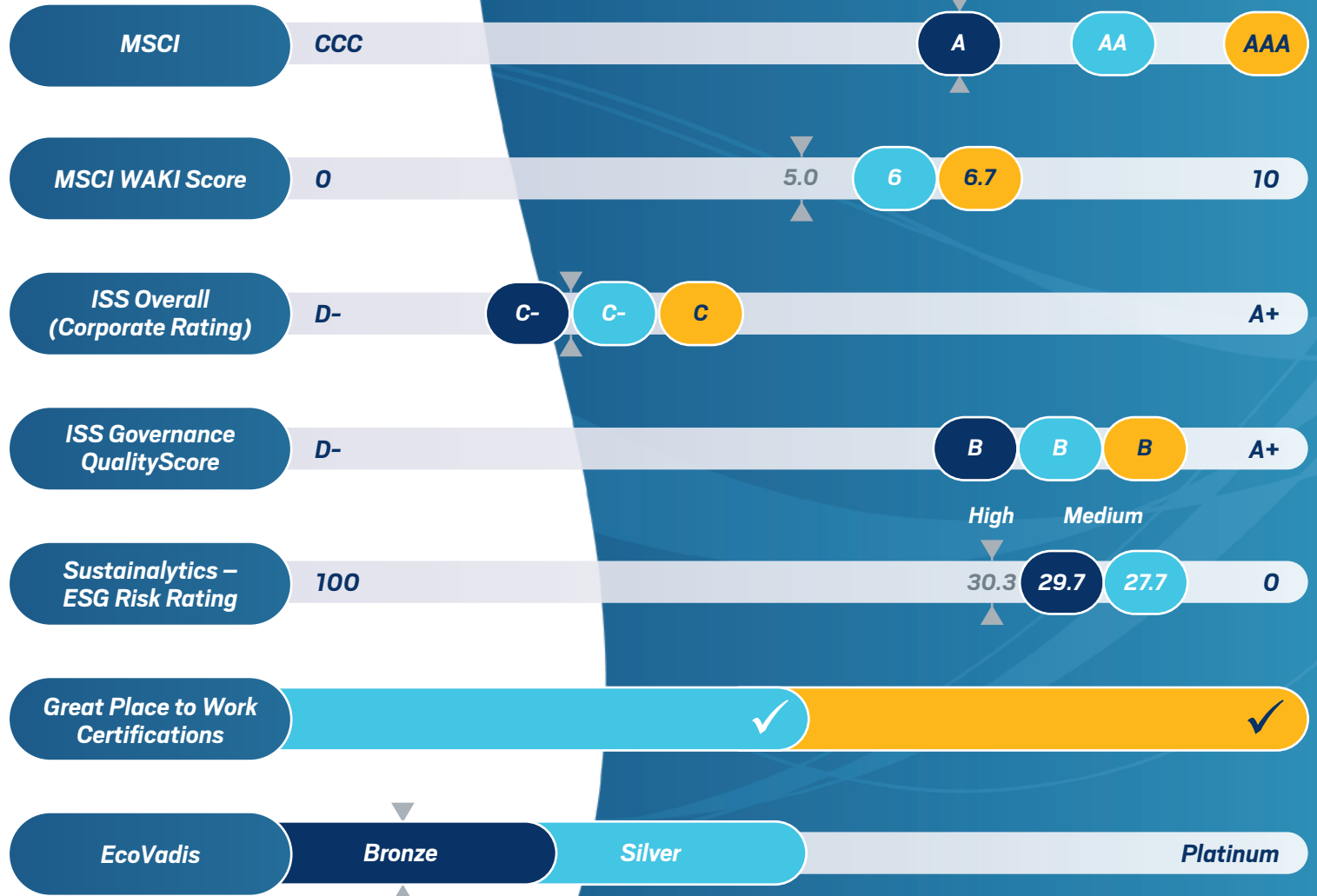
**Metric tons of carbon dioxide equivalents

Ratings and Recognition

Industry Average 2021 2022 2023



As of 2023, Energy Recovery, Inc. received an MSCI ESG Rating of AAA.



Teamwork and Collaboration

Achieving our goals and executing a robust sustainability strategy is a collective effort that requires input and cooperation from a diverse cohort of departments and business units. The following departments contribute significantly through oversight, data collection and analysis, strategy, execution, and more to continuously drive our company forward.



Stakeholder Engagement

We continuously solicit and evaluate feedback from our stakeholders, and we adjust our priorities accordingly as we progress our sustainability strategy.



Investors

- Consistent and proactive investor outreach
- Conferences
- Site visits and facilities tours
- In-person and virtual 1-on-1 meetings
- Screening questionnaires
- Investor Relations email listserv
- Investor Relations website
- Press releases
- Product presentations



Employees

- Sustainability onboarding training and roadshows
- Company intranet
- “Employee Connect” email announcements
- Quarterly Town Hall meetings
- Engagement surveys
- Employee sustainability suggestions
- Code of conduct



Customers

- Direct engagement with sales
- Supply chain surveys, reporting via EcoVadis
- Interviews, case studies, white papers, spotlights
- Social media
- Direct marketing, trade shows, webinars
- Help customers achieve occupational safety and health goals



Suppliers

- Direct engagement with operations team
- Supply chain evaluation
- Trade shows
- Trade media

United Nations Sustainable Development Goals Alignment



The United Nations Sustainable Development Goals (SDGs)

provide an ambitious and high-level blueprint for tackling some of the world's largest challenges to move towards peace and prosperity for all people and the planet. The SDGs are composed of 17 interlinked goals, in recognition of the fact that many of the world's challenges are connected. All UN member nations have now adopted the SDGs, and continued collaboration between governments, businesses, and society at large is essential to the success of this mission. At Energy Recovery, we view the SDGs as an important accountability and measurement mechanism, and as such we are committed to advancing specific SDGs that align with our strengths as a business and our ability to make an outsized impact.



Our Alignment

- Reducing energy needs, costs, and emissions for desalination and wastewater treatment facilities
- Reduce emissions through improved productivity, increased efficiency, and reduced energy consumption
- Aligned with the [Kigali Amendment \(page 34\)](#)
- PX G1300™ pressure exchanger improves energy efficiency of CO₂ refrigeration
- Accelerating the transition to natural refrigerants
- Adopting sustainable consumption and production practices in our own operations
- Responding to the TCFD framework to integrate the management of climate change-related risks and opportunities into our business strategy

Our FY22 Impact

- Over 33 million cubic meters of water produced per day at desalination plants with installed Energy Recovery products
- Purchase orders across 16 wastewater verticals
- 17.2 million MTCO₂e emissions avoided
- Switched to 100% purchased renewable electricity at all facilities
- 68,654 kWh generated from solar in Katy, Texas facility
- \$5.9B in energy expenses saved for our customers
- [Received Refrigeration Innovation of the Year Award \(2023\)](#)
- Partnerships with Epta Group and Fieuw Koeltechniek established to deploy the PX G1300 in European markets
- Certified to ISO 14001 Environmental Management System
- 40% recycled alumina powder used in production
- 100% waste metal recycled
- Published first greenhouse gas emissions inventories
- Identified climate-related risks and opportunities
- \$30,000 donation to GlobalGiving's Climate Action Fund

3 Environmental Management

Energy Recovery delivers energy efficiency and operational profitability through reliable and high-performing equipment to build a more sustainable future for our world. As such, we are committed to measuring and managing our own operational impact on the environment, as well as producing high-quality energy recovery devices and components for our customers. Our current goals formalize our commitment to reduce emissions through our products and to follow best practices for operating sustainably. As our business grows, we are vigilant in managing our climate-related risks to remain successful and competitive in an ever-changing environment.





Goal: Align with TCFD by 2024



Environmental & Climate Change Risks

We are well on our way to meet our **goal of complete TCFD alignment by the end of 2024**. Our qualitative assessment of climate-related risks and opportunities is complete, and our initial findings are detailed throughout this section.

Our continued efforts to integrate the recommendations of the TCFD by 2024 position us to:



Stress-test the resilience and financial condition of our business strategy under various climate scenarios to optimize resource allocation and drive growth in enterprise value



Reduce our environmental impact



Strengthen our enterprise risk management and governance processes



Remain compliant with potential climate reporting mandates and related regulation, such as the Securities and Exchange Commission's (SEC) proposed climate disclosure rule



Provide stakeholders with transparent plans and a clear strategy to manage our business through the energy transition and a changing climate



Building on our previous years' efforts, which included publishing our Scope 1- 3 emissions footprint in 2022, we have substantially advanced our understanding of climate-related risks and opportunities that could impact our business through in-depth analyses and discussion supported by a third-party advisor.

This has accelerated our progress towards our TCFD goal and will help us build a roadmap for improvement, pending the findings from our quantitative analysis. The in-depth analyses we completed required input and involvement from senior leadership and employees from all facets of the organization. This also served to drive awareness of how climate change may affect our business and build alignment on strategic imperatives, which accelerated our progress in 2023.

We view this as a dynamic, ongoing exercise. We look to continue expanding our understanding of how climate change may impact our business and the actions that we may need to take to remain resilient and capitalize on opportunities. The list below represents our core focus areas as we progress towards fully responding to the TCFD's recommendations by 2024:

- **Quantitative scenario analysis** – Executing the quantitative analysis of our risks and opportunities allows us to assess our business' resiliency under different climate change scenarios and timespans. The exercise will prioritize our identified risks and opportunities on an absolute and relative basis according to the expected likelihood and magnitude of financial impact.
- **Risk and opportunity strategy and implementation** – Following this analysis, we will assess current activities to identify strategic gaps, and implement initiatives to mitigate risks and allocate resources to core opportunities.
- **Enterprise risk management and oversight** – We will then incorporate finalized climate-related risks and opportunities into our enterprise risk management program and devise cross-functional oversight structures to properly govern each.
- **Managing our environmental footprint** – Looking forward, we have set a new emissions reduction target for 2026, furthering alignment with the TCFD.



Energy Recovery's Climate-related Risks and Opportunities

Identification Process

We worked alongside a third-party advisor in 2022 to analyze our exposure to climate-related risks and opportunities in our direct operations and value chain. The graphic below outlines our process. We believe these efforts will enable stakeholders to accurately and effectively compare our performance, risk mitigation efforts, and broader strategy to competitors and other market participants. Using well-regarded third-party sources within our assessment also sets the foundation for the potential need to comply with the SEC's proposed mandated climate reporting disclosures.

1 *In-depth external research to gather key climate change findings and global risks and opportunities during future time horizons under different scenarios. Sources consulted include the Intergovernmental Panel on Climate Change (IPCC), the International Energy Agency's (IEA) World Energy Outlook (WEO) report, World Resource Institute (WRI), and the Network for Greening the Financial System (NGFS).*

2 *Analyze peers and value chain to determine prevalent climate-related risks and opportunities from an industry lens. Review of broader regulatory landscape.*

3 *Preliminary identification of climate-related risks and opportunities relevant to our direct operations and value chain. Sustainability Management Committee and participants from various facets of operations underwent an in-person working session to review, refine, and stress-test the company's exposure and gain consensus on potential impacts if certain events were to occur. Risks and opportunities were defined and classified using terminology from the TCFD's guidance and the CDP's climate questionnaire.*

4 *Directionally considered existence and magnitude of potential financial impacts for each risk and opportunity.*

→ *Final identification of climate-related risks and opportunities as well as consideration of directional financial impacts.*

Energy Recovery's Climate-related Risks and Mitigation Strategies

The table below provides an overview of the climate-related risks most relevant to Energy Recovery and our value chain. Based on our analyses, the company's exposure to physical risks of climate change would most likely have the greatest impact on our direct operations and at customer facilities (downstream), while transition risks related to climate change would most likely have an outsized effect on our business partners – both downstream and upstream – within our value chain.

For more information on risks to our business, including climate change, please reference our [Form 10-K](#).

Physical Risks

Risk Category	Position in Value Chain	Climate-related Risk Definition	Potential Impact to Energy Recovery	Mitigation Strategies
Acute	Direct Operations (Facilities)	Impact of increased likelihood and severity of acute physical risks to direct operations (blackouts, flooding, coastal events, earthquakes) on facilities.	<p>The rising risk of blackouts and damage from other acute events to our corporate headquarters in San Leandro, California, could lead to higher repair costs and overall business disruptions. Public safety power shutdowns or natural disasters in San Leandro and Tracy, California, where our secondary manufacturing facility is located, could also increase production downtime and adversely affect our financial condition.</p> <p>While we have insurance coverage for our properties, insurance companies may not provide full protection, and as the severity of weather events continues to escalate in the regions in which we operate, certain forms of insurance may become unavailable or prohibitively costly.</p>	<p>Emergency Preparedness: Our emergency preparedness processes and teams support our ability to properly respond to acute physical risks. Examples include our IT Incident Response and Business Continuity Plans. San Leandro has also undergone an earthquake retrofit to minimize the potential for any physical damage.</p> <p>Inventory Management: Our inventory management strategy mitigates adverse impacts from acute events by maintaining appropriate levels of finished goods in multiple sites. In the event of production disruption, this backstock enables us to minimize customer attrition and loss in market share.</p> <p>Insurance: We seek to maintain adequate levels of insurance to mitigate potential financial losses.</p>

Physical Risks

Risk Category	Position in Value Chain	Climate-related Risk Definition	Potential Impact to Energy Recovery	Mitigation Strategies
Acute	Direct Operations (Employees)	Impact of increased likelihood and severity of acute physical risks (blackouts, flooding, coastal events, wildfires) on employees. ¹	<p>Acute events in the geographic regions relevant to our business could displace our workforce and disturb public transportation systems and communication channels.</p> <p>California is highly exposed to wildfire risks and changing wildfire patterns, which climate change has worsened per the EPA.² While our operational sites are not at overt risk of wildfire burn, secondary risks associated with wildfires could threaten our employees' physical safety and impair production capacity. Such threats include the excessive inhalation of toxic smoke, potential for property damage, and the ability to commute to corporate offices and manufacturing facilities.</p>	<p>Operational and Workforce Continuity: We have measures in place to limit the impacts of an acute event on our employees' ability to communicate and work given our use of cloud-based systems, bi-coastal disaster recovery IT servers, and our IT Incident Response Plan. In the event production is impacted, our inventory management strategy discussed above provides additional mitigation.</p> <p>Minimized Workforce Exposure: Energy Recovery employees do not work in outdoor settings and are less susceptible to the impacts of acute events during the workday.</p>
	Downstream	Impact of increased likelihood and severity of acute physical risks (blackouts, flooding, coastal events, wildfires) on product markets.	<p>Weather-related damage could lead to the destruction of customer sites and/or supply chain disruptions and temporarily result in lower demand for our products. Additionally, prolonged supply chain disruptions and increased delays in shipments could lead to customer attrition and a loss in market share. In the event of an acute physical event, our ability to collect payment in a timely manner from customers may also be impaired, as may our ability to raise capital at favorable terms.</p>	<p>Diversification: We are actively pursuing diversified business growth in markets that are less concentrated in large projects (as compared to desalination mega projects). As our revenue becomes spread out across more projects, the risk from any single project is minimized. Additionally, these projects are more globally distributed. The diversification of our business both from a market and a geography perspective helps insulate us from location-specific acute events.</p>

Physical Risks

Risk Category	Position in Value Chain	Climate-related Risk Definition	Potential Impact to Energy Recovery	Mitigation Strategies
Chronic	Direct Operations (Facilities)	Impact of rising sea levels on Energy Recovery facilities given proximity to coastal areas, and other chronic physical risks related to temperature rise and water stress. ³	<p>Given Energy Recovery’s geographic footprint, our facilities could be exposed to risks associated with rising sea levels. This may adversely affect operating and insurance costs, and the value of existing assets.</p> <p>Sea level and temperature rise may also contribute to water scarcity and potential caps on water consumption, which could impact our R&D processes that utilize water and limit growth opportunity capitalization. Chronic water stress may also directly impact our core operations due to increased water costs and/or decreased access to water.</p>	<p>Insurance: We seek to maintain adequate levels of insurance to mitigate potential financial losses.</p> <p>Operational Efficiency: We are implementing resource-efficient processes across our operations, such as recycling water in our test loops, so that our production and R&D processes can operate on minimal water consumption.</p>
	Direct Operations (Employees)	Impact of rising mean temperatures and other chronic physical risks, such as water stress, may ultimately impact employees and labor productivity. ⁴	Employee well-being, health, and safety could deteriorate due to extreme heat and droughts, which may affect both life at home and employee productivity at work. Water stress and scarcity, a symptom of increased heat and droughts, may also lead to potential caps in water consumption in locations where our employees live and work, leading to increased labor costs.	<p>Workforce Protection: Temperature-controlled facilities, along with the ability to work from home for many job functions, help shield employees from climate-related health and safety impacts, thereby mitigating potential productivity impacts.</p> <p>Workforce Health and Safety: We have implemented systematic safety improvements to ensure employee health and well-being such as achieving certification to the ISO 45001 (Occupational Health and Safety Management Standard).</p>

³IPCC AR6 Synthesis Report Figure 3.4
⁴Based on IPCC data: World Economic Forum Summary of 2023 IPCC Report

Physical Risks

Risk Category	Position in Value Chain	Climate-related Risk Definition	Potential Impact to Energy Recovery	Mitigation Strategies
Chronic	Downstream	Impact of rising sea levels on product markets given proximity to coastal areas, and other chronic physical risks related to temperature rise.	<p>Given the typical placement of desalination and wastewater plants on or near coastlines, demand for our energy recovery devices could be affected due to our customers' exposure to rising sea levels.</p> <p>For example, volatility in the construction of desalination plants and related reductions in spending for desalination-related infrastructure could negatively impact our revenue. These market dynamics could also pose increased credit risk due to a restricted ability to collect timely payment from customers and decrease the company's access to capital.</p>	<p>Diversification: We are actively pursuing diversified business growth in markets that are less concentrated in large projects (as compared to desalination mega projects). As our revenue becomes spread out across more projects, the risk from any single project is minimized. Additionally, these projects are more globally distributed. The diversification of our business both from a market and a geography perspective helps insulate us from location-specific physical events.</p>

Transition Risks

Risk Category	Position in Value Chain	Climate-related Risk Definition	Potential Impact to Energy Recovery	Mitigation Strategies
Market	Upstream	Increased cost of raw materials impacts cost of goods sold.	<p>Energy Recovery may be exposed to price changes in raw materials required to manufacture our products, as well as operational and input costs necessary for production such as water, electricity, and natural gas. These constraints may cause production delays or stoppages, which would likely decrease the volumes of units sold.</p> <p>Our supply chain may also face inflationary pressures related to the sourcing, distribution, and transportation of raw materials due to a variety of factors such as the rising costs of natural gas.</p>	<p>Market Intelligence and Monitoring: Our dedicated market intelligence team monitors macro level trends that impact our business across the value chain (upstream and downstream), for instance, how energy costs in the mining industry may impact the cost of metals.</p> <p>Supply Chain Management: We are actively diversifying to ensure we have qualified back-up suppliers and minimize risks associated with a highly concentrated number of suppliers. We also work to assess opportunities to reduce and streamline shipping activities.</p> <p>Operational Efficiency: We continuously assess opportunities to make our operations more resource-efficient, by addressing water, natural gas, and electricity usage, especially related to manufacturing operations.</p>

Transition Risks

Risk Category	Position in Value Chain	Climate-related Risk Definition	Potential Impact to Energy Recovery	Mitigation Strategies
Technology	Downstream	Substitution of existing products and services with more efficient options.	<p>Our customers' preference for our solutions is deeply connected to our ability to provide the most competitive solution on the market.</p> <p>Across our legacy water segment and emerging technologies, a variety of risks may emerge if the company is unable to provide the most efficient and effective products and services, which are detailed extensively in our 2022 Form 10-K.</p>	<p>Marketing and Sales Efforts: We maintain ongoing sales and marketing efforts with both current and prospective customers to actively solicit feedback, especially soon after product installation.</p> <p>Market Intelligence and Monitoring: Our value proposition is predicated on our ability to provide the most energy-efficient products and services. Given this, we monitor the competitive environment very closely to ensure we can continue meeting customers' needs.</p>

Energy Recovery's Climate-related Transition Opportunities

Though climate change presents risks and challenges for us and society as a whole, it also presents significant opportunities for our business. We have identified four climate-related opportunities across our direct operations and value chain. We view our exposure to climate opportunities as highly relevant to the core strategy of our business: continued innovation.

Transition Opportunities

Opportunity Category	Position in Value Chain	Climate-related Opportunity Definition	Potential Impact to Energy Recovery	Approach to Opportunities
Energy Source	Direct Operations (Facilities)	Use of lower-emission sources of energy.	Diversification of energy sources minimizes reliance on one given source and de-risks energy-related disruptions to operations. Reducing our emissions and environmental footprint also has the potential to reduce operating costs and minimize future liabilities from potential regulation.	<p>Energy Source Diversification: We have shifted our own operations to include offsite and onsite renewable energy sources in recent years.</p> <p>Emissions Footprint Reductions: As of calendar year 2022, we annually report our scopes 1, 2, and 3 greenhouse gas emissions. A better understanding of our footprint will equip us to better identify and implement future emissions reduction initiatives. For more information on efforts to reduce our environmental footprint, see pages 24-26.</p>

Transition Opportunities

Opportunity Category	Position in Value Chain	Climate-related Opportunity Definition	Potential Impact to Energy Recovery	Approach to Opportunities
Market	Downstream	Access to new markets.	<p>Desalination and Wastewater</p> <p>Desalination and wastewater treatment and reuse are critical ingredients to address water scarcity. Regulatory intervention on wastewater and water reuse presents a significant opportunity for our business. Likewise, desalination will increasingly be a tool regions and countries turn to bridge the gap in natural water resources.</p> <p>CO₂ Refrigeration</p> <p>Regulatory changes are driving the refrigeration industry – as well as supermarket chains looking for a safer source of refrigerants – to shift from HFCs to carbon dioxide-based refrigeration, which is one of the most sustainable and safe natural refrigerants due to its low toxicity and flammability, as compared to alternative refrigerants, such as ammonia and propane. As markets catch up to comply, we anticipate the sales of CO₂ refrigeration systems to increase.</p>	<p>New Market Entry: We seek to drive high-margin growth by offering efficient, scalable solutions for recovering otherwise wasted energy in seawater desalination, wastewater treatment, and CO₂ refrigeration, thereby allowing our customers to reduce their capital expenditures, as well as lower operating costs and reduce carbon emissions.</p> <p>For more information on our desalination and wastewater solutions, see pages 33–37. For more information on our CO₂ refrigeration solutions, see page 39.</p> <p>Market Intelligence and Monitoring: Our dedicated market intelligence team monitors macro level trends that impact our business across the value chain (upstream and downstream), for instance how HFC regulation may impact the total addressable market size for CO₂ refrigeration.</p>
Products & Services	Downstream	Shift in customer preferences (cost of energy, water access).	The world's need for freshwater is intensifying, driven by population growth, industrialization, rapid urbanization, and climate change. Freshwater scarcity can lead to a rising focus on water access and quality, particularly when the population is expanding. Fluctuation in electricity costs may influence demand for our energy-efficient product offerings.	<p>Sales and Marketing: We maintain ongoing sales and marketing efforts with current and prospective customers to drive awareness of our pressure exchanger's value proposition, including lowering energy costs.</p> <p>Proven Expertise: With our roots in desalination, we are well-positioned to help address the world's increasing need to produce and reuse freshwater in a sustainable and economical manner.</p>
	Direct Operations	Development of new products or services through research and development and innovation.	<p>Our success has been built on the strength of our proprietary pressure exchanger technology platform, which is the center of our product solutions.</p> <p>This technology platform is applicable to a wide range of industries and functions to reduce energy usage while also lowering operating costs and unplanned downtime.</p>	<p>Research & Development Strategy: Our R&D investments focus on –</p> <ul style="list-style-type: none"> ○ Advancing our solutions to better service historical markets, such as desalination. ○ Applying our pressure exchanger technology to new markets, such as our recent entries into wastewater and CO₂ refrigeration. ○ Fundamental research into new applications of our pressure exchanger technology in existing and new verticals.



Goal: ISO 14001 Certification by 2022



Environmental & Climate Change Risks

Energy Recovery set a clear intention to reduce our own environmental impact and improve our oversight mechanisms. To do this, **we committed to developing a comprehensive Environmental Management System (EMS) and certifying it to the internationally recognized ISO 14001 standard.** This commitment formalizes our intention to hold ourselves accountable and to improve over time.

KPI	Target	2020	2021	2022
ISO 14001 certification by 2022	Achieve certification by 2022	N/A	KPI created in 2021. <u>Environmental Mission Statement</u> released.	Achieved certification of our Environmental Management System to the ISO 14001:2015 standard in September 2022

In late 2022, we reached this significant milestone, and our EMS received ISO 14001 certification within our goal timeframe. The certification covers 100% of our operations and locations, and audits cover all operations within each location.

In 2022, our EMS objectives focused on improving energy efficiency, air quality, reducing waste, and helping our customers reduce their emissions.



Our plan to achieve these objectives included both targeted infrastructure investments, as well as encouraging employees throughout the company to identify opportunities to reduce their environmental footprint within their own sphere of influence. Our company culture encourages employee innovation and creativity.



Environmental & Climate Change Risks

We facilitate implementation of employee-led solutions by organizing training on environmental subjects including climate change, waste management, and overarching sustainability principles. Our aim is to provide them with the tools to view their daily work from an environmental perspective and encourage them to propose improvements. This grassroots culture and momentum, in combination with operational action laid out in the ISO 14001 framework, has resulted in improvements originating across the company. We are proud of our team’s ability to turn ideas into actions, whether they stem from top-down leadership or recommendations from throughout our workforce. This cycle ensures a continuous pipeline of ideas that make our sites more efficient, our employees feel heard, and sustainability truly feel embedded in our day-to-day culture.



Energy Efficiency

- Installing solar panels in Katy, Texas
- Electrical infrastructure prepared for upcoming EV charger installation
- Retrofitting lighting with LEDs
- Optimizing HVAC units



Waste Reduction

- Water recycling in our production test loops
- Installing water meters to measure water consumption in different areas of our manufacturing facilities
- Improving waste infrastructure and hosting trainings for recycling and composting
- Replacing single-serve coffee machines
- Transitioning to reusable dishware
- Reclaiming water from dehumidifiers to water plants
- **Recycling coolant in machining equipment** (p. 27)



Air Quality Improvements

- Retrofitting kilns to reduce combustion-related odors above and beyond air quality requirements
- Installing ventilation and ionization systems to increase air flow throughout our facilities
- Furnishing internal office spaces with plant life
- Planting a community garden in Katy, Texas

Goal: Reduce Scope 1 and 2 GHG emissions intensity 65% by 2026



Operational Impact & Management

Building on the work to report our carbon emissions last year, we are furthering our efforts by **committing to reduce Scope 1 and 2 GHG emissions intensity by 65% by 2026** from a 2021 baseline year. We will also continue to measure our Scope 3 emissions to identify opportunities for reductions in our value chain.

KPI	Target	Baseline year emissions (2021)	Target year emissions (2026)
Scope 1 and 2 emissions reduction (market-based)	65% reduction by 2026 from 2021 baseline	29 MT CO ₂ e per million dollars of product revenue	10 MT CO ₂ e per million dollars of product revenue

Our pathway to achieve this target includes both operational improvements and purchased renewable electricity. Our scope 1 emissions are driven largely by firing our ceramic PX cartridges in natural gas-powered kilns. To reduce this natural gas consumption, our Operations and R&D teams have been evaluating strategies to minimize the run-time of our kilns, optimizing each kiln cycle to produce the same amount of product while maintaining the same high quality for which Energy Recovery is known. We expect this optimization will result in less natural gas usage per kiln cycle and therefore reduce our scope 1 emissions profile. Regarding our scope 2 reduction efforts, we began purchasing 100% renewable electricity for all our facilities in mid-2022, resulting in a 56% reduction in market-based scope 2 emissions in 2022. In 2023, after a full year on these renewable plans, we expect our market-based scope 2 emissions will be zero.

To set an impactful emissions reduction target, we leveraged our forward-looking growth forecasts and revenue targets from our 5-year business plan, as well as historical production and energy consumption metrics to model future natural gas usage in relation to projected product sales.

We determined an intensity reduction rather than an absolute reduction is more appropriate for Energy Recovery given our expected business growth during this time horizon. Aligned with our growth plans, a 2026 target year for this goal is credible and feasible, but also ambitious.

We look forward to reporting on our progress towards this goal, including in the event any market forces impact our path to the target. Setting this near-term goal demonstrates our commitment to action through 2026 and beyond. We will continue to prioritize efforts that reduce our environmental footprint while yielding cost savings and efficiencies.

A summary of our GHG emissions from 2020 through 2022 is shown in the table below and more details can be found in the performance tables on [page 68](#).

Metric Tons CO ₂ e ¹	2020	2021 (Baseline Year) ⁷	2022	2022 % Change from 2021 Baseline
Scope 1²	1,826	1,807	1,606	-11%
Scope 2 (Market-based)^{3,4}	1,066	1,259	552	-56%
Scope 2 (Location-based)^{3,4}	979	1,200	1,230	3%
Scope 1-2 Emissions Intensity (MT CO₂e / \$M Revenue)⁵	31	29	17	-41%
Scope 3⁶	13,671	14,251	14,150	-1%
Total Combined Scope 1-3 Emissions (Market-based)	16,563	17,317	16,308	-6%

In conjunction with our commitment to generate fewer emissions, we are also focused on ensuring our methodology for measuring our GHG emissions remains aligned with best practices. As our business and sustainability strategies evolve, we identify assumptions and data sets that more accurately reflect actual use cases at our facilities. For 2020 and 2021, we have updated our GHG emissions calculation methodology and inputs to reflect more representative operations information in line with the recommendations provided by the Greenhouse Gas Protocol (GHG Protocol). GHG emissions figures that have been updated are identified with footnotes throughout the report.

¹GHG emissions data for 2020 and 2021 have been restated based on revisions to the previous calculation methodology and inputs. The revised methodology more accurately represents actual operations in accordance with the GHG Protocol;

²Scope 1 emissions are direct emissions calculated using the operational-control method aligned with the GHG Protocol across our San Leandro, CA; Tracy, CA; and Katy, TX, sites;

³Scope 2 emissions are indirect emissions produced from purchased energy calculated using the operational-control method aligned with the GHG Protocol across our San Leandro, CA; Tracy, CA; and Katy, TX, sites. The Tracy facility was opened during the latter half of 2020, and production increased by 40% in 2021 to support higher sales, driving scope 2 increases;

⁴Given that we began purchasing 100% renewable electricity for all our sites in the summer of 2022, we have calculated both market-based and location-based scope 2 emissions for the first time. For the location-based calculations, we use the standard Western Power Grid factor (WECC-CA) for our San Leandro, CA and Tracy, CA, sites. For the Katy, TX, site, the ERCOT factor was used. For the market-based calculations, the CA sites rely on the East Bay Community Energy emissions factors for the Bright Choice and Renewable 100 plans published on the California Energy Commission Power Source Disclosure webpage. The market-based emissions for the Katy, TX, site are derived from the emissions factors from the Constellation utility and Green-e program.

⁵Calculated as Metric Tons of CO₂e divided by FY product revenue (\$M);

⁶Scope 3 emissions are indirect emissions across the value chain not captured in scope 1 and 2 and calculated leveraging our third-party advisor's proprietary model, which aligns with the guidance of the GHG Protocol and relies on recent EPA emissions factors and trusted third-party data to determine indirect and induced greenhouse gas emissions. Our reported scope 3 emissions do not include the following categories: 3.10 – Processing of sold products; 3.11 – Use of sold products; 3.12 – End-of-life treatment of sold products; 3.13 – Downstream leased assets; 3.14 – Franchises; 3.15 – Investments. Note, 3.10, 3.11, 3.12 all require customer data to which Energy Recovery does not have access, while our business model and operations deem categories 3.13, 3.14, and 3.15 inapplicable. Our reported scope 3 emissions input categories reflect our U.S.-based operations and global business travel;

⁷In accordance with the GHG Protocol, we consider 2021 to be our best baseline because it is most representative of a normal operational year post-pandemic.

Employee Spotlights – Reducing Our Footprint

Htet Myat

- Project Engineer Intern
- San Leandro, California



Many interns use their time at a company to gain resume-boosting experience for the future. In the case of Htet Myat, he took Energy Recovery’s commitment to sustainability to heart and spearheaded a project to move away from paper-based product manuals. Htet calculated the amount of waste from these manuals over the course of three years and found that over 3,000 pounds of CO₂ emissions and approximately 123,000 liters of water could be saved by simply moving to digital manuals, easily accessed by QR codes. Now, by simply scanning a code with a smartphone, customers can have immediate access to important documents, all while saving the company money and improving our environmental footprint.

Inspired by the hard work of our interns like Htet, we are formalizing our summer internship program, and we look forward to creating more intern opportunities in the future.

2023 Summer Internship Program Stats

San Leandro, California
7 interns

Katy, Texas
3 interns



The employee-led plant committee sought to beautify and purify Energy Recovery locations: plants naturally help clean the air by taking in CO₂ and releasing O₂.

4 *Products and Customers*

At our core, we aim to design and manufacture high-quality products that deliver significant value to customers and help foster environmentally sustainable operations. Innovation and a trusted relationship with our customers is pivotal to this goal, as this allows us to understand their needs and pain points. Our expanded ultra high-pressure PX (U Series), Power Model Pro software, and low-pressure PX are examples of how we have successfully responded to market needs.



“I like thinking about where these PXs are going while I’m making them – I like knowing they’re going somewhere into the world where they’ll help someone get clean water or breathe cleaner air. The work we do here matters in the world.”

John Preto, Ceramics Technician
Tracy, California



*Desalination plants using our energy recovery devices produce over **33 million** cubic meters of water a day – enough to provide for more than **16%** of the U.S. population’s daily water needs.*

We uphold our customers’ trust by meticulously manufacturing products that not only deliver exceptional performance and generate significant value, but also demonstrate reliability and safety. This commitment to quality is ingrained in our practices and reflected in our KPI to maintain warranty expenses and monetary losses associated with health and safety incidents at a minimum.

By partnering with our customers and consistently striving to improve, we are confident in our ability to contribute to their operational profitability while advancing environmental sustainability. Our products are a reflection of our commitment to innovation, trust, and delivering high-performance solutions that drive positive change.



Goal: Deliver Products and Solutions Customers Can Trust



Products

We have spent decades **building a tradition of excellence, and our customers have come to depend on our record of delivering reliable, safe, and effective products.** As we have expanded our product offerings in recent years, our focus is on maintaining this stellar reputation.

KPI	Target	2020	2021	2022
Warranty expenses as a percentage of product revenue	Maintain below 1%	Less than 0.1%	Less than 0.1%	Less than 0.1%
Monetary losses associated with legal proceedings due to product health and safety incidents	Maintain at zero	Zero	Zero	Zero

A key factor in our favor is that our products share a common element – the ceramic cartridge. This consistency not only makes our manufacturing process more efficient but also reduces any potential operational risks of introducing new products. We are proud that we have consistently met these KPIs while bringing new products to market.

By upholding our commitment to quality manufacturing, we are confident that we can continue to serve our customers with exceptional products and uphold our reputation in the industry.



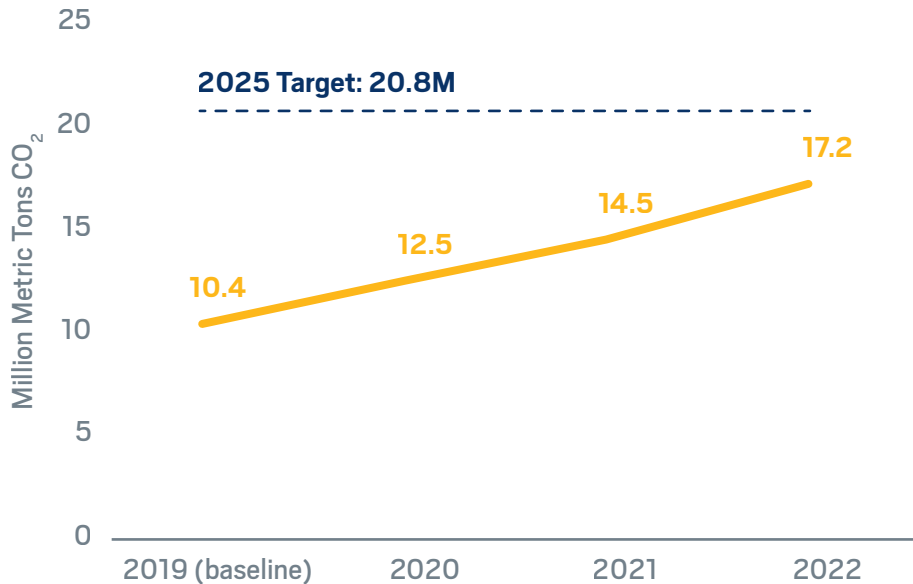
Goal: Double Emissions Reductions from Our Products by 2025



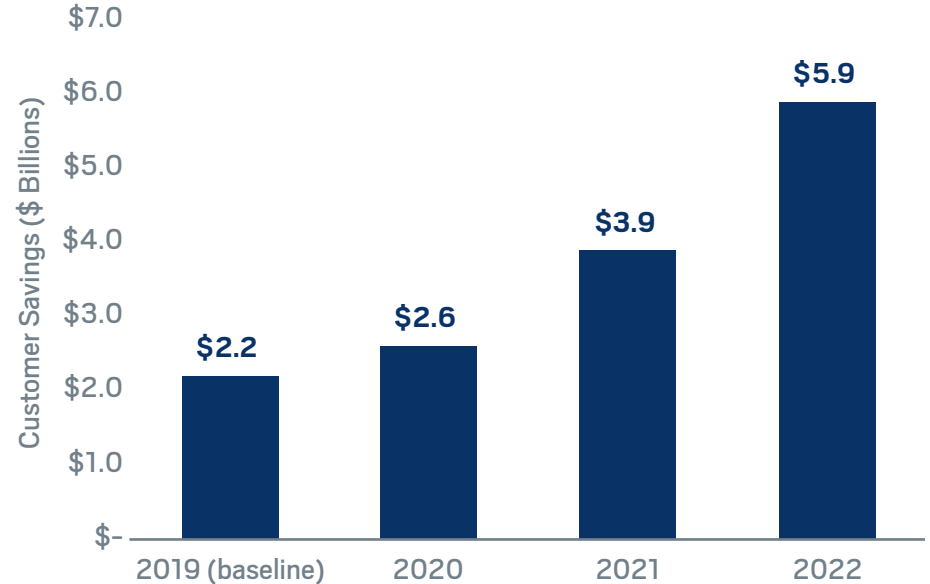
Innovation & Opportunity

Energy Recovery's ambitious goal to **double the reduction in emissions through the use of our products by 2025** is well underway.

Annual Emissions Reductions Across All Products



Annual Customer Cost Savings



Continuous Improvement and Product Innovation

Our business was established over 30 years ago with an innovation that solved a significant pain point in desalination. The PX® Pressure Exchanger® revolutionized desalination thanks to its significant energy savings, with plants able to reduce their energy consumption by as much as 60% in the seawater reverse osmosis (SWRO) process.

Since then, the PX has become the gold standard energy recovery device (ERD) in desalination, and we continue to develop our products and services with the goal of delivering solutions that our customers truly need.



Global Water Awards – Desalination Plant of the Year

Our products are installed in 100% of the 2023 nominee plants, as well as the 2022 winner & runner-up plants.

- **2022 Winner** – Atacama Desalination Plant, Chile
- **2022 Runner-Up** – Rabigh 3 IWP, Saudi Arabia
- **2023 Nominees:**
 - Bahri, Saudi Arabia
 - Qingdao Baifa Phase 2, China
 - Shuqaiq 3, Saudi Arabia
 - Taweelah IWP, UAE

Viewpoints from Energy Recovery

COP Leaders Must Not Overlook Our Growing Need for Water Infrastructure

[Read the Article*](#)



Desalination

In 2022, we launched the PX Q400, our most efficient, highest-capacity pressure exchanger for desalination yet. The PX Q400 is the next evolution of our industry-leading PX technology and demonstrates our continual pursuit of maximizing our customers' energy savings. The PX Q400 is also projected to have the lowest life cycle cost of any energy recovery device for SWRO desalination, providing more value for our customers.

→

Our flagship PX Q Series, including our latest PX Q400, is designed to enhance the safety of SWRO plants through reduced operational sound levels. At 79 decibels or lower, the PX Q Series is one of the quietest energy recovery devices on the market with the Q400 being the highest performing and highest capacity PX Energy Recovery currently offers.

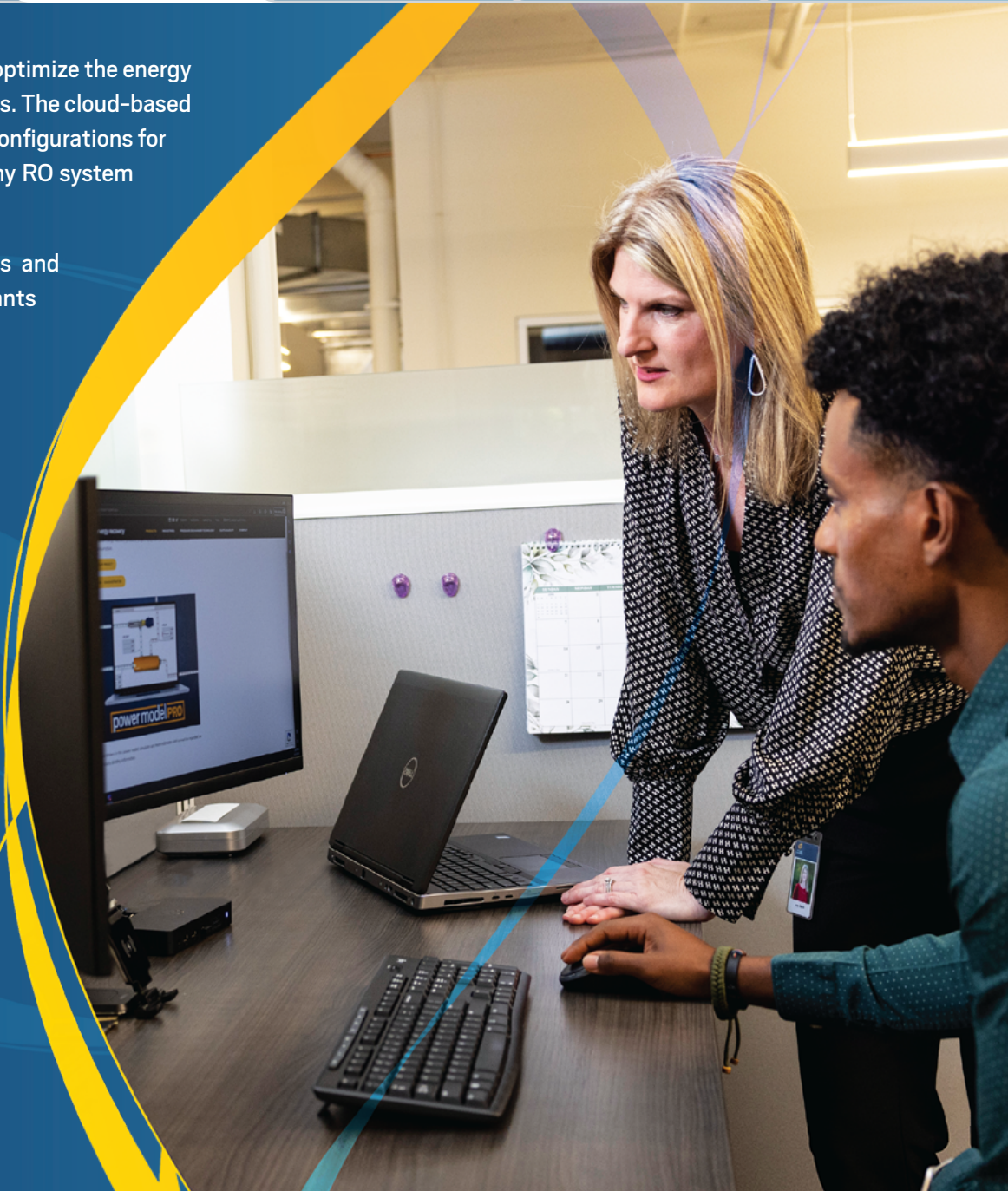


This year we also introduced the [Power Model Pro](#), which allows users to optimize the energy consumption of their RO system using Energy Recovery's pumps and ERDs. The cloud-based software is a unique design tool that identifies the optimal products and configurations for the user's application and models the pump and ERDs performance in any RO system configuration.

The tool allows customers to compare different system configurations and types of ERDs and can be used by small to large plants as well as consultants and engineers.

“Power Model Pro made it much easier to understand which piece of equipment was best suited for our design needs and would maximize our energy savings. The software was simple to use and helped point us in the right direction from Energy Recovery's range of products. Energy Recovery has consistently provided us with great service and this new tool is another testament to their commitment to us as customers.”

GS Inima, Water Treatment Engineering, Design, and Construction Firm



Employee Spotlight

Angel Abajas



In addition to Angel's work as a Sales Manager responsible for European markets and Israel, he dedicates his time to the International Desalination Association Young Leaders' Association. In this role he helps identify young, talented individuals who may not have the resources to travel to key forums and events for networking. This includes Ph.D. candidates and university students in developing countries where water conservation is vital, but where funding to nurture local talent is not available. Providing access to these networks is critical to their career development, and to developing the next generation of desalination professionals.

"I was working at another company in the desalination world, and I looked at the Energy Recovery team like rockstars. I had met the group over the years and knew they were absolute professionals with an incredible product from a company with a stellar reputation. Now that I'm part of the team, I marvel that our Senior Vice President of Water rose through the ranks of Energy Recovery. At Energy Recovery, if you make the effort, you are not just recognized, but rewarded for your ideas." – Angel Abajas, Sales Manager, Spain

Viewpoints from Energy Recovery

Is Seawater Desalination Right for California?

[Read the Article*](#)



Customer Spotlight

Abengoa, ACWA Power, and Rabigh 3 IWP

PX Proves Key in One of the World's Largest Desalination Plants



Capacity

600,000 m³/ day



Energy Savings

~500 GWh annually



Emissions Avoided

~235,000 metric tons of CO₂ annually

As one of the biggest desalination facilities in the world, Rabigh 3 IWP was designed to address the growing demand for water in Saudi Arabia, a water-stressed region, while also keeping energy consumption as low as possible.

Reliability was a key consideration, as Rabigh 3 provides drinking water to a large population in an arid region. The PX fulfilled this requirement as it requires no scheduled maintenance and has a 25-year design life, maximizing the facility's uptime.

By utilizing efficient solutions throughout the facility, the designers and engineers were able to reach their power consumption goal, with Energy Recovery's PX devices as the critical factor. On an annual basis, the PX will save ACWA Power Rabigh 3 IWP approximately 500 GWh each year, which corresponds to over 235,000 metric tons of carbon dioxide equivalents.



Wastewater

The wastewater treatment and reuse industry is experiencing significant growth as governments and the private sector are taking more steps to protect our freshwater supply, and we are adapting our line of solutions for wastewater treatment to meet our customers' evolving needs. The PX U Series for ultra high-pressure reverse osmosis is just one of the solutions that we offer to reduce energy consumption in membrane-based wastewater treatment, alongside our high and low-pressure PX lines. This approach ensures that our customers have a comprehensive range of solutions to choose from, tailored to their specific requirements.

We now offer four products in the PX U Series line, the U20, U40 (also known as the Ultra PX™), U80, and the U250. Direct customer feedback made it clear that there was a need for ultra high-pressure PXs that could operate at higher and lower flow rates, so we expanded our product offerings to better serve the market.

Low-pressure wastewater applications represent significant segments within the overall wastewater market, and these sectors are experiencing notable growth. Our low-pressure PX offers similar energy recovery and reliability benefits as our high-pressure PX, but is optimized for potable, non-potable, municipal, agricultural, and industrial water reuse, as well as brackish water reverse osmosis (BWRO).

By adapting our product offerings and actively listening to our customers' needs, we aim to meet the wastewater treatment industry's pain points just as we have in desalination and address both their bottom line and environmental objectives. Results to date suggest the market is responding positively; in 2022, we quadrupled our wastewater revenue from the year before, demonstrating a strong demand for our products.

To date, our solutions have been installed in 16 different wastewater verticals due to their versatility and unmatched value.



Customer Spotlight

*Detox Group and Aldee Water Pvt. Ltd.
Pali CETP in Pali, Rajasthan, India*

*Full-Service Energy Recovery Solutions at an
Advanced Textile Common Effluent Treatment Plant*



Capacity

12 million liters / day (MLD)



Energy Savings

13,200 KWh / day*



Cost Savings

\$480,000 annually

The PALI Common Effluent Treatment Plant (CETP) in Pali, Rajasthan, India, supports 215 textile treatment factories. The nearby Bandi River is polluted because of industrial discharge and sewage, threatening the health of nearby residents and local agriculture. The Pali CETP adopted multiple advanced reverse osmosis (RO) stages and nanofiltration in order to meet industrial discharge regulations before discharging the treated effluent back to the environment.

Pali CETP partnered with Energy Recovery to achieve more energy efficiency and reduce costs. Because the plant used several different RO stages, a suite of solutions were used to reduce energy consumption, and the plant now utilizes the following Energy Recovery products: AT Turbocharger, PX Q300s, PX Q220s, AquaBold high-pressure pump, and HP and VPXP circulation pumps.



CO₂ Refrigeration

The PX G1300™ represents a significant step forward in making CO₂ refrigeration more energy efficient and affordable, even as climate change causes more frequent and intense heat waves. CO₂ refrigeration is a sustainable alternative to traditional hydrofluorocarbon-based (HFC) refrigeration, but requires a lot of energy to operate, especially when it is hot outside. Energy Recovery's PX G1300 addresses this issue, and as we complete installations and generate more proof points to validate our technology, the refrigeration industry is taking notice.

At the ATMO Awards Ceremony during the ATMOSphere America Summit 2023, the PX G1300 earned the prestigious Refrigeration Innovation of the Year Award, presented to the company that has produced a natural refrigerant-based product that has had, or is expected to have, a significant impact on the market. The PX G1300 was also shortlisted for Refrigeration Innovation of the Year alongside Epta's XTE system and Refrigeration Product of the Year – Components or Peripherals at the 2023 RAC Cooling Industry Awards.

The PX G1300 has been commissioned in both the U.S. and Europe, and we announced two promising partnerships this year. Epta Group, a leader in the commercial refrigeration industry, announced its next-generation CO₂ refrigeration system, the XTE, which includes the PX G1300 as a featured component for the significant energy savings that it provides. We have also partnered with Fieuw Koeltechniek, a refrigeration cooling rack and service provider in Belgium, as the exclusive distributor of the PX G1300 in the Benelux region (Belgium, the Netherlands, and Luxembourg). Both Fieuw Koeltechniek and Epta Group are established and well-respected players in the natural refrigeration industry, and we are proud to partner with them to deliver emissions and energy savings to our customers.



2023 ATMO Awards
North America

Innovation of the Year



Customer Spotlight

Carrefour Installation in Belgium

In Europe, many supermarkets have launched aggressive transcritical CO₂ installation programs to help reduce F-gas emissions and the environmental impact of refrigeration systems. Fieuw Koeltechniek together with sister company HVA Koeling, one of the most prominent Belgian manufacturers of CO₂ refrigeration racks for commercial and industrial clients, has long been an early adopter of sustainable technology and an advocate for CO₂ refrigeration systems. With rising energy costs squeezing operational budgets, Fieuw sought a solution to improve energy efficiency for supermarket CO₂ systems. The PX G1300™, which harvests the high-pressure energy of CO₂ systems to reduce electricity consumption, thereby reducing operating costs and emissions, was the obvious choice.

Fieuw contacted Energy Recovery to determine if the PX G1300 pressure exchanger could improve year-round energy efficiency and replace the extra compressor traditionally required to handle summer temperatures.

Fieuw and Energy Recovery engineering specialists collaborated to design a skid that integrated two PX G1300 pressure exchangers into a 280 kW capacity Carrefour grocery store in Diepenbeek, Belgium. Utilizing two PX G1300s, this retrofit is designed to work in tandem to meet the supermarket's cooling load capacity, improve energy efficiency, safeguard the system against heat wave-related downtime, and reduce future maintenance needs by decreasing compressor workload.

This successful dual installation demonstrates the PX G1300's ability to serve larger refrigeration systems in new and existing stores. Fieuw anticipates that the PX G1300 will help customers save money on electricity consumption year-round, safeguard supermarkets against the frequent temperature spikes brought on by climate change, and be more sustainable in their operations.

“We have been successful because we have provided reliable and sustainable technology to our customers for more than 35 years,” said Stefaan Bostyn of Fieuw. “Energy Recovery has partnered with us throughout design, installation, and commissioning to ensure successful results. The PX G1300 shows significant promise as the technology of the future for CO₂ systems.”



Employee Spotlight

Darren Lacroix

→ CO₂ Account Manager

→ Barcelona, Spain



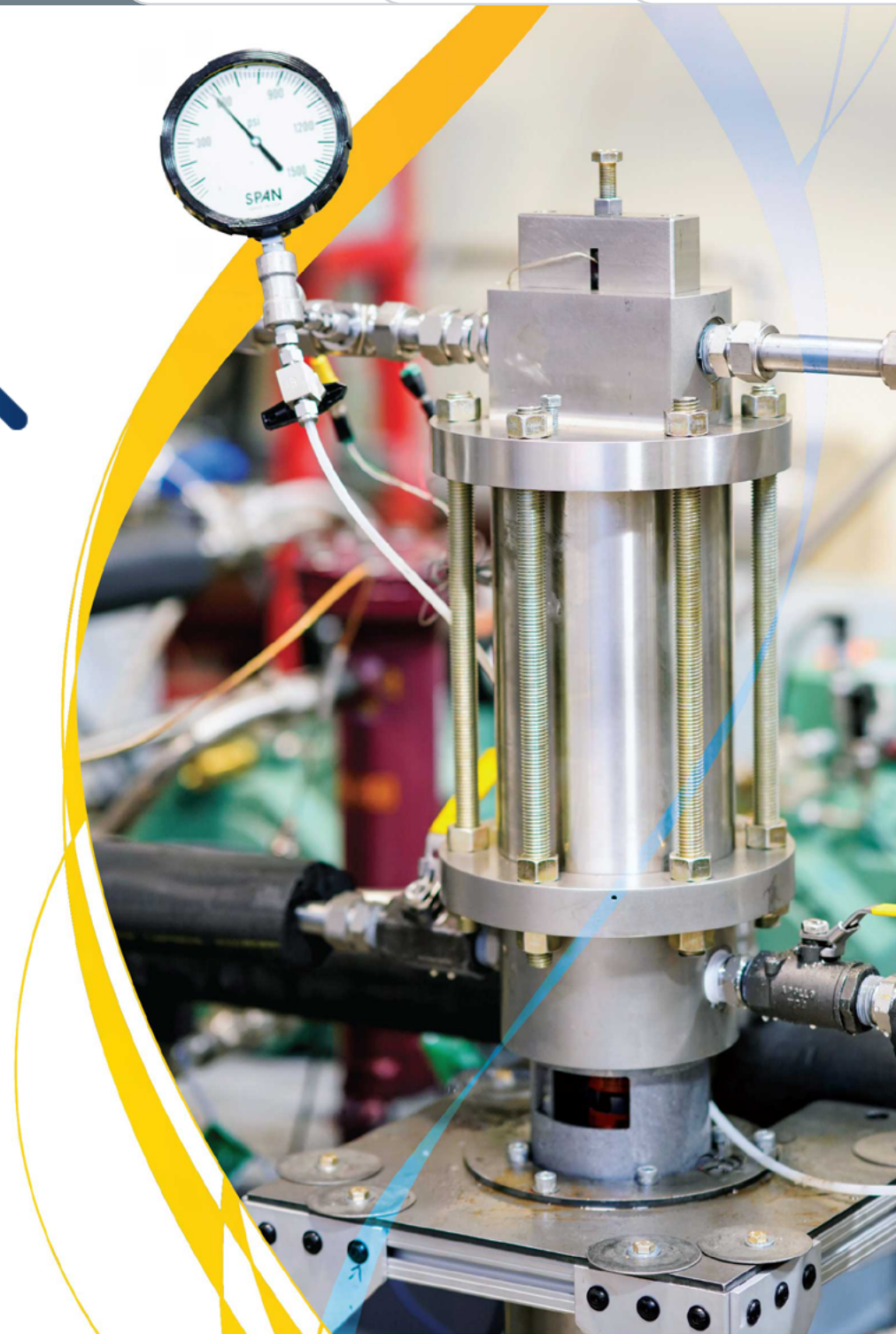
Darren's experience in refrigeration started in 2007 with Carrier Commercial Refrigeration in Germany, where he gained experience leading CO₂ implementation projects. Darren is now Energy Recovery's CO₂ Account Manager responsible for developing the business in Europe for the deployment of the PX G1300 for supermarkets and industrial applications for both original equipment manufacturer and end-user verticals.

"I'm proud of the true innovative spirit at Energy Recovery that produced an exceptional product that makes sustainable refrigeration systems more efficient, less complex, and above all, future-proof. The Energy Recovery team is steadfast in the continuous quest for better economics, performance, and reliability. I believe the role of regulation in the acceleration of natural refrigerants in Europe and the U.S. will be significant. Regulatory mandates provide the industry with guidelines, controls, and subsidies, while climate change, the greatest threat of our modern era, sets the timeline." – Darren Lacroix

Viewpoints from Energy Recovery

The Urgency of World Refrigeration Day for Grocery Stores

[Read the Article*](#)



5 *Employees and Community*

Employees are integral to success and innovation at Energy Recovery, and we are pleased to have achieved our employee retention targets multiple years in a row. It is our firm commitment and responsibility to provide a safe and supportive working environment for our staff where initiative is rewarded, suggestions are valued, and ideas to enhance the company or our products are implemented. Likewise, it is our responsibility to offer ample opportunities for employees to develop their skills.





Goal: Develop Workforce to Deliver Sustainable, Diversified Growth



Employees

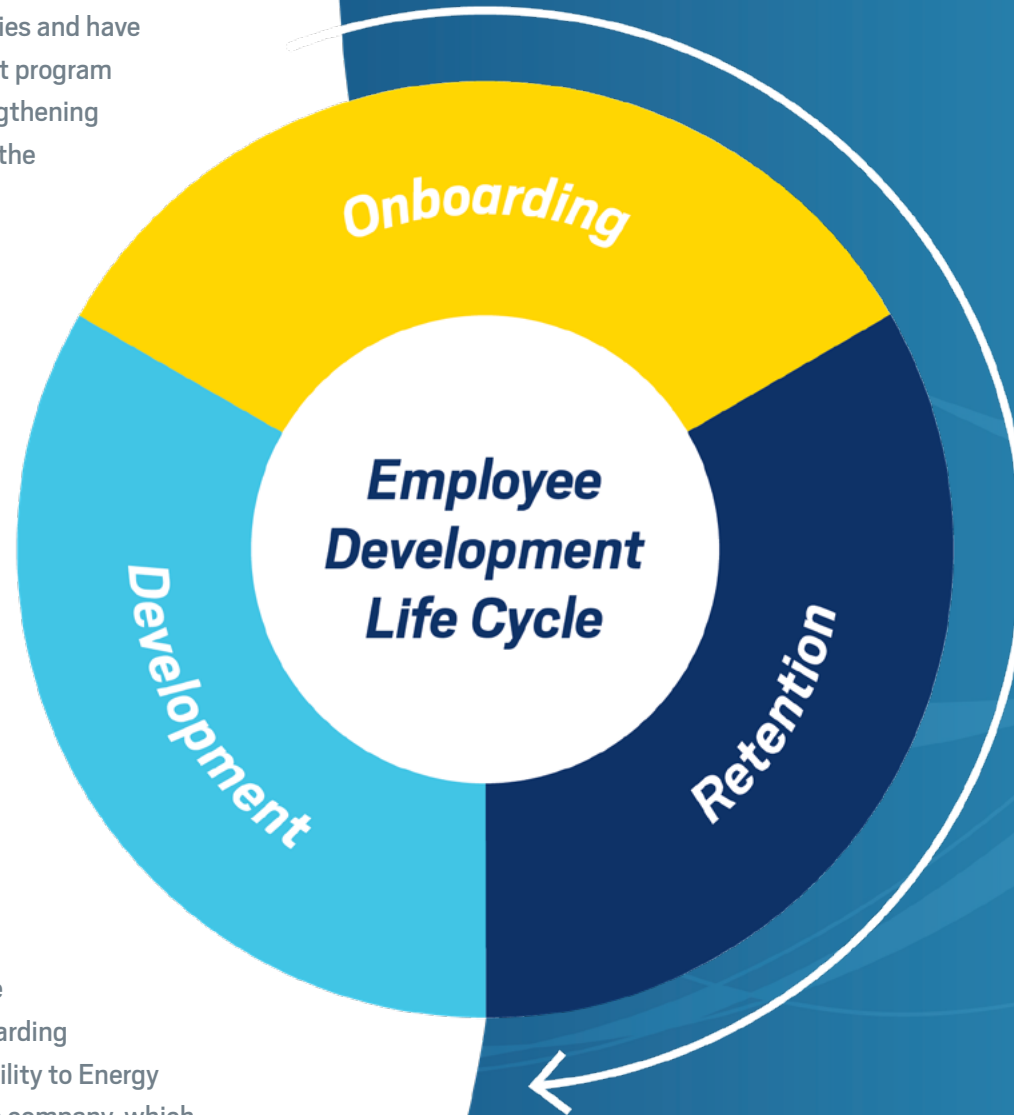
To achieve our new hire and overall employee retention targets, we evaluate the employee development life cycle and implement initiatives and activities at each phase to ensure success.

KPI	Target	2020	2021	2022
Retention rate	Maintain above 90%	94%	91%	93%
New hire turnover rate	Maintain below 10%	7%	4%	8%
Employee sustainability training	All new hires receive sustainability training within three months of hire date by 2022	Target set in 2020	Commissioned sustainability training video	Training video launched in August 2022. 100% of new hires post-launch have received the training.
Great Place to Work survey participation rate*	Maintain above 70%	Survey started in 2021	70%	75%

For new hires, the turnover rate goal underscores the importance of vetting and hiring the best candidates, while at the same time providing onboarding support to pave the way for their early success. We have once again met our new hire retention goal, which demonstrates the effectiveness of our onboarding that was implemented company-wide in 2021. Given the small size of our company, we expect to see natural fluctuations in this percentage year over year.

Our overall employee retention goal is also on track, and we continue to invest in programs, training, and career development to ensure that our employees are satisfied with their career trajectories and have access to equal opportunities. Our talent development program includes a management development series for strengthening current and future people leaders to equip them with the skills to be effective and inclusive managers. So far, this series has engaged six cohorts of managers in our company to develop their managerial and leadership skills, especially in the context of a dynamic, growing company. We have made key investments in our training program, both in terms of increasing the offered content and working to provide greater access through an expanded online learning platform. We aim to continue developing this training program to ensure employees are growing in their careers while addressing any skills gaps within the organization.

Our employee sustainability training goal is also on track, through which we aim to provide new hires with sustainability training within three months of their hire date. We have embedded this training as an introductory video in every new hire's onboarding activities, signifying the importance of sustainability to our mission and strategy. By onboarding employees right away on the importance of sustainability to Energy Recovery, an immediate ripple effect is felt across the company, which motivates and encourages everyone to act and offer ideas and solutions.



As part of our culture of continuous improvement, we once again undertook the Great Place to Work survey, delivered via a third-party employee experience platform, to hear directly from our employees where they believe we are excelling, and areas where we can improve.

We are proud to be certified as a Great Place to Work for a second consecutive year.



We will continue to survey the company annually to gather data and employee sentiment, as well as to understand where and how we can improve the employee experience. To track company participation over time, we are including the survey participation rate as a new formal key performance indicator (seen in the goal table on [page 43](#)). We will continue to report on this KPI annually in our sustainability report going forward.

Thanks to a baseline of data from the prior year, we were able to confirm incremental improvements across a majority of the 60 Great Places to Work survey statements. A key theme that emerged from the survey was employee pride in working for a company where products positively impact people all over the world. There was also a clear appreciation for Energy Recovery's work culture, whether it be employee benefits and perks like an onsite gym, yoga classes, and free lunches, or a recognition of the comradery amongst colleagues. To ensure our benefits packages continue to add value, Energy Recovery conducts an annual review with our insurance broker to compare our benefits to the market. Our current benefits package is beyond the norm relative to our manufacturing peers, and we will continue to regularly evaluate our offerings.



Benefits Offerings

Health	Wellness	Time Off	401(k) and Equity
<ul style="list-style-type: none"> ○ Energy Recovery covers 100% of the employee base plan for medical, dental, mental wellness, and vision monthly premiums ○ Flexible spending accounts ○ Short- and long-term disability and life insurance 	<ul style="list-style-type: none"> ○ Onsite gym and yoga classes ○ Gym membership reimbursement for remote employees ○ Daily lunch provided onsite ○ Quarterly wellness webinars with rotating themes such as financial education, physical and mental wellness 	<ul style="list-style-type: none"> ○ Generous discretionary time off for U.S., exempt employees ○ Paid time off accrued for U.S., non-exempt employees ○ Parental leave 	<ul style="list-style-type: none"> ○ 401(k) employee match ○ Equity compensation

Employee Spotlight

Rima Hopkins

→ Director of Human Resources

→ San Leandro, California



In addition to formal benefit offerings, the HR team has aligned on sustainability principles through thoughtful onboarding gifts and messaging.

To get new hires off on the “right foot,” Rima took the initiative to partner with Conscious Step to give every employee a new pair of their socks, which in turn donates to water.org. Each new hire will know that by just joining Energy Recovery, they have provided someone in need with four years of access to clean water.

“I am always looking for new ways to contribute to our sustainability goals because I believe that it is important for businesses to be good stewards of the environment and society.”

– Rima Hopkins

Our Global Workforce and Culture

Energy Recovery is proud to have built a global workforce to match our global customer base. Our team represents a broad array of backgrounds, professionally and personally, and we believe that this diversity of experience and perspectives is a competitive advantage that allows us to better serve the needs of our customers.

As part of our ongoing efforts to ensure that all employees feel supported and valued regardless of their background, in 2022 we began working with a third-party consultant to conduct employee focus groups with a diverse cross-section of employees. We found that employees generally agree that the company does have a diverse workforce, which they value. However, employees also reported the need for greater transparency around career development, talent processes, and advancement opportunities within the company. Similar feedback was shared by employees in our 2023 Great Places to Work Survey.

Our next steps are focused on addressing this feedback, which we believe is critical as we continue to grow and diversify our business. As part of our employee retention goal, we are already investing in training and professional development programs as well as a career path framework. This is critical not only to ensure our company has the skills and expertise required for each phase of our growth, but also to provide employees with transparency around advancement opportunities. Additionally, we are developing initiatives and processes with measurable objectives specifically aimed at ensuring an equitable working environment for all of our employees.



Employee Spotlight

Jessica Vaughn

→ Director of Supply Management

→ Katy, Texas



Jessica is the Director of Supply Management for Energy Recovery, where she is challenging herself and her team to think about how the company can improve sustainability and transparency throughout our supply chain. For example, they are currently evaluating how our product packaging can strike a better balance of keeping products safe during shipping, while minimizing the carbon footprint. This includes reducing the amount of plastic material for packaging and finding lighter-weight solutions to limit pollution from freight and transportation. Jessica received a certification in production and inventory planning, and her team will be taking a green purchasing and sustainability course this year.

“Energy Recovery really differs from other companies because sustainability is prioritized from the top down. Some companies ‘talk the talk,’ and good ideas and solutions simply die on the vine. At Energy Recovery, there’s a lot of buy-in for change and we thoughtfully implement policies that matter. I believe our supply management team brings a lot of value, innovation, and creativity to the table.”

– Jessica Vaughn





Goal: Provide a Safe Working Environment



Employees

Our total reportable incident rate (TRIR) has remained relatively stable for the last two years, even as safety reporting increased significantly over that timeframe.

KPI	Target	2020	2021	2022
Safety training	Achieve 95% of planned annual training for each employee group	Implemented tailored, job-specific safety training	Transitioned to a new safety training management software that allows for efficient tracking towards the 95% target	93%
Total recordable incident rate	Aim towards zero	4.03	7.80 (4.16 excluding COVID -19)	8.48 (4.49 excluding COVID-19)
Near miss frequency rate	Actively encourage increased reporting to embed safety culture	8.06	13.01	18.96
Fatality rate	Maintain at zero	Zero	Zero	Zero

We have extensively reinforced a culture of reporting to correct underlying issues and “near misses” before they become a safety incident. Our near miss frequency rate (NMFR) increased as employees utilized better reporting tools for tracking, and proactively flagged potential problems and implemented solutions before any incidents occurred. Our Hazard ID reporting increased 500% from 2021 to 2022, and many of these hazards were indeed categorized as near misses, which thanks to immediate action, were corrected. This cycle of reporting allows us to enact additional procedures as needed, which will ultimately reduce the number of near misses identified over time.

Employee Spotlights

Mo Mojadedi

- Facilities Coordinator
- San Leandro, California



On a routine job walk, Mo quickly implemented the Stop Work Authority policy when he stumbled upon a group of contractors using a ladder that was too small for the task at hand. By jumping into action and insisting they procure the properly sized ladder, Mo prevented a potential serious accident or injury.

“Anything that is done here has to be done in a safe manner, and all of our company training reinforces this. We want to do business the safe way, not the fastest way.”

– Mo Mojadedi

Brian Davis

- Material Handler
- Katy, Texas



Brian is a voluntary member of Energy Recovery's Emergency Response Team, which provided him with company-sponsored CPR and first-aid training. During a regular workday lunch break, Brian immediately administered the Heimlich maneuver when another employee began to choke. Thanks to his quick action, the employee walked away unharmed. The value of these emergency response training courses was expressly proven, and as a result, Energy Recovery is increasing the number of training sessions offered per year and the number of participants in each session.



Team Spotlight

Energy Recovery Marketing Team



Our Marketing team proudly touts the benefits of Energy Recovery products to our customers, and it also challenges itself to look at marketing efforts through a sustainability lens. This year, the team analyzed what it could do to limit the climate impact of Energy Recovery's presence at trade shows. A variety of improvements were implemented, including paper reduction through the use of e-brochures and QR codes, thinking carefully about necessary flights and package shipments, as well as procuring responsible promotional products. In February 2023, the team was able to create a climate-neutral trade show booth at Euroshop, with the help of a certified third-party vendor.

In response to noticing some potential safety hazards, the team also took the initiative to engage with the Health, Safety, and Environment team to improve employee safety protocol and training for offsite events. As a result of this collaboration, a new safety policy for participation at trade shows has been implemented for all relevant teams, such as sales and marketing. Safety is not just a priority for the manufacturing floor: personal protective equipment for dealing with heavy boxes, first-aid kits, and an offsite buddy system are just a few of the ways trade shows are now safer for our employees.



Social Investment

Energy Recovery is committed to empowering our employees and to being a responsible member of the communities in which we do business. We have continued our partnership with GlobalGiving, a nonprofit that connects donors with nonprofit organizations around the world, and we provide employees with gift cards that they can use to donate on the platform several times a year. While we highlight specific programs that fall under our three social investment pillars (water, disaster relief, and education), employees are free to donate to any of the verified nonprofits on the GlobalGiving platform. In addition to the employee gift cards, Energy Recovery underwrites all fees and provides a dollar-for-dollar matching program for donations made to our featured nonprofits. Energy Recovery also selected GlobalGiving's Climate Action Fund as the recipient of our primary 2022 corporate donation, in alignment to our commitment to UN SDG 13 Climate Action.

GlobalGiving 2022 Highlights

 **50** *Programs supported through GlobalGiving*

 **~\$50,000** *Donated through GlobalGiving*

 **Top 3 employee donation program themes: disaster response, education, physical health**

GlobalGiving's Climate Action Fund provides ongoing support to nonprofit organizations focused on building ecological resilience in their communities in response to global climate change. Click on each organization to learn more about the types of projects our corporate donation supported:



Instituto de la Naturaleza y la Sociedad de Oaxaca, A.C.



Instituto Chaikuni



Sadhana Forest



EcoLogic Development Fund



Reef Check Malaysia

We also partner with several organizations to contribute both in-kind and with volunteer time:

March 2022

We provided nearly 4,000 masks to Alameda Health Services, where our San Leandro headquarters is located.



December 2022

We delivered 40 pounds of canned food to Alameda County Food Bank from an employee-led donation drive.



September 2022

San Leandro employees attended a beach cleanup hosted by East Bay Regional Parks District. Katy employees participated in a restoration project with the Coastal Prairie Conservancy in Houston, TX.

April 2023

San Leandro employees planted trees on city medians in association with local community partner Common Vision and the City of San Leandro. Katy employees participated in a Houston park cleanup hosted by Buffalo Bayou Partnership.

May 2023

Energy Recovery sponsored the ALADYR Water Olympics for Kids, a program aimed at raising awareness of water importance and management through desalination and other reuse and treatment technologies.

Community Partner Spotlight

Alameda County Fire Department

Due to our company's growth and production ramp-up, employees at the Alameda County Fire Department (ACFD) reported odors coming from our San Leandro manufacturing facility. After first confirming that Energy Recovery was in full compliance with local air quality and safety regulations, we worked hard to go beyond what was required in the spirit of neighborhood partnership and leadership. We worked with the Bay Area Air Quality Management District's (BAAQMD) Engineering, Compliance & Enforcement, and Source Test teams to pinpoint the source of the odor and volunteered to retrofit our kilns to eliminate the impact in the surrounding area. The result was a neighborhood success story that set the stage for further relationship-building and collaboration. The fire station crew is currently using the San Leandro site as a training base for their emergency response drills, and they participated in our annual summer ping pong tournament.



“On behalf of the Fire Department personnel, this huge accomplishment is greatly appreciated. We recognize this was a tremendous undertaking for Energy Recovery, having large impacts financially and through your generous time given. Likewise, the ACFD appreciates the time and collaboration that Energy Recovery took with the BAAQMD, union leadership, and fire department members.”

– Jimmy Sinkay, Fire Captain (Station 7C)

6 Governance

Energy Recovery is committed to maintaining strong governance practices that promote transparency and represent and protect our stakeholders' interests. We believe sound governance is imperative and have continued to enhance our governance framework. This section offers pertinent updates on our governance practices. More information, including our [governance documents](#), can be found on our website.

Our Board regularly discusses material environmental, social, and governance (ESG) issues and the performance of our sustainability strategy, and the Audit Committee receives consistent updates on our progress, compliance, and cybersecurity. Several of our material ESG issues and our sustainability performance goals, such as calculating our greenhouse gas emissions and our ongoing effort to align with the Task Force on Climate-related Financial Disclosures (TCFD), are aimed at better monitoring and understanding our own risks and opportunities to build transparency and improve governance.



Board of Directors

As of June 2023, our Board of Directors is now fully declassified after pursuing a phased approach over the last three years. June 2023 was the first cycle where all three Board classes were elected for one-year terms. This new structure ensures greater accountability and eliminates any perception of Board entrenchment due to long cycles between elections. Shareholders can now evaluate Board performance annually and replace members if needed.

The Board is also focused on maintaining a balance between longer-serving directors and newer directors with complementary skills, expertise, backgrounds and points of view, which allow for natural turnover and a reasonable pace of Board refreshment. In 2023, we welcomed two new directors to the Board as part of an ongoing effort to ensure that the Board has the right mix of skills and expertise to oversee the company's evolving strategy, culture, and risks.



Board Spotlight

Pamela Tondreau

→ *Lead Independent Director*



You joined the Board in 2019, around the same time that Energy Recovery began holistically integrating ESG considerations into business strategy. How did that strategy develop?

When our investors first spoke to us about ESG, we had a lot of learning to do about what specific types of initiatives we should be putting in place and how to build a sustainability strategy. But I saw a big opportunity for the sustainability story, given Energy Recovery's value proposition as an emissions reduction solution, and there was interest within the company. So as a Board member, what I can do is find a leader who can take this on and give them the support and resources to make it happen. Once that is underway, our role is to keep an eye on the metrics and make sure we are on track. We're not involved in the day-to-day, so we get to provide the 10,000-foot view, suggest creative solutions to any hurdles that might arise, and encourage holistic thinking.

Can you tell us a little bit about your role as lead independent director on the Board? What experiences across your career have supported you to prepare for this role?

I was preparing to retire when Bob Mao called me about joining the Board of Energy Recovery. They were specifically looking for someone with a legal and governance background – which of course I had, having spent my career as legal counsel and a Chief Legal Officer at various tech companies. Governance is a lot more technical than some people think. You need to have a good understanding of fiduciary duty, compliance, and even HR considerations; a business background doesn't necessarily prepare you to lead a governance committee. So my experience as a Chief Legal Officer and attorney has given me an appreciation for how complex governance issues can be, which is an asset in my role as lead independent director.



Board Spotlight

David Moon

→ Director



What is the biggest barrier to transitioning from HFCs to CO₂ refrigeration?

The biggest barrier in North America is the cost of replacing existing HFC infrastructure, which amounts to billions of dollars. This HFC infrastructure is not only immense, but also includes supply chains, install and service networks, and countless stakeholders who may be reluctant to change without understanding both the cost and environmental benefits of a CO₂ system. As an industry, we must continue to educate and push the adoption of CO₂ for new construction and remodels.

The North American refrigeration industry can glean important lessons from our counterparts in Europe, where the successful transition to CO₂ is underway in part due to productive partnerships between government and the private sector to affect positive environmental change.

Given your experience in refrigeration, what excites you the most about the PX G1300?

The PX G1300 makes an already efficient CO₂ refrigeration system even more efficient, reliable and first-cost friendly, thus further making the case for the transition from HFCs to CO₂. The PX G1300 improves existing CO₂ systems and new CO₂ installations by reducing energy consumption and improving cooling capacity.

How would you describe the Board of Directors' role in sustainability initiatives and overall strategy?

The Board has always had a fiduciary responsibility to exercise oversight of the company's strategy, mission-critical risks, and opportunities in the pursuit of stakeholder value. The transition to a decarbonized future is essential to the resilience of companies, the economy, and the planet. Strong sustainability strategies and governance frameworks are vital to weather economic cycles and thrive in the long term.

Board Spotlight

Colin Sabol

→ Director



What was your perception of Energy Recovery's PX product line before joining the Board? How has it changed?

As a water industry veteran and a ceramic engineer, I've been impressed by Energy Recovery's unparalleled reputation for product quality, precision manufacturing, and market impact for 20+ years. Since joining the Board, I am captivated by the potential of PX technology to create an even bigger impact on markets beyond desalination. I'm excited to guide and support Energy Recovery as it transforms the way the world thinks about energy.

What lessons from the desalination industry can Energy Recovery take and apply to new markets?

The desalination industry grew up at a time when the value of consumed energy was underappreciated. There was an acute need for fresh water, and low energy costs where plants were initially constructed. But in the decades since, water scarcity has worsened while the value of energy and society's intolerance for its wasteful consumption has grown. As Energy Recovery pursues new markets like wastewater and CO₂ refrigeration, today's stakeholders have a heightened appreciation that energy efficiency is good for business and our planet. While there are challenges to succeeding in these markets, I am optimistic that Energy Recovery can leverage its reputation to rapidly grow.

What do you see as the Board's role in directing and shaping sustainability programs?

Energy Recovery's stakeholders want us to embody sustainability principles in our product offerings, our operations, and our workforce. To meet this demand, the Board must work closely with the management team to make the right investments and share our progress to the outside world. I'm proud to be aligned with a company that is such a leader in this space.



Policy Updates

In March 2022, the Board adopted a new set of [Corporate Governance Guidelines](#) that details director roles and responsibilities, the principles that they follow when carrying out their responsibilities, as well as their management, composition, structures, and policies. The Nominating and Corporate Governance Committee is responsible for periodically reviewing the Corporate Governance Guidelines to ensure that they reflect the best interests of both the company and its shareholders and that they comply with all applicable rules and regulations. In November 2022, a new director resignation policy was added to the Corporate Governance Guidelines.

A new [Whistleblower Policy](#) was also formalized in October 2022 to codify corporate practices already in place. Energy Recovery does not tolerate any retaliation against whistleblowers, and we highly encourage reporting misconduct. We strive to resolve every complaint in a timely manner with the utmost professionalism to ensure compliance with our standards and respect for all parties involved.

Suppliers

After evaluating and educating our suppliers in 2021 on anti-trafficking regulations, policies, and best practices, we expanded our effort to ensure we are sourcing materials ethically by developing an updated supplier code of conduct, which we plan to implement in 2023.



Cybersecurity

In 2023, the Securities and Exchange Commission (SEC) finalized the proposed amendments to its rules that would enhance and standardize disclosures on cybersecurity risks management and incident reporting by public companies. Under the rule changes, companies such as Energy Recovery will be required to report and provide updates on cybersecurity incidents, our risk management processes, our Board's oversight of cybersecurity risks and management, and the Board's expertise and role in cybersecurity matters. Our cybersecurity committee has been preparing for these changes over the past year and is equipped to disclose the necessary information.

Our interdepartmental cybersecurity committee began meeting in the second half of 2022 and continues to meet quarterly to discuss material and non-material issues. Material issues are documented in an incident response report, which covers what the issue was, mitigation tactics, and company impact. An Energy Recovery team also investigates the risks and delivers a formal analysis. Non-material issues are tracked in a ticketing system to better understand potential risks and how we might bolster our first line of defense against attempted attacks.

Our IT team implemented a phishing alert button into Microsoft Outlook as of February 2023. This serves as an efficient, easy-to-use system for employees to report potential phishing attempts. Our IT team is focused on ensuring our employees are aware of suspicious emails and text messages.

To help with employee training, our IT team has enacted phishing test simulation activities and training that provides employees with instant feedback on whether an email was indeed a phishing attempt. The results of the simulation activities have been positive, with an impressive rate of accuracy that continues to improve.

Energy Recovery also adopted a system of predictive analytics that allows IT to map trends in cybersecurity risks and mitigate them via security information and event management (SIEM) or log tracking.

This includes endpoint security and encryption, network intrusion prevention and detection, a system for managing and installing patches for third-party applications, and SIEM systems, all which monitor our infrastructure and alert our security operations center of potential cybersecurity issues. Energy Recovery strictly regulates and limits all access to servers and networks at our facilities. Local network access is restricted by domain authentication, using stringent access control lists and virtual local area networks. Multi-factor authentication is used to build an additional layer of security for remote-work access to critical applications. Our information security department regularly performs penetration testing and engages a third-party company to conduct penetration tests to identify and remediate any issues. Bad actors continue to find sophisticated ways to try and attack organizations. Energy Recovery will continue to be vigilant in employee education and training and regularly evaluate cybersecurity systems and protocols.



7 Content Index



TCFD

Core Topic	Recommended Disclosures	Reference
Governance		
Disclose the organization's governance around climate-related risks and opportunities.	Describe the Board's oversight of climate-related risks and opportunities. Describe management's role in assessing and managing climate-related risks and opportunities.	Our goal to align with the TCFD framework by 2024 is on track. To view our current progress developing and aligning with these disclosures, see the following reference in this report: 2022 Sustainability Report > TCFD Goal Section, pages 14-22 2022 Sustainability Report > Governance, page 55
Strategy		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long-term. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Our goal to align with the TCFD framework by 2024 is on track. To view our current progress developing and aligning with these disclosures, see the following reference in this report: 2022 Sustainability Report > TCFD Goal Section, pages 14-22
Risk Management		
Disclose how the organization identifies, assesses, and manages climate-related risks.	Describe the organization's processes for identifying and assessing climate-related risks. Describe the organization's processes for managing climate-related risks. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Our goal to align with the TCFD framework by 2024 is on track. To view our current progress developing and aligning with these disclosures, see the following reference in this report: 2022 Sustainability Report > TCFD Goal Section, pages 14-22
Metrics & Targets		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. Disclose scope 1, scope 2, and, if appropriate, scope 3 greenhouse gas (GHG) emissions, and the related risks. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	2022 Sustainability Report > TCFD Goal Section, pages 14-22 2022 Sustainability Report > Innovation and Opportunity Goal Section, page 31 2022 Sustainability Report > Emissions Goal Section, pages 25-26

SASB

Topic	SASB Code	Accounting Metric	Category	Unit of Measure	Response
Energy Management	RT-IG-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	(1) 49,474 gigajoules in FY 2022 (2) 36% in FY 2022 (3) 21% in FY 2022
Employee Health & Safety	RT-IG-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	Quantitative	Rate	(1) 8.48 in FY 2022 (2) 0.00 in FY 2022 (3) 18.96 in FY 2022
Fuel Economy & Emissions in Use-phase	RT-IG-410a.1	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	Quantitative	Gallons per 1,000 ton-miles	Suggested accounting metrics for Fuel Economy & Emissions in Use-Phase are not applicable to Energy Recovery's business. As disclosed below, Energy Recovery modified suggested accounting metrics to demonstrate the energy efficiency and associated benefits of its energy recovery devices, an accounting metric it believes is highly relevant to its business model.
	RT-IG-410a.2	Sales-weighted fuel efficiency for non-road equipment	Quantitative	Gallons per hour	
	RT-IG-410a.3	Sales-weighted fuel efficiency for stationary generators	Quantitative	Watts per gallon	Avoided electricity consumption from all Energy Recovery products (excluding pumps) sold and shipped: 36.2 TWh/y in FY 2022.
	RT-IG-410a.4	Sales-weighted emissions of: (1) nitrogen oxides (NOx) and (2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavy-duty engines, and (d) other non-road diesel engines	Quantitative	Grams per kilowatt-hour	The above metric is calculated as the avoided electricity consumption that can be attributed to Energy Recovery's energy recovery devices that have been sold, shipped and, to our knowledge, still in use by customers globally, an amount associated with avoiding approximately 17.2 million metric tons of carbon emissions per year.

Topic	SASB Code	Accounting Metric	Category	Unit of Measure	Response
Materials Sourcing	RT-IG-440a.1	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	FY 2020 ESG Report > Our Suppliers (pages 63-64) Please see Energy Recovery's conflict mineral sourcing policy, conflict minerals report, and conflict minerals statement located on the company's investor website . TCFD Climate-Related Risks and Opportunities: Supply Chain Management
Remanufacturing Design & Services	RT-IG-440b.1	Revenue from remanufactured products and remanufacturing services	Quantitative	Reporting currency	Not applicable

RT-IG-130a.1 – (1) Excludes: leased facilities in Dubai and Shanghai for which leased facility data was not available; de minimis diesel consumption in San Leandro; work from home employees.

RT-IG-130a.1 – (3) Energy Recovery installed solar panels in Katy, TX, in 2020, and began purchasing 100% renewable electricity for all facilities mid-year 2022. The solar panels in Katy, TX, were not operating in August–December 2022 due to an inverter issue.

RT-IG-320a.1 – (1) Excludes contractor hours and international personnel hours. The company plans to re-evaluate the ability to incorporate these numbers for future reports.

RT-IG-410a.1 ; RT-IG-410a.2 ; RT-IG-410a.3 ; RT-IG-410a.4 – The estimate is based on actual sales figures and assumptions about the percentage of our cumulative sales (excluding pumps) operating globally.

PX Pressure Exchangers have a design life of over 25 years; therefore, this accounting metric assumes that the majority of our sold and shipped Pressure Exchangers are in operation. Although it is possible that ERDs shipped in FY2022 may have been in the process of being commissioned and not fully operating as of fiscal year-end, Energy Recovery does not have access to this data and therefore uses ERDs sold and shipped through the end of FY2022 as the basis for this calculation. As ERDs constitute the majority of our sales through end of FY2022, pumps are excluded from this calculation. The calculated CO₂ emissions reductions are based on 1.05 lbs CO₂/kWh emissions factor as published by the International Energy Agency as of 2018, which has been updated in our model. Assumed avoided electricity per PX Pressure Exchanger unit is based on nominal PX Pressure Exchanger efficiency of 96%, turbocharger efficiency of 69%, pump efficiency of 80%, motor efficiency of 96%, 64 bar nominal membrane pressure, and 42.5% membrane recovery.

Industrial Machinery & Goods – Activity Metrics

Topic	SASB Code	Activity Metric	Category	Unit of Measure	Response
–	RT-IG-000.A	Number of units produced by product category	Quantitative	Number	Energy Recovery does not disclose the number of units produced by product category. For a financial breakdown by business segment, please see Item 7 in our 2022 Annual Report .
–	RT-IG-000.B	Number of employees	Quantitative	Number	246 as of Dec. 31, 2022

Electrical & Electronic Equipment – Accounting Metrics

Topic	SASB Code	Accounting Metric	Category	Unit of Measure	Response
Product Lifecycle Management	RT-EE-410a.3	Revenue from renewable energy-related and energy efficiency-related products	Quantitative	Reporting Currency	\$122.1M in FY 2022 (97% of total FY 2022 product revenue across all business segments)

RT-EE-410a.3 – Includes revenue from products incorporated into systems which recover and reuse otherwise wasted energy. Energy Recovery updated this definition in 2021 based on detailed product mapping.

GRI

Certain materials throughout this Sustainability Report and the below table reference GRI 2021 Standards including 2-9 – Governance Structure and Composition, 2-10 – Nominating and Selecting the Highest Governance Body, 2-12 – Role of the Highest Governance Body in Overseeing the Management of Impacts, 2-13 – Delegation of Responsibility for Managing Impacts, 2-14 – Role of the Highest Governance Body in Sustainability Reporting, 2-15 – Conflicts of Interest, 2-16 – Communication of Critical Concerns, 2-17 – Collective Knowledge of the Highest Governance Body, 2-18 – Evaluation of the Performance of the Highest Governance Body, 2-19 – Remuneration Policies, 2-20 – Process to Determine Remuneration, 2-21 – Annual Total Compensation Ratio.

GRI Indicator	Description	Reference
2-9	Governance structure and composition	<ul style="list-style-type: none"> • 2023 Proxy Statement pages 8-19, 23-25 • 2023 Proxy Statement pages 23-25 • FY 2020 ESG Report > ESG Oversight (pages 76-77) • Committee Charters • Board of Directors
2-10	Nominating and selecting the highest governance body	<ul style="list-style-type: none"> • 2023 Proxy Statement pages 10, 18, 25-27 • FY 2021 ESG Report > Board Structure and Composition (pages 69-72) • Nominating and Corporate Governance Committee Charter
2-12	Role of the highest governance body in overseeing the management of impacts	<ul style="list-style-type: none"> • FY 2020 ESG Report > Materiality Assessment (pages 12-14) • FY 2020 ESG Report > Our Approach to ESG (pages 12-25) • FY 2020 ESG Report > ESG Oversight (pages 76-77) • FY 2021 ESG Report > Our Approach to ESG (pages 11-13)

GRI Indicator	Description	Reference
2-13	Delegation of responsibility for managing impacts	<ul style="list-style-type: none"> FY 2020 ESG Report > ESG Oversight (pages 76-77)
2-14	Role of the highest governance body in sustainability reporting	<ul style="list-style-type: none"> 2023 Proxy Statement pages 32-33 FY 2020 ESG Report > ESG Oversight (pages 76-77)
2-15	Conflicts of interest	<ul style="list-style-type: none"> 2023 Proxy Statement pages 28-29, 91
2-16	Communication of critical concerns	<ul style="list-style-type: none"> 2023 Proxy Statement pages 31, 92-93 FY 2020 ESG Report > Ethics and Compliance (pages 65-66) FY 2022 ESG Report > Governance Performance Table (page 69)
2-17	Collective knowledge of highest governance body	<ul style="list-style-type: none"> 2023 Proxy Statement pages 11-15 FY 2020 ESG Report > ESG Oversight (pages 76-77)
2-18	Evaluation of the performance of the highest governance body	<ul style="list-style-type: none"> 2023 Proxy Statement page 22
2-19	Remuneration policies	<ul style="list-style-type: none"> 2023 Proxy Statement pages 7, 34-35, 39-54
2-20	Process to determine remuneration	<ul style="list-style-type: none"> 2023 Proxy Statement pages 34, 39-60 Compensation Committee Charter
2-21	Annual total compensation ratio	<ul style="list-style-type: none"> 2023 Proxy Statement pages 74, 64 The ratio between the annual total compensation of the Chief Executive Officer and the annual total compensation for the median employee was 18.64:1 in FY 2022. In FY 2021, the ratio was 20.26 to 1. For more information, see our 2023 Proxy Statement page 74, 2022 Proxy Statement page 71, and our 2021 Proxy Statement, page 35.

Performance Tables

Environmental Performance Data

MT CO₂e = Metric Tons of CO₂ equivalent

Metric		Unit	Time Period			
			FY 2020	FY 2021	FY 2022	
Operational Impact & Management						
Greenhouse Gas Emissions ^{1,2}	Scope 1 Emissions ³	MT CO ₂ e	1,826	1,807	1,606	
	Market-Based Scope 2 Emissions ^{4,5}		1,066	1,259	552	
	Location-Based Scope 2 Emissions ^{4,5}		979	1,200	1,230	
	Scope 3 Emissions ⁶		13,671	14,251	14,150	
	Scope 3.01 Purchased Goods and Services		4,604	5,376	4,317	
	Scope 3.02 Capital Goods		3,797	3,846	4,789	
	Scope 3.03 Fuel and Energy-Related Activities		837	702	525	
	Scope 3.04 Upstream Transportation and Logistics		1,160	1,731	777	
	Scope 3.05 Waste Services of Operations		782	182	227	
	Scope 3.06 Business Travel		365	552	1,186	
	Scope 3.07 Employee Commuting		349	422	439	
	Scope 3.08 Upstream Leased Assets		1,403	1,098	1,136	
	Scope 3.09 Downstream Transportation and Logistics		377	343	753	
	Total Scope 1 - 2 Emissions (Market-Based)		2,892	3,066	2,158	
	Scope 1 Emissions Intensity ⁷		MT CO ₂ e / \$M Revenue	20	17	13
	Scope 2 Emissions Intensity ⁷			12	12	4
Scope 3 Emissions Intensity ⁷	148	137		113		
Total Scope 1 - 2 Emissions Intensity ⁷ (Market-Based)	31	29		17		

Environmental Performance Data

MT CO₂e = Metric Tons of CO₂ equivalent

Metric		Unit	Time Period		
Operational Impact & Management			FY 2020	FY 2021	FY 2022
Energy Consumption	Natural Gas – Across All Sites	Gigajoules (Gj)	28,138	32,654	31,340
	Diesel – Across All Sites		5,485	1,952	252
	Electricity – Grid Across All Sites		13,688	17,055	17,635
	Electricity – Renewable Across All Sites ⁸		179	404	10,266
	Total Energy Consumption Across All Sites ⁹		47,491	52,065	49,474
	Total Energy Intensity Across All Sites ¹⁰	Gigajoules (Gj) / \$M Revenue	516	501	394
Waste	Reclaimed Alumina Powder Used in PX Production ¹¹	Percentage (%)	39	36	40
Innovation & Opportunity			FY 2020	FY 2021	FY 2022
Customer savings from use of Energy Recovery product versus conventional products	Total Emissions Avoided Across All Products Per Year ¹²	Million MT CO ₂ e	12.5	14.5	17.2
	Year-Over-Year Total Increase in Emissions Avoided ¹²	Percentage (%)	20	16	18
	Customer Cost Savings Per Year ¹²	Billion USD	2.6	3.9	5.9

¹GHG emissions data for 2020 and 2021 have been restated based on revisions to the previous calculation methodology and inputs. The revised methodology more accurately represents actual operations in accordance with the GHG Protocol.

²In accordance with the GHG Protocol, we consider 2021 to be our best baseline because it is most representative of a normal operational year post-pandemic. ³Scope 1 emissions are direct emissions calculated using the operational-control method aligned with the GHG Protocol across our San Leandro, CA; Tracy, CA; and Katy, TX, sites. ⁴Scope 2 emissions are indirect emissions produced from purchased energy calculated using the operational-control method aligned with the GHG Protocol across our San Leandro, CA; Tracy, CA; and Katy, TX, sites. The Tracy facility was opened during the latter half of 2020, and production increased by 40% in 2021 to support higher sales, driving scope 2 increases. ⁵Given that we began purchasing 100% renewable electricity for all our sites in the summer of 2022, we have calculated both market-based and location-based scope 2 emissions for the first time. For the location-based calculations, we use the standard Western Power Grid factor (WECC-CA) for our San Leandro, CA, and Tracy, CA, sites. For the Katy, TX, site, the ERCOT factor was used. For the market-based calculations, the CA sites rely on the East Bay Community Energy emissions factors for the Bright Choice and Renewable 100 plans published on the California Energy Commission Power Source Disclosure webpage. The market-based emissions for the Katy, TX, site are derived from the emissions factors from the Constellation utility and Green-e program. ⁶Scope 3 emissions are indirect emissions across the value chain not captured in scope 1 and 2 and calculated leveraging our third-party advisor's proprietary model which aligns with the guidance of the GHG Protocol and relies on recent EPA emissions factors and trusted third-party data to determine indirect and induced greenhouse gas emissions. Our reported scope 3 emissions do not include the following categories: 3.10 – Processing of sold products; 3.11 – Use of sold products; 3.12 – End-of-life treatment of sold products; 3.13 – Downstream leased assets; 3.14 – Franchises; 3.15 – Investments. Note, 3.10, 3.11, 3.12 all require customer data to which Energy Recovery does not have access, while our business model and operations deem categories 3.13, 3.14, and 3.15 inapplicable. Our reported scope 3 emissions input categories reflect our U.S.-based operations and global business travel. ⁷Calculated as Metric Tons of CO₂e divided by FY revenue (\$M). ⁸Solar panels were down from August-December 2022 due to an inverter issue. 100% renewable electricity plans began mid-year 2022 for all sites. ⁹Calculated as the sum of grid electricity (Gj), diesel (Gj), renewable electricity (Gj), and natural gas (Gj) consumed at our three facilities (San Leandro, CA, Tracy, CA, Katy, TX). ¹⁰Calculated as Gigajoules (Gj) divided by FY revenue (\$M). ¹¹Calculated as kilograms of recycled alumina powder used in PX production divided by kilograms of total alumina powder used in PX production. Recycled alumina powder and virgin alumina powder are tracked as separate part numbers in inventory and on as-builts.

¹²Calculated as the avoided electricity consumption that can be attributed to Energy Recovery's energy recovery devices that have been sold, shipped, and, to our knowledge, are still in use by customers globally. The estimate is based on actual sales figures and assumptions about the percentage of our cumulative sales (excluding pumps) operating globally. PX Pressure Exchangers have a design life of over 25 years; therefore, this accounting metric assumes that the majority of our sold and shipped Pressure Exchangers are in operation. Although it is possible that ERDs shipped in FY2022 may have been in the process of being commissioned and not fully operating as of fiscal year-end, Energy Recovery does not have access to this data and therefore uses ERDs sold and shipped through the end of FY2022 as the basis for this calculation. As ERDs constitute the majority of our sales through end of FY2022, pumps are excluded from this calculation. The calculated CO₂ emissions reductions is based on 1.05 lbs CO₂/kWh emissions factor as published by the International Energy Agency as of 2018, which has been updated in our model. Assumed avoided electricity per PX Pressure Exchanger unit is based on nominal PX Pressure Exchanger efficiency of 96%, turbocharger efficiency of 69%, pump efficiency of 80%, motor efficiency of 96%, 64 bar nominal membrane pressure, and 42.5% membrane recovery. The calculated customer cost savings is based on the global average power price of \$0.127/kWh as published by Electric Rate in 2022.

Social Performance Data

Metric		Unit	Time Period		
Employees			FY 2020	FY 2021	FY 2022
Health & Safety	Total Recordable Incident Rate ¹	(Incidents per 200,000 hours worked)	4.03	7.80	8.48
	Near Miss Frequency Rate ²		8.06	13.01	18.96
	Fatality Rate ³		Zero	Zero	Zero
Recruitment & Retention	Retention Rate ⁴	Percentage (%)	94%	91%	93%
	New Hire Turnover Rate ⁵		7%	4%	8%
Products			FY 2020	FY 2021	FY 2022
Quality	Warranty Expenses as a Percentage of Product Revenue	Percentage (%)	Less than 0.1%	Less than 0.1%	Less than 0.1%
Safety	Monetary Losses Associated with Legal Proceedings due to Product Health and Safety Incidents	USD	Zero	Zero	Zero

¹Total recordable incident rate is calculated as (number of incidents x 200,000)/(hours worked). Note: Energy Recovery's TRIR was 4.16 excluding COVID-19 incidents for FY 2021 and 4.49 in FY 2022. Excludes international employees, temp employees, and contract workers.

²Near miss frequency rate is calculated as (number of near misses x 200,000)/(hours worked). Excludes international employees, temp employees, and contract workers.

³Fatality rate is calculated as (number of work-related fatalities x 200,000)/(hours worked). Excludes international employees, temp employees, and contract workers.

⁴Retention rate is calculated as the number of voluntary terminations (of both domestic and international employees) divided by the average headcount for the fiscal year.

⁵Includes both voluntary and involuntary terminations of domestic and international employees. Excludes interns, temporary employees, and part-time employees.

Governance Performance Data¹

Metric		Unit	Time Period		
General			FY 2020	FY 2021	FY 2022
Company Profile	Annual Product Revenue	Million USD	92.1	103.9	125.6
	Number of Employees	Number	216	222	246
Board Composition			FY 2020	FY 2021	FY 2022²
Board Composition	Board of Director Female Representation	Percentage (%)	14%	38%	43%
	Board of Director People of Color Representation		17%	25%	29%
	Independent Directors		86%	88%	86%
Stakeholder Engagement			FY 2020	FY 2021	FY 2022
Stakeholder Engagement	Number of Total Critical Concerns	Number	1	0	0
Executive Compensation			FY 2020	FY 2021	FY 2022
Executive Compensation	Annual Total Compensation Ratio	Ratio	19.6:1	20.26:1	18.64:1

¹Information is available in current and historical 10-k and proxy filings found on our investor website.

²As of September 2023, our Board of Director Female and People of Color Representation are 29% and 14%, respectively.



Sustainability Report

2022

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for a Sustainable Future*