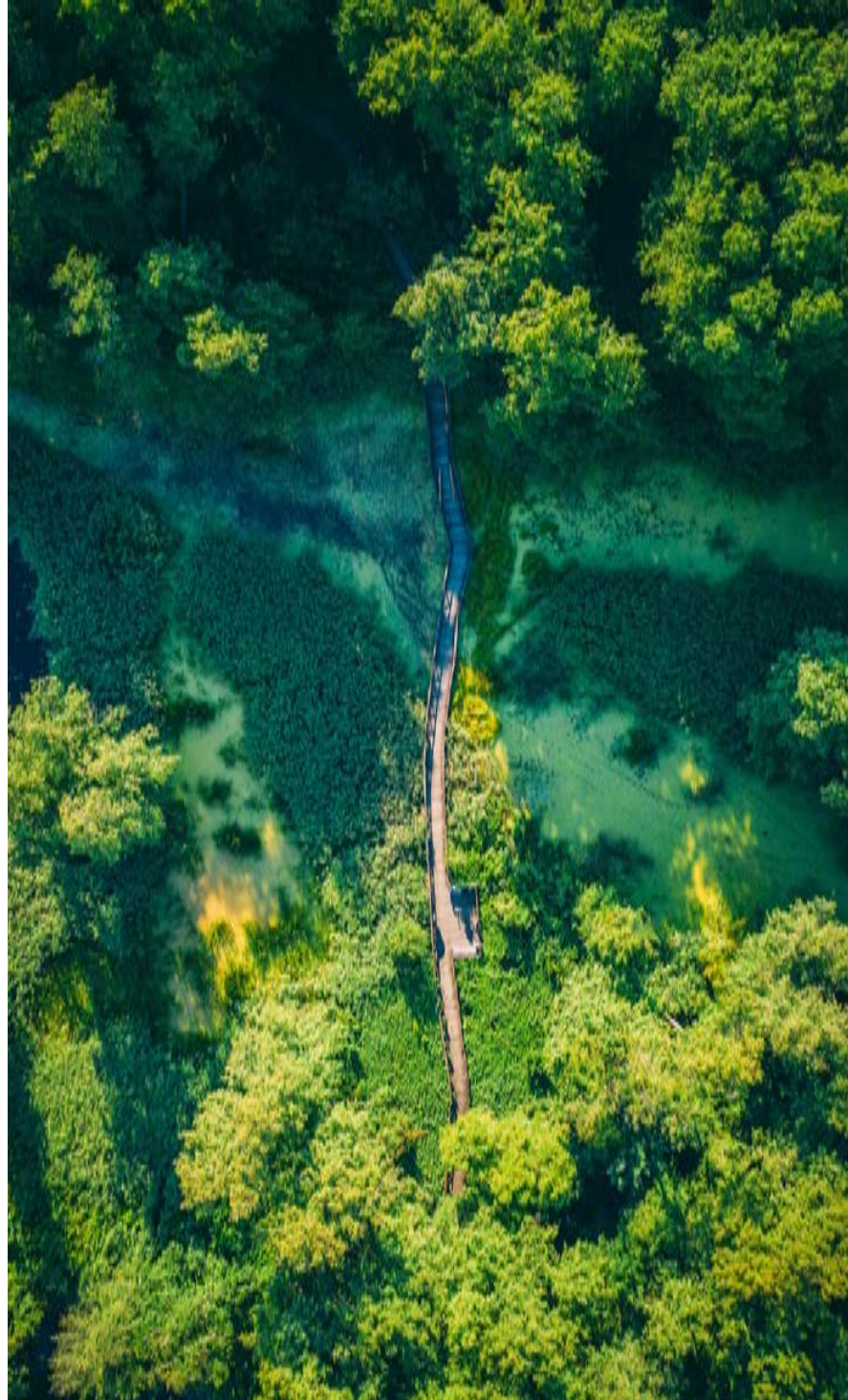




# Growth through sustainability

## 2024 Sustainability Report



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# Introduction

## Growth through sustainability

Every day, approximately 45,000 Trane Technologies team members work together united by one purpose: to boldly challenge what's possible for a sustainable world.

We are the forerunners in climate innovation. We design, manufacture and deliver sustainable, efficient heating and cooling solutions and services for buildings, industry, homes and transportation around the world. As our customers demand low-carbon solutions that result in energy savings, our global business evolves to meet these challenges. Our sustainability leadership drives our strong financial performance over time, creating value for our customers, shareholders, people and communities.

Our 2024 Sustainability Report highlights the actions we take every day to advance our Sustainability Commitments. [This report aligns](#) with leading sustainability frameworks and shares 2024 enterprise-wide information and data for Trane Technologies, unless otherwise noted.

[CEO Letter to Stakeholders](#)

[2024 highlights](#)

[Awards & rankings](#)



## INTRODUCTION

# CEO Letter to Stakeholders

GRI 2-22

As we reflect on 2024, I am proud to share the positive impact Trane Technologies continues to make in the world and for our customers, shareholders, people and communities. Driven by our purpose — to boldly challenge what's possible for a sustainable world — we continue to set the pace for decarbonizing buildings, industry and the cold chain.

## LEADING FINANCIAL PERFORMANCE

Trane Technologies achieved another standout year in 2024. The company delivered organic revenue growth of 12%, adjusted earnings per share growth of 24% and powerful free cash flow conversion.\* Customer demand continues to grow, as marked by another year of strong bookings, up 11%.\* Since 2020, Trane Technologies has achieved a compound annual revenue growth rate of 12%, and 2024 marked our fourth consecutive year of adjusted earnings per share growth exceeding 20%.

This robust performance is powered by our focused sustainability strategy; ongoing investment in innovation; consistent execution and a continuous focus on an uplifting, inclusive culture.

## ACCELERATING INNOVATION AND OUTCOMES

As a leading global climate innovator, we relentlessly innovate, develop new solutions and enhance the way the world heats and cools buildings and transports refrigerated goods. Our advanced technologies, including thermal management systems and thermal storage, waste heat recovery, all-electric heat pumps and refrigerated transport solutions, as well as purpose-built digital solutions and AI, enable our customers to optimize system performance while reducing energy use, carbon emissions and operational costs. Our customer solutions are green for green — good for the environment, and good for the bottom line.

\*These are non-GAAP financial measures. Reconciliation of non-GAAP financial measures can be found in our [2024 Annual Report, preceding the 2025 Notice and Proxy Statement](#). On a GAAP basis for the full-year 2024, Trane Technologies achieved revenue growth of 12%, earnings per share growth of 28%, bookings growth of 11% and powerful free cash flow conversion.

We also continue to lead by example as we reduce carbon emissions, water, waste and energy use within our own operations. In 2024, Trane Technologies announced an industry-first, precedent-setting commitment to reduce embodied carbon in our products by 40% by 2030.

## OUR PEOPLE MAKE IT POSSIBLE

Our remarkable progress is made possible by our people and our uplifting culture. Our focus on creating Opportunity for All accelerates employee innovation, engagement and retention. We see this first-hand in our top quartile employee engagement results and our key talent retention rate of 98%. Similarly, we are investing in the next generation of climate innovators through new state-of-the-art training facilities, apprenticeship programs and educational opportunities in our communities that strengthen the talent pipeline for our company and our industry.

## BUILDING A SUSTAINABLE FUTURE

Our ability to consistently deliver leading financial performance while advancing our bold sustainability commitments demonstrates there is no trade-off. For Trane Technologies, sustainability is at the center of our strategy and drives strong financial results over time.

I am immensely proud of our team and what we have accomplished together. The year 2025 marks our fifth anniversary as Trane Technologies. We are five years older, and five years bolder, and I am confident our brightest days are ahead.

**Dave Regnery**

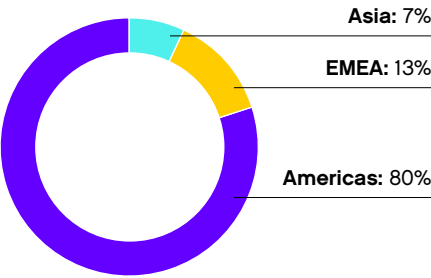
Chair and CEO  
Trane Technologies

# 2024 financial highlights

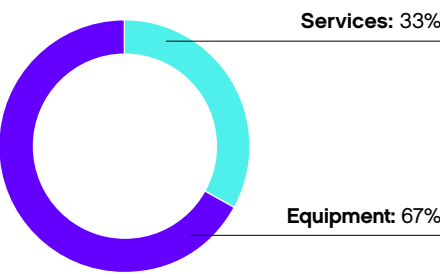
2024 Total Revenue

\$19.8B

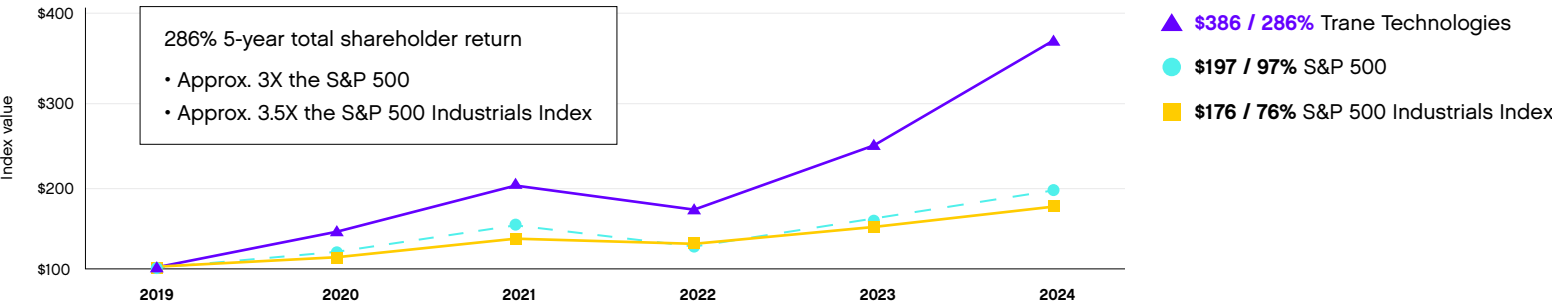
Revenue by Segment



Revenue by Stream



Shareholder returns



Highlights

\$20.3B

Bookings

+11% Organic Growth\*  
102% Book-to-Bill

12%

Organic Revenue Growth\*

109%

Free Cash Flow Conversion\*

39.6%

Free Cash Flow Return on Invested Capital (CROIC)\*

+140 bps

Adjusted EBITDA margin Expansion\*

24%

Adjusted Continuing EPS Growth\*

\$6.75B

Backlog

-3% vs. '23  
+133% vs. '20

\$2.6B

Balanced Capital Deployment

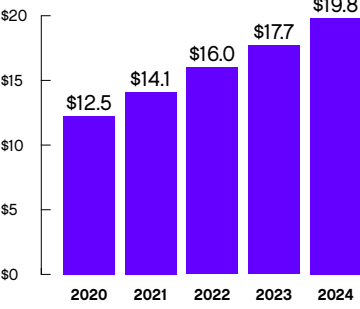
[Includes dividends, share repurchases, acquisitions and CapEx]

\*These are non-GAAP financial measures. Reconciliation of non-GAAP financial measures can be found in our [2024 Annual Report, preceding the 2025 Notice and Proxy Statement](#). On a GAAP basis for the full-year 2024, Trane Technologies achieved revenue growth of 12%, earnings per share growth of 28%, bookings growth of 11% and powerful free cash flow conversion.

Consistent track record of strong financial results

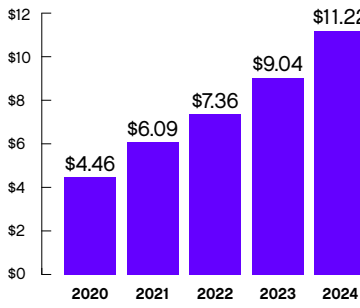
Revenue (\$B)  
(growth %)

↑ +12% CAGR



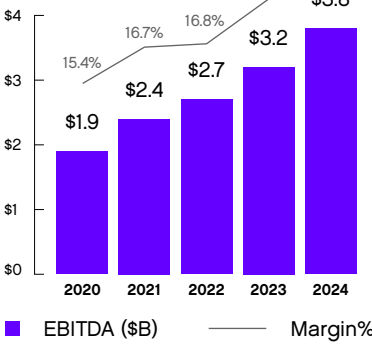
Adjusted continuing earnings per share\*

↑ +26% CAGR



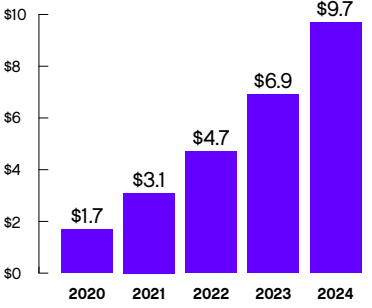
Adjusted EBITDA\*  
(margin %)

↑ +400 bps

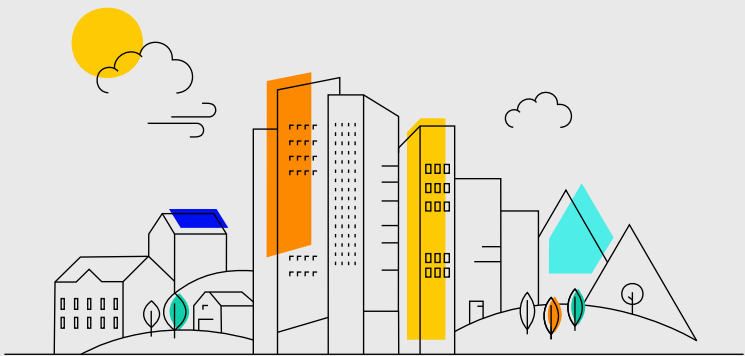


Cumulative free cash flow since 2020\* (\$B)

↑ 108% average  
FCF as a % of Adj. net earnings '20-'24



# 2024 sustainability highlights



## Leading by example

We are reducing energy use and emissions in our operations and embodied carbon in our products

3.2%

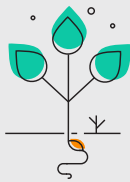
absolute energy reduction since 2019, even as demand and production significantly increased

\$215M

revenue generated from remanufactured products and remanufacturing services in 2024, more than double from 2023

## Reducing carbon emissions for customers

We are reducing 1 gigaton (1 billion metric tons) of carbon emissions from our customers' footprints by 2030<sup>[1]</sup>



237M

metric tons of carbon emissions (mtCO<sub>2</sub>e) reduced from our customers' carbon footprints since 2019, in contribution to our Gigaton Challenge<sup>[2]</sup>

## Investing in a sustainable future

We are investing in communities by expanding volunteerism throughout our organization



92,000

hours volunteered by global team members

\$20M

in philanthropic giving

## Uplifting our workforce & culture

We invest in our workforce and culture to help everyone thrive and grow

98%

key talent retention

82

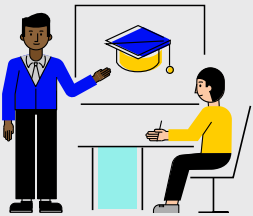
overall employee engagement score (out of 100), reflecting top quartile among benchmarks

\$2.5M

tuition support and advancement distributed to nearly 600 global team members

155

participants in the Trane Technician Apprenticeship Program (TAP), a significant increase from 2023



<sup>1</sup> Compared to a 2019 baseline.  
<sup>2</sup> Formula to calculate Gigaton Challenge contribution is reviewed annually and refined as needed to include items that were not able to be measured previously.

# Awards & rankings

We are proud to share the awards and rankings we received from some of the world's top organizations for our industry-leading financial and sustainability performance.

Member of  
**Dow Jones Sustainability Indices**  
Powered by the S&P Global CSA

**Dow Jones Sustainability Index**

- 14th consecutive year on North America Index, 4th consecutive year on World Index



**InfluenceMap**

- Ranked 4th globally in the [2024 Corporate Climate Policy Engagement Leaders report](#) and named Strategic Engagement Leader for North America



**Ethisphere® Institute: 2025 World's Most Ethical Companies**

- 2nd consecutive year recognized as one of the World's Most Ethical Companies<sup>[1]</sup>

1 "World's Most Ethical Companies" and "Ethisphere" names and marks are registered trademarks of Ethisphere LLC.

## Listings & other awards

In addition to the ratings and rankings we received in 2024, a series of prominent listings recognized Trane Technologies for our performance and company culture:

- 2025 Military Friendly® Employer Gold Award
- 3BL 100 Best Corporate Citizens of 2024
- 50/50 Women on Boards — Gender-Balanced Board
- Fast Company Best Workplaces for Innovators 2024
- Financial Times Europe's Climate Leaders 2024
- PEOPLE® Companies that Care
- The Wall Street Journal — Management Top 250
- U.S. News & World Report Best Companies to Work For



**CDP**

- Climate score: A, for 3rd consecutive year
- Water score: B-, 5th consecutive year listed



**JUST 100**

- Ranked 6th overall, 1st in the Building Materials & Construction Industry
- 4th consecutive year on the list



**TIME**

- World's Most Sustainable Companies, ranked 65th overall
- World's Best Companies for Sustainable Growth
- World's Best Companies



**FORTUNE<sup>[2]</sup>**

- World's Most Admired Companies, 13th consecutive year
- Best Workplaces in Manufacturing & Production, ranked 5th

2 From Fortune. ©2025 Fortune Media IP Limited. All rights reserved. Used under license. Fortune and Fortune Media IP Limited are not affiliated with, and do not endorse the products or services of Trane Technologies.

**Corporate Knights**

- Ranked 26th on the Corporate Knights 2025 100 Most Sustainable Corporations in the World

**EcoVadis**

- 94th percentile; Silver Medal award winner
- 74/100 advanced overall score

**FTSE4Good**

- 10th consecutive year (5th as Trane Technologies)

# Sustainability strategy

Sustainability is our business strategy. In developing our product and services portfolio, our team members focus on advancing sustainability by reducing energy intensity and emissions through integrated systems, electrification and digital enablement.

[A note from our Chief Technology & Sustainability Officer](#)

[Sustainability commitments](#)

[Embedding sustainability](#)

# A note from our Chief Technology & Sustainability Officer

DEAR STAKEHOLDERS,

This year, 2025, marks the halfway point of our 2030 Sustainability Commitments — and five years as Trane Technologies. When we set our bold commitments, we aligned our goals with climate science and our business strategy, confident that our purpose-driven culture and pioneering spirit would lead the way.

Our 2030 Sustainability Commitments have evolved and grown with us. They are the vanguard for our industry — setting the standard for what’s possible in sustainable innovation and growth.

GROWTH THROUGH SUSTAINABILITY

Propelled by our target to reduce our customers’ carbon footprint by 1 gigaton of emissions, we are proving that it is possible to be a growth company, meet ambitious sustainability commitments and add value to customers by helping them meet theirs.

Innovation is at the core of who we are and is necessary to achieve our ambitious goals. Examples of technologies developed since we published our Gigaton Challenge commitment include simultaneous heating and cooling systems, advancements in artificial intelligence (AI) and digital services and fully electric solutions for transport refrigeration. These highly efficient and sustainable solutions offer attractive paybacks to our customers, helping them meet their goals and continuing to drive our growth.

In our own operations, we’ve deployed our technology and expertise to reduce environmental impacts through electrification, energy-efficiency and waste reduction strategies, even as our business and manufacturing demands have increased.

Exciting opportunities lie ahead, including our commitment to unlock more value through circularity strategies and plans to reduce embodied carbon.

INSPIRATION FOR WHAT’S AHEAD

The combination of what we’ve accomplished and the transformative potential ahead is why I joined Trane Technologies.

As an engineer and a business leader, I’m excited to be a part of this company where every role is an opportunity for impact and sustainable innovation is integral to the business. I am inspired by all the ways we empower and engage our people to take action through our Leadership Principles, goal setting and opportunities for learning and leadership.

ABOUT THIS REPORT

Our leadership includes a commitment to transparency and rigor in reporting our performance. Our 2024 Sustainability Report comprehensively accounts for the actions that have put us on track to meet our commitments. It reviews how we have embedded sustainability into our business model. And it’s a story about our people taking action to have an uplifting legacy.

As we recognize this five-year milestone and the significant progress we’ve achieved, we’re already focused on what’s next. We are proud to showcase how centering sustainability in our business generates positive outcomes for our customers, our business and society.



**Mauro J. Atalla**  
Senior Vice President and Chief Technology and Sustainability Officer  
Trane Technologies

Reporting our progress



**Global Reporting Initiative (GRI):** We report in accordance with the GRI Standards. See our [GRI content index](#).



**Sustainability Accounting Standards Board (SASB):** As a diversified manufacturer, we report to the standards for both the Electric & Electronic Equipment and the Industrial Machinery & Goods industries. See our [SASB content index](#).



**Task Force on Climate-related Financial Disclosures (TCFD):** We align with the Task Force’s voluntary disclosures. See our [TCFD content index](#).



**World Economic Forum (WEF) Stakeholder Capitalism Metrics:** We disclose our performance against the WEF’s Stakeholder Capitalism Metrics. See our [WEF content index](#).



**United Nations Sustainable Development Goals (UN SDGs):** We identify the UN SDGs on which we can have the most meaningful impact. Learn about our ambitions in the [United Nations Sustainable Development Goals](#) section.

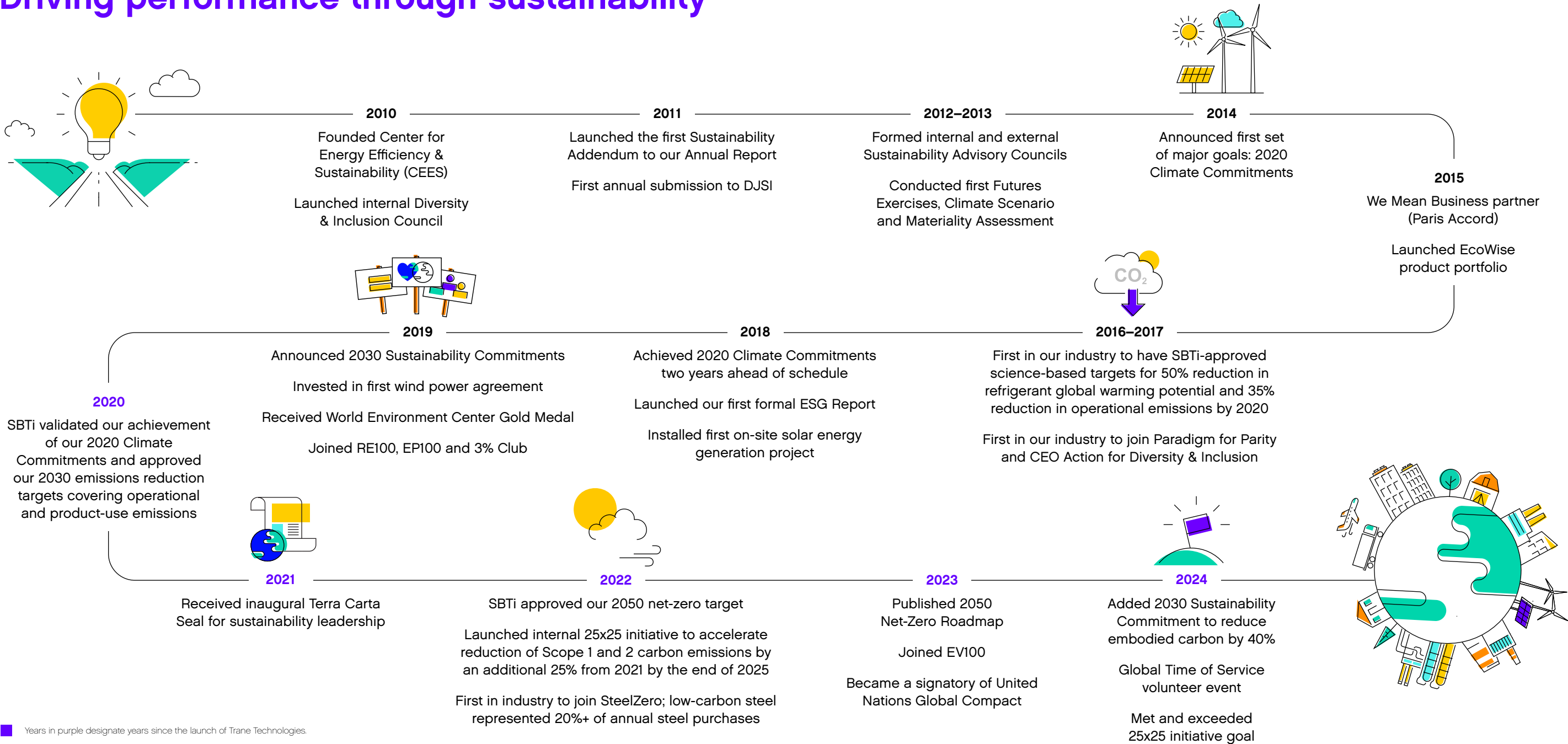


**CDP:** We voluntarily respond to the CDP questionnaire to disclose environmental impacts, risks and opportunities, as well as performance data. See our [2024 CDP Response](#).



**United Nations Global Compact (UNGC):** We align our operations and strategy with the universally accepted Ten Principles outlined by UNGC in the areas of human rights; Environment, Health and Safety; and anti-corruption. See our Global Compact status [here](#).

# Driving performance through sustainability



# Sustainability commitments

## Our 2030 Sustainability Commitments

To drive progress toward a more sustainable future, we established our 2030 Sustainability Commitments. The commitments cover our entire value chain and use our technology and innovation expertise to address global challenges that affect the communities where we work and live. Our commitments cover the 2020–2030 timeframe, and progress is tracked against a 2019 baseline unless otherwise noted. They are also aligned with multiple [United Nations Sustainable Development Goals](#) (UN SDGs).

We organize our 2030 Sustainability Commitments into three pillars: the Gigaton Challenge, Leading by Example and Opportunity for All. Our commitments drive our climate actions and innovation, inspire our people and culture and guide our community engagement. We track and publicly report our progress to hold ourselves accountable to these commitments.

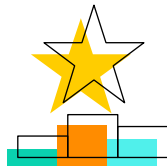


### GIGATON CHALLENGE

- Reduce our customers’ carbon footprints by 1 gigaton<sup>[1]</sup>
  - ✓ Increase sales of high-efficiency equipment
  - ✓ Expand product mix to accelerate electrification
  - ✓ Increase system-level energy efficiency
  - ✓ Transition to low-global warming potential (GWP) refrigerants

Our Gigaton Challenge rallies our team members to innovate to reduce our Scope 3 emissions and address global challenges related to climate change. Read more about the [Gigaton Challenge](#).

<sup>1</sup> 1 billion metric tons of carbon emissions (mtCO<sub>2</sub>e), compared to a 2019 baseline.

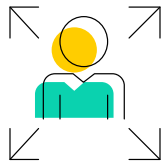


### LEADING BY EXAMPLE

- Achieve carbon neutral operations
- Deliver zero waste to landfill
- Achieve net-positive water use in water-stressed locations
- Reduce absolute energy consumption by 10%<sup>[2]</sup>
- Design systems for circularity
- Reduce embodied carbon in our products by 40%<sup>[2]</sup>

We lead our industry in responsible operations and encourage our suppliers to follow. Read more about our approach to [Greenhouse gas emissions](#), [Waste](#), [Water](#), [Energy](#) and [Circularity](#).

<sup>2</sup> Compared to 2019 baseline.



### OPPORTUNITY FOR ALL

- Advance an uplifting, diverse and inclusive culture
- Broaden access to career pathways to strengthen talent pipeline
- Maintain world-class safety metrics
- Provide market-competitive wages, benefits and leading wellness offerings for our global workforce
- Invest \$100 million in building sustainable futures
- Dedicate 500,000 employee volunteer hours in our communities
- Provide access to comfort and fresh food for vulnerable communities

We create new possibilities and a better world for all. Read more about our approach to [Our workforce & culture](#), [Safety](#) and [Corporate citizenship](#).



“ We are known for credible action on climate and the very real way that our employees are committed to our purpose. We are seeing this consistency translate into growth.

Chris Kuehn, Executive Vice President & Chief Financial Officer, Trane Technologies



Sustainability for growth  
[Read](#) →

LIMITED ASSURANCE  
GRI 2-5

We received limited assurance from an independent third party for select data associated with our 2030 Sustainability Commitments, including the product use emissions data included in the Gigaton Challenge calculation and select environmental, health and safety (EHS) data related to the commitments under the Leading by Example pillar. Unless otherwise indicated, we track progress on our goals against a 2019 baseline. See our [2024 Limited Assurance Report](#) for a comprehensive list of the greenhouse gas (GHG) emissions data and EHS metrics that received limited assurance.

Progress toward 2030 Sustainability Commitments

2025 marks the halfway point of our 2030 Sustainability Commitments — and five years as Trane Technologies. In 2019, we set our bold commitments, aligned with climate science and our strategy for business growth, knowing that our purpose-driven culture and spirit of innovation would lead the way.

Our commitments have grown and adapted with us, and we continue to make solid progress. Our culture drives our success, and our team members build our momentum with the actions they take every day.



Gigaton Challenge  
We're significantly reducing our customers' carbon emissions and driving innovation.

Progress through 2024:  
Tracking ahead ▲+

2030 goal	Performance indicators and enablers
Reduce our customers' carbon footprints by 1 gigaton (or 1 billion mtCO <sub>2</sub> e)	<ul style="list-style-type: none"><li>Reduced our customers' carbon footprints by 237 million mtCO<sub>2</sub>e since 2019.<sup>[1]</sup></li><li>Launched 190 new products in 2024, including a significant portfolio refresh with lower global warming potential (GWP) refrigerants.</li></ul>

<sup>1</sup> Formula to calculate Gigaton Challenge contribution is reviewed annually and refined as needed to include items that were not able to be measured previously.



Leading by Example  
We're reimagining our supply chain and operations to have a restorative impact on the environment.

Progress through 2024:  
On track ▲

2030 goal	Performance indicators and enablers
Achieve carbon neutral operations	<ul style="list-style-type: none"><li>Reduced operational GHG emissions by 44% from a 2019 baseline.</li><li>On track to meet our RE100 commitment with 68% of our electricity consumption coming from renewable sources in 2024.</li></ul>
Reach zero waste disposed of in landfills <sup>[2]</sup>	<ul style="list-style-type: none"><li>36 of our global sites operated as zero waste to landfill in 2024, representing 80% of our facilities.</li><li>Focused on improving circularity practices for steel, copper and aluminum.</li></ul>
Achieve net-positive water use in water-stressed locations	<ul style="list-style-type: none"><li>Reduced total water use at facilities in water-stressed locations by 27% since 2019.</li></ul>
Achieve 10% absolute reduction in energy consumption	<ul style="list-style-type: none"><li>Absolute energy use from our operations totaled approximately 848,000 megawatt-hours (MWh) in 2024 — a 3.2% reduction from our 2019 baseline, even as manufacturing and production demands increased.</li></ul>
Design systems for circularity	<ul style="list-style-type: none"><li>Leveraged our Design for Sustainability and Circularity module as part of our product development process.</li></ul>
Reduce embodied carbon in our products by 40%	<ul style="list-style-type: none"><li>Established our new embodied carbon commitment.</li><li>Met our commitment to have low-carbon steel account for 20% of our annual steel purchases.</li></ul>

<sup>2</sup> We define zero waste to landfill sites as having a 90%+ diversion rate consistent with industry practices.



Opportunity for All

We're uplifting our workforce and communities through an inclusive approach with a focus on broadening access and creating rewarding career pathways.

Progress through 2024:

On track ▲

2030 goal	Performance indicators and enablers
Advance an uplifting, diverse and inclusive culture	<ul style="list-style-type: none"><li>Achieved a 2024 overall employee engagement score of 82 out of 100, ranking in the top quartile among external benchmarks.</li><li>Strong engagement results in the Sustainability Index (score of 82) and Inclusion Index (score of 80) topic areas.</li></ul>
Broaden access to career pathways to strengthen talent pipeline	<ul style="list-style-type: none"><li>Removed degree requirements where not required for over 50 roles.</li><li>Delivering a wide range of learning and development experiences at all career stages.</li></ul>
Maintain world-class safety metrics	<ul style="list-style-type: none"><li>Lost-Time Incident Rate was 0.09 and Total Recordable Incident Rate was 0.70 in 2024, both below our 2019 baseline.</li><li>58 of our global locations celebrated 10 years with zero lost-time injuries.</li></ul>
Provide market-competitive wages and benefits and leading wellness offerings for our global workforce	<ul style="list-style-type: none"><li>All employee compensation is regularly assessed for market competitiveness and pay equity. U.S. hourly starting wages are 200%+ above state minimum wages on average.</li></ul>
Invest \$100 million in building sustainable futures	<ul style="list-style-type: none"><li>\$20M in philanthropic giving in 2024 and \$77M in total giving since 2020, including significant contributions to organizations focused on broadening access to STEM education and career pathways.</li></ul>
Dedicate 500,000 employee volunteer hours in our communities	<ul style="list-style-type: none"><li>Employees volunteered over 92,000 hours in 2024, including through participation in our 2024 Global Time of Service event, and have volunteered over 329,000 total hours since 2019.</li></ul>
Provide access to comfort and fresh food for vulnerable communities	<ul style="list-style-type: none"><li>Supported access to fresh and healthy food through Carolina Farm Trust and Thermo King's We Move Food program.</li></ul>



Looking to the United Nations' 100th anniversary in 2045, the Vision 2045 campaign shares stories of businesses leading the way in achieving the UN SDGs.

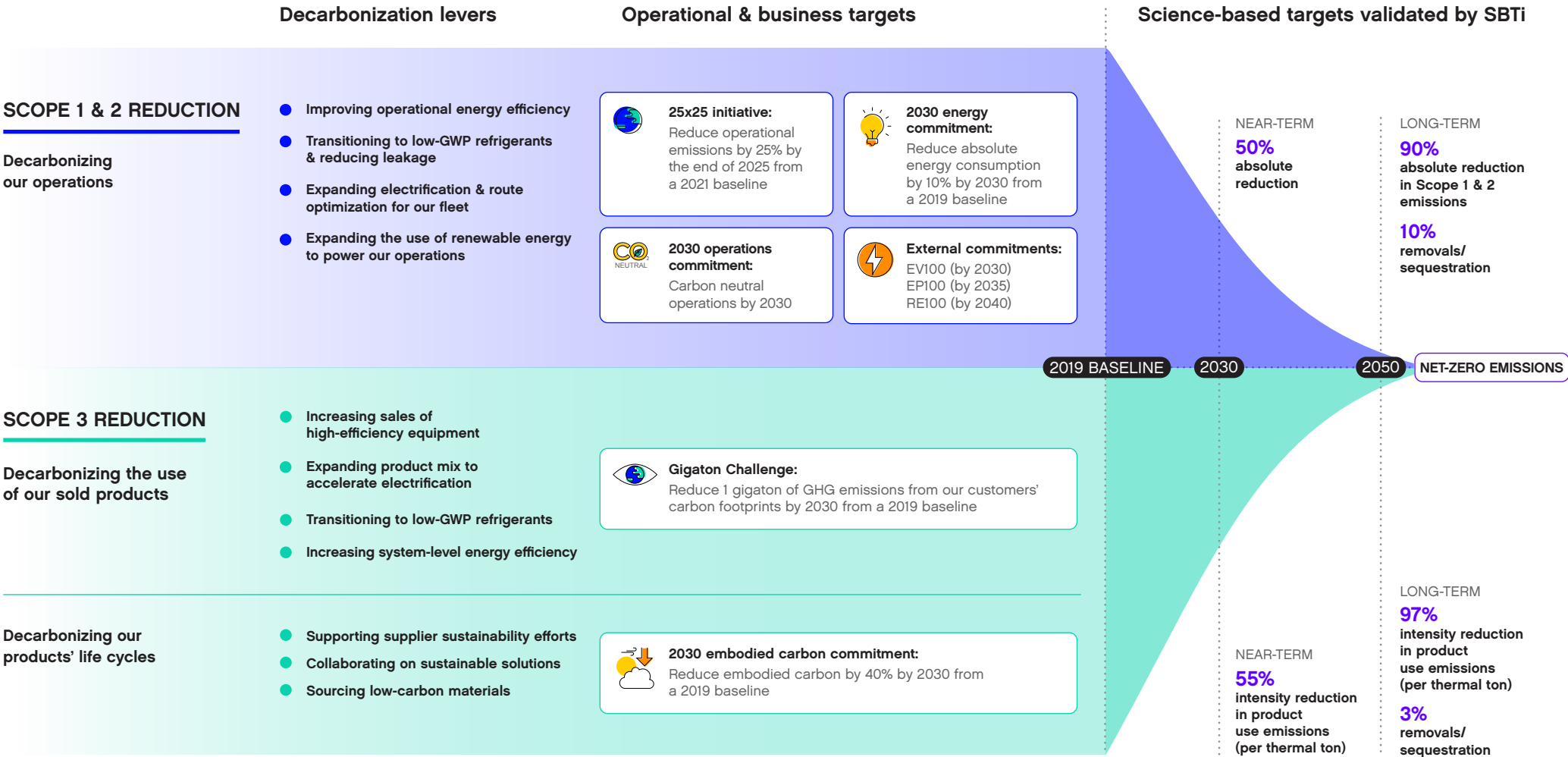
Our climate strategy

GRI 3-3

In 2025, we published our first Climate Transition Plan. The plan outlines our forward-looking climate strategy, including how we plan to manage physical and transition climate risks and opportunities, reduce carbon emissions in alignment with international climate agreements and prepare for future policy, market and technological changes.

Read more about our decarbonization levers and the strategic elements that support and influence the implementation of our climate strategy in our [Climate Transition Plan](#).

Trane Technologies’ Climate Transition Plan  
Our decarbonization strategy



**Scope 1, 2 & 3 decarbonization strategy dependencies & external factors:** Market conditions, potential locked-in GHG emissions, extreme temperatures and weather events, policy and regulatory change, inconsistent climate legislation, technological developments, a lack of supplier climate action to reduce GHG emissions

Climate Transition Plan elements

**Climate change resilience**

We conduct climate scenario analysis to assess our exposure and sensitivity to potential futures and integrate the results in our risk management process.

**Business model design**

We designed our business model and growth strategy to pursue climate innovation to deliver sustainable solutions that support our customers' decarbonization journeys, and have identified three climate-related strategic ambitions that we anticipate will shape our business and value chain leading up to 2030.

**Policy advocacy**

We support and advocate for policies that enable and encourage the adoption of decarbonization solutions.

**Governance**

We manage our climate strategy through a robust governance framework that includes Board oversight and assigns responsibility for implementation and risk management to executive leadership and specific teams.

**Financial planning**

We recognize our climate strategy influences our financial position and performance, and believe it improves our business resiliency, contributes to growth and drives top quartile financial results.

**Just Transition**

We strive to ensure that environmentally sustainable economies are promoted in a way that is fair and inclusive, creating decent work opportunities and benefiting everyone.

**Culture**

We foster a culture of climate innovation and impact through sustainability-focused goal setting, training and communications, internal initiatives and financial incentives.

**Tracking and reporting progress**

We disclose our progress in implementing the Climate Transition Plan in our annual Sustainability Report.

## OUR SCIENCE-BASED TARGETS

Trane Technologies was the first in our industry — and one of the first companies in the world — to set a long-term net-zero target approved by the Science Based Targets initiative (SBTi). To achieve our goal of net-zero emissions by 2050, we first established SBTi-approved 2030 targets for our Scope 1 and 2 greenhouse gas (GHG) emissions and our Scope 3 product use GHG emissions. These targets are aligned with international climate agreements' aim to limit global temperature rise to 1.5 degrees Celsius. Our science-based Scope 3 intensity target is exclusively focused on product use emissions,<sup>[1]</sup> as these emissions represent our most significant reduction opportunity. As of 2025, we consider our 2030 science-based targets as near-term targets and our 2050 science-based targets as long-term targets.<sup>[2]</sup>

### Near-term: Our 2030 science-based targets

- **Absolute Scope 1 and 2 GHG emissions:** 50% reduction from a 2019 baseline.
- **Scope 3, Category 11 “use of sold products” GHG emissions:** 55% reduction per thermal ton<sup>[3]</sup> from a 2019 baseline.

### Long-term: Our 2050 science-based targets to achieve net-zero

- **Absolute Scope 1 and 2 GHG emissions:** 90% reduction below 2019 levels and neutralization of the remaining 10% of emissions through carbon removals and sequestration.
- **Scope 3, Category 11 “use of sold products” GHG emissions:** 97% reduction per thermal ton<sup>[3]</sup> below 2019 levels and neutralization of the remaining 3% of emissions through carbon removals and sequestration.

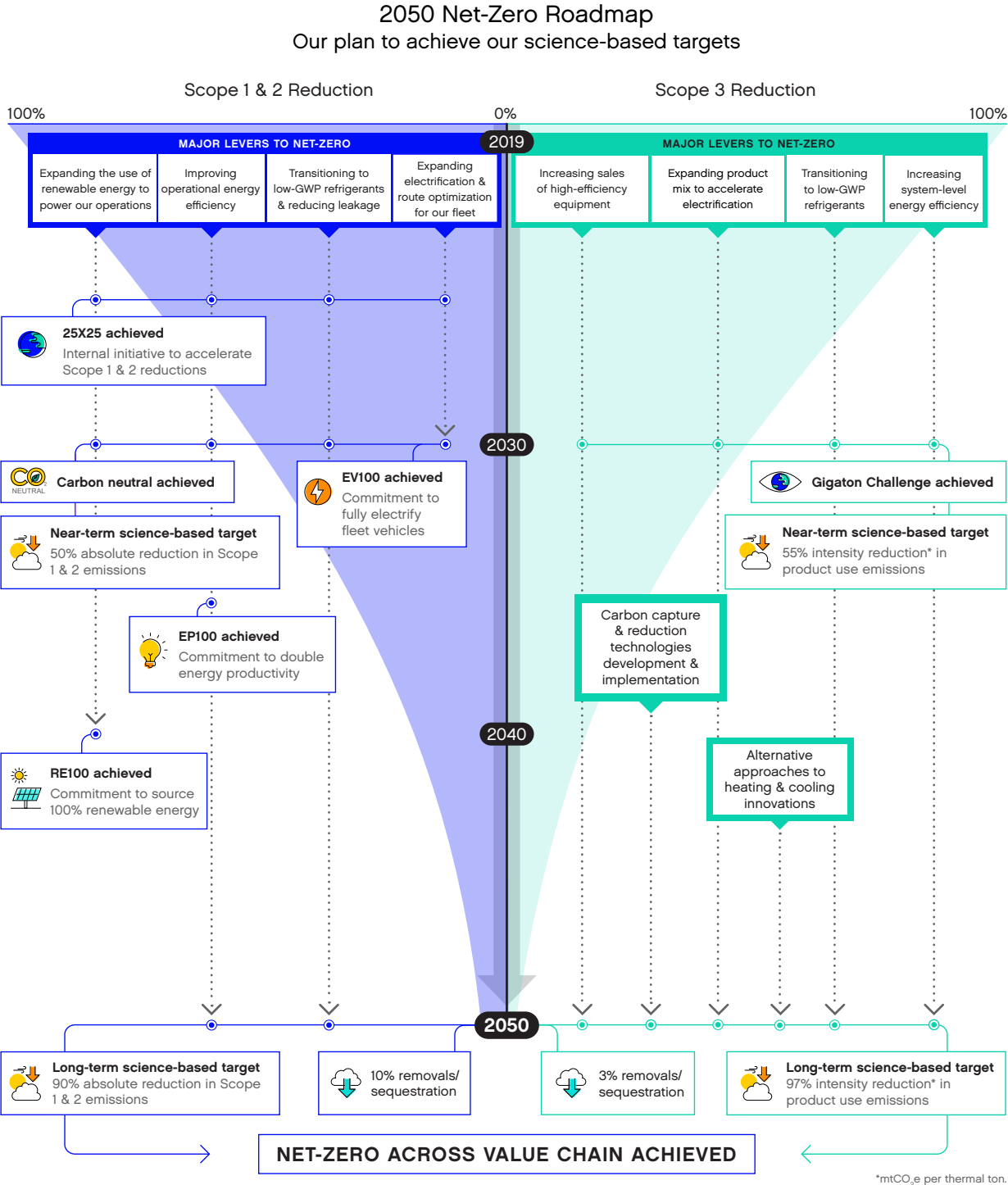
## OUR 2050 NET-ZERO ROADMAP

Trane Technologies' 2050 Net-Zero Roadmap represents our plan to achieve net-zero emissions across our value chain by 2050. It is focused on our Scope 1 and 2 and Scope 3 product use science-based targets. The roadmap also includes internal and external commitments that contribute to emissions reductions and can help us achieve our science-based targets. Read about our 2024 emissions reduction efforts and progress in the [Greenhouse gas emissions](#) section.

1 Our SBTi-approved Scope 3 target covers Category 11 “use of sold products” emissions.

2 We define near-term targets as being one to five years out and long-term targets as being in excess of five years. We utilize our Enterprise Risk Intelligence program's definitions for “near-term” and “long-term” when categorizing targets.

3 Emissions per thermal ton (capacity) are calculated by dividing the total emissions by the total thermal capacity in tons.





# Embedding sustainability

We integrate sustainability across all businesses and functions in our company, and we believe that every team member has the potential to advance our work as a global climate innovator.

In our [annual employee engagement survey](#), we achieved a score of 82 out of 100 in the Sustainability Index topic area, demonstrating a strong shared belief in our role as a global leader in sustainability.

To create an even stronger connection to our purpose and the daily contributions that make a difference, our salaried team members commit to a sustainability-oriented objective as part of annual goal setting. In 2024, we introduced a comprehensive directory of functional sustainability goal examples and a learning guide for creating custom sustainability goals. This supports our team members in operationalizing sustainability into specific roles or functions in clear and practical ways that deliver business value.

How we integrate sustainability:

- **Purpose:** To boldly challenge what’s possible for a sustainable world
- **Growth strategy:** [Product development](#) and [innovation](#)
- **Business operating system:** [Supply chain resilience](#), reducing environmental impacts in [our own operations](#)
- **Employee engagement:** [Purple Teams](#), [Sustainability Ambassador Network](#), [Business Resource Groups](#)
- **Annual goal setting:** Sustainability goals included in [individual goal setting](#)

## EMBEDDING SUSTAINABILITY

### Purpose profiles



**Cal Krause** connects to our purpose through his work as an Operational Impacts Program Manager.



**Anna Meier** connects to our purpose through her work as an Account Manager for our commercial HVAC customers.



**Emma Van Fossen** connects to our purpose through her work as an Energy Engineering Team Lead in our Energy Services business.



Sustainability is ingrained in our culture — that’s really the foundation. Everyone I work with is excited about contributing to our climate commitments, increasing the sustainability of our industry and the world.

Emma Van Fossen, Energy Engineering Team Lead, Trane Technologies



[See their stories](#) →

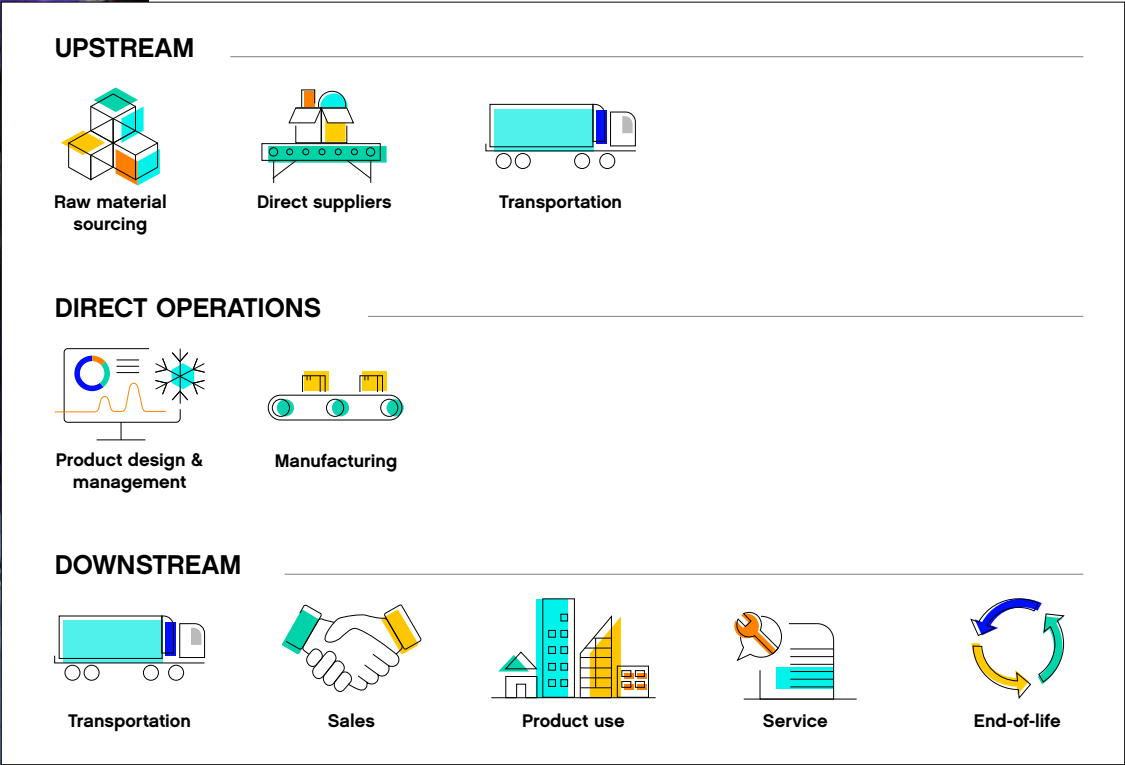


## Value chain

Trane Technologies is a multinational business with global facilities and a vast product portfolio. For over a decade, our manufacturing strategy has been in-region, for-region and our supply chain tends to follow. As a result, our operations have a wide range of environmental, social and economic impacts.

Our value chain consists of 10 major stages. For each stage, we have identified the areas that are most relevant to our business and that we actively manage, as well as the stakeholder groups most directly affected by these impacts. We actively consult with these stakeholder groups to identify potential business impacts, risks and opportunities that could influence our decisions.

Learn more about the topics and areas of focus for each stage of our value chain on our [website](#).



# Technology & innovation

We grow our global business through products and services that help our customers reduce energy use, decarbonize and advance their own sustainability goals. The industries we serve evolve constantly. That's why we continue to innovate and develop new solutions with great customer payback as we enhance the way the world heats and cools buildings and transports refrigerated goods.

[Innovation](#)

[Sustainable solutions](#)

[Product sustainability & circularity](#)

## TECHNOLOGY & INNOVATION

# Innovation

GRI 3-3

Our customers' use of our products is our largest source of emissions, comprising more than 98% of our carbon footprint. Additionally, the built environment and transport sectors we serve represent more than half of the world's emissions. Through advancements in sustainable innovation and technology-enabled products and services, we aim to have both an immediate and long-term impact.

Learn more about the major levers and opportunities we've identified to reduce greenhouse gas GHG emissions in the [Greenhouse gas emissions](#) section, as well as in our [Climate Transition Plan](#).

## Approach to innovation

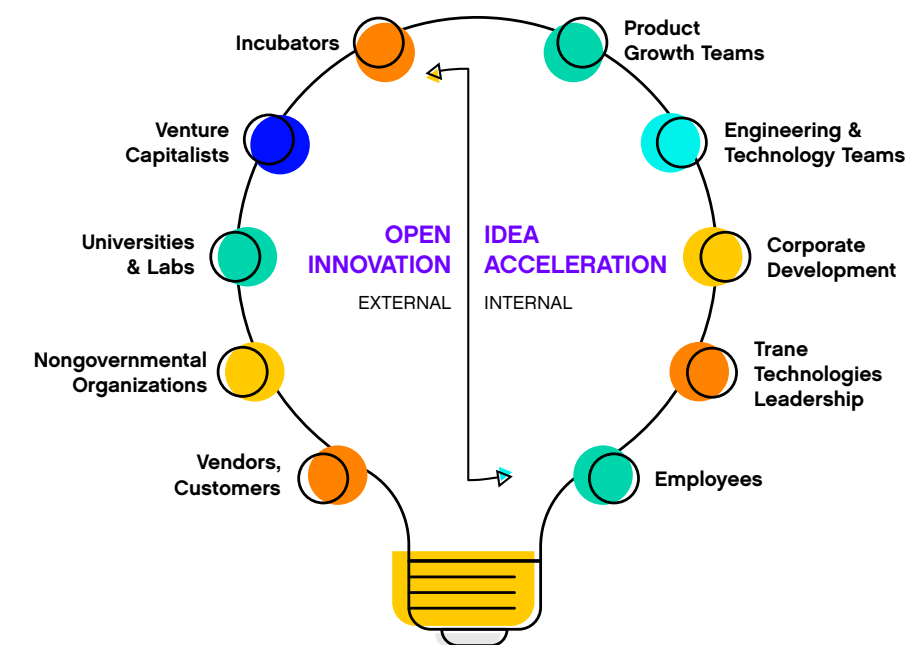
We provide industry-leading products and services that help our customers reduce emissions, enhance efficiency, save money and adapt to a rapidly changing climate. We actively engage with our customers to understand their needs and develop solutions that advance their goals. We work across a network of partners, including accelerators, universities, national labs and suppliers, to enhance our product development process and deliver new and improved offerings.

Our Business Operating System guides our innovation and product development process. Our Chief Technology and Sustainability Officer oversees innovation teams that identify opportunities to refine our product portfolio to meet our customers' needs through internal and external engagement efforts. Our engineering teams integrate these opportunities and improvements into our product development process.

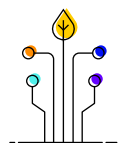
Our Networks of Excellence (NOEs) are groups of technical experts and researchers that focus on the future of materials, chemistry, modeling/simulation, compression technologies and electrified systems and components. Our NoEs scan and screen technologies, develop and deploy capabilities and enable the development of energy-efficient and low-emission solutions.

With a strong focus on continuous improvement, we foster a culture of innovation, facilitating an environment where ideas can be explored, tested and scaled to make a meaningful impact.

## Our innovation ecosystem



SOURCE IDEAS ► PRIORITIZE ► MATURE IDEAS ► CREATE OUTCOMES



# \$309M+

research and development expenses incurred in 2024 (as reported in accordance with U.S. generally accepted accounting principles (GAAP))



# 135+

new patent filings in 2024

Investing in sustainable solutions

In 2024, Trane Technologies invested over \$309 million in sustainability-driven research and development centered on:

- Product and system-level improvements, such as increasing energy efficiency;
- Advancing the electrification of heating and transport;
- Developing and implementing low-global warming potential (GWP) refrigerants;
- Reducing material content in products;
- Designing products for circularity; and
- Leveraging artificial intelligence (AI) solutions to increase energy efficiency.

In 2024, our company applied for more than 135 new patents worldwide, seeking to expand our global portfolio of over 2,500 granted patents. More than 40% of the patent applications filed during the year were for innovations that directly support our sustainability efforts, including the electrification of heating and the use of next generation low-GWP refrigerants. Our internal Intellectual Property Committee manages our portfolio of patents and trademarks across the enterprise.

We also direct investment into building our own capabilities through innovation hubs like the three featured to the right.

INNOVATION REVENUE

We track Innovation Revenue, which we define as the revenue occurring in the current reporting year derived from new solutions or new markets launched within the prior 36 months. As of the end of 2024, innovation revenue accounted for nearly 32% of our overall revenue.



**Manufacturing Technology Design Center in Davidson, NC:** In early 2024, we introduced the Manufacturing Technology Design Center in Davidson, North Carolina, inspired by the success of our manufacturing automation lab in Galway, Ireland. Team members at the center validate technology and develop plans to successfully deploy automation solutions to our global operations. The center also hosts controls engineers, robotics engineers and machine vision engineers from our sites around the world as we upskill our people and develop the future of automation for our company.



**Innovation Center in Oberhausen, Germany:** Spanning an impressive 14,000 square meters, the Innovation Center, which opened in 2024, showcases the diverse range of efficient and sustainable heating and cooling solutions for industrial and commercial buildings and transport. It also serves as Trane Technologies’ Center of Excellence for Electrification, with unique testing capabilities on-site. Recent advancements include the development of electric drive solutions and components for transport refrigeration units, like the [Thermo King®](#) [AxlePower](#) kinetic energy recovery system.

“ Oberhausen’s thriving job market and high quality of life make it an attractive destination for professionals. This innovative center, along with the training facility on-site, will contribute to the development of science, technology, engineering and math (STEM) skills in our community.

Daniel Schranz, Mayor of Oberhausen



**Trane® Control Lab in China:** In collaboration with Tongji Architectural Design Group, Trane Technologies established the Trane Control System Lab in Taicang, China. The lab focuses on energy management systems and aims to tackle customer challenges in high-tech industrial and pharmaceutical sectors by providing a smart energy management solution for high-performance chiller plants. The lab leverages advanced technologies, including a cloud platform and building automation system, to help businesses achieve efficient and stable heating, ventilation and air conditioning (HVAC) operations.

## Employee-powered innovation

As our [employee engagement survey](#) demonstrates, our team members believe in our commitment to sustainability and want to be part of exploring new ideas and innovation. Launched in 2021, Operation Possible is our employee-driven innovation program designed to harness the power of our people to solve pressing sustainability challenges. The program provides team members with the opportunity to submit potential solutions to social and environmental challenges aligned with our 2030 Sustainability Commitments. A global cross-functional committee evaluates and consolidates the submitted ideas, and employees vote for the ideas they believe have the greatest opportunity for impact, helping determine which ideas are selected for incubation.

In 2024, we continued to focus on a multi-year challenge to identify and address heating and cooling needs for vulnerable and displaced people. Six global project teams worked on a range of solutions to improve air quality and provide heating and cooling for temporary dwellings with no direct energy sources.

## External collaboration

We believe collaboration is key to solving global challenges. We work with industry experts, research institutions and other climate tech companies to extend innovation and enhance our sustainable solutions. Through our engagements, we advance our knowledge and co-develop and pilot new technologies.



### Collaborating with Autodesk to enhance commercial building energy efficiency

Our cross-industry collaboration with Autodesk, Inc. seeks to simplify the user experience and enable sustainable, AI-assisted design by integrating Trane's TRACE® software and Autodesk Revit for architects and engineers.

Fusing Trane's leading Mechanical, Electrical and Plumbing (MEP) and HVAC engineering analysis solutions with Autodesk's Building Information Modeling (BIM) technology reduces rework, enhances efficiency in the design process and accelerates the building industry's move toward sustainable design.

AI design exploration, connected workflow and integration innovations developed through the collaboration are planned to initially be available in high BIM-adoption regions, such as the U.S. and Canada.



### 7th Annual American Innovation Conference

Our Vice President of Commercial HVAC Product Management, Oakley Roberts, delivered the keynote address at the 7th Annual American Innovation Conference at Fordham University. He shared how the innovative integration of energy-efficient equipment, thermal storage systems, building controls and automation help buildings make a leap forward in their low-carbon and net-zero ambitions, including a cutting-edge and large-scale project at [55 Water Street](#) in New York City.

The conference celebrates the nation's most innovative companies as ranked by consumers in the American Innovation Index™. The consumer rankings were derived from research conducted by the Responsible Business Center, Illuminas and the Norwegian School of Economics.



A common misconception is that sustainable solutions are prohibitively expensive. However, energy efficiency and emissions reductions often result in short payback periods — sometimes within just two to three years.

Jose La Loggia, Group President, EMEA,  
Trane Technologies

## TECHNOLOGY & INNOVATION

# Sustainable solutions

GRI 2-29, 3-3

We recognize that we have the ability to influence our customers' collective power to create beneficial environmental outcomes through our sustainable solutions. We provide industry-leading technology and product innovations in electrification, energy efficiency, digital services and autonomous controls and the use of low-global warming potential (GWP) refrigerants.

## Customer engagement

To understand customers' changing needs, we conduct customer surveys to solicit input, measure satisfaction and gain insight into our customers' experiences and demands. We monitor critical key performance indicators (KPIs), including scores that measure our customers' satisfaction and ease in doing business with Trane Technologies.

Each quarter, we capture channel and end-customer feedback for each business. Business leaders review the feedback and develop action plans to address items that require corrective action to meet stated customer experience targets.

Our Residential HVAC and Thermo King® products are distributed through certified dealers, and each dealer must participate in extensive training to fully understand our brands before becoming certified. Certified dealers must also maintain a high customer satisfaction rating. Long-time dealers help inform how we improve and innovate based on their engagement with customers.

In 2024, Thermo King introduced a new [Electrification Readiness Program](#) for dealers in the U.S. The program equips our vast dealer network with technical expertise, resources and support for deploying and servicing the next generation of hybrid and electric equipment, advancing decarbonization for customers in the transport refrigeration sector.

Supporting our customers goes beyond our product lines. We also serve as a resource for our commercial customers through our online [Legislation and Incentives Resource Center](#). The resource center provides insights into major legislation, policies and incentives affecting commercial buildings today and shares expert guidance to help customers adapt for the future.

## Electrification

Today, energy grids are still largely powered by fossil fuels, but as technology evolves and energy grids become more efficient and source from renewable energy, electric solutions will generate fewer direct emissions. We offer hybrid and electric solutions to help residential, commercial and industrial customers reduce the use of fossil fuels and advance toward a net-zero future.

### ELECTRIFICATION OF HEAT

As we plan for a future powered by clean energy, we are also focused on optimizing energy demand today. We are pioneering new technologies like thermal storage, waste heat recovery and all-electric heat pumps, including advanced systems that offer simultaneous heating and cooling capabilities. When integrated, these electrified thermal management systems can deliver three to five times greater energy efficiency, with a customer payback of less than three years. Our digital services and controls can further reduce energy use.

### ELECTRIFICATION OF REFRIGERATED TRANSPORT

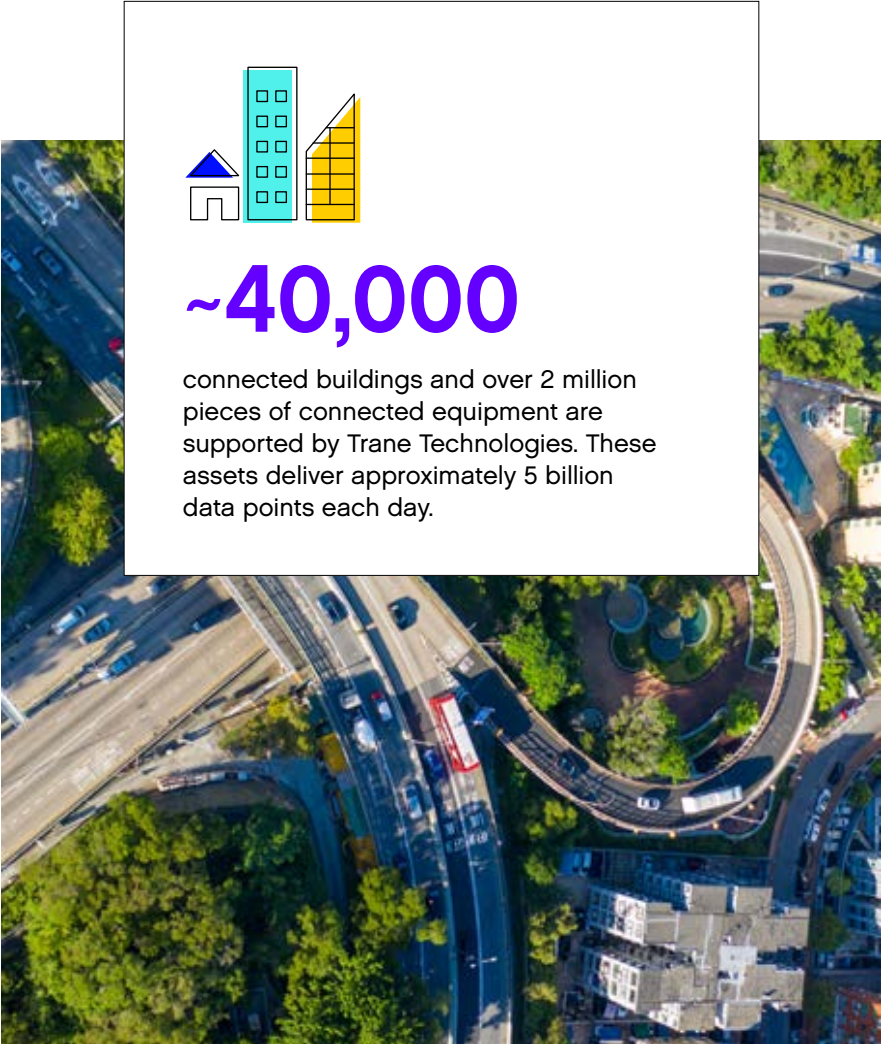
Electrifying refrigerated transport significantly reduces GHG emissions by minimizing reliance on fossil fuels. Electric units are more energy-efficient than diesel-powered units, enabling lower energy consumption and reducing operational costs. The electric systems also run more quietly than their diesel counterparts, reducing noise pollution.

We are investing more than \$100 million in the all-electric Thermo King evolve™ portfolio, which includes electric refrigeration solutions for truck, trailer, rail, air and marine transport. In 2023, Thermo King achieved its commitment to deliver a fully electric, zero direct emission refrigeration solution for every cold chain segment in the Europe, Middle East and Africa (EMEA) region, and we are on track to do the same in the Americas by the end of 2025.

AI & digital enablement

With artificial intelligence (AI) and digital services, building management and HVAC systems can do more than ever. Buildings become more sustainable as digital systems track performance factors to manage comfort, process heating and cooling needs and reduce energy demand and costs.

We provide end-to-end connectivity solutions and strategies for customers across a range of needs, from complex buildings and industry to all modes of transportation across the cold chain.



According to the [U.S. Environmental Protection Agency](#) (EPA), on average, 30% of the energy used in commercial buildings is wasted. Our investment in purpose-built AI-for-HVAC is centered on addressing this inefficiency and reducing demand-side energy consumption. Our AI systems combine structured data (building layout, indoor temperatures from sensor readings, installed equipment specifications, etc.) with unstructured data (weather patterns, forecasts, pollution data, sun position, building occupancy patterns, etc.) to optimize the energy performance of buildings. The systems learn how to proactively respond to changing conditions, including energy pricing fluctuations. Our AI-enabled building controls autonomously optimize energy performance and enable cost-effective predictive maintenance.

By leveraging AI and real-time data management, sophisticated controls, building automation systems and continuous commissioning, we are advancing digitization technologies that enable greater energy and cost savings.

“ In a continually warming world, demand for cooling is only increasing. HVAC systems play a crucial role in our shared vision for a net-zero future — and their integration of advanced AI technology is supercharging what’s possible for reducing built environment emissions.

Riaz Raihan, Senior Vice President & Chief Digital Officer, Trane Technologies



How AI can help dramatically reduce energy demand and emissions

[Read](#) →



Technology acquisitions advance building decarbonization

In 2023, we acquired NuvoLo, a leading cloud-based software and solutions provider for intelligent workplace solutions and enterprise asset management.

In January 2025, we completed our acquisition of BrainBox AI, a pioneer in autonomous HVAC controls and generative AI building technology. BrainBox AI uses advanced deep learning algorithms to predict building energy needs and automate HVAC systems, reducing energy consumption by up to 25% and reducing GHG emissions by up to 40%.

The additions of NuvoLo and BrainBox AI further augment Trane Technologies’ core building management and digital capabilities, helping customers achieve their decarbonization and workplace transformation goals.

Energy services

Through Trane® Energy Services, we work with customers to address all aspects of sustainability and develop strategies that reduce their energy consumption and carbon emissions. Our process maximizes impact and minimizes investment by prioritizing and sequencing sustainability improvements, while leveraging available funding and incentives.

For Scope 1 GHG emissions, we transition customers from fossil fuel-powered equipment to electrified heating and cooling systems where feasible. For Scope 2 GHG emissions, we implement energy efficiency improvements such as HVAC optimization, controls and smart building enhancements, building envelope improvements, lighting upgrades and thermal energy storage. Additionally, we enhance resilience and further reduce emissions by integrating on-site renewable energy and distributed energy resources, including solar, microgrids and combined heat and power generation.

Low-global warming potential refrigerants

We have been leading the transition away from high-GWP refrigerants in our chiller and transport refrigeration portfolios since 2014, before industry regulations were in development.

Today, we continue to explore new refrigerant technologies that prioritize product safety, efficiency and sustainability, and we assess technologies and systems to reduce refrigerant leaks. We are engaged as an industry thought leader in the development of a circular refrigerant life cycle where refrigerants can be reclaimed and recycled into next-generation solutions. Trane Technologies continues to lead in this space and remains committed to supporting our customers. Learn more about how we have supported the refrigerant transition in the [Public policy](#) section.

Non-greenhouse gas emissions

Trane Technologies' product development process is designed to reduce emissions, including nitrogen oxides (NO<sub>x</sub>), through increased product efficiency.

As an example, in our transport refrigeration business, we offer hybrid electric architecture to deliver cost savings, greater uptime and lower emissions. Our hybrid engines are compliant with the evergreen California Air Resources Board (CARB) regulations that address air pollution in the state. With an Evergreen CARB compliant unit, customers meet the strictest particulate matter and NO<sub>x</sub> regulations and maximize their fuel usage.

Product efficiency

Our commitment to energy efficiency goes beyond meeting minimum regulatory requirements. We aim for our products to deliver higher energy savings, which creates greater long-term value for our customers by lowering operating costs and reducing their environmental impact. We use industry-leading standards and benchmarks to drive superior performance beyond national, state and local minimums, including energy efficiency rating standards from the Air-conditioning, Heating and Refrigeration Institute (AHRI), ENERGY STAR criteria set by the U.S. EPA and the Consortium for Energy Efficiency (CEE) standards. We also use guidelines established by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) to inform our ambitious targets. To validate the additional efficiency gains achieved through our services, we conduct audits using submeters and utility consumption reports, ensuring measurable and verifiable energy savings.

“ We’re continually on the leading edge of new, sustainable technologies, and have proudly led the industry in the transition to next-generation refrigerants.

Dwayne Cowan, President, Residential HVAC,  
Trane Technologies



Leading the refrigerant transition for customers  
[Read](#) →



DOE’s Heat Pump Technology Challenge

Trane Technologies joined the U.S. Department of Energy’s (DOE) [Commercial Building Heat Pump Technology Challenge](#) in 2024. The program is designed to advance the adoption of cost-effective, next-generation heat pump rooftop units and cut carbon emissions. By partnering with the DOE and its national laboratories to create prototypes, test product performance and durability and conduct field trials, we leveraged our innovation expertise to develop new low-emissions heat pump rooftop units. These units can reduce GHG emissions and energy costs by up to 50% compared to conventional units.

“ We love to help spur the technology that is going to drive us into the future.

Keishaa Austin, Acting Principal Deputy Director,  
U.S. DOE Office of State and Community  
Energy Programs

# Product reliability & safety

SASB RT-EE-250a.1; RT-EE-250a.2

Our products undergo thorough engineering analysis and testing to ensure they perform reliably under extreme conditions — precisely when customers need them most.

We design for reliability and safety, meeting or exceeding global industry standards and codes, including UL, NEC, ANSI, ASME, PED and ASHRAE, among others. Our cross-functional product development teams assess environmental, health and safety risks throughout the product development process. They also perform design failure modes and effects analysis to identify potential failure points and their root causes. Additionally, we measure our products' health and safety performance using internal serviceability, reliability and durability metrics.

We adhere to regulations and codes related to product labelling, service information, marketing communications and customer safety. Each business unit is responsible for tracking incidents of noncompliance within its market, with legal counsel addressing any issues.

In early 2025, Trane Technologies' secure software development life cycle process earned a globally recognized cybersecurity certification: ISA/IEC 62443-4-1. This rigorous certification validates that our global product development process meets or exceeds industry-accepted best practices, demonstrating our commitment to improving the security of our products and connected solutions.

## VULNERABILITY MANAGEMENT & AWARENESS

We provide a [Vulnerability Management webpage](#) and survey on our main website to help bring awareness to product safety and security. The Trane Technologies Product Security Incident Response team works to validate, analyze and mitigate any potential vulnerabilities in a responsible manner to minimize our customers' risks. We publish information on the website related to potential product security threats and list the product name, documentation and information related to the most recent software update. Customers can also provide a vulnerability disclosure submission. To support the protection of organizations engaged in Good Faith Security Research, Trane Technologies supports Safe Harbor reporting.





## Innovative products & solutions

Buildings are responsible for [approximately 30%–40%](#) of global emissions, and transportation accounts for [approximately 20%](#) of global emissions. Our innovative products, systems and services are commercially available to customers now and are helping to decarbonize the sectors responsible for approximately half of the world's emissions, while reducing energy demand and energy costs.

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### TruComfort™ Heat Pump

From refrigeration units for the cold chain to unitary products for commercial use to high-efficiency residential products, we are transitioning our portfolio to next-generation refrigerants with 78% less GWP. Our [residential product portfolio](#), which includes our [20 TruComfort™ Variable Speed Heat Pump](#), demonstrates our commitment to leading the refrigerant transition while also delivering enhancements in energy efficiency and connected technology.

---

### Trane® Thermal Battery™ Storage-Source Heat Pump System

Ideal for larger buildings, this innovative [chiller-heater system](#) is designed to advance electrified, low-carbon heating, including in climates that fall below zero degrees Fahrenheit. The system helps accelerate building decarbonization and results in improved system efficiency by combining proven heat pump technologies, controls and thermal energy storage tanks, which store heat like a battery stores electric energy.

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### Tracer® Enhanced Chiller Plant System Control

[Tracer® chiller plant control](#) is part of our full-service approach to total building optimization. With new platform enhancements, Tracer chiller plant control strategically manages the custom rotation, staging and sequencing of multiple chillers for job-specific needs. This approach helps deliver the perfect balance of proven sequences for enhanced reliability, sustainability and energy management.

### Trane® Hydronic Branch Conductor

The [Hydronic Branch Conductor](#) helps retrofits and new buildings achieve higher energy efficiency and zone comfort from decarbonized, electrified heating and cooling. The Conductor enables the repurposing of existing water piping for both heating and cooling distribution, even in buildings with existing two-pipe branch systems, helping customers achieve sustainable comfort with minimal structural changes and installation costs. In certain applications, the Conductor can improve heating efficiency by more than 35%.

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### Thermo King® AxlePower

A trailer-mounted solution for any tractor format, [AxlePower](#) recovers and stores kinetic energy generated while driving and is used to power the refrigeration unit using sustainable energy with no compromise on performance. Powerful enough for long-haul highway journeys, the technology seamlessly integrates into existing fleets and leverages advanced TrackKing telematics capability for system management.

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### Trane® City™ RTSF HT High-Temperature Water-to-Water Heat Pump

Designed for diverse industrial and commercial applications, the [City™ RTSF HT Heat Pump](#) integrates Trane's proprietary screw compressor technology and an ultra-low-GWP refrigerant. In addition to decarbonizing the primary energy source, the system is ideal for capturing and repurposing process waste heat streams, significantly reducing both operational costs and the carbon footprint.

“ Many industries heat and cool within the same process but often rely on separate systems to run simultaneously. This practice causes large thermal inefficiencies. By electrifying process heating and enabling the repurposing of thermal energy, we are helping industries transition away from fossil fuels and achieve ambitious sustainability targets.

Erik van Oossanen, Product Management Leader, Trane Technologies

Supporting customers’ business & sustainability goals

Together with our customers, we are multiplying the impact we can have to reduce carbon emissions while also enhancing the sustainability of their operations and business through energy reduction and cost savings.

[EnerSys](#), a leading global battery manufacturer for industrial applications, and Trane are working together to reduce emissions and increase electrification across EnerSys facilities. Phase one of the collaboration included an automation and controls upgrade at the EnerSys plant in Missouri. The upgrade will reduce over 1,900 metric tons of carbon dioxide equivalent (mtCO<sub>2</sub>e) of operational emissions and save approximately \$250,000 in annual energy costs. At the start of 2025, projects in progress included HVAC upgrades at EnerSys’ Kentucky facility, an energy optimization project at the headquarters in Pennsylvania and efficiency and electrification upgrades across several other facilities.

[Organon](#), a global pharmaceutical company focused on improving women’s health, is working with Trane to implement sustainable heating and cooling technology to reach their goal of carbon neutrality by 2035. Trane installed three decentralized heat pumps to replace the current fossil fuel boilers at Organon’s industrial site in Oss, Netherlands. With the three new heat pumps, Organon is saving nearly 7,700 gigajoules of energy per year, equivalent to the usage of nearly 243,000 cubic meters of gas annually.



[Geely Auto Group](#), a leading auto manufacturer based in Hangzhou, China, has been working with Trane for nearly 10 years to make the shift to zero-carbon intelligent manufacturing. Trane supplies a range of highly efficient centrifugal chillers at Geely’s electric vehicle production sites across China. Trane China has provided chillers surpassing the national primary energy efficiency standards for several major projects. The chillers can help Geely achieve an energy efficiency improvement of 8-15%.

[DP World](#) logistics group and food retailer Woolworths are the first in Africa to operate the Thermo King AxlePower energy recovery system on the road. The AxlePower system recovers the truck’s kinetic energy while driving to power the trailer’s Thermo King Advancer refrigeration unit. Over a distance of 146,000 kilometers as of January 2025, the system has operated in electric mode to cool the trailer, even in temperatures exceeding 40°C, without engaging the unit’s diesel engine for more than 97% of the time — and without charging the battery. Estimates indicate that AxlePower will save up to 10 tons of carbon dioxide annually compared to traditional diesel-powered trailer refrigeration systems.

[Range Energy](#), the hardware company bringing powered trailers to the commercial trucking market, and Thermo King are collaborating to advance the commercialization of electric refrigerated trailers in the Americas. With a shared pursuit to make commercial trucking cleaner, safer and more efficient, this collaboration will develop an electric trailer technology system that integrates Range’s electric trailer platform with Thermo King’s hybrid and electric trailer refrigeration units. The integration process will include extensive testing, customer pilots and a public demonstration of the electric refrigerated trailer.



The paradox of data centers & AI

According to the U.S. Department of Energy, data centers consume anywhere from [10 to 50 times more energy](#) than a typical commercial building and account for about 2% of total U.S. electricity consumption.

The explosive growth of data centers will require unprecedented electricity. The answer, however, will not solely be in supplying more energy. We are addressing the demand side of electricity and helping data centers operate more efficiently. We develop energy-efficient cooling systems that reduce overall energy demand, as well as heat recovery capabilities that offset energy needs by using otherwise wasted heat for other purposes. For example, in the [Aalsmeer Energy Hub](#), repurposed heat from a local data center was used to heat a nearby childcare center, sports complex and plant nursery.

## Product sustainability & circularity: A life cycle approach

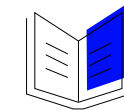
GRI 3-3, 301-2, SASB RT-IG-440b.1

In 2024, we deepened our commitment to the principles of circularity throughout the entire value chain. Our approach is to evaluate the product life cycle, from product conception to end-of-life, and examine the environmental impacts at each stage. Our teams then employ strategies to source low-carbon materials, repair and reuse parts and products and remanufacture and recycle whenever possible. This aligns with our [2030 Sustainability Commitment](#) to increasingly design our products for greater circularity.



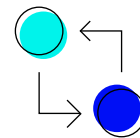
By embracing circularity, we're creating a business ecosystem that is both more resilient and less carbon-intensive.

Jenelle Shapiro, Circularity Leader, Trane Technologies



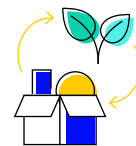
**Driving business value:  
Embracing circularity**

[Read →](#)



**46%**

average recycled content in 2024



**\$215M**

revenue generated from remanufactured products and remanufacturing services in 2024, more than double from 2023

# Our approach to designing for circularity

We believe it is crucial to develop circular economy strategies that reduce our reliance on virgin materials, keep products in service longer, reduce waste and create new strategic business opportunities. When we implement circular operations, we prevent downstream landfilling, which can be hazardous to water and air quality and can negatively impact human health and biodiversity. Circular design can also reduce the carbon footprint of our products. We strive to extend product life cycles and build long-term strategic relationships with customers to create a more circular supply chain.

## ENTERPRISE CIRCULARITY COUNCIL

Our Enterprise Circularity Council works to elevate and more fully transition to a circular economy across all business units globally. Through the council, Trane Technologies aligns our work with client needs and our 2030 Sustainability Commitments, identifies priority focus areas and sets relevant goals and targets. The council acts as a forum to build circularity momentum across our operations, facilitating cooperation as a global team. In 2024, we expanded the composition of the Enterprise Circularity Council to add leaders across every region, business unit and key functional teams. Our Circularity Leader chairs the council.

The key objectives of the Enterprise Circularity Council are to:

**Develop and ensure** continued business growth, alignment and prioritization of our circularity pillars against set goals and metrics.

**Enable and advocate** for continued circularity leadership by creating greater alignment and value for customers and employees.

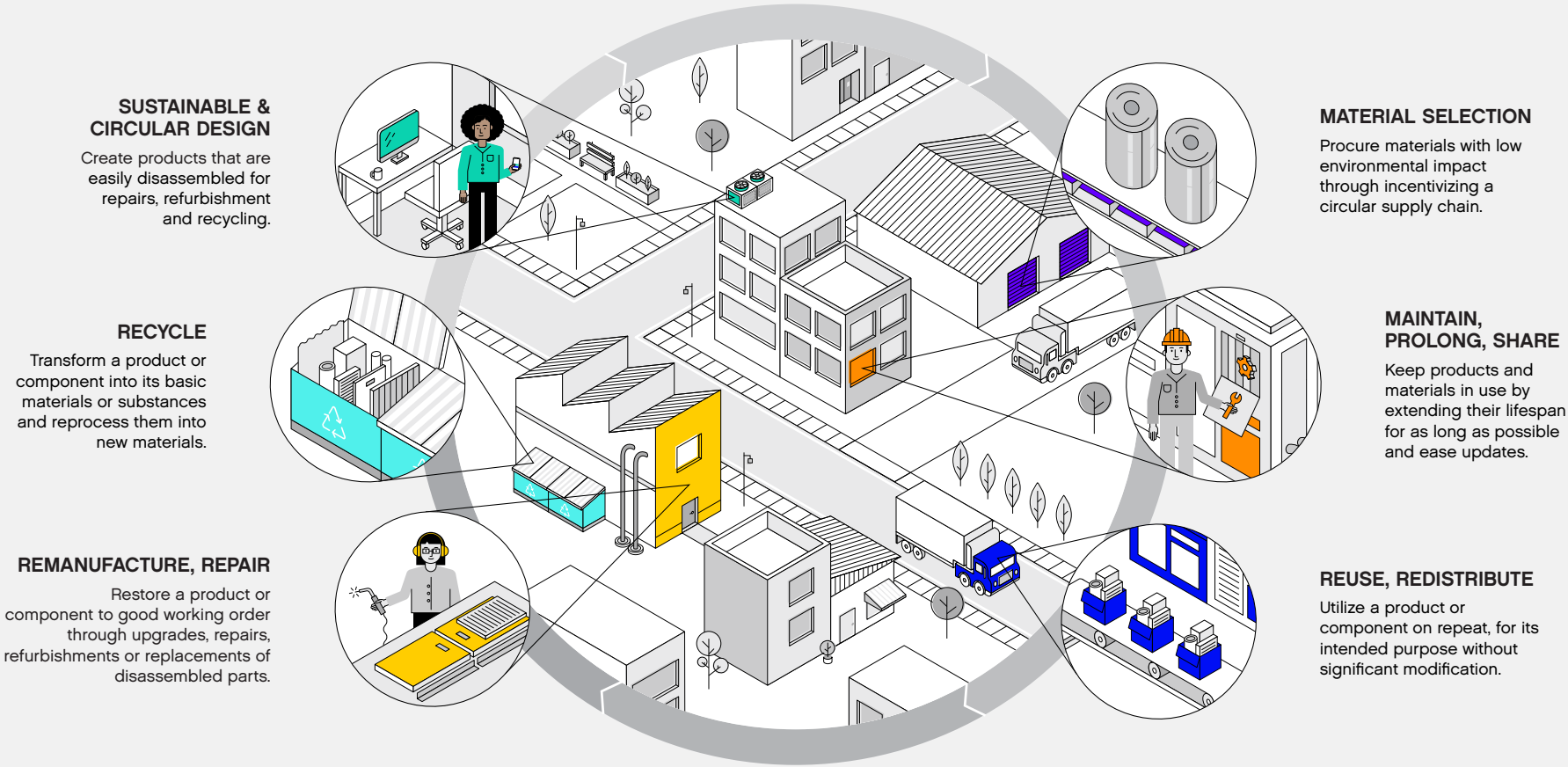
**Support and align** technological innovation, investment and continuous improvement across all businesses and functions.

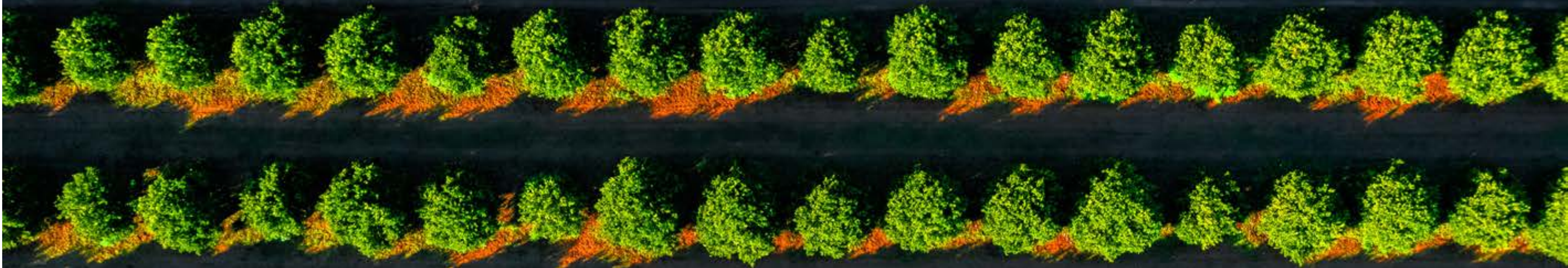
“ The Enterprise Circularity Council focuses on leading our organization to advance a circular economy, which goes beyond recycling; it’s about rethinking our entire product life cycle value chain and the development of expanded business models.

Tyrone Ellis, Aftermarket Engineering Leader,  
Trane Technologies

# Six strategic pillars

Our circularity pillars guide our efforts. Each pillar shows how we can integrate circularity into our products across their life cycle. Within each pillar, our team members work to define goals and metrics as we increasingly design systems for circularity.





### SUSTAINABLE & CIRCULAR DESIGN

Every circularity pillar is important, but sustainable design is the most instrumental as it informs every other pillar. When we design across the value chain to solve for longevity, durability, repairability, efficient material usage and recyclability, we work towards full business circularity.

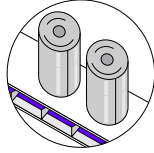


Embedding circularity into product design begins with our New Product Development process. Through this structured process, project teams of engineers, product managers and operations managers consider topics such as customer requirements, parts and raw materials sourcing, manufacturing footprint and product performance.

Opportunities to enhance the sustainability and circularity of products exist at every stage of the product life cycle. In 2023, we updated our New Product Development process to include our Design for Sustainability and Circularity (DfSC) module. With the DfSC module, project teams are given framework through which they can evaluate customer and market requirements related to sustainability and circularity, prioritize improvement opportunities at every stage of product development in line with our 2030 Commitments and track DfSC progress across projects over time. In 2024, we worked to continue the uptake and use of DfSC across all new product development projects.

### MATERIAL SELECTION

In the second stage of the product life cycle, our teams work to optimize procurement and engage with suppliers to source low-carbon alternatives — those with high recycled content as opposed to virgin extracted raw materials. We evaluate ways to reduce embodied carbon in metal and plastics used in the manufacturing of our products that will help, in part, reach our [embodied carbon commitment](#), as the majority of our products' embodied carbon is derived from purchased inputs. Read more about our [commitment to low-carbon steel](#).



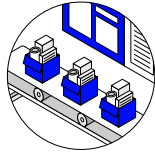
### MAINTAIN, PROLONG, SHARE

A key component of circularity is extending the usefulness of parts and products. Our team of global technicians and dealers work with our customers to prolong the use of each product through preventive maintenance and parts repair. We continually strengthen our products' digital capabilities to better forecast maintenance needs, address issues before they become problems and find opportunities for material resource efficiency and cost savings.



### REUSE, REDISTRIBUTE

In this pillar, we focus on creating a second life for our products and components to develop new streams of revenue for our business. Second life equipment can reduce carbon emissions. In addition, reselling used components can generate revenue and incentivize new circular business models.



### REMANUFACTURE, REPAIR

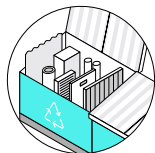
Remanufacturing involves disassembling failed components, replacing broken or obsolete parts, repairing parts that can be reused and assembling finished products that are tested to the same quality and performance as new ones.



We have been remanufacturing key equipment parts since 1973. In 2024 alone, our Global Aftermarket teams remanufactured more than 10,000 total components, including compressors, motors, controllers, electronic components, starters and more.

### RECYCLE

Waste is produced at various points throughout the product life cycle. We work to create value from discarded materials and use them in material sourcing for new products. This allows Trane Technologies to save money and lower the embodied carbon of our product inputs.



MATERIAL SELECTION EXAMPLE

**Testing the use of recycled nylon:** Our Enterprise Materials and Chemistry Network of Excellence team, together with Procurement and Thermo King Engineering, are finalizing extensive testing on multiple plastic components within our Thermo King® Trailer Refrigeration products. The testing is exploring changing from a virgin nylon plastic to both post-consumer and post-industrial recycled nylons. The teams' main goals are to reduce the carbon footprint and save on product costs.

Through engagement with multiple partners (resin manufacturers and current molders), our teams have identified significant savings. By converting from 100% virgin resins to post-industrial and post-consumer recycled material, we will decrease total carbon by 30% and will reuse more than 350,000 pounds of scrap and recycled material within our supply chain annually.



MAINTAIN, PROLONG, SHARE EXAMPLE

**Fleet monitoring to extend engine life:** For over three decades, Thermo King has partnered with DOT Transportation, Inc. (DTI), a major food industry redistributor with over 2,900 trailers operating across the U.S. DTI uses Thermo King's TrackKing® Pro telematics, a digital program to analyze fuel consumption, electricity usage and other operational metrics associated with the trailer refrigeration unit.

DTI's customer team uses the telematics data to help increase fleet uptime, improve efficiencies and prevent food waste that could potentially result from an unexpected refrigeration equipment breakdown. As a result of the telematics data, DTI changed an engine mode across the fleet, resulting in less runtime. The update is expected to save \$1.1 million in fuel and maintenance costs within 12 months and help extend the useful life of the system.



REUSE, REDISTRIBUTE EXAMPLE

**Recovering & reusing parts:** In support of our circularity goals, the team at our Trane distribution hub in Mesa, Arizona developed a pilot program to collect and reuse salvageable parts from damaged HVAC equipment. They are redefining the process, documentation, training and systems for tearing down units and harvesting parts to fulfill warranty claims with our Trane Supply stores. By the end of 2024, nearly 800 parts were harvested for reuse.

RECYCLE EXAMPLE

**Trane's Global Refrigerant Reclaim Program:** Trane's [Refrigerant Reclaim Program](#) offers customers and technicians an over-the-counter cylinder exchange and monetary reimbursement for qualifying refrigerants. Through this program, we aim to make properly reclaiming refrigerants easy for technicians and customers by providing them with a clean, empty cylinder and sending the used refrigerant cylinders to a third party for reclamation. Reclaimed refrigerants also create a more resilient supply chain, as they are immediately available. This program helps our customers decarbonize and contributes to our Gigaton Challenge.

In 2024, Trane Supply stores and global aftermarket distribution partners collected the equivalent of over 323,700 metric tons of carbon dioxide equivalent (mtCO<sub>2</sub>e) in recovered refrigerants. This was a 50% increase year-over-year, with more than 150 Trane Supply stores in the Americas participating as of year-end 2024.





# How we measure circularity

Historically, we measured our progress in designing for circularity based on two distinct elements: the percentage of recycled materials sourced per year and remanufacturing revenues. In 2024, we developed cross-functional working groups, with the Enterprise Circularity Council and internal Sustainability Council oversight, to identify more intention-based circularity KPIs. These headline indicators will provide us with a current view of how circular our business is today and identify areas we need to improve.

Our KPIs will focus on three areas:

- **Materials circularity:** Reducing finite resources used and keeping materials in use at their highest value.
- **Circular services and solutions:** Bridging the gap between resource efficiency and extension of life of products to create additional business value.
- **Circular GHG impact:** Implementing circular strategies which result in emissions reductions.

These new KPIs build on our historic circularity metrics, which measured the average percentage of materials containing recycled content sourced per year and remanufacturing revenue. In 2024, approximately 46% of the key

commodities (e.g., copper, steel, cast iron, aluminum and plastics) used to manufacture our products contained recycled content, and we generated \$215 million in revenue from our remanufactured products and remanufacturing services. Discover more of our product metrics in the [Data center](#).

## MEASURING LIFE CYCLE IMPACT

We can optimize our circularity and embodied carbon reduction efforts when we understand where and how the largest share of environmental impacts occur in the product life cycle. To this end, we perform life cycle assessments (LCAs) on key products across our portfolio. We also publish Environmental Product Declarations (EPDs) to provide customers and other external stakeholders with credible and transparent data on the environmental footprint of our products across their entire life cycle, including their embodied carbon.

LCAs and EPDs disclose emissions across the entire product life cycle, providing insight into where the greatest impact occurs. With this information, our team defines strategies to reduce embodied and operational carbon in our portfolio over time. In service to our new [embodied carbon commitment](#), the data from LCAs and EPDs will help to track and understand emissions “hotspots” outside of the product-use phase and prioritize reductions across our value chain.

We continue to advance our pursuit and publication of LCAs and EPDs to meet customer demand for transparency into the sustainability of our products. Customers reference our LCAs and EPDs for various uses, including making informed decisions on the most sustainable products or materials for their projects, contributing to whole-project LCAs (e.g., whole building LCAs) and performing their own corporate carbon footprint calculations.

In 2023, we published an EPD encompassing our [CenTraVac® chiller models](#) CVHF and CDHH and Agility® model HDWA water-cooled chiller. In 2024, we added to our publications with completed EPDs for [Ascend® Model ACRC Chillers](#) with Integrated Free Cooling and [Sintesis™ eXcellent GVAF Chillers](#). We also completed an ISO 14044-conformant LCA for the Advancer trailer refrigeration unit product line from Thermo King EMEA. Additionally, we increased our utilization of the [TM65 Embodied Carbon in Building Services Methodology](#) to evaluate and report embodied carbon for a variety of products across our commercial and residential HVAC portfolios.

Trane Technologies' EPDs are publicly available on our product websites and reference international ISO standards that govern EPDs. TM65 disclosures are available upon request.



# Environment

We work toward a net-zero future for our customers and in our global operations. Our 2030 Sustainability Commitments guide our efforts, and we continue to make progress on our science-based targets by reducing emissions across our operations and in our value chain.

[Climate change impact](#)

[Waste](#)

[Greenhouse gas emissions](#)

[Water](#)

[Energy](#)

## ENVIRONMENT

# Climate change impact

GRI 3-3, 201-2

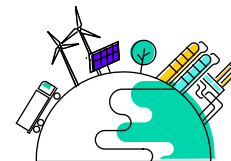
We recognize that human activity causes climate change, and businesses play a critical role in its mitigation. Through our innovation-driven climate strategy and science-based targets, we aim to address climate change and reduce impacts on people and the planet. We engage with communities and organizations to foster collaboration and understand how we can strengthen our climate actions to drive progress.

We report our progress toward our climate ambitions each year. We drive progress through innovative products, services and mitigation efforts. By engaging with suppliers, collaborating with external partners and developing new products and services, we continue to reduce emissions, improve energy efficiency and challenge what is possible. Read more about our external partnerships in the [Charters & associations](#) section.



## 44%

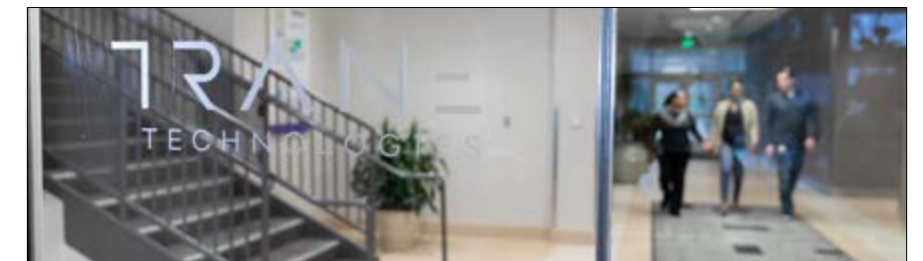
reduction in operational emissions from our 2019 baseline, progressing toward our science-based target of 50% reduction by 2030



## 17%

reduction in product use emissions per thermal ton<sup>1</sup> from our 2019 baseline, progressing toward our science-based target of 55% reduction by 2030

<sup>1</sup> Emissions per thermal ton (capacity) are calculated by dividing the total emissions by the total thermal capacity in tons.



## Our internal decarbonization guidelines

In 2024, we published internal guidance detailing our GHG emissions reduction strategy and explaining its importance. This resource, titled “Doing Our Part: Reducing greenhouse gas emissions in our operations and across our value chain,” is available to all employees. The guidelines define Scope 1 and 2 GHG emissions, as well as each category of Scope 3 GHG emissions, and provide descriptions of how each type of emissions manifests in Trane Technologies’ operations and value chain and the specific decarbonization actions we will take to reduce them.

# Our carbon footprint

We developed our climate strategy in alignment with international climate agreements’ aim to limit global temperature rise to 1.5 degrees Celsius, and have integrated it throughout our business, from research and development to our manufacturing processes. Our strategy includes near-term Scope 1 and 2 and Scope 3 product use greenhouse gas (GHG) emissions reduction targets for 2030 and a long-term 2050 net-zero target, all of which were validated and approved by the Science Based Targets initiative (SBTi). We annually calculate our Scope 1, 2 and 3 GHG emissions in accordance with the [GHG Protocol](#) to track progress against our targets and determine our carbon footprint. To confirm the accuracy of our emissions calculations, we perform audits through an annual internal assurance process. We also use an independent third party to verify our Scope 1 and 2 GHG emissions data and the GHG emissions data associated with our most significant Scope 3 categories, as recorded in our [2024 Limited Assurance Report](#).<sup>[1]</sup>

In 2019, we completed a GHG emissions inventory aligned with the GHG Protocol across our Scope 1, 2 and 3 emissions to serve as the baseline for our Scope 1 and 2 and Scope 3 product use science-based targets. We chose 2019 as our base year because it represented an average production year and allowed us to set ambitious emissions reduction targets and strategies.

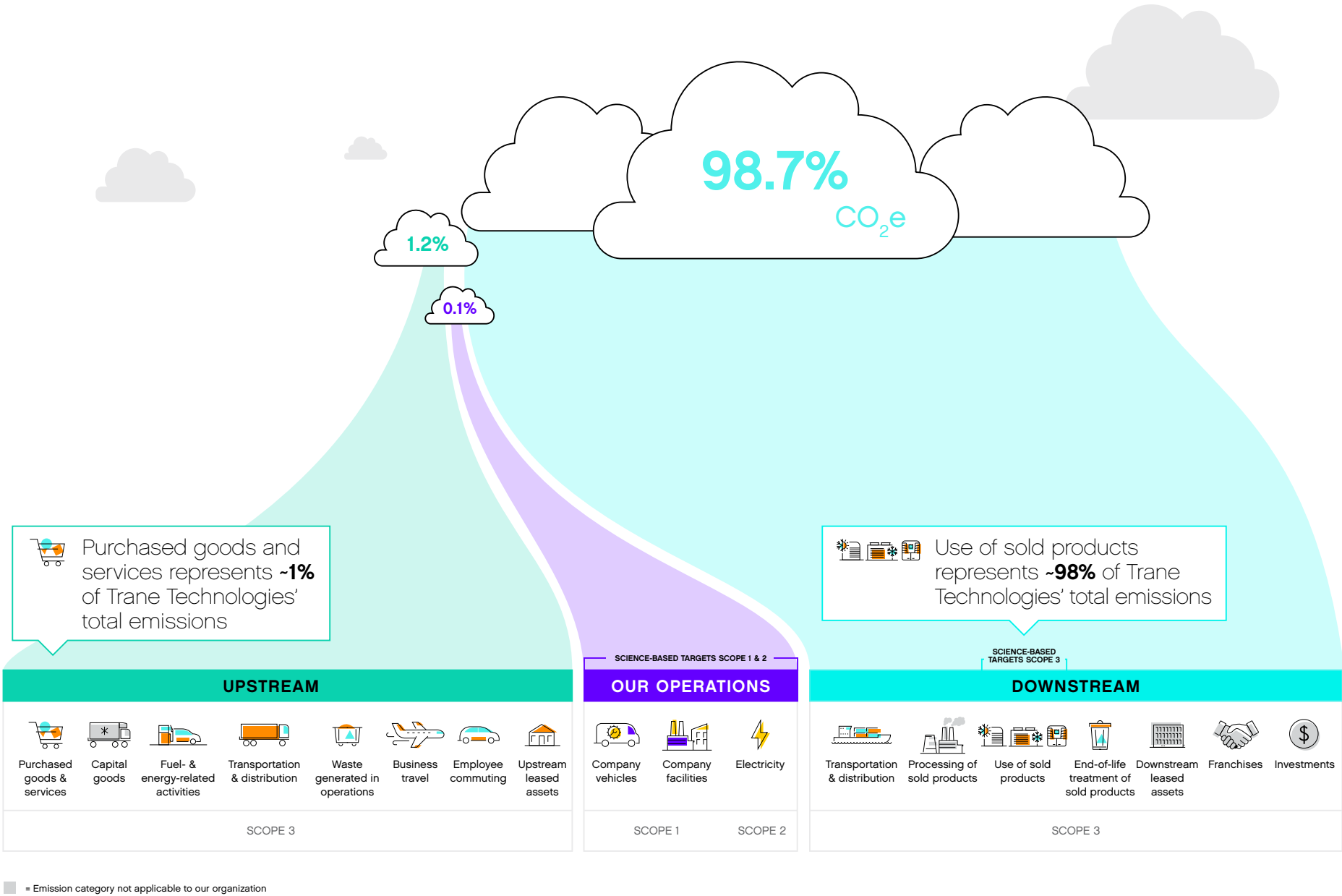
Customer use of sold products is our largest source of emissions and comprises more than 98% of our carbon footprint. For this reason, our SBTi-approved Scope 3 targets are dedicated to reducing Scope 3, Category 11 “use of sold products” emissions. We also established the [Gigaton Challenge](#) to help our customers reduce their product use emissions and to drive progress on our Scope 3 science-based targets.

Our new [commitment to reduce embodied carbon](#) by 40% by 2030 from a 2019 baseline is focused on reducing our second largest category of emissions, Scope 3, Category 1 “purchased goods and services” emissions. In addition to lowering emissions in our value chain, we actively work to reduce operational emissions and meet our Scope 1 and 2 science-based targets through the implementation of electrification and efficiency solutions.

Published in 2025, our [Climate Transition Plan](#) details our forward-looking climate strategy and the decarbonization levers we have implemented to meet our emissions reduction targets and achieve our 2050 net-zero goal. See an overview of our Climate Transition Plan and read more about our science-based targets in the [Sustainability strategy](#) section.

1 Our most significant categories of Scope 3 emissions are Category 1 “purchased goods and services” emissions and Category 11 “use of sold products” emissions.

## Our 2019 baseline carbon footprint by Scope<sup>[2]</sup>



2 We recalculate and restate the 2019 baseline data as required based on acquisitions and other activities.

## Climate resilience in our communities

At Trane Technologies, we recognize that climate change disproportionately affects underrepresented and poorer communities. We commit to ensuring a Just Transition to a low-carbon economy in alignment with the [International Labor Organization \(ILO\) Guidelines for a Just Transition](#), which defines “Just Transition” as “ensuring that environmentally sustainable economies are promoted in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.” In 2024, we began internal discussions to further define and embed our Just Transition strategy throughout our business in alignment with the ILO Guidelines for a Just Transition. Examples of how we support a Just Transition include:

- Committing to identifying equitable ways to retain and retrain our workers associated with electrification and decarbonization so their careers can evolve alongside technology and innovation. For example, we are upskilling our Data Science and Cybersecurity employees on our Engineering and Technology Centers India team by partnering with top-tier institutions for advanced technical programs.
- Creating new pathways to training and career advancement for skills-based talent through programs like the [Trane Technician Apprenticeship Program](#) and through participation in Opportunity@Work’s [Tear the Paper Ceiling coalition](#).
- Investing in broad workforce development and innovation opportunities that help communities and our sector, such as our [Electrification Readiness Program](#) for our Thermo King® dealer network.
- Supporting [environmental policy changes](#) that aim to positively affect the health and well-being of everyone in our communities through the development of clean energy infrastructure and the use of low-global warming potential (GWP) refrigerants.

Learn more about our initiatives to advance a Just Transition for workers, suppliers, customers and communities in our [Climate Transition Plan](#).



Heat waves touch everybody and can pose significant risks to children, the elderly and people with chronic illness. It’s important for us to innovate, collaborate and advocate for solutions.

Helen Walter-Terrinoni, Global Director of Decarbonization Advocacy, Trane Technologies

## Our impact on natural systems

We recognize climate change and nature are interconnected, and we commit to assessing natural impacts while improving the ways we track and manage these efforts. Many of our existing climate and sustainability commitments and initiatives manage for our nature impacts such as:

**Water:** To achieve our 2030 net-positive water commitment, we track monthly water use and effluent discharge in water-stressed locations, which helps us identify areas to reduce our water consumption and improve water quality. By reducing our reliance on fresh water, we help protect natural watersheds and preserve access to fresh water in water-stressed areas. Since 2019, we have [reduced water use](#) at facilities in water-stressed regions by 27%, ensuring water availability for local wildlife and increasing groundwater recharge time.

**Circularity:** Our [embodied carbon commitment](#) holds us accountable for sourcing low-carbon and recycled materials and supports our 2030 Sustainability Commitments to [design our products for circularity](#) and achieve [zero waste to landfill](#). Using recycled materials decreases our reliance on virgin materials and demand for raw material and resource extraction, lessening our negative impacts on nature. We encourage suppliers to use [reusable or returnable packaging](#) to reduce the need for wood-based and single-use plastic packaging in our supply chain.

**GHG reductions:** Our near-term and long-term science-based targets are designed to reduce our climate change impacts, including the loss of biodiversity and habitats caused by rising temperatures and sea levels. Through our transport refrigeration solutions and [Gigaton Challenge](#), we aim to reduce food loss within the cold chain. Increasing global access to the cold chain eliminates the need to increase food supply to compensate for food loss, lessening pressure on agricultural land.

In 2024, we used the Taskforce on Nature-related Financial Disclosures’ (TNFD) Locate, Evaluate, Assess and Prepare (LEAP) approach to engage in a geographic assessment of our global facilities and identify those in nature-sensitive locations. We also conducted a nature-related dependencies, impacts, risks and opportunities (DIRO) assessment to understand our business’ interactions with nature throughout our value chain. Based on the results of our TNFD LEAP and DIRO assessments, we published Trane Technologies’ first Nature Assessment. We are using the results to enhance the tracking and management of our impact on natural systems. Read our [Nature Assessment](#) to learn more.



### Monterrey employees support local protected areas

Team members in Monterrey, México volunteer to support conservation efforts in the Sierra Picachos Mountains, which are located near our facility and make up the largest protected natural area in Nuevo León, México. They partner with the [Asociación Ecológica de la Sierra de Picachos A.C.](#) (AESPAC), a non-profit with the mission to conserve the ecosystem of Sierra Picachos while working with the local community to promote peace through environmental education.

In 2024, the volunteers worked with AESPAC to help clean the preserved area by picking up trash and trimming back overgrown paths. They also participated in an educational session, learning about the production of oregano in the Sierra Picachos.

## Greenhouse gas emissions

GRI 3-3, 305-1, 305-2, 305-3, 305-4, 305-5, SASB RT-IG-410a.1, RT-IG-410a.2, RT-IG-410a.3, RT-IG-410a.4

Within Trane Technologies, our cross-functional experts collaborate to advance our decarbonization strategy and reduce our contribution to climate change. We aim to achieve net-zero emissions by 2050 and have established both science-based targets and business commitments to meet this goal. Through our near-term science-based targets, we commit to reducing our absolute Scope 1 and 2 greenhouse gas (GHG) emissions by 50% by 2030 from a 2019 baseline and reducing our Scope 3 product use GHG intensity metric of emissions per thermal ton<sup>[2]</sup> by 55% over the same timeframe. Our long-term science-based targets commit us to reducing our absolute Scope 1 and 2 GHG emissions by 90% and our Scope 3 product use GHG emissions by 97% per thermal ton by 2050. We plan to use carbon sequestration technologies to remove the remaining emissions and meet our 2050 net-zero commitment.

### Our Climate Transition Plan

In 2025, we published our inaugural Climate Transition Plan, which captures our forward-looking climate strategy to manage physical and transition climate risks and opportunities, reduce carbon emissions and prepare for future policy, market and technological changes.

The plan elaborates on our decarbonization strategy, providing insight into our 2050 Net-Zero Roadmap to meet our science-based targets. It also describes our business model design, our commitment to a Just Transition and our use of policy advocacy to support our climate strategy. Read our [Climate Transition Plan](#) to learn more.

<sup>2</sup> Emissions per thermal ton (capacity) are calculated by dividing the total emissions by the total thermal capacity in tons.



# 194,000

mtCO<sub>2</sub>e reduction in operational emissions, representing a 44% decrease from a 2019 baseline




# 237 million

mtCO<sub>2</sub>e contributed to the Gigaton Challenge since 2019, progressing toward our goal<sup>[1]</sup>

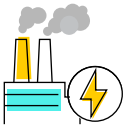
<sup>1</sup> Formula to calculate Gigaton Challenge contribution is reviewed annually and refined as needed to include items that were not able to be measured previously.

Significant emissions scopes




**Scope 1**

Direct emissions from sources owned or controlled by a company




**Scope 2**

Indirect emissions from purchased electricity, steam, heat & cooling



**Scope 3**

**Category 1**  
Purchased goods & services



**Category 11**  
Use of sold products

Scope 1 & 2 GHG emissions

Refrigerant losses, fuel consumption and electricity use contribute to our Scope 1 and 2 GHG emissions. As of the end of 2024, we had reduced our absolute Scope 1 and 2 GHG emissions by 44% from the 2019 base year and were on track to achieve our near-term Scope 1 and 2 science-based target in 2030. Between 2023 and 2024, our absolute Scope 1 and 2 GHG emissions increased by 2,572 metric tons of carbon dioxide equivalent (mtCO<sub>2</sub>e). This minor increase was mainly due to delays in refrigerant changeover, delays in electric and hybrid vehicle orders for our North American fleet and difficulties in purchasing biodiesel for new service vans, which resulted in higher fuel usage.

Additional information on Scope 1 and 2 GHG emissions metrics is available in the [Data center](#). Read more about our electricity consumption in the [Energy](#) section.

Although our Scope 1 and 2 GHG emissions make up less than 1% of our total emissions,<sup>[1]</sup> we seek to accelerate operational emissions reductions by implementing the latest technologies and engaging in external initiatives and partnerships. We use an internal carbon shadow price at times to help inform strategies for Scope 1 and 2 GHG emissions reductions.

Read more about carbon pricing in our [2024 CDP Response](#) and learn about our operational decarbonization levers in our [Climate Transition Plan](#).

REFRIGERANT MANAGEMENT BEST PRACTICES

We can effectively reduce our Scope 1 emissions from refrigerant use by transitioning from hydrofluorocarbons to low-global warming potential (GWP) refrigerants, preventing leaks in our operational equipment and maintaining our process and ancillary equipment.

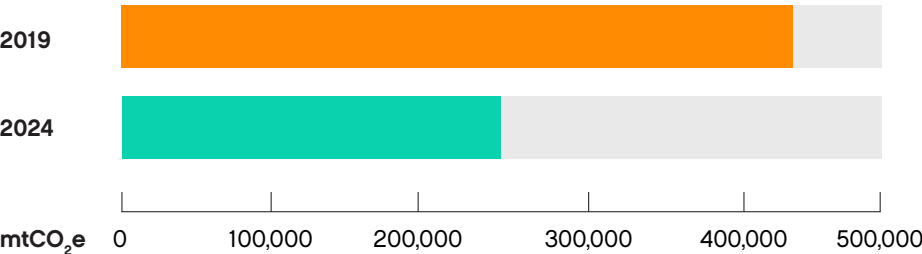
In 2024, we completed a major refrigerant changeover project in our operations, transitioning to a new class of refrigerants, known as A2L refrigerants. The A2L refrigerants have a lower GWP compared to traditional refrigerants and will significantly reduce our Scope 1 GHG emissions in 2025, and beyond.

In addition to transitioning our refrigerants, we have focused on implementing best practices in leak prevention, including enhancements to our Process Safety Management standard work and leak prevention and detection technology and control systems.

In 2024, emissions from refrigerant losses made up approximately 42% of our Scope 1 GHG emissions. By transitioning to low-GWP refrigerants and implementing enhanced leak prevention technologies, we have reduced GHG emissions from refrigerant leaks by over 56% from a 2019 baseline.

<sup>1</sup> Total emissions: Scope 1, 2 and 3 GHG emissions.

44% reduction in absolute Scope 1 and 2 GHG emissions from a 2019 baseline



Achievement of DOE's Better Climate Challenge

In 2024, Trane Technologies achieved the U.S. Department of Energy (DOE) [Better Climate Challenge](#). Our team exceeded the Challenge to reduce Scope 1 and 2 GHG emissions by 50% from a 2017 base year with an overall 60% reduction.

The Better Climate Challenge is one component of DOE's [Better Buildings Initiative](#), through which DOE partners with public and private sector organizations to make buildings more energy efficient. We also participate in other DOE programs that contribute to our emissions reductions. Read about our participation in DOE's [Commercial Building Heat Pump Technology Challenge](#), which advances the adoption of next-generation heat pump rooftop units that contribute to emissions reductions.

ACHIEVEMENT OF OUR 25X25 INITIATIVE

In 2022, we launched an internal 25x25 initiative to accelerate the reduction of Scope 1 and 2 GHG emissions by 25% by the end of 2025 from a 2021 baseline. In 2024, we achieved our 25x25 initiative goal a year early, reducing Scope 1 and 2 GHG emissions by 26%.

A dedicated working team met regularly to review our progress and prioritize reduction opportunities that contributed to the initiative. This included efforts to transition to low-GWP refrigerants, renewable energy and energy-efficient heating, ventilation and air conditioning (HVAC) systems with smart controls in our operations.

Even with the achievement of the 25x25 initiative goal, we have more to accomplish. A team of our [Trane® Energy Services experts](#) continues to identify transformational improvement opportunities at our manufacturing sites and operations.

FUEL EMISSIONS

In 2024, our fleet contributed to Scope 1 GHG emissions through its use of approximately 7.5 million gallons of gasoline and approximately 1 million gallons of diesel fuel. As part of our efforts to reduce fuel usage and Scope 1 emissions, we committed to [EV100](#), which calls for a transition to an electric fleet by 2030.

Throughout 2024, we continued to modernize our fleet and made progress toward our EV100 commitment by adding 745 hybrid and fully electric vehicles to our fleet, increasing the percent of hybrid and fully electric vehicles in our fleet from 8% in 2023 to 17% in 2024. We increased our average fleet fuel efficiency to 19.6 miles per gallon (a 9.9% increase from 2023) through the acquisition of newer, higher-efficiency vehicles (gasoline, diesel, hybrid or electric). We also continued partnering with a fleet management company to help address barriers to electric vehicle adoption, including our rate of vehicle purchases and the need for charging infrastructure.

We commit to using Sustainable Aviation Fuel when available for our air travel but are currently limited due to availability and accessibility.

Scope 3 GHG emissions

Customers’ use of Trane Technologies’ products accounts for approximately 98% of our emissions and represents our largest opportunity for reductions. Therefore, we developed science-based targets specifically focused on Scope 3, Category 11 “use of sold products” emissions reductions. Our near-term and long-term science-based targets are both intensity metrics based on emissions per thermal ton.<sup>[1]</sup>

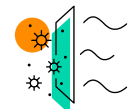
In 2024, we achieved a 17% reduction in Scope 3 product use emissions per thermal ton from our 2019 baseline. We are on track to meet our 2030 science-based target to reduce Scope 3 product use emissions by 55% per thermal ton. We continually refine our calculations for Scope 3 product use emissions to account for new products and services in our absolute emissions number.

Although our science-based Scope 3 targets are specific to Category 11 “use of sold products” emissions, we also seek to reduce emissions across other Scope 3 categories. In 2024, we established our [embodied carbon commitment](#), which focuses on reducing emissions associated with our second most significant category of Scope 3 emissions, Category 1 “purchased goods and services” emissions. To reduce upstream and downstream Scope 3 distribution and transportation emissions, we continue to implement route optimization, fuel efficiency and shipment utilization improvement projects with logistics partners. We also implement in-region for-region manufacturing operations where possible and focus on reducing the number of miles that our materials and products travel before reaching our customers. Read more about our logistics strategy in the [Supply chain sustainability, transparency & performance](#) section.

We use the [GHG Protocol](#) to measure our Scope 3 emissions and manage progress toward our targets. See additional data on our Scope 3 emissions in the [Data center](#).

1 Emissions per thermal ton (capacity) are calculated by dividing the total emissions by the total thermal capacity in tons.

2024 Scope 3 emissions (mtCO<sub>2</sub>e)<sup>[1]</sup>


 **234 million**  
emissions from product use

 **3.7 million**  
emissions from purchased goods and services


1 A third party provides limited assurance on our absolute product use and purchased goods and services emissions.

Scope 3 product use decarbonization levers


To help us achieve our Scope 3 product use science-based targets and our [Gigaton Challenge](#), we defined four levers that guide our product development strategy and provide the most significant opportunities to decarbonize our customers’ use of our products. Learn more about these levers in the [Climate Transition Plan](#).




Increasing sales of high-efficiency equipment



Transitioning to low-GWP refrigerants



Expanding product mix to accelerate electrification



Increasing system-level energy efficiency



Gigaton Challenge

Our Gigaton Challenge is the first-of-its-kind climate commitment related to customer product use of any business-to-business company. We created the Gigaton Challenge to address emissions from customers' use of our products, which is our largest area of GHG emissions. Through our commitment, we aim to reduce 1 gigaton of GHG emissions (1 billion mtCO<sub>2</sub>e) from our customers' footprint by 2030 from a 2019 baseline.

In 2024, we made progress toward our Gigaton Challenge goal through innovative product and service design that helps advance our customers' carbon reduction journeys. As of the end of 2024, we had reduced a total of 237 million mtCO<sub>2</sub>e since 2019 and are tracking ahead on our goal.

We have also continued to improve visibility and drive progress on our Gigaton Challenge by transitioning from quarterly to monthly internal reporting on emissions reductions. Each month, our business unit presidents and individuals from our Product Management, Engineering and Finance teams meet to discuss how sales and business trends are impacting our Gigaton Challenge results and explore how to further advance customer product use emissions, energy reduction and cost savings over the life of the product. We present the results of the Gigaton Challenge, key takeaways from our monthly discussions and the initiatives we are piloting to our Enterprise Leadership Team during quarterly business reviews.

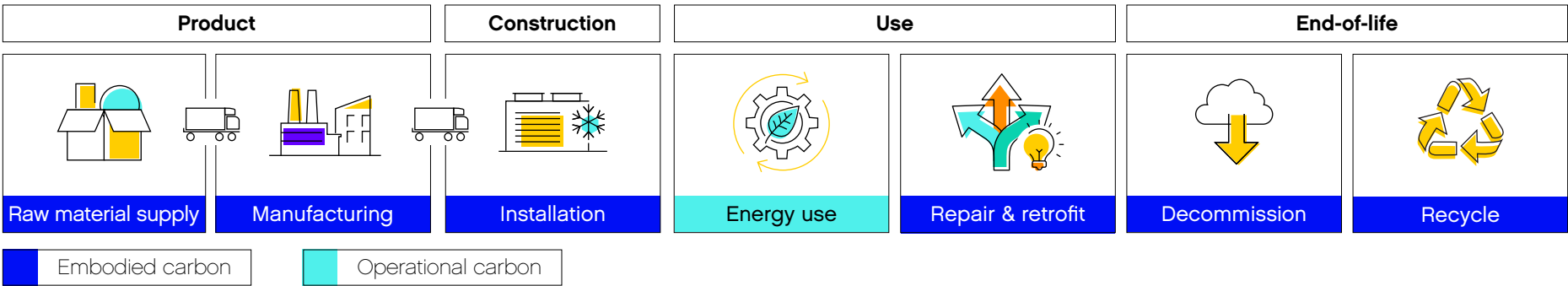
Read about the key Scope 3 “customer product use” decarbonization levers to achieve our Gigaton Challenge and how we calculate our cumulative customer emissions reduction in the [Climate Transition Plan](#). Detailed information on our commitment is also available in our [Gigaton Challenge Playbook](#).



How to deliver on ambitious sustainability commitments

Read →

Embodied carbon & operational carbon across the life cycle of a product



Embodied carbon commitment

In 2024, we announced our industry-first commitment to reduce embodied carbon by 40% by 2030 from a 2019 baseline. Our commitment aligns with the guidance provided in the World Business Council for Sustainable Development's [The Building System Carbon Framework](#) report, which suggests that the building and construction sector should reduce embodied carbon in building materials and equipment by at least 40% from 2019 levels by 2030 and reach net-zero by 2050.

Embodied carbon refers to the total amount of GHG emissions associated with a product material's life cycle, including the extraction of raw materials, manufacturing, transportation and recycling. While reducing our Scope 1 and 2 emissions associated with manufacturing helps reduce embodied carbon, our target primarily aims to address our Scope 3, Category 1 “purchased goods and services” emissions. Most of the embodied carbon in our products is generated upstream and is related to the goods purchased from our suppliers. To meet our embodied carbon commitment, we identified three levers to decarbonize our products' life cycle emissions.

- **Supporting supplier sustainability efforts:** Engage suppliers to understand where they are on their sustainability journey and support them in emissions reduction target setting and achievement in alignment with our [Sustainable Procurement Policy](#).
- **Collaborating on sustainable solutions:** Partner with suppliers to discover and apply sustainable and circular solutions, such as investigating new technologies, decreasing waste, optimizing material recycled content and enhancing material and energy efficiency.
- **Sourcing low-carbon materials:** Prioritize procuring materials with lower embodied carbon by integrating sustainability as a key criterion in product development and sourcing decision-making.

Learn about how we consider embodied carbon when designing for circularity and measure products' life cycle impacts in our [Product sustainability & circularity](#) section.

ADDRESSING CARBON EMISSIONS IN THE VALUE CHAIN

To determine where to focus our carbon reduction efforts related to purchased goods, in 2024, we conducted a supplier sustainability assessment with key suppliers in top-emitting categories to gauge their sustainability maturity level. This assessment helped us understand our suppliers' existing emissions reduction efforts and targets, identify opportunities for collaboration and determine the next steps to meet our embodied carbon commitment.

We plan to take a phased approach to addressing embodied carbon in our procured materials. Among the commodities we purchase, steel, aluminum, copper and metal fabricated parts are the top sources of embodied carbon, so we are prioritizing decarbonization efforts related to these materials. To encourage the decarbonization of the steel market and catalyze commercial adoption of low-carbon commodities, we are members of organizations like [SteelZero](#) and [First Movers Coalition](#) and aligned our commitments to procure, specify or stock net-zero steel in our material selection. In 2024, low-carbon steel made up 20% of our annual steel purchases.

Although our primary focus is reducing Scope 3 emissions related to purchased goods and services, reductions in other Scope 3 categories contribute to our embodied carbon commitment. For example, our initiatives to reduce upstream and downstream transportation emissions through route optimization and in-region for-region manufacturing operations help us reduce embodied carbon.

## Energy

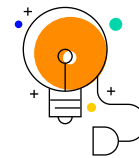
GRI 3-3, 302-1, 302-3, 302-4, SASB RT-EE-130a.1; RT-IG-130a.1

We are integrating energy-efficient processes in our operations to reduce our absolute energy consumption and GHG emissions. Our energy reduction initiatives contribute to our 2030 Sustainability Commitments to achieve carbon neutral operations by 2030 and reduce absolute energy consumption by 10% by 2030. Additionally, our commitment to reduce absolute energy consumption contributes to our science-based targets to reduce absolute Scope 1 and 2 emissions.

Our Chair and CEO signed our [Energy Policy](#), which outlines our commitment to energy-efficient processes across our business operations and functions. Our business units manage and track their progress toward our 2030 goals with oversight from our Vice President of Environmental, Health and Safety (EHS). The Vice President of EHS leads our EHS management team, which provides data reporting protocols and manages company-wide actions. The Vice President of EHS is also a key member of our Global Integrated Supply Chain Leadership team, which manages all operational activities.

Many of our business units have a Sustainability Oversight Team that identifies and evaluates energy solutions and improvement opportunities and guides selected projects. The teams are comprised of cross-functional representatives from Engineering, Facilities, Maintenance, Procurement, Operational Excellence, EHS and Operations. Our [Trane® Energy Services team](#) helps the Sustainability Oversight teams define and implement site-specific energy efficiency improvements. Our [membership in coalitions](#) advancing the clean energy economy supplements our technical expertise and provides collaborative opportunities that can help us progress toward our goals.

Our EHS management team conducts annual internal audits to validate select energy use data points, which are then verified by an independent third party as part of a limited data assurance audit. Read more about our energy consumption in the [Data center](#) and our [2024 Limited Assurance Report](#).



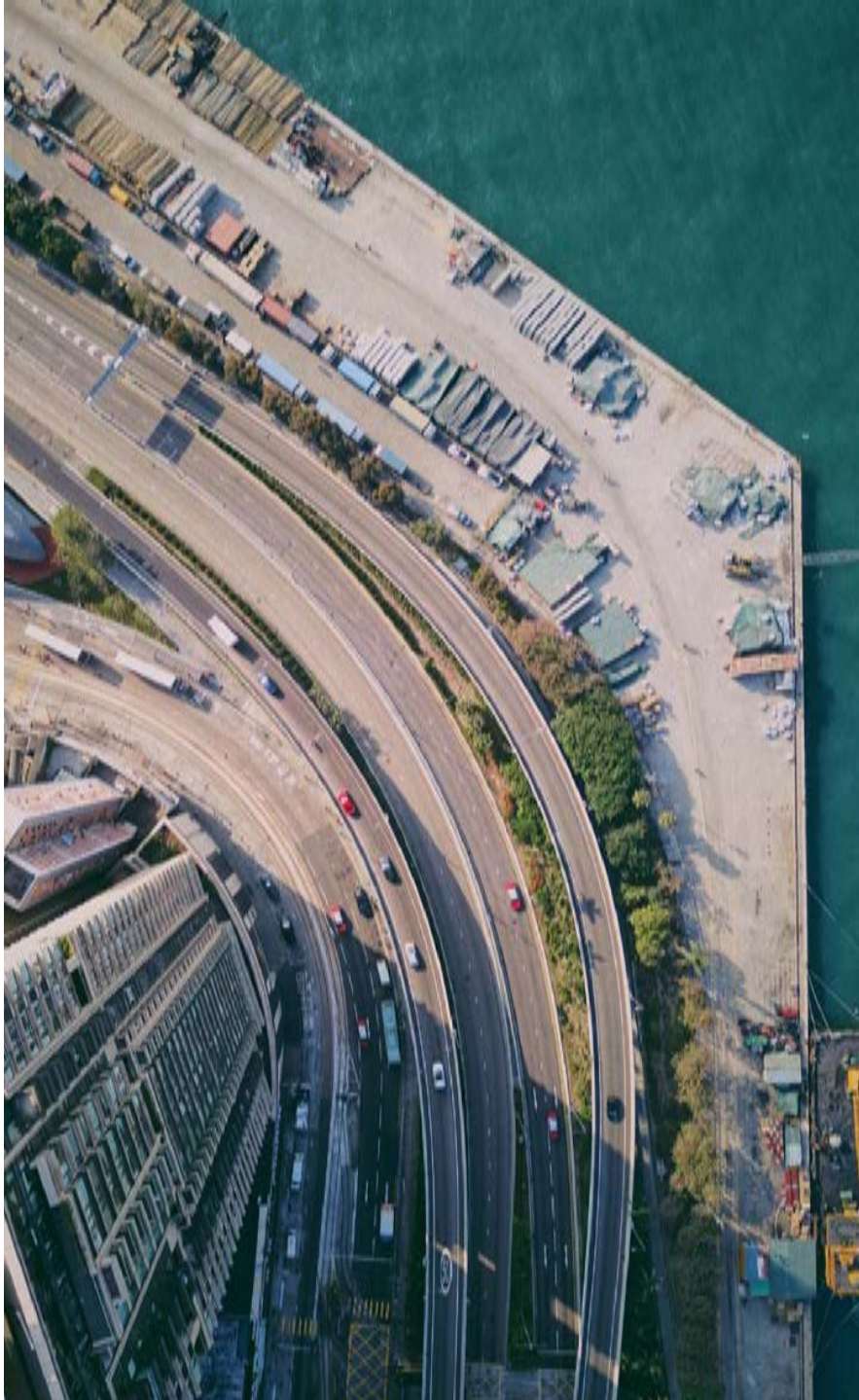
# 3.2%

reduction in absolute energy consumption against a 2019 baseline, even as the business grew and production increased



# 68%

of our electricity consumption came from renewable sources in 2024



## Energy use

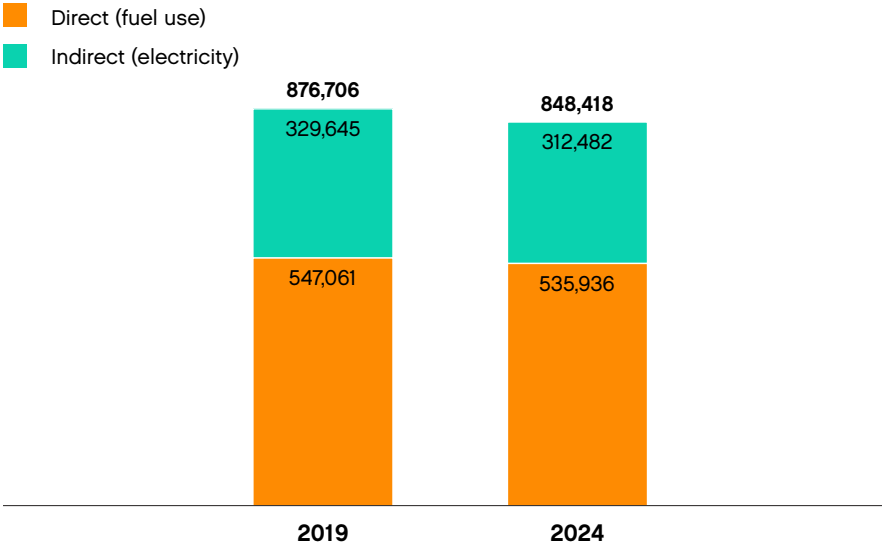
In 2024, absolute energy use from our operations totaled approximately 848,000 megawatt hours (MWh), a 3.2% reduction from our 2019 baseline despite increases in business demand and production. Our energy intensity ratio, which represents our total direct and indirect energy consumption divided by our total annual revenue in millions, was 42.8 in 2024, a 10% decrease from 2023. During 2024, 68% of our total electricity use was directly or indirectly received from renewable generation.

## Energy efficiency

Energy efficiency improvements are at the forefront of the sustainable changes we are implementing in our facilities. By lowering our overall energy consumption, we can reduce business costs and decrease GHG emissions. We install passive heating and cooling techniques to reduce the needed load from heating, ventilation and air conditioning (HVAC) systems and automate mechanical systems to reduce energy use. By designing smarter systems that support renewable energy integration, we shift electricity demand during peak periods to reduce the consumption of carbon-intensive electricity from the grid.

### Absolute energy consumption (MWh)

3.2% absolute energy reduction from a 2019 baseline



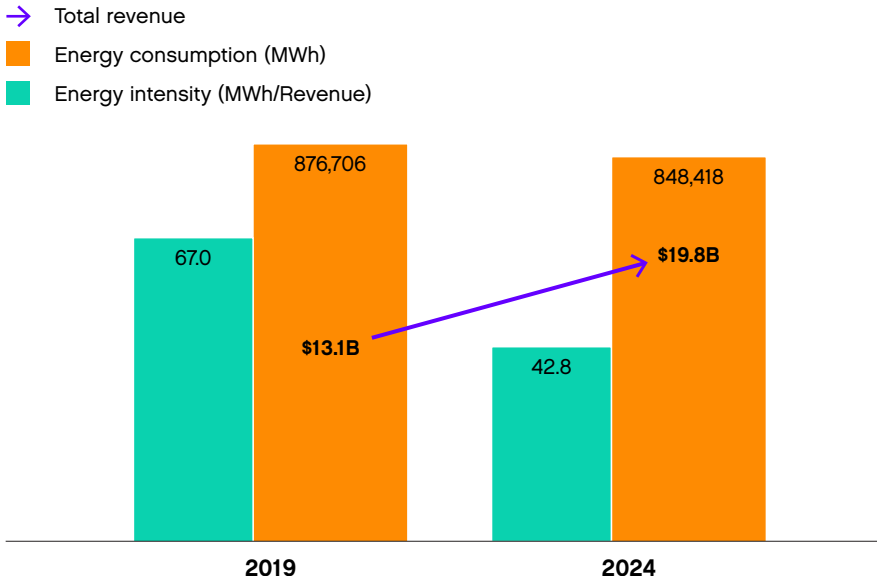
We also reduce energy use by replacing equipment at its end-of-life with more energy-efficient and electrified equipment. By shifting to energy-efficient and electrified equipment in our global operations, we made a 36% improvement in total energy intensity in 2024 from a 2019 baseline.

We hold ourselves accountable to the energy reduction goals in our 2030 Sustainability Commitments through formal engagements with the following initiatives:

- **Better Plants Challenge:** In 2021, we made our commitment to reduce energy intensity by 20% over the next 10 years. We have reduced energy intensity by approximately 30% since 2021, meeting this goal early.
- **EP100:** As a member, we commit to doubling our energy productivity by 2035 from a 2013 baseline. In 2024, we achieved an energy productivity increase of 82% against our 2013 baseline.

At the end of 2024, we had seven International Standards Organization (ISO) 50001-certified sites, seven LEED-certified sites and four Green Globe-certified sites. Each of these certifications requires Trane Technologies to meet energy management and efficiency requirements, further demonstrating our commitment to sustainability throughout our operations.

### Energy consumption & revenue growth



Renewable energy

We commit to sourcing renewable energy to power our operations. We source renewable-based electricity directly from our own on-site photovoltaic (PV) / solar generation systems and indirectly through contracts with power suppliers and long-term power purchase agreements (PPAs). These suppliers provide electricity directly from renewable systems (solar, wind or water) to help power our operations.

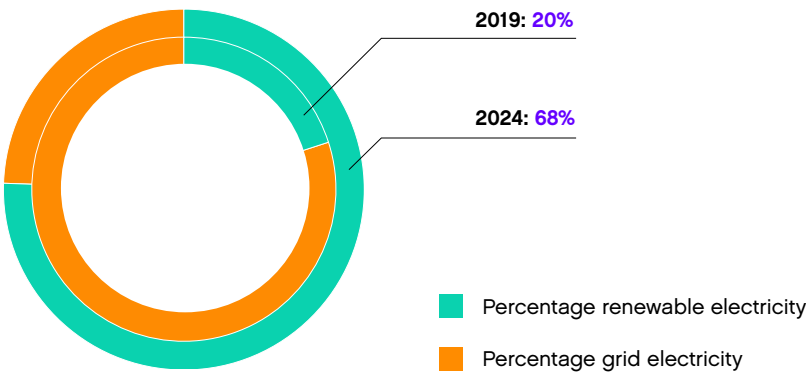
As a member of the global corporate renewable energy initiative [RE100](#), we commit to sourcing 100% renewable electricity globally by 2040. As of the end of 2024, we are on track to achieve our RE100 commitment. Total renewable electricity use across all Trane Technologies locations represents 68% of our total global electricity usage for 2024, with 27 locations receiving 100% of their electricity directly or indirectly from renewable sources.

Four of our European facilities receive electricity that is 100% zero carbon, and in 2024, our La Crosse, Wisconsin facility signed a multi-year PPA and became the first U.S. facility to receive electricity that is 100% zero carbon. Sourcing 100% zero carbon electricity means that 100% of the electricity used was generated from renewable sources with zero associated Scope 2 carbon emissions. Learn more about the La Crosse facility's energy reduction initiatives in our [Leading by Example in La Crosse](#) feature.

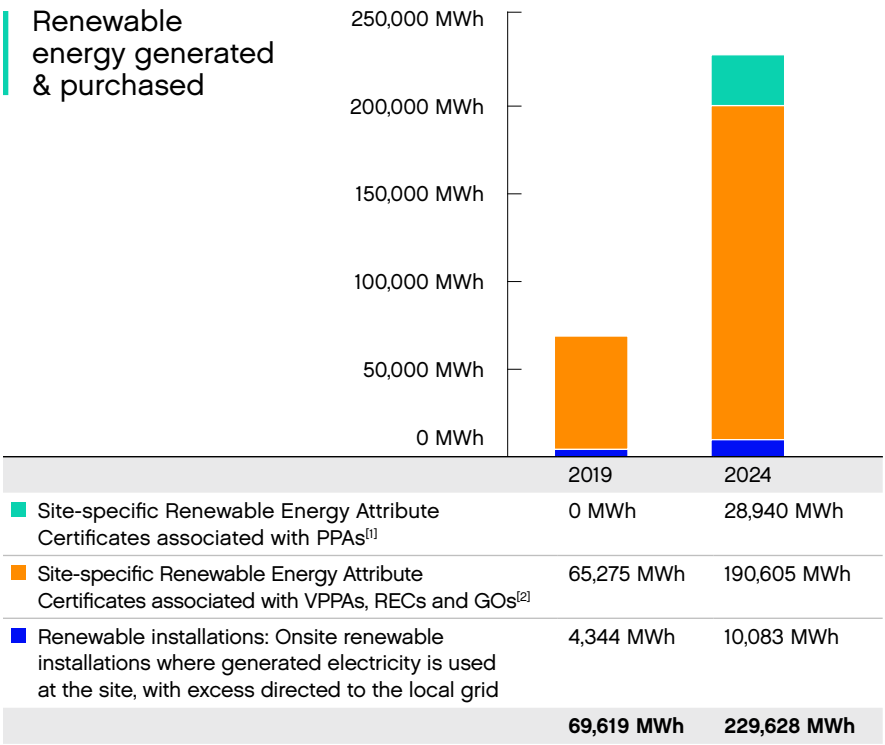
In 2024, we added on-site solar energy generation to our Rushville, Indiana and Wujiang, China sites. We also continued to advance the solar energy generation project at our Monterrey, México facility. We will begin reporting solar energy performance for these three locations in 2025. In January 2025, we will have 12 facilities with on-site solar generation, including four in the U.S., one in México, three in Europe and four in Asia Pacific. We began the construction of a PV system at our facility in Kolin, Czech Republic in 2024, and expect to commence operations in spring 2025.

By generating renewable electricity, contracting with power companies that only supply renewable electricity and utilizing Renewable Energy Credits (RECs), we have reduced our Scope 2 GHG emissions by 67% since 2019. Read more about the emissions derived from our energy use in the [Greenhouse gas emissions](#) section, and find details on our renewable energy utilization in the [Data center](#).

Percentage of renewable electricity



Renewable energy generated & purchased



1 PPA = Power purchase agreement

2 VPPA = Virtual power purchase agreement; REC = Renewable Energy Credit; GO = Guarantee of Origin



## ENVIRONMENT

# Waste

SASB RT-EE-150a.1

Trane Technologies' waste reduction strategy aligns with our sustainability, resiliency and supply chain management efforts. We look for opportunities to minimize waste at every stage of our operations by [designing for circularity](#).

## Our waste reduction strategy

We begin with waste prevention. We aim to use less material during manufacturing to reduce waste at the source. If we cannot reduce material use, we look for opportunities to minimize waste at every stage of our operations by integrating circular economy principles into our product development process. For example, our engineers consider the recyclability and efficiency of each material during product development, which helps us improve remanufacturing and recycling rates at the end-of-life stage. We also search for efficiency opportunities to conserve natural resources and reduce potential by-products, like mineral waste and hazardous waste, in our manufacturing processes.

When our manufacturing operations generate waste, we work to minimize landfill disposal through material reuse, recycling and energy and material recovery. We segregate the waste into source-separated material streams and recycle it with local recycling partners. If recycling is not an option, we work with waste-to-energy companies, particularly to dispose of oils and mixed compacted materials from the manufacturing process. We only dispose of materials in landfills when all other alternatives have been exhausted. We comply with local regulations on the management, transport and disposal of hazardous waste using the appropriate local definitions.

Our local facility management teams execute our waste reduction strategy in our sites. They evaluate and implement the most optimal waste-related initiatives and partnerships for their region. Our teams review our waste management and circularity practices to minimize materials sent to landfills.

Read more about how we design for circularity in the [Product sustainability & circularity](#) section.



# 80%

of sites are zero waste to landfill<sup>[1]</sup>

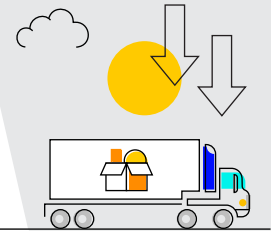
<sup>1</sup> We define zero waste to landfill sites as having a 90%+ diversion rate consistent with industry practices.

## Our waste reduction strategy

MOST PREFERRED

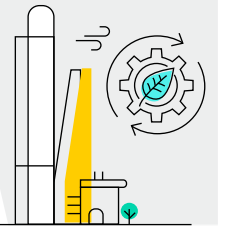
### Source reduction & redesign

We invest in research and development and design systems for sustainability and circularity to prevent and reduce waste at the source.



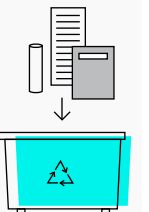
### Reuse

We work to create a second life for our products and components through re-harvesting and refurbishing product parts. We also collaborate with suppliers to integrate closed-loop supply chains and establish localized returnable packaging programs.



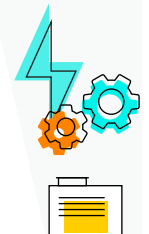
### Recycling

We recycle scrap metals, reclaim refrigerants and implement recycling programs at our manufacturing facilities and offices for e-waste, cardboard, wood and pallets.



### Energy recovery

We utilize energy recovery technologies to convert non-recyclable waste into usable forms of energy, such as electricity, heat or fuel.



### Disposal

We landfill materials only when other options have been exhausted.



← LEAST PREFERRED

## Zero waste to landfill

We are on track to achieve our goal to send zero waste to landfill by 2030. We consider a site to operate at “zero waste to landfill” status if it has a more than 90% diversion rate consistent with industry practices. In 2024, 36 of our global sites operated at zero waste to landfill status. We note that our progress is not always linear in reaching this goal. For instance, we may experience issues with a third party vendor at a particular site or sell a location that was zero waste to landfill.

We conduct waste audits at select sites to determine how they can achieve zero waste to landfill. We also contract local waste management companies to review waste streams and identify improvement opportunities for materials segregation and recycling.

In 2024, we administered a Request for Proposal (RFP) for Trane Technologies’ sites in North America to re-evaluate service suppliers that manage metal scrap generated during our manufacturing process. The RFP reviewed several different suppliers in categories related to logistics, strategic alignment, quality of services and closed-loop circularity capabilities. We will use the information gathered through the RFP to further improve circularity for steel, copper and aluminum.

See more waste metrics in our [Data center](#).

## Packaging

Our [Supplier Packaging Guidelines](#) inform our suppliers of best practices that minimize cost, maximize safety and quality and promote our circularity principles. Our packaging engineers work closely with our significant suppliers to develop collaborative design and productivity strategies to support them in reducing packaging waste sent to landfill.

Our Returnable Packaging team provides expertise in scoping, testing and implementing returnable systems, and collaborates with our external suppliers on projects for inbound parts. Their work eliminates the cost of new packaging materials, creating productivity savings. It also reduces solid waste and decreases carbon emissions since the returnable systems require less materials and transportation. In 2024, our Returnable Packaging team implemented eight new projects that will reduce approximately 133 metric tons of solid waste and 48 metric tons of carbon dioxide equivalent (mtCO<sub>2</sub>e) annually.



## Reducing e-waste

We are committed to managing our global e-waste responsibly and encouraging proper disposal of day-to-day office e-waste through localized recycling drives. Our IT Asset Management team works with environmentally conscious Global IT Support Partners to responsibly dispose of retired company assets like laptops, desktops, servers, network devices, printers, mobile phones and other accessories. At the end of the asset’s life, the item is recycled, refurbished or donated based on its condition. In 2024, we recycled nearly 4,000 assets and refurbished over 3,500 for resale. Some of the proceeds were donated to the [Helping Hand Fund](#).

Throughout the year, team members around the world host localized e-waste drives. Our team in Tyler, Texas hosted a recycling drive for e-waste during our [Global Time of Service](#). In a single day, the team collected over 100 pounds of cables, 13 monitors, 27 keyboards and various other e-waste materials including projectors, audio equipment and batteries for safe disposal with an authorized recycler.



## Replacing wood pallets used in deliveries with reusable containers

In early 2024, team members in our facilities in Florida and Tennessee replaced the wood pallets used in deliveries of heat exchangers with a reusable alternative. Wood pallets generate excessive waste, can cause injury from raw wood and nails and can damage products. Our team members collaborated with a supplier to develop a new delivery system that uses reusable, folding containers.

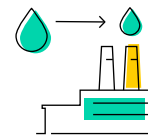
The new containers eliminated the use of 115 wood pallets per week, reducing solid waste by 550 metric tons. They also decreased packaging emissions by 170 mtCO<sub>2</sub>e, as wood pallet life cycle emissions were avoided. We expect the project will save us nearly \$500,000, as we should not need to replace the new, reusable containers for at least 10 years.<sup>[1]</sup>

<sup>1</sup> We reflect \$500,000 in savings in 2023 data due to the project’s implementation timeframe.

## ENVIRONMENT

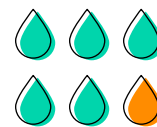
# Water

We understand the importance of water to the natural ecosystems and communities in which we operate, which is why we assess our water scarcity risk annually. The World Resources Institute's Aqueduct Water Risk Atlas tool allows us to assess enterprise-wide risk, and we currently consider ours to be low. Our policies for water supply management, storm water management and wastewater discharge management support our goal to achieve net-positive water use in water-stressed areas by 2030 and guide our management of wastewater exceedances. We strive to continually improve our operating standards and procedures and educate team members on water management best practices. All of our manufacturing locations deliver annual environmental management awareness training that includes guidance for water management.



# 49%

reduction in total water use since 2019



# 27%

reduction in water use at facilities in  
water-stressed areas since 2019



We know how important water is for our environment and communities — and we're dedicated to taking care of our water resources and using them wisely, especially in areas where water is scarce. That's why we look to experts, like EcoLab, to learn and apply the best water management strategies.

Scott Tew, Vice President of Sustainability,  
Trane Technologies



**Healthy Spaces Podcast:**  
**Climate & water**  
[Listen →](#)



### Responsible water use

As part of our [2030 Sustainability Commitments](#), we commit to achieving net-positive water use in water-stressed areas by 2030. “Net-positive water use” refers to consuming less water than we replenish. In 2023, we developed a net-positive water strategy aligned with our 2030 Commitment and created procedures and guidance for defining and realizing net-positive operations in 2024.

To minimize our water use and protect natural watersheds, we operate wastewater treatment systems and rainwater harvesting systems at select sites. In 2024, we implemented a rainwater capture and reuse system at our new location in Wujiang, China. The rainwater harvesting system contributes to our 2030 Commitment by reducing our water purchases from the local water authority and capturing water that can be used to replenish water bodies, positively impacting the local water supply.

Learn about our water stewardship efforts at our La Crosse, Wisconsin, site in the [Leading by Example in La Crosse](#) feature, and see more water metrics in our [Data center](#). Additional information on our water management approach is available in our [2024 CDP Response](#).

### Monitoring water-stressed areas

We utilize the World Resource Institute’s Aqueduct Water Risk Atlas to determine water-stressed locations. According to the Aqueduct Water Risk Atlas, a facility is considered water-stressed if it has a risk score of three or more for Physical Risks Quantity, Physical Risks Quality, Regulatory and Reputational Risks or Overall Risk. Out of our 52 sites reporting water usage in 2024, 17 sites<sup>1</sup> met the Aqueduct Water Risk Atlas criteria and operate in a water-stressed area. These sites accounted for 15% of our total water use in 2024. For sites in water-stressed areas, we set annual localized water reduction targets to advance progress on our 2030 Commitment.

During our 2024 annual review of our facilities against the Aqueduct Water Risk Atlas, we determined that some additional locations have been reclassified as water-stressed. The number of sites operating in water-stressed areas continues to increase as water becomes scarcer. We will set localized water reduction targets for these sites in 2025.

1 Our calendar year 2025 report will include additional sites defined using the World Resource Institute’s 2023 Aqueduct Water Risk Atlas data.

Through the use of a third party benchmarking platform and customized dashboards and reports, we track monthly water use and monitor our effluent discharge against local and federal regulatory limitations using the platform’s water management module, helping us meet environmental requirements and drive improvement efforts. Learn more about our impact on natural systems in the [Climate change impact](#) section.

As part of the Alliance for Water Stewardship, we work to improve water conditions in water-stressed areas, which can improve access to safe drinking water. Our commitment to water stewardship is an important part of our work to make a positive impact on society and the environment.

## Leading by Example in La Crosse

Trane® was founded in La Crosse, Wisconsin more than 100 years ago. Today, our La Crosse facility is helping lead our business into the future. The team is reducing the environmental impact of our operations, innovating for customers with sustainable solutions for high-growth markets, investing in our people through training and supporting our community with a focus on increasing access to STEM education.

### Renewable energy

The La Crosse facility is our first U.S. facility to meet our [RE100](#) commitment to source 100% renewable electricity. In October 2024, the facility signed a five-year power purchase agreement with Xcel Energy to procure 100% of the electricity used from renewable sources.

### Reducing energy & emissions

A Trane thermal battery storage source heat pump system, a first-of-its-kind solution to advance electrified, low-carbon heating, was installed in La Crosse's Training Center buildings. The system combines four technologies to accelerate building decarbonization — thermal energy storage ice tanks, air-to-water heat pumps, all-electric chiller-heaters and intelligent controls — and is estimated to reduce the overall energy intensity of the building by 28% compared to the previous system. The facility expects to reduce operational emissions by 21 metric tons of carbon dioxide equivalent (mtCO<sub>2</sub>e) per year.

### Reducing water use

La Crosse is Trane Technologies' largest single user of water in our global operations. Beginning in 2022, the La Crosse facility began a multiyear effort to reduce water use through prioritizing water reclamation and source reduction solutions. The efforts in La Crosse contributed significantly to Trane Technologies' total water use reduction of 20% in 2023.

With the continued operation of the Trane thermal battery storage source heat pump system and the installation of other plant equipment upgrades, La Crosse reduced water usage by another 129 million gallons in 2024. This represents a 39% reduction of the site's prior year water usage and a 25% reduction of Trane Technologies' total prior year water usage.

### Zero waste to landfill

Since 2022, the La Crosse site has been sending zero waste to landfill. The team diverts all industrial waste and scrap material — without disrupting production — to local partners who fully recycle the materials or convert combustible items to energy.

### Innovating for our customers

The La Crosse team built a new manufacturing line for the CDHH CenTraVac® water-cooled chiller, a product designed for the semiconductor and data center industries. It is the first CenTraVac duplex with heat recovery and is the largest heat recovery unit ever produced by Trane Technologies. The design allows a facility to reuse as much heat as possible, improving system efficiency while reducing energy consumption from the grid and decreasing our customers' carbon footprints. The system also reduces emissions through low-global warming potential (GWP) refrigerants. These features can often pay for themselves through reduced water consumption, lower heating and ancillary energy use and lower operating costs.

### Investing in talent

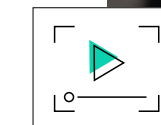
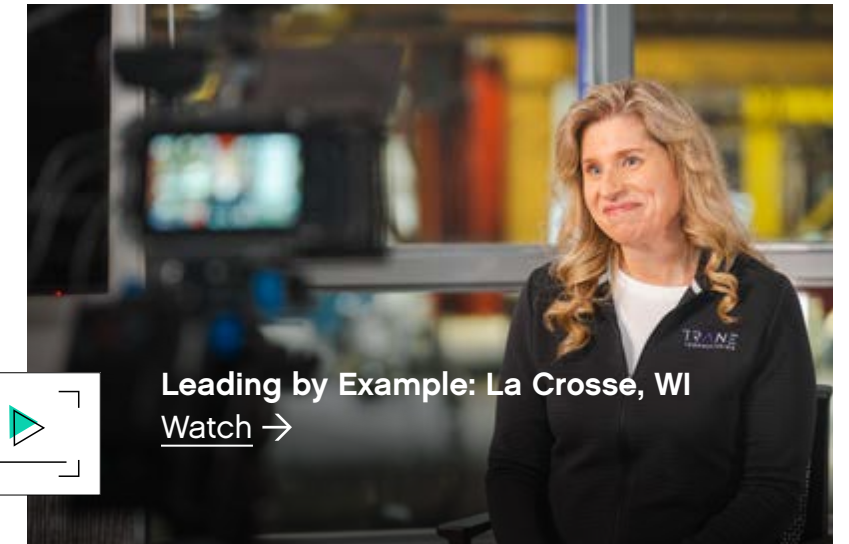
The La Crosse facility has a long history of providing educational and development opportunities for team members, helping develop a wide range of expertise:

- The Graduate Training Program (GTP) is an intensive, immersive, 20-week program for new sales engineers. In 2024, over 130 participants graduated from our GTP program. Read more about the GTP in [Learning & development](#).
- At the Technician Training Center, we've modernized technician training, educating technicians on newer products, including new hot water loops and pumps, as we move into electrification of heat.
- In the Welding Lab, technicians hone their skills on welding equipment that is unique to our products and not typically taught at welding schools.

### Supporting the La Crosse community

The La Crosse Inclusion Network and Purple Team lead volunteer efforts, including trail clean-ups, toy and food drives and STEM gift giving during the holidays. We invest in STEM programming for area youth through the La Crosse Boys & Girls Club, volunteering and hosting Project Scientist and sponsoring an Engineers Week for middle schoolers and the [Seven Rivers Robotics Regional Competition](#).

Our company also provides support for the Trane® All Abilities Park, the first inclusive playground in the community, as well as a new exhibit at the La Crosse Children's Museum designed to educate children about HVAC technology and innovation.



**Leading by Example: La Crosse, WI**  
[Watch](#) →



A lot of customers come to Trane Technologies with requests that nobody else can do. We have the team that can make it happen.

Shari Werwinski, La Crosse Plant Manager, Trane Technologies



# Social

At Trane Technologies, our uplifting culture drives our business success. We believe team members' diverse experiences and perspectives strengthen our ability to develop solutions for global challenges. We invest in our people to provide opportunities for them to thrive at work, at home and in their communities.

[Our workforce & culture](#)

[Human rights](#)

[Occupational health & safety](#)

[Corporate citizenship](#)



98%

key talent retention rate in 2024



82

overall employee engagement score  
in 2024 (out of 100), top quartile  
among companies benchmarked

## SOCIAL

# Our workforce & culture

GRI 2-7, 2-8, 3-3, 401-1, 401-2, SASB RT-EE-000.B; RTIG-000.B

We are developing our future workforce today. A workforce valued for their skills and experience — with pathways to thrive at work and home.

We strive to create an inclusive, uplifting culture that empowers team members to be themselves and boldly share their ideas. Each day, our team members collaborate to create a more sustainable world. Our global team is comprised of more than 23,000 full-time salaried team members and 21,000 full-time hourly team members. Trane Technologies employs people in 61 countries, with manufacturing and assembly operations conducted in 45 sites around the world.

## Our progress

Our focus on creating Opportunity for All and our dedication to investing in our people helped us attain a key talent retention rate of 98% in 2024. Our company-wide voluntary retention rate was 92%.

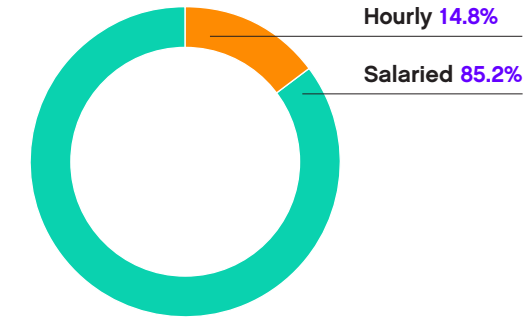
In 2024, women occupied six out of 12 seats on our Board of Directors. Representation of women in management positions increased from 25.2% in 2023 to 26.4% in 2024. In total, women comprise 25.9% of our global workforce.

In the United States, salaried team members who are racially or ethnically diverse increased from 20.6% in 2023 to 21.3% in 2024.

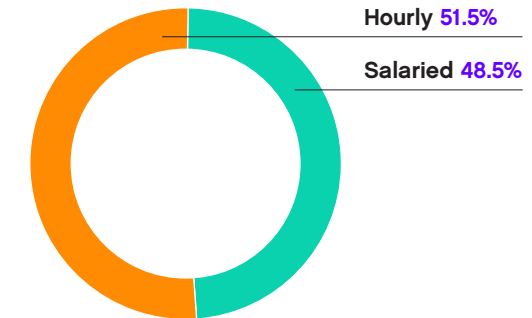
We are proud of our continued progress in creating Opportunity for All.

Learn more about our global workforce in the [Data center](#) and our published [EEO-1 report](#).

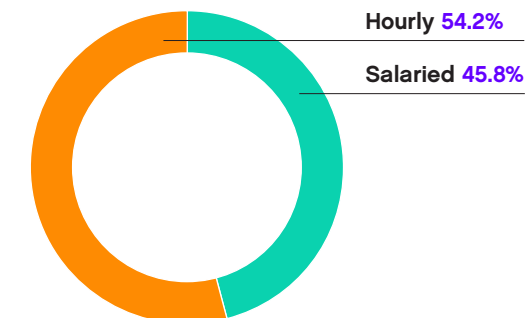
### Asia Pacific



### EMEA



### Americas



# Employee experience & well-being

We take deliberate steps to cultivate a growth-oriented culture that embodies our Leadership Principles and encourages our people to boldly challenge what's possible for a sustainable world. We foster this culture by creating a work environment where our people uplift each other, make an impact on our planet and thrive at work and at home.

We consistently receive external recognition for our commitment to our people, culture and corporate citizenship. Learn more about our 2024 achievements in the [Awards & rankings](#) section.

## EMPLOYEE EXPERIENCE

To grow our business and sustain our uplifting, engaging and inclusive culture, we need to attract, develop and retain talent that supports and advances our business strategy and goals.

One of the ways we do this is by creating a differentiated employee experience — the value that we bring to team members in exchange for the value they bring to the organization.

Informed by input from our team members, our promised employee experience is shaped by three distinct pillars:



**Uplifting others:** We lift each other up and care about the success and well-being of others.



**Making an impact:** We succeed together by striving daily to create a lasting, positive impact on our business and our planet.



**Thriving at work and home:** We thrive, supported by meaningful benefits, compensation and opportunities for rewarding careers.

We continue to listen and learn about what matters most to our people. We aim to deliver a consistent employee experience across our global operations, supported by our managers and people practices.

Throughout the year, we hold Performance and Development Connections with our team members to help them work toward their career goals and establish a plan for continued growth. Our performance and development conversations also strengthen our people's connection to our purpose, strategy, Leadership Principles and 2030 Sustainability Commitments. In 2024, all salaried employees received regular performance discussions and reviews. As part of this process, we ask each Trane Technologies team member to set a goal that describes how they contribute to our 2030 Sustainability Commitments (Gigaton Challenge, Leading by Example and Opportunity for All). Learn more about our 2030 Commitments in the [Sustainability commitments](#) section.



## My Career Navigator

In 2024, we relaunched My Career Navigator, making it even easier for team members to own and reach their career goals. The global online tool is available to individuals to reflect, explore and plan actions for their career development. As a result of the improvements, we saw a 54% increase in user engagement with the career-planning tool. We also provided people leaders with new resources to address the unique needs of their team members and support them in their career development.

# Our Leadership Principles

We work today for a sustainable tomorrow.

We keep customers at the heart of all we do.

We include and uplift one another.

We make better happen.

We dare to do things differently.

We own our actions and decisions.

We do what's right, always.

EMPLOYEE RECOGNITION

Rewarding and recognizing exceptional service and our Leadership Principles is foundational to our culture and is demonstrated throughout the company. We reinforce this spirit of recognition through our internal quarterly President’s Awards and our annual Challenge Possible Awards, our company’s highest honor. The award categories reflect our strategy and purpose to boldly challenge what’s possible for a sustainable world:

- Culture and Community
- Environmental Sustainability
- Innovation and Growth
- Leadership
- World-class Lean

In addition to our formal awards, our enterprise-wide recognition program, Appreciate and Celebrate, provides resources and opportunities to recognize team members and peers in real time. This program is intended to build our uplifting culture and connect our team members in a meaningful and inclusive way.

EMPLOYEE ENGAGEMENT

We conduct an annual employee engagement survey to understand how our employees feel about their experience on a range of topics, including sense of belonging, career development, inclusion, safety, sustainability and business integrity. We use the survey results to assess how we are delivering against our promised employee experience.

In 2024, 90% of our team members participated in our annual employee engagement survey. Our overall 2024 Employee Engagement Index score was 82 out of 100, our highest score yet, placing us in the top quartile of companies surveyed across all industries.

Compared to last year, all scores improved or remained the same. We showed continued progress in important areas like Sustainability and Inclusion, each with a two-point increase.



2024 employee engagement survey results

Topic	Survey question	Average score (out of 100)
Employee Engagement Index	Pride — “I am proud to work for the company.”	82
	Energy — “I am energized by my work.”	
	Optimism — “I am excited about this company’s future.”	
Inclusion Index	Belonging — “I feel a sense of belonging at this company.”	80
	Equal opportunity — “Regardless of background, everyone at Trane Technologies has an equal opportunity to succeed.”	
	Respectful treatment — “I am treated with respect and dignity.”	
	Expressing opinions — “While at work, I am comfortable expressing opinions that diverge from my group.”	
Sustainability Index	Company sustainability — “Our company is recognized as a global leader in sustainability.”	82
	Company purpose — “I believe in our company’s purpose to boldly challenge what’s possible for a sustainable world.”	
	Corporate citizenship — “Trane Technologies does a good job supporting the communities in which it does business.”	
Manager Effectiveness Index	Consideration — “My manager cares about me as a person.”	81
	Feedback — “My manager provides me with feedback that helps me improve my performance.”	
	Support — “I can get the support I need from my manager.”	
	Communication — “My manager communicates effectively.”	
	Career path — “My manager has meaningful discussions with me about my career development.”	

THE CLIMATEZONE CONVERSATION

One way team members are connected, informed and engaged throughout the year is through ClimateZone, our internal online news channel. ClimateZone is available in multiple languages on both computers and mobile devices, and engages team members across business units, geographical locations and roles. The internal communications channel serves as a primary news source for enterprise and business priorities and provides our team members with the opportunity to engage with their peers and connect to the programs and offerings that bring our employee experience to life — from information on volunteerism, Business Resource Group events, physical and mental wellness and more.

Since we launched ClimateZone in 2020, usage has steadily increased for both salaried and production hourly team members, with a significant number of our hourly team members adopting the mobile app.

EMPLOYEE WELL-BEING

GRI 401-2, 401-3

To ensure our employees can thrive at work and at home, we provide a variety of benefits for physical, social, emotional and financial well-being. We have 285 Wellness Champions who promote and support well-being across our regions.

We continue to explore ways in which we can support our employees through enhanced benefits. In 2024, we expanded our U.S. benefits offerings to include domestic partners and their dependent children for Medical, Dental, Vision, Life Insurance, Critical Illness Insurance, Accident Insurance, Legal and Identity Protection. This change will enable even more opportunity for team members and their partners to get the benefit coverage they need — and makes our inclusive, uplifting and engaging culture that much stronger.

We also support our team members by providing:

- Access to company-sponsored wellness offerings, including a global Employee Assistance Program and a global wellness platform for all team members. These resources provide education and access to counseling and individual support, including financial and retirement planning, wellness, mental health and dependent care.
- A [Tuition Assistance Program](#) that provides up-front financial assistance to qualified employees for associate, undergraduate, graduate and post-graduate degree programs, as well as certain technical trade certifications. To eliminate financial barriers, the program advances tuition costs.
- One full day of paid time off per year for eligible global employees to volunteer with non-profit charitable organizations.
- A leader-led approach to flexibility, which offers options for on-site, hybrid, remote within a geography, virtual or part-time work based on the nature of the role and the job location.
- Pay-based tier contributions to U.S. medical plans that increase affordability for team members in lower to mid-range salaries.
- A high deductible U.S. medical plan with a health savings account (HSA) compatible structure. This plan offers a wellness incentive that provides an HSA contribution of up to \$1,750 per year for both participating employees and their medically enrolled spouse or domestic partner, or \$3,500 combined.
- An enhanced adoption assistance program that provides financial support for family building, including costs related to surrogacy and adoption of children with special needs (further discussed in the [Parental leave & support](#) section).
- Competitive paid time off, including vacation, holidays, personal, sick and parental leave.
- Student loan repayment support through matching contributions in our 401(k) plan for qualified student loan repayments.
- Roth provisions across our 401(k) plans, allowing participants to make retirement savings contributions on an after-tax basis.

To inform employees about our continually enhanced benefit offerings in the U.S., we conduct in-person presentations at our manufacturing and production sites.



2024 Global Be Well Challenge

Through our Be Well program, we provide resources to help team members take charge of their physical, financial, social and emotional well-being, and offer financial rewards to our U.S. employees to encourage engagement in healthy activities throughout the year.

Our Global Be Well Challenge is an annual highlight. In 2024, more than 5,200 participants across 81 teams achieved 7.57 million well-being minutes. Team Vietnam was the Overall Team Winner with 14 participants earning an average of 5,721 well-being minutes per person.

More than 11% of our global team members registered for the challenge. This level of participation met the threshold for a company donation of \$25,000 to the [Helping Hand Fund](#), which assists employees in need.



### Mental health

We continue to promote a culture that encourages and supports open discussion about mental health. Several years ago, we introduced a series of conversations to allow people to share their mental health stories to foster an inclusive environment and break down barriers or misperceptions about mental health. In addition, we launched a Mental Health Hub to provide quick access to information, resources and support for team members and their families.

More recently, we implemented a global mental health training program that highlights how to recognize and react to mental health concerns, provide support and leverage resources. This program, offered in 10 languages, is designed for people leaders and is available to everyone. To date, more than 7,000 team members, including over 1,400 people leaders, have completed the training.

### Parental leave & support

We offer competitive parental leave benefits in every market we operate, with unique programs that exceed regulated leave requirements in some countries. For example, in the U.S., we supplement the paid maternity leave provided through our short-term disability plan with four additional weeks of paid leave. The program also extends to non-birthing parents, adoptive parents and foster parents. Eligible team members include salaried/non-union hourly employees. For union team members, parental leave is a bargained benefit. Learn more about our U.S. parental leave in the [Data center](#).

We acknowledge that our employees can take various routes to grow their families. We continue to offer financial assistance for adoption to hourly and salaried team members. These benefits were expanded in 2023 to provide increased financial assistance for adoption and coverage of surrogacy-related costs, as well as additional financial assistance for families adopting a child with special needs. In addition, all employees and spouses/domestic partners enrolled in the U.S. medical plan are eligible for infertility support. Maternity counseling through delivery is also made available to all enrolled participants. We also provide private lactation rooms and cost reimbursement for nursing mothers to ship breast milk while traveling for business.

As part of our efforts to help our employees thrive at work and at home, we have been exploring new ways to support dependent care. A 2023/2024 pilot program at two manufacturing locations provided up to \$300 per month in a Dependent Care Flexible Spending Account for eligible childcare expenses. We have now expanded that pilot to cover an additional three manufacturing locations.

We also partner with a third party company that offers resources to identify local, high-quality child and elder care solutions for our U.S.-based team members. This includes emergency center-based or in-home back-up care as needed.

### COMMITMENT TO PAY EQUITY & TRANSPARENCY

We are fostering a workplace where all employees are valued and rewarded fairly across all compensation variables. Our compensation practices are based on external norms, extensive data, internal equity, job scope, accountability and performance.

We strive to ensure our Total Rewards offerings, including competitive, performance-based pay and strong benefits, support our employees throughout their careers and life stages. We work to ensure our rewards structure incorporates a balance of compensation and benefits programs to deliver a competitive 'livable' wage for our employees and their families. In the U.S., our average hourly starting wages are approximately 200% of state minimum wages.

Our commitment to pay equity (equal pay for equal work) and pay transparency is integral to our broader mission of driving sustainable growth and fostering a culture of trust and integrity. Trane Technologies conducts a global annual pay equity analysis. The results of this analysis are shared with the Human Resources and Compensation Committee of the Board of Directors. Additionally, our manager effectiveness learning path covers topics such as compensation practices and guiding principles, as well as mitigating bias in performance reviews and when making compensation decisions. Through these practices, we ensure that employees performing the same roles with similar experience and performance levels are compensated equitably, regardless of gender, race, ethnicity or any other characteristic.

We meet all statutory pay equity disclosure requirements in the countries where we operate. For example, see our [2024 Ireland Gender Pay Analysis](#) and [2024 France Annual Pay Gap Reporting](#). We are proactively preparing to comply with the forthcoming EU Pay Transparency Directive.

# Learning & development

The learning and development opportunities provided at Trane Technologies empower our employees to grow. In 2024, team members completed more than 16 hours of formal learning and development on average, in addition to many informal training and development experiences offered. We prioritize opportunities for employees to learn on the job and receive support and feedback from their managers and peers. In our employee engagement surveys, our service technicians consistently name our learning platforms as one of the reasons why they stay and grow their careers at Trane Technologies.

## LEARNING & DEVELOPMENT RESOURCES

### Trane Technologies University

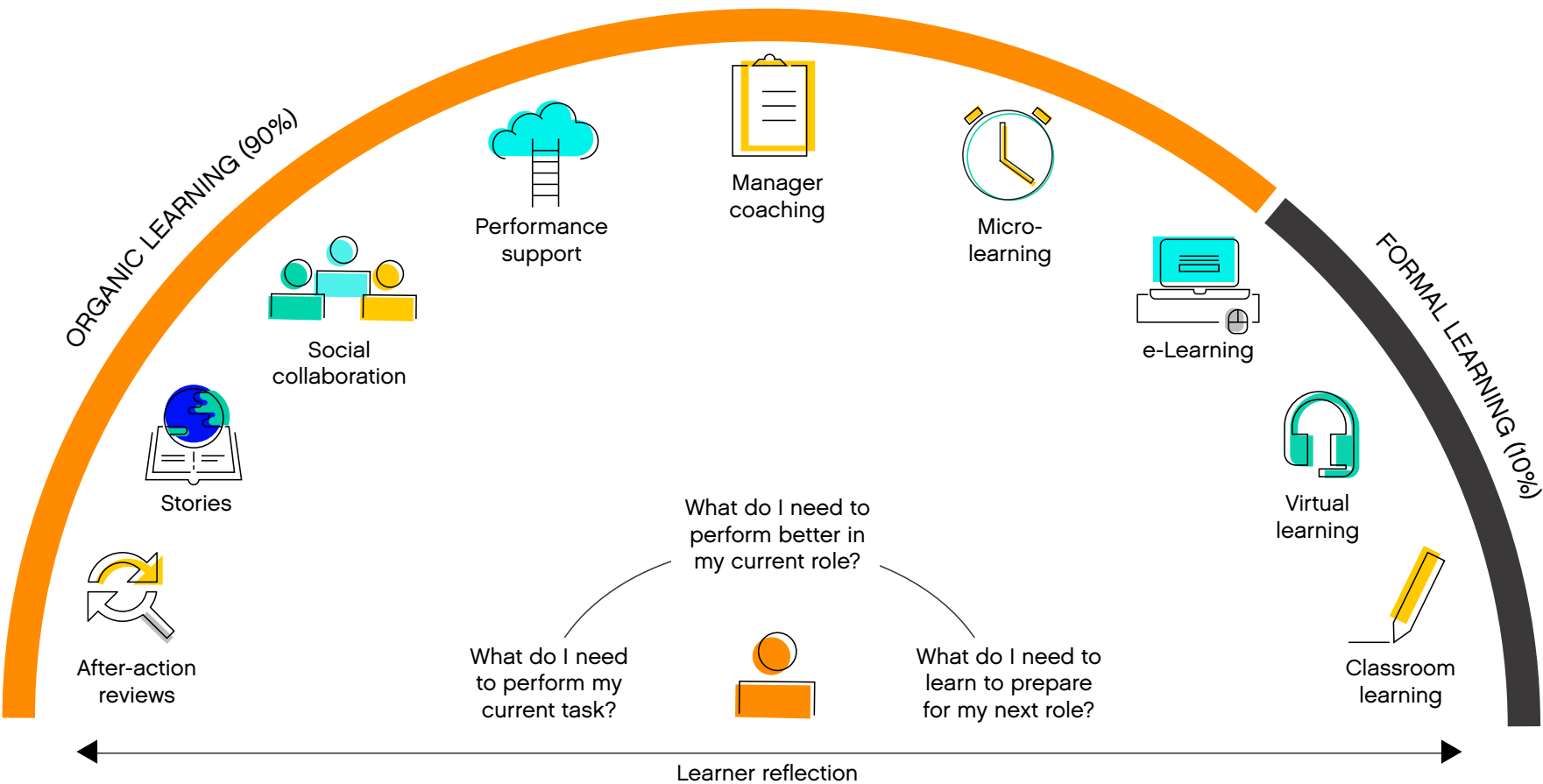
Trane Technologies University provides everyone in our organization the opportunity to learn at their own pace with on-demand trainings and industry-leading programs.

Team members can access on-demand, technology-enabled training through three internal platforms: our Learning Management System, the “Grow You” channel on our mobile news platform and our Global Learning Library.

### Tuition support

In 2023, Trane Technologies transitioned our tuition support program for employees from tuition reimbursement to tuition advancement. Now, when eligible employees pursue academic degrees or technical support programs related to their current or potential future job responsibilities, we pay the expense on their behalf.

Additionally, the Trane Technologies Scholarship Program is open to the dependents of all employees and includes grants of up to \$2,500 per school year toward a range of educational pathways, from vocational certifications to two- and four-year degrees.



### Advancing access to higher learning

In 2024, participation in our tuition advancement program increased by 28% compared to the prior year, with nearly 600 global employees receiving an aggregate value of \$2.5 million dollars in tuition assistance.

### Sustainability Ambassador Network

Our internal Sustainability Ambassador Network is an online community open to team members interested in increasing their own sustainability knowledge, developing the capability to share Trane Technologies’ sustainability story and championing sustainability actions. Its mission is to educate, encourage and empower our members and the broader Trane Technologies community to adopt sustainable practices to reach our 2030 Sustainability Commitments.

In 2024, driven by rising membership, we established an employee-led global Steering Committee to refine our Sustainability Ambassador Network’s mission and create a formal program framework.



## LEADERSHIP DEVELOPMENT

We offer many different development programs, including programs open to high-potential leaders from all backgrounds, as well as programs and training experiences geared to specific needs and career paths for our workforce. Our innovative leadership programs accelerate team member growth at pivotal career points. The following programs are examples of the broad range of development opportunities we provide team members.

### Team & Group Leader Development Programs

The Team Leader Development Program (TLDP) is a cornerstone of Trane Technologies' culture, empowering front-line production hourly leaders to make sound business decisions through a blend of tactical Lean operations knowledge, coaching and the development of leadership and problem-solving skills. As of 2024, over 1,100 team members have completed the TLDP across 13 global sites.

We started the Group Leader Development Program (GLDP) program in 2023 for salaried, frontline leaders in our manufacturing facilities. As of 2024, 380 people have completed the GLDP, and the program has 16 facilitators across 17 global sites.

A standout site in 2024, our facility in Arecibo, Puerto Rico, made a significant commitment to growing leadership capability through the completion of Lean leadership courses and GLDP. As of March of 2024, 39% of site leaders and 88% of frontline leaders at the Arecibo facility graduated from the GLDP.

### Regional Leadership Development Program

The Regional Leadership Development Program (RLDP) is designed for future leaders or current leaders (with less than five years of leadership experience) who are interested in developing their business acumen and leadership skills. The six-month program includes participation from eight to ten employees per region and focuses on leadership fundamentals, finance, customer mindset and team building.

### Sales Leader Development Program

In 2024, we held the inaugural Sales Leader Development Program (SLDP) training in our EMEA region with nearly 20 sales leaders. The program is designed for sales leaders with less than five years of experience. Its goal is to enhance their organizational acumen and enable them to lead their teams to success. Following the success of this program, two cohorts are being planned for 2025.

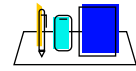
### LEAP Elevate

LEAP Elevate is a training program designed for sales leaders looking to advance in their career and develop their coaching and leadership skills. The program covers key development areas, including pipeline management, goal setting, effective communication, building influence and identifying strategic opportunities. It is designed to run for four weeks and includes a week-long residency at our North America headquarters.

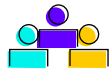
### Leader's EDGE

In 2024, over 110 leaders from six cohorts graduated from Leader's EDGE, our development program for new managers. This program is a 13-week, virtual, cohort-based program that includes both scheduled connections and additional learning opportunities focused on leading self, leading others and leading business.

We also designed a development journey for new managers called Leadership Foundations Series. The goal of this program is to help new managers develop the skills they need to transition to a leadership role at Trane Technologies.



INDEPENDENT &  
SYNCHRONOUS  
LEARNING



PEER  
COLLABORATION



EXECUTIVE  
SPONSORSHIP



NEURO-  
LEADERSHIP

## Leading for Impact Program

We created this 13-week program for mid-career, high-potential leaders to help them develop a growth mindset, communicate more effectively, build their influencing skills and take steps to own and accelerate their careers.

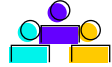
In 2024, we redesigned the program and included an in-person session at our North America headquarters. The in-person session allowed for new additions to the program, including a community service event and a leadership assessment with coaching. The assessment gave participants insight into their leadership strengths, core value drivers and areas for improvement. The 2024 cohort included nearly 60 leaders across our business.



EXECUTIVE  
COACHING



360  
FEEDBACK



DEVELOPING  
DIVERSE TEAMS



ACTION  
LEARNING



STRATEGY  
INTEGRATION

## Executive Leadership Program

Our immersive, six-month Executive Leadership Program (ELP) for high-potential executive leaders builds skills in three critical areas: strategy, executive leadership and execution. In 2024, nearly 30 high-potential leaders and executives participated in the ELP to build on their knowledge of strategy and executive leadership. The program was designed with INSEAD, one of the world's largest providers of business school executive education.

## EARLY CAREERS PROGRAMS AND INTERNSHIPS

Our [early careers programs](#) are designed to provide students and new graduates with opportunities to network and develop professional, technical and business skills. We partner with local universities to source talent for our internships, co-ops, roles for part-time student employees and new graduate programs.

We offer three-month functional and commercial sales internships, six-month engineering co-ops and part-time student employee roles with the aim of transferring the participants into full-time roles. We offer interns, co-ops and part-time student employees well-rounded and structured experiences, with the opportunity to do meaningful work and receive competitive pay. In 2024, we had nearly 530 interns and co-ops, and over the past three years, 330 students have made the transition from interns to full-time team members.

### Accelerated Development Program

For recent graduates globally, we offer the Accelerated Development Program (ADP), a full-time, two-plus year rotational program designed to prepare early career team members for positions of greater responsibility within select functional areas at Trane Technologies. Through ADP, young professionals have the opportunity to learn, hone their functional and leadership skills and grow their network. Our ADP program was established over 40 years ago and has produced hundreds of team members that continue to contribute to our success. In 2024, over 35 team members graduated from the program and advanced in their careers.

### Graduate Training Program

For nearly 100 years, recent graduates from across the globe have enrolled in our Graduate Training Program (GTP), a comprehensive program in HVAC. Reuben Trane created GTP in 1926 to help sell his revolutionary convector radiators. His new approach to heating was superior to cast iron heaters, but no one understood the new technology well enough to sell it. Reuben recognized that his novel product required a unique sales force, and GTP was born.

Today the program is an intensive, immersive, 20-week program for new sales engineers. It covers everything from basic physics to sales to professional practice and is designed to give recent college graduates knowledge of Trane® equipment and applications — in addition to what they have learned while pursuing their bachelor's degrees, typically in engineering. Participants receive on-the-job training and mentoring before working independently. In 2024, approximately 130 graduates participated in our GTP programs.



TECHNICAL TRAINING OPPORTUNITIES

In 2024, we standardized our technician and production onboarding process across North America. We also enhanced onboarding activities across the services business, creating more time for managers to focus on moments that matter. We offer a range of robust technical training opportunities to develop new talent and expand the skills of our team members.

Trane Technician Apprenticeship Program

We launched our Trane Technician Apprenticeship Program (TAP) in 2023 with the ambition of training HVAC service technicians and strengthening company talent while supporting the communities in which we work. The four-year program provides 2,000 hours of on-the-job training and over 140 hours of technical instruction per year. While in the program, apprentices earn a full-time wage and receive raises with demonstrated skill attainment.

Since its launch, participation in the TAP has grown exponentially, and in 2024, we hosted two new cohorts with a combined total of 155 apprentices participating.

The apprenticeship program is a pathway into lucrative roles for skilled workers. Nearly all (99%) of the participants do not have a four-year college degree. In 2024, we also launched new recruiting materials and [features on apprentices](#), a streamlined onboarding process and annual regional self-assessments.

Trane Service Technician Training Program

The Trane Service Technician Training Program supports all levels of technicians to improve customer satisfaction skills, improve job performance and open new career opportunities. The program integrates cutting-edge technology, real-world scenarios and expert-led instruction to prepare technicians to tackle complex HVAC systems with confidence and precision and to apply this knowledge across their career journey.

To meet the industry’s growing demand for qualified HVAC technicians, we set records for technician training throughout 2024. A total of 2,800 service and controls technicians, including both Trane Technologies team members and external customers, attended factory training at our La Crosse and White Bear Lake facilities.

We are expanding our capacity for developing Trane Commercial Service Technicians, including breaking ground on our new technician training center in Davidson, North Carolina, which opens in 2025, and making upgrades to our [La Crosse Training Center](#) in Wisconsin.

Field Instructor Network

In 2024, we launched the Field Instructor Network as part of our technician growth strategy, with the goal of certifying in-region technicians to teach quality technical content to their peers. During the year, we certified nearly 50 technicians as Field Instructors, drastically increasing our ability to scale technical service training.

Digital Risk Apprenticeship

We introduced a pilot training program in 2024 to address the talent gap in the cybersecurity industry and provide new career pathways for talent already in the Trane Technologies workforce. Built as a three-year rotational program, participants gain on-the-job experience monitoring and addressing security threats, assisting in incident response and protecting data from attacks.



“The commercial HVAC industry as a whole is growing more rapidly than ever before. To keep up with that growth you need tremendous growth in your technician population, but there’s simply not enough HVAC technicians to hire out there. We said — how do we set up the right programs to not only attract new talent, but to build the talent?”

Cale Simmons, Portfolio Manager, Trane Technologies



Next-generation technical training

A cross-functional team developed and delivered a training session for our contractor customers to start up and service our Symbio 700 product, a digitally-enabled controller for rooftop and split systems. The training was broadcasted to more than 100 offices across the U.S. and Canada, with approximately 2,800 contractors in attendance. It now serves as a model for other customer training solutions.

Diversity & Inclusion

GRI 3-3, 405-1

Trane Technologies has been steadfast in our commitment to building an inclusive, uplifting culture. Simply put, it’s good for our business. Our inclusive culture helps us drive innovation, attract and retain the needed talent for our growing company and industry and meet the needs of our global customer base.

We aspire to create Opportunity for All. This aspiration helps us access the broadest talent pool possible, bringing in the diversity of thought and innovation needed to achieve our business goals. Our approach remains a key component of our success, as demonstrated by our consistent record of exceptional performance, including top quartile employee engagement, industry-leading talent retention and differentiated financial results.

BUSINESS RESOURCE GROUPS & INCLUSION NETWORKS

Trane Technologies’ Business Resource Groups (BRGs) and Inclusion Networks are voluntary and open to all team members and create a sense of belonging, as well as opportunities to network, learn and grow. Our BRGs plan initiatives throughout the year, including mentoring circles and other opportunities for support and connection. They also play an important role in our business through community involvement, brand advocacy, recruiting and shaping business and target market insights.

Participation in our BRGs continued to grow in 2024. Allies often make up the largest portion of BRG members, as team members seek to engage with and learn about the diversity of experiences and perspectives among colleagues.

In addition, our Inclusion Networks are localized extensions of our BRGs. With over 14 Inclusion Networks, there are many local opportunities for our people to build community and connections in support of one another and foster inclusion.

Learn more about our inclusive culture and BRGs on our [website](#).



OUR BUSINESS RESOURCE GROUPS — OPEN TO ALL EMPLOYEES

Asian Employee BRG

Black Employee Network

Global Organization of Latinos

Intergenerational BRG

PRIDE

Veterans BRG

VisAbility BRG

Women’s Employee Network



Celebrating sustainable clothing in India

Each year, our inclusion event in India celebrates our regional cultural diversity. In 2024, two contests highlighted innovative approaches to sustainability. The first contest, “Best Out of Waste,” encouraged participants to share creative ways they repurpose items that would typically be discarded. The second contest was a fashion show with a sustainability theme, where teams showcased imaginative and stylish outfits made from reused materials. These contests reinforced the value of diverse perspectives to innovation and the importance of sustainable practices in our daily lives.



### Disability inclusion

Trane Technologies again achieved a top score of 100 in the [U.S. Disability Equality Index](#), a comprehensive benchmarking tool for disability inclusion. We were also included among the [2024 Best Places to Work for Disability Inclusion](#).

We recognize that some disabilities may not be immediately apparent — which can hinder our team members from bringing their whole selves to their work. In 2024, we entered a partnership with the global organization Hidden Disabilities. Through this partnership, we are working to ensure a safe and accessible environment for all team members. With the Hidden Disabilities Sunflower tool, team members can voluntarily share whether they have a condition that may not be apparent and could require a helping hand, more understanding or more time when traveling and in public settings.

### OPEN DIALOGUE & CONVERSATION

#### Global Inclusion Summit

Our Annual Global Inclusion Summit in 2024, open to all employees, centered around the theme of Impacting Growth. Leaders from our BRGs and business units shared updates on our company's focus on Opportunity for All, as well as stories from their own careers and cultural journeys with over 3,000 participants. The session confirmed that the diverse talents all team members bring to the table strengthen our bold strategies for growth, resulting in better decisions and better performance.

“After sharing my story, many people shared their own neurodivergent experiences with me, reflecting how large the community is and the opportunity to uplift people around us. I'm grateful to be at a company that promotes bringing your whole self to work and ties success to this culture.

Brenton Hard, Senior Talent Acquisition Partner, Trane Technologies



#### Uplifting others to leverage their “superpowers”

[Read](#) →

### CEO Day of Understanding

We have held a CEO Day of Understanding every year since we signed the CEO Action for Diversity & Inclusion in 2017. During our CEO Day of Understanding in 2024, nearly 3,000 team members gathered in person and virtually around the world for a reflective and candid conversation with our Chair and CEO about the importance of creating an inclusive culture. Global leaders also joined the discussion and shared their inclusive leader journey with participants.

### BUILDING INCLUSIVE LEADERSHIP CAPABILITIES

We invest in the development of our people leaders and employees to reinforce our uplifting and inclusive culture. For example, we offer online learning, available to all global salaried team members, to help our teams better understand and appreciate the diverse ways in which we view the world — and how our unique talents, skills and contributions help us achieve our business goals.

Additionally, through our Learning Management System, we continued to promote and offer the Inclusive Culture Learning Experience — a comprehensive learning path that teaches inclusivity through self-reflection and real-life inclusive leadership practices. The Work of the Inclusive Leader online materials help learners understand key elements of inclusive leadership, such as being an advocate for belonging. As of 2024, over 8,600 team members have participated in this learning experience. Read more about our leadership development in the [Learning & development](#) section.



# Talent for growth

As our company continues to grow, we have invested in innovative ways to broaden our talent pools and tap into a wider range of perspectives and ideas. To help us meet the evolving needs of our growing global workforce, we continue to:

- Expand our network of recruiting partners;
- Identify high-performing, yet often overlooked, skills-based talent;
- Develop both future and current team members through learning programs and career experiences; and
- Create meaningful connections through peer and formal coaching and mentorship.

Our skills-based hiring strategy focuses on the specific skills and competencies required for each role, rather than how those skills were acquired. For example, we are updating our job descriptions to be less focused on degrees when they are not required. By doing so, our job descriptions are more inclusive and accessible. As of 2024, we have removed degree requirements from more than 50 positions and also translated them into multiple languages.

We work with external organizations and community-connected associations that help us bridge the growing skilled labor gap, broaden our pipeline of highly skilled talent from varied backgrounds and support industry career development.

As we prepare for recruiting events, we proactively schedule on-site interviews with candidates. Following events, we often develop correspondence with candidates to keep Trane Technologies top of mind as a destination employer. As a result of our efforts to reach and attract a higher volume of qualified candidates, we have seen an increase of more than 60% in total applicants, which has supported our growing talent needs.

For employees at the end of their career that feel they have more to offer the company, we offer a phased retirement option that allows for part-time work. Additionally, employees can access retirement planning resources through our third-party benefits partners.

# WORKFORCE INNOVATION

Our Workforce Innovation team develops partnerships, programs and pathways to create more opportunities for everyone and to produce a sustainable workforce for our most critical job roles. We uncover new pathways to training and career advancement for skills-based talent with programs like the [Trane Technician Apprenticeship Program](#) (TAP).

# TEAR THE PAPER CEILING

Trane Technologies was the first manufacturing partner in the [Tear the Paper Ceiling](#) coalition led by Opportunity@Work. The organization's mission is to rewire the labor market to create economic opportunity for workers who are Skilled Through Alternative Routes (STARs). As a Tear the Paper Ceiling coalition partner, we actively work to create more opportunities for workers who are STARs and expand opportunities to qualified talent.



What's at the heart of workforce innovation is challenging our traditional norms and really making sure that we've got innovative ways to remove barriers and broaden and diversify our talent pools.

Betsey Strobl, Vice President of Talent,  
Trane Technologies



**Healthy Spaces Podcast:**  
**Climate talent**  
[Listen](#) →



## Occupational health & safety

We are committed to maintaining a culture that is focused on safety and equips our team members and the people who work with us with the tools and training they need to do their jobs safely and effectively. Our proactive approach to Occupational, Health and Safety (OHS) identifies potential hazards and mitigates safety incidents before they happen. Our aim is to achieve zero incidents and injuries across the enterprise.

### Occupational health & safety strategy

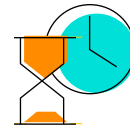
Our OHS strategy involves team members at all levels of the organization, up to our Chair and CEO, who actively promotes a safety-focused culture and mindset. CEO town hall meetings and monthly meetings at both the facility and service organization levels raise awareness of safety risks, share success stories and best practices and encourage preventive measures. We also engage managers and team members in open discussions on recognizing and preventing safety incidents through our new Connect and Engage safety program, which replaced our previous Behavior-Based Safety program. We develop OHS policies in consultation with workers and workers' representatives.

### Tracking our OHS metrics

SASB RT-IG-320a.1

We track safety metrics and incident data by location, business unit and at the enterprise level to provide accountability, focus our efforts on achieving our OHS goals and help us evaluate and identify opportunities for improvement. Analyzing quantitative metrics and qualitative feedback from team members influences updates to our OHS policies, education and training.

As part of our 2030 Sustainability Commitments, we aim to achieve world-class safety performance across all industries, defined as a lost-time incident rate (LTIR) of 0.06 and a total recordable incident rate (TRIR) of 0.60. In 2024, we achieved an LTIR of 0.09 and a TRIR of 0.70, both below our 2019 baseline. See more OHS metrics in the [Data center](#).



# 0.09

lost-time incident rate (LTIR) per 200,000 hours worked in 2024



# 0.70

total recordable incident rate (TRIR) per 200,000 hours worked in 2024



# 58

of our global locations celebrated 10 years of zero lost-time injuries in 2024

Incident prevention & response

Our proactive approach to safety includes identifying risks and developing solutions before an incident occurs. We use a thorough risk assessment program to identify, prioritize and focus on removing high-risk operations by site.

In the event an incident does occur on the job, we seek immediate medical care for the team member. We identify each incident's root cause, take corrective actions and apply key learnings across the company. Every lost-time incident is reported to our Chair and CEO, who assigns accountability for and receives updates on incident response.

Our OHS auditing program follows U.S. Occupational Safety and Health Administration (OSHA) requirements and incorporates our internal Environmental, Health and Safety (EHS) management guidelines, which often go beyond regulations. As part of our audits, we look for safety risks and workplace hazards that could endanger personnel. When our audit team identifies an OHS risk, we mandate the facility take corrective action to enhance safety.

Each year, we use a 100 Days of Safety Campaign to promote safety expectations and best practices to reduce OHS risks. The campaign takes place during our peak season, in the hottest months in North America, from June to August. It focuses on topics such as crisis management planning, ergonomics, management of change, personal protective equipment, driving and travel safety and safety concern reporting.

We also conduct an annual Winter Safety Campaign to educate sites on emergency preparedness and risks and hazards associated with winter weather, including winter driving and slip, trip and fall prevention. In addition to the 100 Days of Safety and Winter Safety Campaigns, our global EHS teams regularly share materials on common health and safety risks and promote safety training. In 2024, members of our global EHS team gathered for continued technical and professional development and planned measures to further strengthen our OHS management systems.



Updating our Behavior-Based Safety program

We refreshed our Behavior-Based Safety program in 2024 to shift the focus from work-related hazards and safety issues to recognizing and preventing safety incidents. We updated the program following extensive consultations with 300+ team members across multiple facilities. The updated program, known as our Connect and Engage program, focuses on connecting with our employees on safety versus auditing behaviors. Through this program, we strive to create a more open environment for self-reporting and accountability for safety incidents.

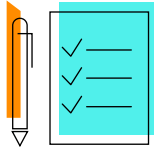
## Human rights

GRI 2-23, 2-24, SASB RT-EE-440a.1; RT-IG-440a.1

As an organization driven by our Leadership Principles, we uphold human rights in our operations and value chain. Our [Global Human Rights Policy](#) outlines our commitment to human rights and describes the processes and legal requirements to which we strictly adhere. The Policy addresses key human rights issues including child and forced labor, discrimination and harassment, freedom of association, work environment standards, compensation and privacy. The Policy extends to our value chain and covers our expectations for our business partners and suppliers.

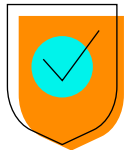
Our Global Human Rights Policy aligns with international requirements, including the [International Labor Organization's \(ILO\) Declaration on Fundamental Principles and Rights at Work](#). Our [Modern Slavery and Human Trafficking Statement](#), part of our Global Human Rights Policy, is aligned with ILO conventions 29 and 105 and covers child labor under the guidance of ILO convention 138.

Our Policy also aligns with the [United Nations' Universal Declaration of Human Rights](#) and addresses the human rights and labor principles that are part of the [Ten Principles of the United Nations Global Compact \(UNGC\)](#).



100%

of global salaried team members completed anti-harassment training



100%

of global salaried team members in specified functions completed anti-human trafficking training

## Global Human Rights Policy

Our Chair and CEO is a signatory to the [Global Human Rights Policy](#), with a team of senior Legal and Human Resources executives acting as Policy owners. The team includes the Vice President and Deputy General Counsel, Labor and Employment; Vice President and Deputy General Counsel, Global Ethics and Compliance; and Vice President of Talent and Organizational Capability.

Employees can report any suspected human rights violation to the [Trane Technologies Ethics Helpline](#), available in over 150 languages by telephone and in 75 languages by webform. Each reported incident is investigated, and violations of our policy can result in disciplinary action, up to and including employment termination. Retaliation against anyone reporting concerns in good faith is strictly prohibited.

In the sourcing of minerals, we adhere to the U.S. Securities and Exchange Commission (SEC) [Section 1502 of the Dodd-Frank Act](#). We work with our suppliers to ensure that conflict minerals are sourced responsibly, their suppliers meet conflict minerals compliance policies and there is adequate documentation. Trane Technologies uses the [EICC/GeSI template](#) for surveying suppliers and encourages its suppliers to do the same with their suppliers.

## Business Partner Code of Conduct

At Trane Technologies, we acknowledge that our impact and responsibility extends beyond our company to our value chain as well. Our [Business Partner Code of Conduct](#) (BPCoC) articulates our commitment to legal and ethical standards and human rights to our business partners. It is available in nine languages for our suppliers across the globe. Supplier adherence to the BPCoC is also ensured through the addition of compliance requirements to the BPCoC and human rights in supplier contracts.

To ensure compliance with international trade laws and regulations, we engage select suppliers and business partners in risk-based due diligence. This approach differs based on the role of the business partner in our value chain. For example, our sales-facing business partners go through our business partner vetting process, which is highly focused on corruption risk. We require our direct materials suppliers and some suppliers of higher-risk services to complete the Slavery & Trafficking Risk Template, which is an industry-standard template designed to help companies with their supply chain modern slavery due diligence. These processes allow us to gather information on Code of Conduct and BPCoC adherence, which is used to assess our human rights policies and identify areas for improvement.

The Business Partner Code of Conduct covers the following topics:

- Legal requirements;
- Discrimination;
- Wages and benefits;
- Child labor;
- Freedom of association;
- Limitations on gifts and gratuities;
- Forced labor — physical coercion;
- Antitrust and competition laws;
- Human rights;
- Environment;
- Health and safety;
- Anti-corruption and bribery;
- No retaliation;
- Confidentiality;
- Global trade compliance; and
- Management system.

Learn more about how we assess our suppliers in the [Supply chain sustainability, transparency & performance](#) section.

## Training

Salaried team members are required to complete Code of Conduct training annually and hourly team members are required to complete the training biannually. All team members attest that they will uphold our Code, which includes our Global Human Rights Policy. Additionally, 100% of our global salaried team members received anti-harassment training in 2024. We provide anti-harassment training for all team members and ensure all policies are clear and available to employees globally. Read more about our Code of Conduct and anti-harassment and non-discrimination policies and trainings in the [Business integrity](#) section.

Based on their job function and associated risks, global salaried team members in Legal, Human Resources and Global Integrated Supply Chain must also complete a training course on anti-human trafficking annually. In 2024, 100% of global salaried team members in the specified functions completed the anti-human trafficking training course.





UN SUSTAINABLE  
DEVELOPMENT GOALS →



**\$20M**

in philanthropic giving in 2024



**92,000**

hours volunteered by our team in 2024,  
cumulatively bringing us 66% of the  
way to our 2030 goal of 500,000 hours

## SOCIAL

# Corporate citizenship

As part of our commitment to creating Opportunity for All, we are advancing our Sustainable Futures strategy through ongoing community partnerships, dedicated employee engagement and thoughtful philanthropic investments.

## Sustainable Futures

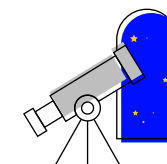
Our Sustainable Futures strategy is our corporate citizenship strategy. It consists of three pillars focused on broadening access to Science, Technology, Engineering and Mathematics (STEM) education and green careers.

### I Sustainable Futures pillars



#### ACCELERATE STUDENT SUCCESS

- Introduction of STEM and sustainability concepts to a broader range of students.
- Enhanced childhood literacy to build skills and love of learning.



#### OPEN CAREER PATHWAYS

- Improved perception and familiarity with manufacturing, engineering and technical careers.
- Broaden access to green careers and STEM professions.



#### ENHANCE LEARNING ENVIRONMENTS

- Indoor Environmental Quality solutions and expertise for healthy homes and classrooms to optimize learning.
- Access to healthy food and medicines for students and their families for improved wellness.

## Employee volunteerism

Our team members' robust involvement in communities around the world exemplifies the richness of our culture and our commitment to uplifting others. Employees are encouraged to volunteer with programs of personal significance, as well as to take advantage of our customized tools and experiences. Trane Technologies annually provides eligible team members with a paid workday to volunteer through our Global Volunteer Time Off program.

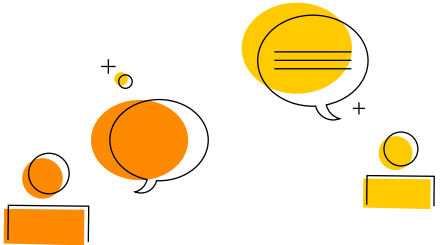
### PURPLE TEAMS

We have approximately 75 Purple Teams around the world, and our global network continues to grow. Our Purple Teams champion our Sustainable Futures strategy, driving awareness of program opportunities, planning volunteer events and supporting the reporting processes for our volunteerism targets.

In 2024, we hosted the first Purple Teams Summit in the Americas to deepen the network's knowledge of the ways our corporate citizenship commitments help to strengthen our business and culture. The three-day summit was held at our Davidson, North Carolina, campus and featured educational workshops and networking events. Attendees had the opportunity to talk with executive and community leaders. During the summit, attendees also volunteered 147 hours, supporting the work of [Carolina Farm Trust](#), Digi-Bridge and Rise Against Hunger.

“ The Purple Team Summit was the highlight of my year. Having the opportunity to spend time with so many like-minded and dedicated individuals was inspiring and reinvigorated my own motivations. Not to mention, the incredible speakers, volunteer events and networking opportunities.

Timothy Vice, Design Manager, Trane Technologies



2024 employee community engagement data

**9,500+**

volunteer participants

**22%**

of team members participated in community or sustainability initiatives

**\$2.9 million**

value of volunteering

**92,000+**

total hours volunteered



HELPING HAND FUND

Trane Technologies' Helping Hand Fund supports team members around the world during times of crisis, including serious illness and natural disasters. In addition to issuing grants to employees in need, the fund also gives team members an opportunity to donate with a 'for us by us' spirit. The Fund is also supported by the Trane Technologies Foundation. With the growing intensity of natural disasters, which have impacted thousands of our colleagues, the Helping Hand Fund is an increasingly valuable resource.

Since 2019, nearly \$5 million of qualified financial assistance has been provided to employees through the Helping Hand Fund, with \$750,000 distributed in 2024.

Our community partners

To amplify our Sustainable Futures strategy, we work with a growing network of non-profits. In 2024, we continued to expand several existing partnerships, including our three-year, million-dollar grant with [Project Scientist](#). Among many efforts to grow this partnership, we expanded it into Monterrey, México where our teams helped provide local students with some of their first exposures to STEM experiences.

We also continued our long-term sponsorship of the [National Coalition of Certification Centers](#) (NC3), a trade industry network that provides teachers and students in over 1,000 U.S. schools with free career and technical education certifications. Students can pursue certifications for careers in the heating, ventilation and air conditioning (HVAC) and transport refrigeration industries.

Additional examples of our community partnerships are included on the next page. Visit the [Charters & associations](#) section of the report to learn more.



Global Time of Service

In 2024, Trane Technologies hosted a Global Time of Service, bringing together thousands of team members to uplift their communities. During the Global Time of Service, our team members volunteered in schools, food banks, green spaces and waterways. For example, some team members spent time in classrooms — virtually and in-person — sharing career insights with our future workforce. Others worked with their teams in assembly-line fashion, filling more than 900 backpacks with books, packaging more than 100,000 meals and providing other valuable support.

Team members around the world volunteered over 4,900 hours to help 49 non-profit organizations enhance programs and create more opportunities.



Global crisis relief

As Hurricanes Helene and Milton devastated the southeastern U.S. and Storm Boris overtook rural communities in the Czech Republic, Trane Technologies worked around the clock to support team members and communities in need. We collaborated with local authorities to deliver aid, including water, food, fuel, living essentials, temporary shower facilities and housing to address urgent needs. We also provided emergency relief funds to hundreds of affected team members through our global crisis relief fund, the Helping Hand Fund, which is supported by our Trane Technologies Foundation and employee contributions.

Through the Helping Hand Fund, employees needing immediate financial assistance following a natural disaster receive grants of up to \$2,500.

DISCOVERY EDUCATION

In 2024, we provided Trane Technologies’ sustainability curriculum to nearly 160,000 U.S. students, mostly in schools in lower-income communities, through our growing partnership with [Discovery Education](#). The curriculum has reached approximately 475,000 students since it became available in 2022. It features relatable lessons on sustainability through concepts like food loss, green buildings and climate change. It also pairs the lessons with career spotlights so students can see the people and careers shaping our work. As part of our sustainability curriculum, students are encouraged to start thinking today about being tomorrow’s sustainability innovators. Our curriculum also helps students appreciate the impact their everyday decisions have on their lives and the environment.

We also launched an online Career Connect platform with Discovery Education that gives U.S. schoolteachers the ability to invite Trane Technologies’ subject matter experts into their classrooms for virtual career discussions with their students. The teachers can introduce our team members to individual students or invite them to speak in their classrooms across the U.S.

“ We talk about human activities [in the classroom], and some of the ways that we make this applicable and immersive to our students’ lives are through resources like Sustainable Futures.

Courtney Clague, Eighth Grade Science Teacher  
in Tyler, Texas



**Healthy Spaces Podcast:  
Sustainable Futures**  
[Listen →](#)

STEM ENLIGHTENMENT PROGRAM, CHINA

We expanded our STEM Enlightenment Program in the Asia Pacific region with new experiences for students in rural China who have limited access to technology and STEM-related careers. Trane Technologies’ volunteers visited students in rural communities and shared sustainability principles with them in the classroom. Some students also had the opportunity to visit urban areas, a first for many of them, to engage in STEM education and cultural experiences.

EUROPEAN SCHOOLNET

Our alliance with [European Schoolnet](#) continues to serve as a market catalyst, helping corporations understand the importance of supporting STEM Education. Through workshops and thoughtfully curated events that engage corporations with educators, the collective is forging school partnerships. Likewise, in Ireland, our local teams are advancing opportunities through college STEM scholarships and robotics education for students with limited access to advanced STEM opportunities.

CAROLINA FARM TRUST

Our partnership with [Carolina Farm Trust](#) (CFT) aligns with our ambition to increase access to healthy food. CFT is a non-profit dedicated to strengthening local food systems by working with partners, farmers, markets and consumers to increase access to healthy food. It offers programming for local farmers, supports land conservation efforts, hosts educational tours for students and operates an urban farm and a market. CFT’s vision is to make the Charlotte, North Carolina, region a global leader in local food production.

In addition to being a founding partner, we support CFT in many ways, including through on-site employee volunteering, making connections in the community and providing an executive-on-loan to advise the organization as they grow. We are proud to support CFT as they work to create a new local food system that encourages sustainable farming practices, supports the local economy and increases the availability and affordability of fresh and nutritious food.



**Organic growth: The Carolina Farm Trust & Trane Technologies**  
[Watch →](#)

“ The Carolina Farm Trust is all about building systems, and we are really using food and agriculture as the backbone of this vision of regional resilience.

Zack Wyatt, President & CEO, Carolina Farm Trust

Corporate citizenship governance

Our Sustainable Futures strategy is brought to life through several programs and initiatives. While their execution is the responsibility of our Corporate Citizenship team, governance is provided by our Global Corporate Citizenship Council, a cross-section of senior leaders from our businesses and functions who provide critical guidance to optimize the impact of our strategy with our teams and in our communities. The Global Council convenes quarterly to review progress and provide guidance on strategic initiatives. The Council also evaluates philanthropic grant requests submitted to the Trane Technologies Foundation in the Americas.

Beyond the U.S., regional Corporate Citizenship Councils — in Asia Pacific; Europe, the Middle East and Africa; and Latin America — work in a similar fashion to execute our corporate citizenship strategy and initiatives in each region.

An aerial photograph of a lush green park with many people walking and sitting on the grass. A paved path runs vertically through the center of the image. The trees have vibrant yellow and orange autumn foliage. A horizontal yellow line is positioned above the 'Governance' title.

# Governance

Our extensive governance framework guides our work to manage our sustainability strategy, track and measure our performance and stay accountable to our 2030 Sustainability Commitments.

Sustainability management

Supply chain sustainability,  
transparency & performance

Business integrity

Environmental, health  
& safety management

Public policy

Charters & associations

Memberships



GOVERNANCE

Sustainability management

GRI 2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-18, 2-19, 2-29

We align our environmental, social and governance practices with our purpose and business strategy.

Our Board of Directors (the Board) views sustainability leadership as a core element of Trane Technologies' business strategy. The Board closely monitors and addresses sustainability-related risks and market opportunities and assures management implements appropriate mitigation strategies. Responsibility for sustainability matters has been delegated across several Board committees. The committees track sustainability-related risks, opportunities, trends and performance and regularly report findings to the full Board. For more details on our approach to risk management, visit the [Business integrity](#) section.

The Board's oversight and strategic direction helps hold us accountable for embedding strong sustainability practices, encompassing environmental, social and governance aspects, in every facet of our business.



National recognition for corporate governance

Trane Technologies was ranked top three in Extel's 2024 All-America Executive Team (Electrical Equipment & Multi-Industry sector) for investor relations, sustainability, our company board and the leadership of our Chair and CEO and Chief Financial Officer. This recognition highlights our commitment to sustainability, innovation and building a better world through purpose-driven performance.



### Board oversight

Our CEO serves as the Chair of our Board of Directors, and all other members are independent Directors. Our independent Directors serve on several Board committees that focus on environmental, social and governance facets of our business, including the Sustainability, Corporate Governance and Nominating Committee; the Audit Committee; the Finance Committee; the Technology and Innovation Committee; and the Human Resources and Compensation Committee.

The **Sustainability, Corporate Governance and Nominating Committee** monitors sustainability trends and issues, recommending sustainability initiatives and corporate governance matters to the full Board. This committee oversees the development and implementation of sustainability policies, tracks our progress against sustainability objectives (including climate change impacts) and provides guidance on climate risk assessments and sustainability goals. It also reviews and updates our corporate governance principles and oversees the evaluation of the performance of the Board, its committees and management. The committee also conducts an annual self-evaluation.

The **Finance Committee** advises the Board on financial resource management and key financial strategies. The committee approves the annual financing plan and oversees financial risk management activities.

The **Audit Committee** ensures the integrity of our financial statements, our adherence to accounting policies and financial reporting standards and our compliance with applicable laws and regulations. The committee reviews and discusses with management and the independent auditors, as applicable, significant legislative, regulatory and other developments regarding environmental, social and governance (ESG) reporting and disclosures. The committee also reviews and discusses with management and the Sustainability, Corporate Governance and Nominating Committee, as applicable, the types of information to be included in the company’s ESG disclosures within the company’s periodic financial reports; the alignment of the company’s financial reporting and ESG disclosures; and the internal controls and procedures related to ESG disclosures, including any assurance being provided by the independent auditor or other third party with respect to ESG disclosures. Furthermore, the Audit Committee, the Sustainability, Corporate Governance and Nominating Committee and the Human Resources and Compensation Committee all review the human capital management disclosures included in our Form 10-K.

The **Technology and Innovation Committee** supports the Board by overseeing product innovations that address climate change, reduce greenhouse gas (GHG) emissions, improve energy efficiency and consider product life cycles and materials. The committee also assists in reviewing environmental and sustainability practices, including environmental, health and safety policies and assesses the transparency and performance of our supply chains.

The **Human Resources and Compensation Committee** focuses on executive compensation, employee benefits and key human capital initiatives. This includes leadership recruitment and retention, culture and inclusion efforts, pay equity and wage reviews. The committee also sets and approves annual financial targets and sustainability factors for our Annual Incentive Matrix (AIM), while overseeing our claw back policy to recover erroneously awarded incentive-based compensation. We will report any claw back funds if necessary, in accounting restatements and are expanding our policy to encompass team members, officers and customers to cover misconduct.

Each committee operates under a formal [charter](#) approved by the Board, outlining its responsibilities. These charters are reviewed at least annually, with additional reviews conducted as necessary.

### Annual incentive matrix

One of the primary components of our executive compensation program is our Annual Incentive Matrix (AIM) remuneration structure. The AIM provides our top executives and over 3,000 leaders with clarity on their ability to earn an annual variable cash incentive based on strong performance across several metrics, including a financial score, a Sustainability Modifier and individual performance scores.

Our [2024 Annual Report](#) includes more information about our AIM program.

Materiality

GRI 3-1, 3-2

Conducting a formal materiality assessment helps us understand the most salient ESG topics to our business and stakeholders. We take an active approach to maintaining, managing and monitoring all ESG topics relevant to Trane Technologies and acknowledge that our focus on these topics may shift over time due to stakeholder interests or business opportunities, among other factors. We updated our materiality assessment in 2022 and will refresh it as necessary to ensure our strategies remain relevant, targeted and impactful.

Our Materiality Assessment is reviewed and approved by key executive leadership and shared with our Board of Directors. The materiality assessment results influence our Enterprise Risk Intelligence process. See our materiality assessment methodology and materiality matrix on our [website](#).

Materiality, as used in this report and sometimes referenced as “ESG materiality,” is different than the definition used in the context of filings with the Securities and Exchange Commission (SEC). Issues deemed material for ESG purposes may not be considered material for SEC reporting purposes.



Examples of our important and material topics include:

- Greenhouse gas (GHG) emissions;
- Energy;
- Technology & innovation;
- Energy efficient & low emissions products;
- Climate risk; and
- Business integrity & company culture.

We are dedicated to maintaining and continuously improving our processes for assessing impact topics.

Programmatic sustainability management

CENTER FOR ENERGY EFFICIENCY & SUSTAINABILITY

Established 14 years ago, the [Center for Energy Efficiency & Sustainability](#) (CEES) focuses on pioneering sustainability strategies in our everyday operations and culture. CEES aligns our internal sustainability efforts with the expectations of external stakeholders. It also facilitates collaboration with government agencies, non-governmental organizations, universities and industry-leading groups. The team tracks progress on our sustainability commitments and science-based targets, providing disclosures and staying ahead of emerging requirements and trends.

INTERNAL SUSTAINABILITY COUNCILS

In addition to CEES, our internal enterprise and regional business sustainability councils develop tailored sustainability strategies for each business, supporting our 2030 Sustainability Commitments. We encourage the growth of these councils, as they enable each business to chart the best course toward achieving our sustainability goals.

EXTERNAL ADVISORY COUNCILS FOR SUSTAINABILITY

Trane Technologies is guided by our external [Advisory Council on Sustainability](#), a global council of sustainability thought leaders focusing on infrastructure development, energy policy, circular design, social progress and emerging technology, among other pressing topics.

Our management and leadership team consult the Advisory Council as their renowned expertise helps us understand the impact of these issues on our operations and inspire strategies for creating innovative products and solutions.

Internal leaders and experts within our business are supported by our Center for Healthy & Efficient Spaces External Advisory Council, which is comprised of experts in medicine, epidemiology, education and policy. The group focuses on challenges, policies and practices at the intersection of indoor environmental quality, health and energy efficiency.

Additionally, we participate in multiple coalitions working together with like-minded companies in pursuit of a better net-zero economy. These coalitions open us to new solutions and keep us accountable as we strive to accomplish our goals. A full list of the coalitions we participate in is available in the [Charters & associations](#) section.

“Trane Technologies’ commitment to sustainable innovation is a core part of the company’s genetic code. This has enabled them to establish a leadership position in their industry, offering distinctive solutions for decarbonization, system efficiency and building intelligence.

Daniel Vermeer, Professor & Executive Director, Duke University Center for Energy, Development and the Global Environment

ESG reporting oversight

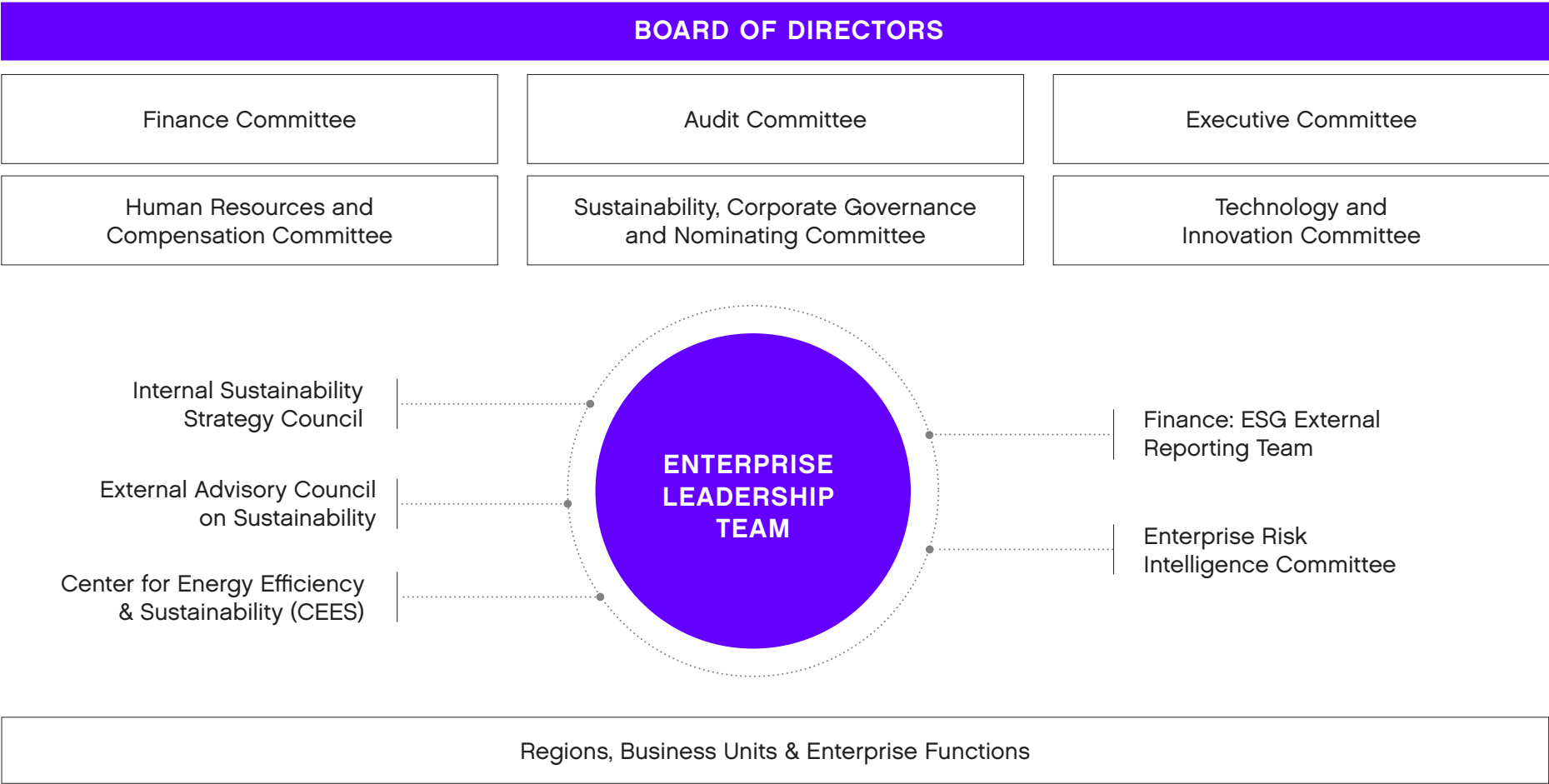
Recently, multiple jurisdictions introduced legislation requiring ESG reporting. To ensure Trane Technologies remains well positioned for compliance with these diverse disclosure requirements, we established the Finance Director of ESG Reporting role.

This role is responsible for leading our global efforts to analyze sustainability-related financial reporting mandates and guides our compliance approach, ensuring consistency across international

jurisdictions. The Finance Director of ESG Reporting oversees the development of systems, processes and controls related to ESG data governance, reporting and disclosures. This role collaborates closely with our CEES and EHS teams to implement efficient methods for collecting and reporting ESG data.

As ESG reporting requirements continue to evolve, this role will establish and maintain processes to monitor industry, accounting and regulatory developments, ensuring we remain compliant.

Sustainability management structure



Cybersecurity

Our cybersecurity program helps us maintain the integrity and security of our network, protect our intellectual property, safeguard customer data, secure our products and maintain operations. Our program identifies and manages risks to our company's hardware, software and data assets throughout their life cycles. The program also includes documented cybersecurity policies, vulnerability management, third party risk management, threat intelligence and ongoing monitoring for unusual activities. We take a proactive approach to security incidents and report appropriately to stakeholders.

An operational technology security program addresses cybersecurity related risks to our manufacturing operations, while a centralized product security program ensures customer-facing products are secure by design.

We leverage external experts and partners to improve our security by conducting regular reviews of our cybersecurity controls and programs. Each year, we conduct penetration testing and mandatory regulatory assessments and audits, along with assessments required by our customers. We also benchmark our program against industry frameworks, such as the National Institute of Standards and Technology's Cybersecurity Framework.

Our cybersecurity strategy, governance and compliance is overseen by the Audit Committee of our Board and is led by our Vice President, Digital Risk, who reports to the Executive Vice President, Chief Financial Officer. Senior management briefs the Audit Committee on cybersecurity threats and the risk landscape at least twice per year and reports to the full Board on an annual basis. We require all salaried employees to complete an annual cybersecurity training and provide voluntary ongoing training for all employees to defend against cyber risks. We published information on our cybersecurity risks in our [2024 Annual Report](#).

In 2024, we published an internal Generative AI Acceptable Use Policy for employees and an external [AI Policy Use Statement](#) on our website.

## Supply chain sustainability, transparency & performance

GRI 2-6, SASB RT-EE-440a.1; RT-IG-440a.1

Trane Technologies sources from a network of over 28,200 suppliers worldwide. To enhance sustainability and resilience, we focus on in-region, for-region sourcing. We source direct materials like electrical and mechanical inputs, components such as refrigerants and raw materials like steel, copper and aluminum to manufacture our heating and cooling systems for residential, commercial and industrial applications and transport refrigeration. We also source indirect goods and services and consider how to optimize logistics as part of our procurement process.

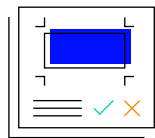
Like other global companies, our complex supply chain is subject to various risks. Supply chains present economic challenges, like labor shortages, raw material price fluctuations and tariffs. Safeguarding human rights in our supply chain is critically important, and we continue to find ways to enhance performance and transparency and prepare for risk and growth. Read more about our risk management and mitigation processes in the [Business integrity](#) section.

### Procurement process

Our Global Procurement leadership team, led by our Vice President of Enterprise Procurement, manages our strategic sourcing process. This process allows Trane Technologies to receive the highest quality goods and services possible while supporting suppliers that operate ethically and sustainably.

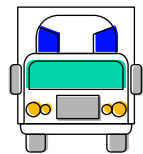
Our supplier decision matrix empowers our procurement teams to consider not only price and the supplier's financial stability and innovation capacity, but also a range of factors such as sustainability, quality and risk when selecting suppliers. A cross-functional team determines the weight of each factor within the matrix based on the criticality of the purchase. This decision matrix is applied as part of our new product development process when selecting suppliers. Existing suppliers are also reviewed periodically with the use of third party data and other supplier key performance indicators as part of the supply chain management and risk reduction process.

In 2024, we announced a new commitment to reduce embodied carbon in our products by 40% by 2030, leading our procurement team to begin considering embodied carbon when sourcing materials. To meet our goal, we are collaborating with our suppliers to develop a standardized approach to measuring and managing embodied carbon to reduce carbon intensity across the value chain. Learn more about how we are addressing carbon emissions in the value chain in the [Greenhouse gas emissions](#) section.



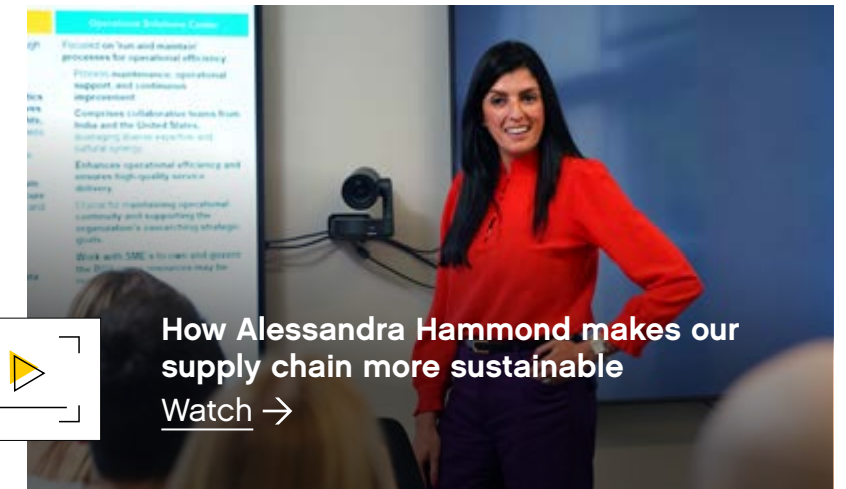
100%

of significant suppliers enrolled in sustainability reporting platform



24,000

mtCO<sub>2</sub>e avoided in 2024 through loads shipped with SmartWay certified carriers



**How Alessandra Hammond makes our supply chain more sustainable**  
[Watch →](#)



To me, sustainability isn't just what we report in the Sustainability Report. It's what we do every single day.

Alessandra Hammond, Global Business Operations Leader, Integrated Supply Chain, Trane Technologies

# Risk assessment

We take supply chain risk seriously, as potential disruptions could impact our ability to meet the needs of our business, customers and other stakeholders. We plan to achieve long-term resilience through strategic supply chain network design. We developed standardized risk portrayal systems that allow for the roll-up and depiction of risk at the part level, supplier level and plant/product/enterprise level for suppliers. This allows us to assess supply chain risk holistically rather than through multiple assessments. This new tool also allows us to identify, assess and prioritize our actions to reduce supplier and manufacturing risks in a proactive manner and streamline our response to risk disruptions specific to country, business segment and commodity.

We maintain a cybersecurity third party risk management program for indirect materials and services. This program evaluates third parties that either host or have access to our data and/or systems to ensure alignment with our security requirements. The program includes initial review, ongoing monitoring and contractual agreements with cybersecurity requirements to ensure third party services meet our standards and that the cybersecurity risks associated with using these services are acceptable.

We collaborate with a third party supply chain data management solution to facilitate the collection and management of supplier Conflict Mineral questionnaires and reports. We also issue an annual Human Trafficking/ Modern Slavery questionnaire to suppliers flagged for potential risks based on specific commodities or locations. The Conflict Minerals and Human Rights data enable us to identify and follow up with potential high-risk suppliers and take corrective action as necessary, up to and including termination of the supplier relationship. For more details on our approach to human rights management, read the [Human rights](#) section.

## PROCESS FOR SUPPLY CHAIN AUDIT

Our Supplier System Assessment (SSA) audits assess site-specific sustainability and business continuity risks. A dedicated team of experts in each region manages the SSA process, which examines various risk categories such as quality management, environmental stewardship, human rights, labor relations, cybersecurity, product and safety compliance, sub-supplier oversight and supply chain evaluation. In 2024, 100% of new direct material suppliers in North America were screened using environmental criteria through an SSA audit. Learn more about our SSA in our [Global Supplier Quality Manual](#).

# Shared supplier sustainability goals

Trane Technologies' [Business Partner Code of Conduct \(BPCoC\)](#) applies to all suppliers doing business with us. It communicates our expectation that suppliers operate ethically and in full compliance with our standards and hold their own suppliers to the same high standards.

Beyond the ethical principles outlined in the BPCoC, we encourage suppliers to work toward sustainable business practices specified in our [Supplier Sustainability Expectations](#) and our [Sustainable Procurement Policy](#). As outlined in these documents, we support suppliers by sharing best practices in areas such as resource conservation and sustainable packaging. We also collaborate with key suppliers to support their emissions reduction goals and better understand embodied carbon in the products we purchase.

To monitor supplier EHS performance and sustainability efforts, we use a third party platform that provides transparency into supplier performance relative to our standards. Through our Supplier Sustainability Survey, which is sent to significant suppliers, we gather insights into energy management, emissions reduction, waste handling, water usage and other social and governance-related practices, such as human trafficking due diligence and conflict mineral reporting. Significant suppliers are identified based on their risk of negative environmental impacts due to large quantities of carbon produced from their products in Trane Technologies' value chain. All of our significant suppliers are enrolled in the sustainability reporting platform and capacity building programs, and 50% have existing GHG reduction programs or programs under development.

We do not maintain relationships with suppliers who fail to uphold our BPCoC, meet our quality standards or who violate labor standards. For more information on our ethical operations, read the [Business integrity](#) section and to learn about our management of the BPCoC, see the [Human rights](#) section.



## Supplier Sustainability Survey enhancements

In 2024, we introduced a new and enhanced Supplier Sustainability Survey to better track our suppliers' progress on their sustainability commitments and provide educational support to help assist them with their sustainability initiatives. The updated survey includes specific modules that align with our sustainability strategy. New data analytics features provide a grading and scoring system, allowing us to monitor progress over time. This improved survey strengthens our relationships with high-performing suppliers and facilitates meaningful conversations with those who are still developing their sustainability initiatives, enabling us to better understand and support their needs.



### Our annual supplier conference

Supplier engagement is an integral part of our business. In spring 2024, we hosted our annual supplier conference to recognize suppliers, communicate our business expectations and share growth opportunities. Throughout the two-day event, we explored the themes of growth, resiliency and sustainability.

During the conference sessions, our procurement leaders shared insights on how suppliers can grow with us through innovation, flawless execution, optimization, resiliency, sustainability and technology. Our Vice President of Sustainability and Managing Director of CEES highlighted key sustainability initiatives and how our suppliers' efforts align with these initiatives. Additionally, we hosted an awards dinner recognizing suppliers for their accomplishments in sustainability, continuous improvement, inclusion, innovation, quality, service and more.

### SUPPLIER TRAINING

Our teams host learning sessions for our suppliers covering important sustainability topics, such as embodied carbon. We also offer tailored training and workshops designed by our in-house experts to address suppliers' specific needs and interests. Training on our Sustainability priorities and our BPCoC is also available to suppliers.

### SUPPLIER INCLUSION

Building a diverse and inclusive supply chain fortifies resilience, fosters access to innovative perspectives and cutting-edge ideas and drives economic growth within the communities we serve. Through our global integrated supply chain strategy, we actively collaborate with qualified, experienced and value-focused suppliers from all backgrounds, including small businesses.

In 2024, we introduced an enhanced platform to make it easier for a broad range of prospective suppliers to let us know about their capabilities and certifications. The platform is available to all business enterprises interested in doing business with Trane Technologies.

For more information on our Supplier Inclusion program, visit our [website](#).

### Logistics

We seek to optimize our logistics, reduce our carbon footprint and cycle time, improve labor conditions and increase transparency. This also helps us better meet customer needs and lower our operational costs. Over the past year, we built upon our current initiatives, which include:

- Using space on truckload shipments to transport greater volume in fewer trucks;
- Pooling lower-weight shipments into single truckloads for transportation to less-than-truckload carrier terminals;
- Increasing our dedicated fleets, which will reduce empty miles;
- Partnering with steamship lines that use more sustainable marine fuel and carbon recovery systems; and
- Implementing returnable packaging solutions that increase shipment density, reducing carbon emissions and solid waste to landfill.

We designed our transportation initiatives to reduce transit miles and lower carbon dioxide emissions. In 2024, we pooled shipments, consolidating over 30,000 tons into approximately 4,900 full truckload shipments and avoiding an estimated 1,363 metric tons of carbon dioxide equivalent (mtCO<sub>2</sub>e).

Our Dedicated Carrier Program focuses on minimizing empty trailer miles. In 2024, this program reduced empty trailer miles by 87% on the lanes covered by the Dedicated Fleet, leading to an emissions reduction of approximately 2,800 mtCO<sub>2</sub>e. We also participated in an international transportation provider's sustainable fuel program, which verifies our shipments and confirms a corresponding amount of sustainable marine fuel is used. In 2024, this initiative reduced emissions by approximately 880 mtCO<sub>2</sub>e.

We prioritize the use of SmartWay® carriers, a program led by the U.S. Environmental Protection Agency to promote freight efficiency and sustainability through transparent data tracking. In 2024, 82% of our shipments were transported by SmartWay-certified carriers, resulting in an emissions reduction of approximately 24,000 mtCO<sub>2</sub>e compared to non-SmartWay carriers.





## Business integrity

GRI 2-16, 2-23, 2-24, 2-25, 2-26, 3-3, 201-2, SASB RT-EE-510a.3

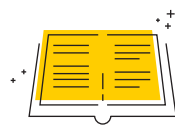
Upholding business integrity is a top priority at Trane Technologies. For the second year in a row, we are honored to be recognized as one of the 2025 World's Most Ethical Companies® by Ethisphere, a global leader in defining and advancing the standards of ethical business practices. We hold all team members to the highest standards of ethical conduct.

Our [Business Partner Code of Conduct](#), [Leadership Principles](#) and [Code of Conduct](#) facilitate our actions and promote our responsible business culture. Additionally, our [Global Human Rights Policy](#) and our [Environmental, Health and Safety \(EHS\) Policy](#) are designed to protect human rights and workers in the value chain. The messaging and values outlined in these statements reflect our global minimum business standards across our value chain. We uphold these standards everywhere we operate while complying with local laws and regulations. For more information about our ethics and risk management practices, read our [2024 Annual Report](#).

### Risk management

Our Board of Directors is responsible for overseeing our overall risk management strategy and ensuring that management implements appropriate mitigation strategies. We regularly review the risk landscape to address potential changes as they arise.

Trane Technologies' Chief Financial Officer also serves as the Chief Risk Officer, periodically reporting to the Board and its committees on risk management policies, practices and specific risk mitigation plans. These reports help inform the Board's decisions and shape the company's risk management strategies.



100%

of salaried team members completed  
Code of Conduct training in 2024

The Enterprise Risk Intelligence program goes beyond identifying risks to actively mitigating them. The program leverages technology, scenario planning and simulations to manage risks and opportunities strategically. It assesses risks based on impact, likelihood and vulnerability, categorizing them into tiers to ensure prioritization. Tier 1 risks are addressed through scenario planning and mitigation actions, while Tier 2 risks are managed with focused mitigation efforts. Progress is tracked using key risk indicators across all risk tiers (1 to 3), enabling proactive risk sensing.

Critical risks managed through our program include cybersecurity threats due to the rapid advancement of generative artificial intelligence (AI). We continue to focus on the development of guidelines and controls to harness its potential while mitigating associated risks. We closely monitor social and geopolitical changes, using scenario planning to address potential impacts on our operations and markets. To address practical challenges arising from these changes, we have implemented strategies to ensure supply chain continuity and safeguard our global workforce.

### SUSTAINABILITY RISK MANAGEMENT

The Sustainability, Corporate Governance and Nominating Committee of the Board is responsible for overseeing corporate sustainability governance and sustainability objectives including the impacts of climate change. The Sustainability, Corporate Governance and Nominating Committee also evaluates social and environmental trends and issues in connection with the Company's business activities and makes recommendations to the Board regarding those trends and issues.

### CLIMATE RISK

In 2022, Trane Technologies conducted a quantitative and qualitative climate scenario analysis to identify and manage both emerging and existing climate-related risks and opportunities for the business. This analysis focused on transition risks and opportunities within our direct consolidated operations, excluding upstream and downstream suppliers, customers and other entities outside of our direct control, as well as a physical climate risk assessment covering 45 key locations worldwide, factoring in their insured asset values. More details on this assessment can be found in our [2024 CDP Response](#).

The Enterprise Risk Intelligence Committee incorporates the climate-related risks and opportunities identified in the scenario analysis into our broader risk management strategy. Throughout the year, the committee works closely with the Enterprise Leadership Team to assess, manage and plan climate risk mitigation efforts within our upstream and downstream value chains as well as our own operations.

## Mitigation strategies

We aim to reduce the risks of corruption, bribery, harassment and human rights violations across our organization and value chain through our comprehensive policies. We expect our team members and partners to adhere to these standards and we provide compliance training for our workforce to support this commitment.

### CODE OF CONDUCT

Trane Technologies' [Code of Conduct](#) outlines the standards that all team members are expected to uphold. It comprehensively addresses key topics such as labor relations, human rights, equal employment opportunities, discrimination, harassment, anti-bribery and corruption, conflicts of interest, political activities and contributions and data privacy. The Code also highlights our company's [Leadership Principles](#) and sets expectations for how team members should interact with stakeholders across our value chain. It applies to all team members, regardless of role or location, as well as to the Board when acting in relation to their Trane Technologies duties. At its core, our Code emphasizes that we:

- Include and uplift each other.
- Do what's right, always.
- Work for a sustainable tomorrow.

All salaried team members are required to complete annual training on the Code of Conduct. The training covers a range of topics and varies from year to year based on the risk profile of an employee's specific role. All hourly team members complete Code of Conduct training on a biennial basis.

We also expect our business partners to operate with the highest legal, moral and ethical standards, as outlined in our [Business Partner Code of Conduct](#) (BPCoC). Learn more about the BPCoC in the [Human rights](#) section and our supplier assessment and due diligence review process in the [Supply chain sustainability, transparency & performance](#) section.

### ANTI-CORRUPTION

GRI 205-2, SASB RT-EE-510a.1, RT-EE-510a.2

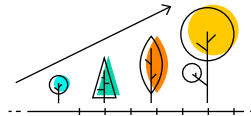
Our Code of Conduct and Anti-Bribery and Corruption Policy ensure that our team members adhere to strict ethical and legal compliance standards. The policy prohibits offering, giving or accepting anything of value in exchange for a business advantage, including a complete ban on facilitation payments for routine government functions. We expect team members to engage with customers or third parties solely for legitimate business purposes.

The Board's Audit Committee reviews our compliance programs to ensure the company's compliance with, among other laws, all relevant anti-corruption laws. Trane Technologies' Global Business Integrity Council (GBIC) is responsible for implementing risk-based compliance solutions that prevent, detect and address misconduct while promoting an ethical culture. Chaired by our Chair and CEO, with shared leadership by the Vice President and Deputy General Counsel, Global Ethics and Compliance, the Global Business Integrity Council oversees our global ethics and compliance program, collaborating with regional councils to establish and enhance compliance practices.



# Ambition

- Operate with integrity and uphold Trane Technologies' Leadership Principles



# Action

- Code of Conduct training
- Business Partner Code of Conduct training
- Anti-harassment and anti-slavery training
- Business partner environmental compliance assessment
- Continued launch of workplace harassment and Code of Conduct trainings for hourly employees

# Impact

- 100% of salaried team members completed Code of Conduct training
- Zero suppliers identified as having actual or potential negative environmental impact

## NON-DISCRIMINATION & ANTI-HARASSMENT

Trane Technologies is an Equal Employment Opportunity employer in the United States, providing equal opportunities to individuals regardless of race, gender, color, national origin, creed, religion, pregnancy, age, disability, military/veteran status, sexual orientation, gender identity, genetic information, marital status or any other legally protected status.

This policy applies to all aspects of employment, including hiring, promotion, demotion, transfer, recruitment or recruitment advertising, layoff, termination, compensation, benefits and opportunities for training, such as apprenticeships and other employment conditions.

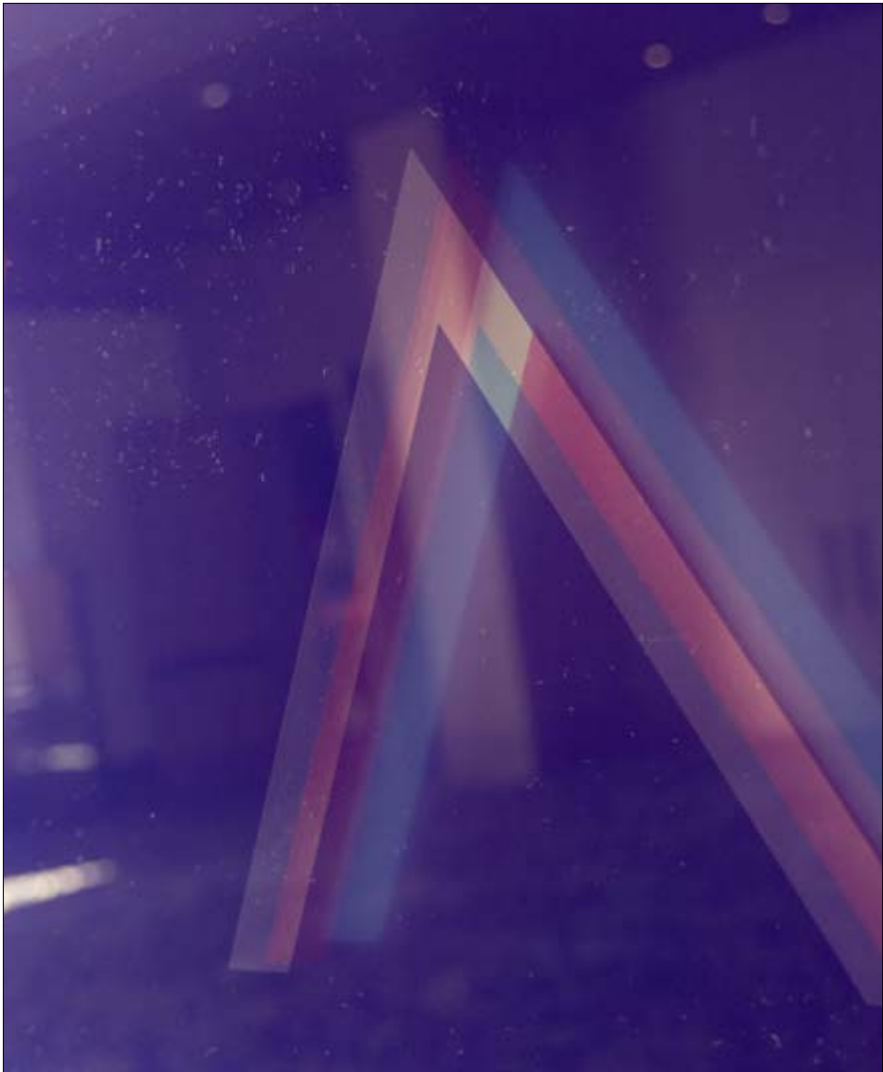
We also maintain a strict anti-harassment policy and expect all team members to uphold these high standards. To support an inclusive workplace, we provide annual anti-harassment training to 100% of our global salaried team members. In 2023, we launched a biennial Code of Conduct course to our hourly workforce. This course includes anti-harassment content.

## REPORTING

We offer multiple channels for team members to report ethical concerns or violations of our Code of Conduct, laws or regulations. Team members can reach out to the [Ethics Helpline](#), managed by an independent third party; send an email to [ethics@tranetechnologies.com](mailto:ethics@tranetechnologies.com), monitored by our Ethics and Compliance Group; or report issues to their manager, Human Resources, the Legal Department, the Ethics and Compliance Group or the Assurance and Advisory Services Group.

Our global Ethics Helpline is available to 100% of our employees and external stakeholders, including business partners, to report known or suspected violations of the Code of Conduct, laws or regulations. Our publicly available [Code of Conduct](#) provides detailed instructions for accessing the Ethics Helpline. Stakeholders or employees can use a secure [website](#) or country-specific toll-free numbers, available 24/7, to report concerns or follow up on previous inquiries. We regularly test the Ethics Helpline numbers to ensure correct functionality. Reports can be made anonymously, except where local privacy laws prohibit this.

Every report received is reviewed by the Ethics and Compliance Group, which takes corrective action when necessary to ensure compliance and protect the company's ethical reputation. The Ethics Helpline reporting program is managed by the Ethics and Compliance Group. We strictly prohibit retaliation against anyone reporting a violation in good faith or cooperating with a company investigation. Remedial actions are assigned, tracked and monitored by the Ethics and Compliance Group until resolved.



## Inside Investigations Educational Series

The Inside Investigations Series was created to share real internal stories with team members about ethics and compliance investigations and success stories where employees have demonstrated ethical leadership to do the right thing, always. The Ethics and Compliance Group selects stories that serve as helpful lessons. These stories are shared on the company's intranet available to all team members.



## Environmental, health & safety management

GRI 2-23, 2-24

Trane Technologies is dedicated to operating in a way that safeguards our people and protects the environment through sound environmental, health and safety (EHS) practices. We commit to cultivating a zero-injury and zero-incident culture across our operations. As part of our safety culture, we publish an enterprise-wide EHS Policy. Our policy aligns with the global, national, state and local EHS statutes at our operational sites, often exceeding regulatory requirements. Our EHS standards are aligned with the latest guidance from regulatory bodies, including the U.S. Occupational Safety and Health Administration and the International Organization for Standardization (ISO).

### EHS Policy

As a cornerstone of our safety culture, we maintain a comprehensive, enterprise wide [EHS Policy](#). The policy represents our commitment to environmental sustainability and safety, outlines EHS practices for our team members and businesses and describes how we engage with stakeholders on EHS matters.

In accordance with our EHS Policy, we established enterprise-wide engineering, maintenance and EHS standards that are robust, scientifically sound and protective of the environment, our people and our communities. Our policy requires management plans to be implemented and followed to proactively identify and minimize EHS risks associated with our business operations.

We set annual targets to measure, manage and communicate our EHS performance. The targets and actions follow our Business Operating System standard of work, which includes programs to proactively reduce our environmental footprint by preventing pollution, reducing waste, limiting energy consumption and conserving water. We work to decrease our use of non-renewable natural resources, increase the reuse and recycling of materials and reduce our greenhouse gas (GHG) emissions.

Our Business Operating System addresses the EHS Policy requirements for health and safety risk and incident response with EHS incident, crisis and hazard response plans. The response plans outline how we remediate EHS incidents and take appropriate corrective actions to prevent recurrence at the specific location and across the enterprise.

**MANAGEMENT**

Our Chair and CEO and the Executive Vice President and Chief Integrated Supply Chain Officer serve as the executive sponsors of our EHS Policy. Business unit EHS leaders and the Enterprise EHS team hold regular meetings to evaluate management standards, set yearly performance goals and assess key metrics. These metrics include both leading and lagging indicators such as injury rates and reductions in GHG emissions. In 2024, our EHS and Medical Services team created a management system focused on air quality due to increasing wildfire pollution. During 2024, the EHS Policy sponsors reviewed performance and discussed strategic direction at quarterly town hall meetings.

Our EHS Council serves as the key driver for EHS improvements and updates at Trane Technologies. It actively tracks emerging trends and regulatory shifts by collaborating with EHS authorities across our operational sites and continuously updates our policies in response. Additionally, the Enterprise EHS group reviews internal performance data and oversees both internal and external audits of our facilities. Every year, management procedures are shared with our third party limited assurance providers as part of their verification of selected EHS data. Our EHS management system conforms with ISO 14001 and ISO 45001 standards.

**TRAINING**

We expect all team members to incorporate strong EHS practices into their daily tasks. When joining Trane Technologies, both new hires and contractors undergo EHS training tailored to their specific work site or project. Employees in operational roles must complete annual EHS training to stay informed on our policies and procedures. In 2024, we replaced our Behavior-Based Safety program with our new Connect and Engage safety program, which includes eight to ten new training sessions available to team members across the globe. This new training leverages artificial intelligence (AI) in the training materials to facilitate more participation and learning. These programs emphasize environmental stewardship, including energy-saving techniques and material reuse and recycling, as well as jobsite safety protocols designed to support our commitment to a zero-injury, zero-incident culture.

**Audits & due diligence**

Each of our facilities conducts an annual EHS self-assessment using a standardized company-wide protocol. In addition to these self-assessments, Trane Technologies also performs internal audits. In 2024, we delivered a three-day, hands-on training for our global, internal safety audit experts, covering the fundamentals of EHS auditing, our proprietary audit tools and including a practice physical audit. The insights from both self-assessments and internal audits help us identify areas for improvement and refine our EHS management practices.

In 2024, Trane Technologies’ experts and third party consultants conducted EHS audits at 21 locations, including factories, distribution centers, parts stores and field service locations. The audit schedule is determined by the complexity, size and type of operations at each site, as well as relevant local, state and federal EHS regulations.

After completing the acquisition of a new business or site, we apply a thorough EHS integration model that builds upon focus areas identified during formal due diligence and EHS inspections. Our integration process involves orientation training, compliance audits, risk assessments, the implementation of our EHS management system and establishing data reporting protocols.

In 2024, we did not incur any significant fines for environmental noncompliance. We adhere to the principles of the Precautionary Approach, as outlined in Principle 15 of the 1992 United Nations Rio Declaration. We are striving to minimize or eliminate the use of hazardous substances in our operations by redesigning manufacturing processes and transitioning to low-global-warming-potential refrigerants. We continue to evolve our business practices to align with the Precautionary Principle.





# Public policy

GRI 2-29

We support public policies founded on sound scientific principles and reasonable regulation to benefit business and society. We enable and advocate for the adoption of innovative, sustainability-driven solutions to meet customer demand. These include products and pathways for decarbonization, such as the electrification of heat, energy efficiency, thermal energy storage, accelerated adoption of low-global warming potential (GWP) refrigerants and renewable energy. We also support energy efficiency mandates and standards as well as updating building codes to better accommodate the net-zero future.

As is evidenced in this report, we champion transparent and public reporting of greenhouse gas (GHG) emissions, targets verified by the Science Based Targets initiative (SBTi), and progress backed by standardized reporting frameworks that are reviewed by third parties.

## Credible disclosure & engagement

As a signatory of the [COP27 Action Declaration on Climate Policy Engagement](#), Trane Technologies is committed to policy engagement activities that support the Paris Agreement. Multiple third party organizations have recognized us as a leader in climate policy engagement due to our active involvement and transparency regarding policy advocacy.

We signed the United Nations Global Compact in 2023, and in 2024, we further advanced our commitment by joining the [United Nations Global Compact \(UNGC\) Forward Faster initiative](#). As of 2024, only 17% of the United Nations Sustainable Development Goals (UN SDGs) were on track. Forward Faster calls for urgent action from both the public and private sectors to accelerate progress. The initiative supports businesses with important guidance to achieve greater impact towards the UN's 2030 SDGs.

In 2024, InfluenceMap ranked Trane Technologies fourth globally in their [2024 Corporate Climate Policy Engagement Leaders report](#), elevating our company from the 27th spot in 2023. To achieve this, a company must demonstrate a strategic level of transparent, positive and direct advocacy

on climate-related policy that meets InfluenceMap's rigorous criteria. [InfluenceMap](#) also identified Trane Technologies as the North America Regional Leader in the Strategic Engagement Leadership category, highlighting our exceptional performance relative to all U.S.-based entities considered as part of the analysis.

## Public policy management

Our Government Relations Steering Committee, led by our Chair and CEO, manages our public policy positions and monitors emerging issues. The committee meets every quarter to assess important legislative and regulatory developments and review them in light of our business, climate science and the positioning of our policy collaborators, from non-governmental organizations (NGOs) to industry trade associations. We then develop, adopt and manage policy positions based on the assessments and their impact on our company and on sustainability.

“As an industry leader, lawmakers and regulators need, and want, to hear from us. We make sure they do, and in turn, they benefit from our expertise and experience. That's the essence of our government relations and public policy work every day in capitals throughout the world.”

Brian C. Jones, Vice President of Government Relations,  
Trane Technologies

We promote meaningful climate action by engaging with policymakers, industry leaders and environmental advocates. Throughout the year, we participate in key meetings and forums with government leaders and policymakers in Washington, D.C., and in state capitals throughout the U.S. In 2024, our Government Relations team collaborated with jurisdictions across the U.S. to update building codes to permit the commercial and residential use of A2L refrigerants, a low-GWP alternative to high-GWP hydrofluorocarbon (HFC) refrigerants. We also worked closely with lawmakers in both houses of Congress, the White House, the U.S. Department of Energy, the Environmental Protection Agency and U.S. state capitals to develop and implement standards related to climate provisions within the Inflation Reduction Act of 2022.

We advocate for climate action and policy adoption at national and global events and forums. As a member of the [World Economic Forum's Alliance of CEO Climate Leaders](#), Trane Technologies joined more than 100 CEOs and Senior Executives in signing an [open letter](#) to world leaders ahead of the UN Climate Change Conference 2024 (COP29). The letter emphasized the need for governments and business to double down on energy efficiency and triple renewable energy through transformative policies and collaboration to transition to net-zero emissions by 2050. Trane Technologies' leaders joined critical climate discussions throughout COP29, weighing in on topics including turning net-zero commitments into reality, the role of the HVAC industry in building decarbonization and expanding the benefits of clean energy.

At Climate Week New York 2024, Trane Technologies leaders met with customers, suppliers and environmental non-governmental organization partners dedicated to building a more sustainable world. Senior leaders shared insights on corporate climate leadership, climate technology and decarbonizing the built environment panels. During a panel discussion with Holcim and Nucor, two producers of low-carbon materials, our Vice President of Sustainability and Managing Director of CEES [announced](#) our commitment to reduce embodied carbon by 40% by 2030.

Policy & advocacy areas

We propose and support climate and sustainability policies that advance decarbonization and encourage the adoption of low-GWP refrigerants, energy efficiency product standards and renewable energy. We frequently provide technical support or formal comments during policy development to support climate action or counter unproductive messaging from trade associations and other companies.

The public comments and testimonies we made in 2024 are available on our [Policies, Practices and Disclosures webpage](#) under Sustainability Advocacy.



Trane Technologies tackles embodied carbon at Goals House  
[Watch →](#)

“ We need more first movers like Trane Technologies putting their green procurement to work to lead this shift in the value chain.  
Nollaig Forrest, Chief Sustainability Officer, Holcim

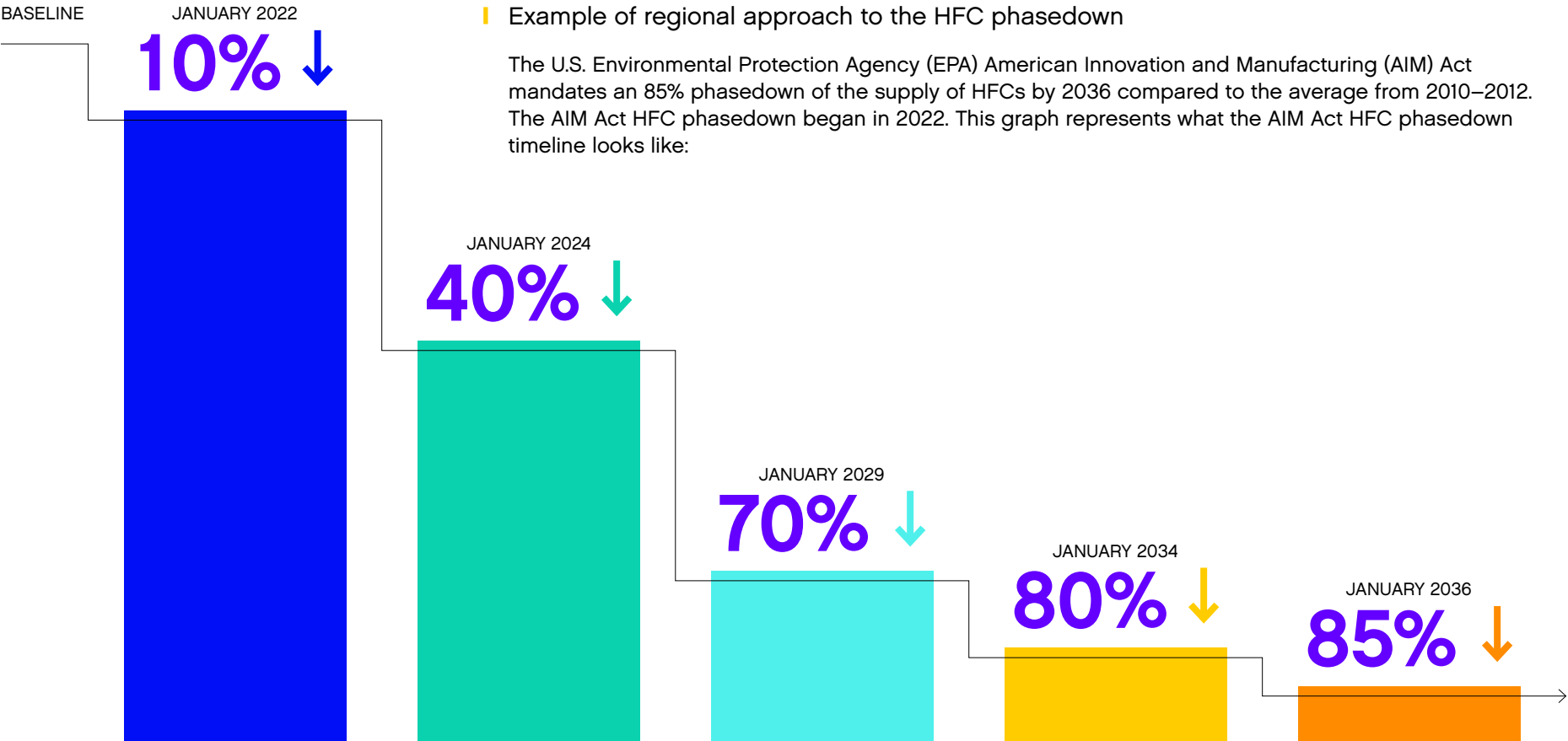


REFRIGERANT TRANSITION

For over a decade, Trane Technologies has consistently supported the global transition away from high-GWP HFCs and advocated for policies that enable the adoption of new low-GWP refrigerants. We began HFC phasedown as early as 2014 and continue to lead the refrigerant transition in products ahead of regulations. For example, in March 2024, we [announced](#) our new residential product portfolio consisting of heat pumps and air conditioners utilizing a next-generation, low-GWP refrigerant with 78% less GWP. We frequently share our product innovation and technology readiness insights with policymakers to inform them on what is practically scalable for operational and customer use.

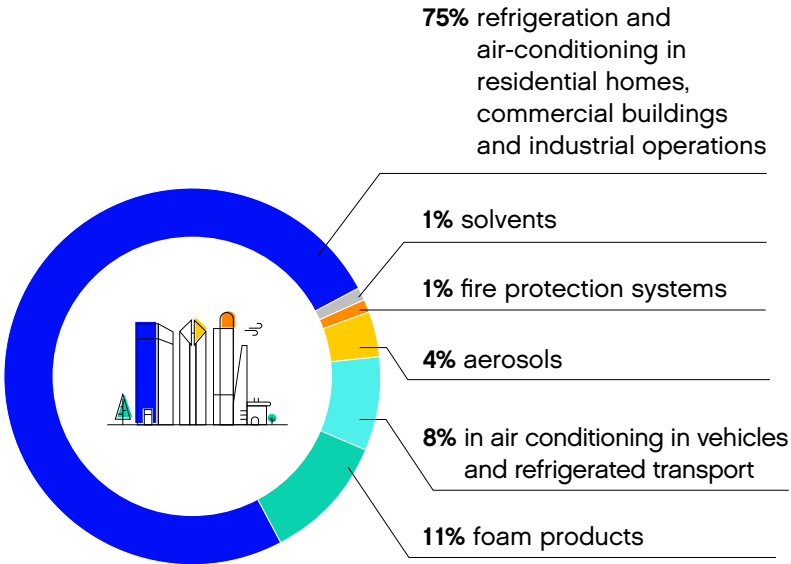
In 2024, we volunteered our technical and sustainability expertise with jurisdictions and code and standard development organizations to update building codes ahead of January 1, 2025, the effective date of the transition to lower GWP refrigerants under the American Innovation and Manufacturing Act, or “AIM Act.” Our team members worked with organizations and jurisdictions to codify the commercial and residential use of low-GWP A2L refrigerants to replace high-GWP HFC refrigerants.

We help drive the low-GWP transition by chairing and participating in technical standards committees, including committees for equipment design, installation and refrigerant classification standards. We also train technicians and other stakeholders to enable the successful adoption of new refrigerant technologies worldwide.



HFC sources in the U.S.

(all amounts are approximates as of 2019)<sup>[1]</sup>



<sup>1</sup> [U.S. Environmental Protection Agency](#)

ENERGY EFFICIENCY

We are heavily engaged in the development of relevant product energy efficiency standards and other minimum energy performance standards (MEPS) globally, with a focus on advocating for increased system-level performance for HVAC products. We participate in MEPS development through public comment proceedings for national rulemakings, including rulemakings with the U.S. Department of Energy or U.S. state appliance standards and national MEPS in the European Union, China and South America.

We advocate for the adoption of the latest, most efficient energy building codes at the local level and volunteer our technical and sustainability expertise with code and standard development organizations to update model building energy codes. We support policies and incentives related to the adoption of energy efficient technologies, such as efficient heat pumps, which help our customers reduce energy demand and operational costs.

SYSTEM-LEVEL ENERGY EFFICIENCY

Trane Technologies also supports policies that promote system-level energy efficiency, such as policies promoting real-time energy consumption data to reduce system-level energy waste. The use of intelligent information and communication technologies (ICT) at the system-level creates greater savings than device-only ICTs and improves overall operational efficiency and productivity.

RENEWABLE ENERGY

The electric grid can use intelligent energy demand management and energy storage to load-shift electricity demand to periods when more renewable energy is available, which can reduce emissions from fossil fuel-based sources. We engage with the Business Council for Sustainable Energy (BCSE) and the Center for Climate and Energy Solutions (C2ES) to support renewable energy and energy-efficient load shifting. We also support building electrification policies and energy codes at the federal and state levels.

ELECTRIFICATION OF THE BUILT ENVIRONMENT

We support building electrification policies and energy codes within the European Union and at the U.S. federal and state levels, including efficient heat pump adoption policies and incentives. For example, we worked directly with the White House Council on Environmental Quality and the General Services Administration to develop and adopt more stringent energy codes for federal buildings, creating additional demand for the electrification of heating and energy management systems and maximizing emissions reductions. Those efforts led to, among other things, the introduction of a federal definition for zero-emissions buildings, a new standard for building energy performance in buildings.

HEAT WAVES

The rising health effects of extreme heat events have created a nascent focus on extreme heat policies at home, school and work. Trane Technologies’ advocacy supports practical solutions to combat heat waves where we have expertise, such as cooling load reduction.

In 2024, we attended the [HeatWise Policy Partners Summit](#), where over 100 leaders from across the U.S. convened to determine how to equitably make communities more ready for heat waves.

“ We don’t always need to think of totally new policies. We can refine the policies that we have in place, so they can better meet this moment. The potential for public private partnerships to really make enormous headway is there.

Ashley Ward, Director, Duke University  
Heat Policy Innovation Hub



**Healthy Spaces Podcast:**  
**Rethinking heat**  
[Listen](#) →



Grand Challenge with Scott Institute  
for Energy Innovation

Our vision for a more sustainable world strongly aligns with the ambition of the Carnegie Mellon University Wilton E. Scott Institute for Energy Innovation to accelerate decarbonization. We are the first private sector company to join the Scott Institute’s new and growing family of Grand Challenge Partners — a select group of organizations with an ambitious decarbonization vision and goals for their operations, products and global markets. The multiyear collaboration will study the maximum adoption possible for electrified residential heating and cooling systems across the U.S. given the existing distribution infrastructure and household electrical capabilities.

In 2024, we hosted a virtual lecture titled, “The Role of the Building HVAC Industry in Decarbonizing the Built Environment” by Professor Vivian Loftness of the Scott Institute.



**Healthy Spaces Podcast: Building zero**  
[Listen](#) →



## Political engagement

We strictly adhere to all laws and regulations governing corporate political activities. The laws of many countries prohibit or strictly limit contributions by corporations to political parties and candidates. Although our team members may engage personally, Trane Technologies prohibits them from doing so on behalf of our company.

In the United States, we manage a non-partisan political action committee (PAC), which complies with all applicable laws and is regulated by the Federal Election Commission (FEC). Under the FEC, we publicly disclose the funds donated by eligible employees to the PAC, as well as resulting contributions to federal candidates in the FEC Campaign Finance database. The Trane Technologies employee PAC is 100% voluntary. We do not permit our team members to receive reimbursement from Trane Technologies for PAC contributions or personal contributions to political parties and candidates. Global lobbying expenditures totaled \$1.2 million in 2024. More information on our lobbying expenditures can be found in the [Data center](#).

### 527 ORGANIZATIONS & SUPER PACS

Trane Technologies does not contribute to 527 organizations, which are political organizations created under Section 527 of the U.S. Internal Revenue Code, other than PACs and candidates. We also do not contribute to federal independent expenditure-only committees, also known as “super PACs.”

## Policy associations

In 2024, we belonged to the following representative trade, industry and policy associations:

- Air Conditioning, Heating and Refrigeration Institute (AHRI)
- American Council for Energy Efficient Economy (ACEEE)
- Business Council for Sustainable Energy (BCSE)
- Center for Climate and Energy Solutions (C2ES)
- Ceres
- Charlotte Regional Business Alliance

- Clean Energy Buyers Association (CEBA)
- CO2EFFICIENT — AI Infrastructure Coalition
- Digital Climate Alliance (DCA)
- Energy Efficiency Business Coalition (EEBC)
- Energy Storage Association (ESA) European Heat Pump Association
- EuroHeat and Power
- European Heat Pump Association (EHPA)
- International WELL Building Institute (IWBI)
- Manufacturers Alliance for Productivity and Innovation (MAPI)
- Midwest Energy Efficiency Alliance (MEEA)
- National Association of Energy Service Companies (NAESCO)
- National Association of Manufacturers (NAM)
- National Association of State Energy Officials (NASEO), Executive-level affiliate member
- North Carolina Chamber of Commerce
- North Carolina Sustainable Energy Association (NCSEA)
- Northeast Energy Efficiency Partnerships (NEEP)
- South Central Partnership for Energy Efficiency as a Resource (SPEER)
- Southeast Energy Efficiency Alliance (SEEA)
- Southwest Energy Efficiency Partnerships (SWEET)
- The Alliance for Responsible Atmospheric Policy (ARAP)
- The Energy and Resources Institute (TERI) — India
- U.S. Business Council for Sustainable Development (US BCSD)
- U.S. Green Building Council (USGBC)
- World Business Council for Sustainable Development (WBCSD)
- World Wildlife Fund Climate Business Coalition (WWF)

# Charters & associations

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Trane Technologies partners with organizations that share our ambition to accelerate progress toward emissions and energy reductions and to broaden opportunities for all.



**Climate Group's [RE100](#), [EP100](#) & [EV100](#)**

Trane Technologies is a member of the Climate Group's RE100, with a goal to source 100% renewable electricity by 2040; EP100, with a goal to double our energy productivity by 2035 from a 2013 baseline; and EV100, with a goal to transition our vehicle fleets to electric vehicles by 2030.



**[First Movers Coalition](#)**

Trane Technologies is an inaugural member of the First Movers Coalition (FMC) launched in 2021 at the Conference of the Parties 26 (COP26) in Glasgow, Scotland. FMC members agree to set ambitious purchasing targets for hard-to-abate material.



**[SteelZero](#)**

Trane Technologies is a member of SteelZero, a global initiative working to accelerate the transition to a net-zero steel industry. As a SteelZero member, we commit to a purchasing target to help shift the global steel market toward responsible sourcing and procurement of steel.



**[Disability:IN](#)**

Our Chair and CEO signed the Disability:IN CEO Letter in 2021, extending Trane Technologies' commitment to advance access and inclusion for all. Disability:IN envisions a global economy in which people with disabilities participate meaningfully and fully.



**[Opportunity@Work](#)**

Opportunity@Work is working to rewire the U.S. labor market to create opportunity for workers who are Skilled Through Alternative Routes (STARs). As a coalition partner, we actively work to create more opportunities for workers who are STARs and expand pathways for qualified talent.



**[Race To Zero](#)**

In 2021, Trane Technologies joined this global campaign from the United Nations Framework Convention on Climate Change to rally leadership and support from businesses, cities, regions and investors for a healthy, resilient, zero-carbon recovery that prevents future threats, creates decent jobs and unlocks inclusive, sustainable growth.



**[World Economic Forum Alliance of CEO Climate Leaders](#)**

Our Chair and CEO is a member of the Alliance of CEO Climate Leaders, an influential network of business leaders committed to raising bold climate ambition and accelerating the net-zero transition by setting science-based targets, disclosing emissions and catalyzing decarbonization and partnerships across global value chains.



**[Sustainable Markets Initiative](#)**

Our Chair and CEO is a member of the Sustainable Markets Initiative (SMI) and serves on SMI's [Sustainable Buildings Task Force](#). SMI's mission is to build a coordinated global effort through key initiatives that enable the private sector to accelerate transition to a sustainable future. [Terra Carta](#) is SMI's guiding mandate and proposed a set of principles for 2030 that place Nature, People and Planet at the heart of the private sector's global value creation.

### ADDITIONAL ASSOCIATIONS

- **America Is All In** is an organization of more than 3,900 businesses, mayors, county executives, universities, faith groups and investors that have committed to supporting the Paris Agreement and working to meet its goals.
- **Business Ambition for 1.5°C** is an initiative of the United Nations Global Compact, CDP, World Resources Institute and other non-governmental organizations whereby companies commit to set a long-term, science-based target to reach net-zero value chain GHG emissions no later than 2050.
- **CEO Action for Diversity & Inclusion** is the largest CEO-driven business commitment to advance Diversity & Inclusion in the workplace, representing more than 2,500 CEOs.
- **Clean Energy Ministerial (CEM) Advanced Cooling (AC) Challenge** urges governments, companies and other stakeholders to make, sell or install super-efficient air conditioners or cooling solutions that are smart, climate-friendly and affordable. It is a call to action to recognize that access to cooling improves health, productivity, economic growth and education.
- **The Climate and Clean Air Coalition HFC Initiative** is a United Nations Environment Programme initiative that supports technologies and various capacity-building activities to disseminate information on emerging technologies and practices to transition away from high-global warming potential HFCs and minimize HFC leakages.

- **Cool Coalition** is a global multi-stakeholder network that connects governments and the private sector to finance, academia and civil society groups to facilitate knowledge exchange, advocacy and joint action toward a rapid global transition to efficient and climate-friendly cooling.
- **H2ForNetZero** is a global initiative by World Business Council for Sustainable Development (WBCSD) and Sustainable Markets Initiative (SMI) focused on companies pledging to consume, supply or support hydrogen with the lowest possible carbon intensity.
- **Mission Efficiency** is a collaboration of governments, the private sector and financial institutions that commit to working together to accelerate the transition to energy efficiency at a global scale.
- **National Minority Supplier Development Council (NMSDC)** aims to serve as a growth engine for NMSDC certified minority businesses and enable its members to advance economic opportunity.
- **National Veteran-Owned Business Association (NaVOBA)** works to create corporate contracting opportunities for America's Veteran's and Service-Disabled Veteran's Business Enterprises (VBEs/SDVBEs).
- **OneTen**, established in 2020, is a coalition of leading companies committed to broadening access to opportunity for people without a four year degree.
- **Paradigm for Parity** is a coalition of business leaders, board members and academics who are committed to fostering inclusive leadership and expanding opportunity and access for women in leadership.

- **Sustainable Energy for All (SEforALL)** is an international organization working with governments, the private sector and civil society to drive further, faster action toward the achievement of Sustainable Development Goal 7, which calls for universal access to sustainable energy by 2030, and international climate agreements that call for reducing GHG emissions to limit climate warming to below 2°C above pre-industrial levels.
- **The United Nations Global Compact (UNGC)** is a global voluntary initiative in which companies and organizations commit to implement universal sustainability principles and support United Nations goals.
- **U.S. Department of Energy Better Buildings Initiative** partners share their GHG, energy, water and waste reduction solutions and best practices to help other organizations replicate their success.
- **WEConnect International** certifies and connects women-owned businesses to global, corporate buyers.
- **We Mean Business Adopt a Science-Based Emissions Reduction Target** leads businesses to recognize the opportunity — and the imperative — to be part of the zero carbon transition by encouraging companies to create carbon reduction plans in line with international climate agreements. To engage in this initiative, companies set bold, science-based emission reduction targets and publicly announce the targets after approval by the Science Based Targets initiative (SBTi).
- **We Mean Business Commitment to Reduce Short-Lived Pollutant Emissions** is a coalition of companies that agree to include measurement of HFCs in their GHG accounting and reduce emissions of short-lived climate pollutants (SLCPs). Participants also engage stakeholders in their supply chain to reduce SLCP emissions, promote best practices and showcase successful efforts.
- **Women's Business Enterprise National Council (WBENC)** is a leading national non-profit organization dedicated to helping women-owned and small businesses thrive.



# Memberships

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Our representative memberships help keep us aware of key issues, perspectives and opportunities in our industry and beyond:

- AHC Group
- American Belt and Road Working Group under the U.S. Embassy
- American Center for Life Cycle Assessment (ACLCA)
- American Chamber of Commerce in India (AmCham India)
- American Chamber of Commerce in Shanghai (AmCham Shanghai)
- American Council for an Energy Efficient Economy (ACEEE)
- Association of Climate Change Officers (ACCO)
- Association of Energy Engineers (AEE)
- Association of Physical Plant Administrators (APPA)
- BuildingGreen
- Building Decarbonization Coalition (BDC)
- Business Council for Sustainable Energy (BCSE)
- Center for Climate and Energy Solutions (C2ES)
- China Federation of Logistics and Purchasing (CFLP)
- China Refrigeration and Air Conditioning Industry Association (CRAA)
- Clean Energy Buyers Association (CEBA)
- Climate Generation: A Will Steger Legacy
- Corporate Eco Forum (CEF)
- Digital Climate Alliance (DCA)
- Energy & Environmental Building Alliance (EEBA)
- Energy Efficiency Business Coalition (EEBC)
- First Movers Coalition
- Global Environmental Management Initiative (GEMI)
- GreenBiz Executive Network (GBEN)
- Ibec — Irish Business Association



- Institute for Market Transformation (IMT)
- International Code Council (ICC)
- International WELL Building Institute™ (IWBI)
- Manufacturers Alliance for Productivity and Innovation (MAPI)
- National Association of Environmental Management (NAEM)
- National Association of Manufacturers (NAM)
- National Association of State Energy Officials (NASEO)
- New Buildings Institute (NBI)
- Residential Energy Services Network (RESNET)
- Rocky Mountain Institute (RMI)
- Shanghai Energy Conservation Center
- Shanghai Green Building Association (GBCI)
- Shanghai Refrigeration Institute
- Sustainable Energy for All (SE forALL)
- Sustainable Markets Initiative (SMI)
- The Air Conditioning, Heating and Refrigeration Institute (AHRI)
- The Aspen Institute's Aspen Leaders Forum
- The Conference Board
- Urban Green
- U.S. Business Council for Sustainable Development (US BCSD)
- U.S. Green Building Council (USGBC)
- U.S. Regional Energy Efficiency Organizations: SPEER, MEEA, SEEA, SWEEP, NEEP, NEEA
- World Business Council for Sustainable Development (WBCSD)
- World Economic Forum (WEF)
- World Environment Center (WEC)
- World Wildlife Fund: Climate Business Network



# Data & frameworks

[About our data](#)

[United Nations Sustainable Development Goals](#)

[GRI content index](#)

[SASB content index](#)

[TCFD content index](#)

[WEF content Index](#)

[Sustainability data center](#)

# About our data

GRI 2-4, 2-5

Throughout this report, we define our organizational boundary using the financial control approach and report on Scope 1 and 2 greenhouse gas (GHG) emissions using the GHG Protocol. We believe this reporting approach most accurately reflects the direct impact of our operational footprint. We report Scope 2 GHG emissions using an adjusted, market-based approach, which considers specific emission factors associated with the energy sources chosen and incorporates the renewable electricity that we proactively procure or generate. Our company’s Scope 3 product-related GHG emissions are those emissions associated with the product-use phase and cover the majority of revenue associated with our diverse product portfolio. For data associated with our company’s 2030 Gigaton Challenge commitment, heating and cooling output is normalized for growth to capture product performance improvements.

We report data from newly opened and acquired facilities as soon as valid data is available. For recently closed or sold facilities, the data is included for the time period a site was part of our company to ensure year-over-year comparisons remain consistent. As such events occur, baselines are adjusted to account for these operating footprint changes. As our data collection system continues to mature and improve, the operational data we report improves in accuracy and expands in breadth. Additionally, the formula to calculate our Gigaton Challenge contribution is reviewed on an annual basis and refined as needed to include items that were not able to be measured previously.

We present data in absolute terms and normalize it by our revenue (intensity). Our safety data is normalized by the number of hours worked. Data presented represents the reporting period from January 1, 2024 to December 31, 2024, unless otherwise noted, and aligns with our financial reporting period.

We receive limited assurance from an independent third party on an annual basis for select environmental, health and safety (EHS) and GHG emissions data, including purchased goods and services emissions data and product use emissions data. View the results in our [2024 Limited Assurance Report](#).

## FORWARD-LOOKING STATEMENTS

This report contains certain forward-looking statements, which are statements that are not historical facts, including statements regarding our 2030 Sustainability Commitments; our pathway to net-zero by 2050; our sustainability targets, goals, commitments and programs; our product and service innovations; and other business plans, initiatives and objectives. These forward-looking statements are based on our current expectations and are subject to risks and uncertainties, which may cause actual results to differ materially from our current expectations. These forward-looking statements generally are identified by the words “aim,” “believe,” “project,” “dedicate,” “expect,” “commit,” “estimate,” “propose,” “forecast,” “intend,” “strategy,” “invest,” “plan,” “may,” “could,” “should,” “will,” “would,” “will be,” “will continue,” “will likely result” or the negative thereof or variations thereon, or similar terminology generally intended to identify forward-looking statements.

All such statements are intended to enjoy the protection of the safe harbor for forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. Our actual future results, including the achievement of our targets, goals or commitments, could differ materially from our projected results as a result of changes in circumstances, assumptions not being realized or other risks, uncertainties and factors. Such risks, uncertainties and factors include the risk factors discussed in Item 1A of our most recent Annual Report on Form 10-K and subsequent quarterly reports on Form 10-Q filed with the SEC. We urge you to consider all the risks, uncertainties and factors identified above or discussed in such reports carefully in evaluating the forward-looking statements in this report. New risks and uncertainties arise from time to time, and it is impossible for us to predict these events and how they may affect our company. We assume no obligation to update these forward-looking statements.

## Reporting frameworks

Our annual Sustainability Report aligns with leading sustainability reporting frameworks.



**Global Reporting Initiative (GRI):** The GRI Standards are fundamental to our reporting process, and we report in accordance with them. See our [GRI content index](#).



**Sustainability Accounting Standards Board (SASB):** As a diversified manufacturer, we report to the standards for both the Electric & Electronic Equipment and the Industrial Machinery & Goods industries. See our [SASB content index](#).



**Task Force on Climate-related Financial Disclosures (TCFD):** We strongly support TCFD through supporter sign on and align with the voluntary disclosure framework. See our [TCFD content index](#) for details.



**World Economic Forum (WEF) Stakeholder Capitalism Metrics:** We disclose our performance against the WEF’s Stakeholder Capitalism Metrics to demonstrate our performance on sustainability topics and contributions to the United Nations Sustainable Development Goals. See our [WEF content index](#) for details and read more about our alignment with the [United Nations Sustainable Development Goals](#).



**CDP:** We voluntarily respond to the CDP questionnaire to disclose environmental impacts, risks and opportunities, as well as performance data. See our [2024 CDP Response](#).



**United Nations Global Compact (UNGC):** We align our operations and strategy with the universally accepted Ten Principles outlined by UNGC in the areas of human rights; Environment, Health and Safety; and anti-corruption. See our [Global Compact status](#).



# United Nations Sustainable Development Goals

The United Nations Sustainable Development Goals (UN SDGs) call for a more sustainable and united world through individual, business and global action. We set ambitious [2030 Sustainability Commitments](#) that demonstrate our pledge to address environmental and socioeconomic topics in line with the SDGs.



Using Trucost's SDG Evaluation Tool, we identified three primary SDGs on which we could have the most meaningful impact.



## SDG 5: GENDER EQUALITY

We are broadening access and building a stronger talent pipeline as part of our Opportunity for All commitment. We continue to expand our hiring and recruiting practices by recruiting from a number of sources and removing academic degree and industry skill requirements in select roles where they are not necessary for success. We also offer a variety of [learning programs](#) that help women and others develop in their careers.

We also broaden opportunities with our suppliers and offer training and development to help them adopt more sustainable business practices and grow.



## SDG 7: AFFORDABLE & CLEAN ENERGY

As part of [RE100](#), we are committed to sourcing 100% renewable energy by 2040, which exceeds RE100 requirements. Accordingly, we employ energy efficiency measures across our enterprise, purchase renewable energy for our operations, work to advance policies to increase the availability of renewable energy and create innovative energy-efficient products

and energy management solutions to reduce our customers' energy consumption profiles. Our [2030 Sustainability Commitments](#), including the [Gigaton Challenge](#), reflect our efforts to create product solutions that decrease energy use while optimizing performance and reducing operating costs.



## SDG 13: CLIMATE ACTION

Trane Technologies proactively works to decrease greenhouse gas emissions across the built environment and transportation sectors. Our [Climate Transition Plan](#) details our climate strategy, including our decarbonization levers and the strategic elements that support and influence the implementation of our climate strategy. Examples of how we're reducing our carbon footprint include:

- Transitioning to low-global warming potential [refrigerants](#);
- Developing system-level [energy-efficient solutions](#);

- Offering highly efficient and [fully electric products](#);
- Expanding the use of [renewable energy](#) to power our operations;
- Leading our industry in the transition to and use of [low-carbon materials](#);
- [Advancing policies](#) to increase the adoption of decarbonized heating and cooling; and
- Educating our team members, suppliers, customers, policymakers and other stakeholders on the effects of [climate change](#).

Further SDG support



SDG 2: ZERO HUNGER

In addition to our Thermo King® cooling solutions that help protect food in transit, resulting in reduced food loss, we support the Carolina Farm Trust (CFT). The CFT offers programming for local farmers, supports land conservation efforts and operates an urban farm and a market. We support CFT in a variety of ways, including through on-site employee volunteering, making connections in the community and providing an executive-on-loan to advise as they grow. Learn more in the [Corporate citizenship](#) section.



SDG 3: GOOD HEALTH & WELL-BEING

We offer benefits that support the physical and mental well-being of our team members, including an Employee Assistance Program, parental leave and family care policies. Read more about our benefits in the [Our workforce & culture](#) section.



SDG 4: QUALITY EDUCATION

We encourage and invest in employee learning and career development through Trane Technologies University, our Tuition Assistance Program and our extensive learning portfolio. We contribute to external educational organizations like Discovery Education, which enhance access to science, technology, engineering and mathematics. Read more about our [Learning & development programs](#) and educational support in line with our [Corporate citizenship](#) strategies.



SDG 9: INDUSTRY, INNOVATION & INFRASTRUCTURE

Our building automation services, advanced heat pumps and thermal management systems and digital solutions demonstrate our focus on innovating resilient and efficient products. We support policies to upgrade infrastructure to enable decarbonization. Read more about our [Technology & innovation](#) solutions and [policy efforts](#) that align with advancing sustainable infrastructure.



SDG 10: REDUCED INEQUALITIES

Broadening access to a diverse pipeline and workforce supports Trane Technologies' future growth and innovation, which is why Opportunity for All is one of our three core [2030 Sustainability Commitments](#) pillars. We invest in our communities and the next generation of talent and develop new hiring pipelines to broaden access to opportunity. Learn more about our [Diversity & Inclusion](#) initiatives.



SDG 11: SUSTAINABLE CITIES & COMMUNITIES

We continue to reduce our emissions and improve air quality in local communities. In 2023, Thermo King® reached its commitment to deliver a fully electric, zero direct emission refrigeration solution for every cold chain segment in the Europe, Middle East and Africa region, and we are on-track to do the same in the Americas by the end of 2025. Read more about our emission-reducing products in the [Sustainable solutions](#) section.



SDG 12: RESPONSIBLE CONSUMPTION & PRODUCTION

We have established strict sourcing requirements and conduct policies for our suppliers in our Business Partner Code of Conduct, Sustainable Procurement Policy and Global Human Rights Policy. We design our products for reliability and safety, meeting or exceeding global industry standards and codes. We consistently validate, analyze and mitigate potential product vulnerabilities in a responsible manner to minimize our customers' risk. We also provide ways for security researchers, industry organizations, third party component suppliers and our customers to contact us with any potential vulnerabilities. Read more about our [Product reliability & safety](#).





# GRI content index

**Statement of Use:** Trane Technologies has reported in accordance with the GRI Standards for the period 1 January 2024 – 31 December 2024.

## GRI 2: General Disclosures 2021

Disclosure number	GRI disclosure title	2024 direct response or location
The organization and its reporting practices		
2-1	Organizational details	Trane Technologies 170/175 Lakeview Drive Airside Business Park Swords, Co. Dublin, Ireland <a href="#">Form 10-K: Cover page and Part I, Item 1 and Item 2</a>
2-2	Entities included in the organization's sustainability reporting	<a href="#">Form 10-K: Part I</a>
2-3	Reporting period, frequency and contact point	Reporting period: 1 January 2024–31 December 2024 Reporting frequency: Annual Date of report publication: 20 May 2025 Point of contact: Carrie Ruddy <a href="mailto:carrie.ruddy@tranetechnologies.com">carrie.ruddy@tranetechnologies.com</a>
2-4	Restatements of information	<a href="#">Data &amp; frameworks</a>
2-5	External assurance	<a href="#">Sustainability commitments</a> <a href="#">About our data</a> <a href="#">2024 Limited Assurance Report</a>  Select environmental, health and safety indicators receive limited assurance annually by an independent third party.  The assurance process is led by the Vice President, Environmental, Health and Safety Operations, who reports to the Executive Vice President and Chief Integrated Supply Chain Officer.
Activities and workers		
2-6	Activities, value chain and other business relationships	<a href="#">Form 10-K: Part I, Item 1</a> <a href="#">Supply chain sustainability, transparency &amp; performance</a> <a href="#">Value chain webpage</a>  During the reporting year, there were no major changes within our supply chain.

Disclosure number	GRI disclosure title	2024 direct response or location
2-7	Employees	<a href="#">Our workforce &amp; culture Data center</a> Our workforce breakdown includes the total number of full-time and hourly employees by region and gender. We employ contractors but do not currently track the region and gender breakdown of the contractor workforce. We did not experience significant fluctuations in our workforce during the reporting period.
2-8	Workers who are not employees	<a href="#">Our workforce &amp; culture Data center</a>
Governance		
2-9	Governance structure and composition	<a href="#">Sustainability management 2024 Annual Report</a>
2-10	Nomination and selection of the highest governance body	<a href="#">Sustainability management 2024 Annual Report</a>
2-11	Chair of the highest governance body	<a href="#">Sustainability management 2024 Annual Report</a>
2-12	Role of the highest governance body in overseeing the management of impacts	<a href="#">Sustainability management 2024 Annual Report</a>
2-13	Delegation of responsibility for managing impacts	<a href="#">Sustainability management 2024 Annual Report</a>
2-14	Role of the highest governance body in sustainability reporting	<a href="#">Sustainability management 2024 Annual Report</a>
2-15	Conflicts of interest	<a href="#">2024 Annual Report</a> The company's Conflicts of Interest Policy requires employees to disclose actual or potential conflicts of interest in a variety of categories, which generally capture the four categories of conflicts defined by GRI 2-16-b. Each disclosure is reviewed by the company's Ethics and Compliance Group and disclosed to the employee's manager. Conflict disclosures are escalated within the company, including to the Board of Directors, as necessary to effectively eliminate or mitigate the conflict.

Disclosure number	GRI disclosure title	2024 direct response or location
2-16	Communication of critical concerns	<a href="#">Business integrity 2024 Annual Report</a> Trane Technologies' Vice President and Deputy General Counsel, Global Ethics and Compliance provides an overview of critical concerns to the company's Global Business Integrity Council (GBIC) six times per year and the Audit Committee of the Board of Directors five times per year. The GBIC brings together executive focus and expertise to drive consistent implementation of risk-based compliance solutions to prevent, detect and remediate misconduct and promote an ethical culture. The GBIC is chaired by the CEO and co-owned by the Vice President and Deputy General Counsel, Global Ethics and Compliance, who acts as the company's chief compliance officer. Other participants in the Council include the Executive Vice President and Chief Financial Officer; Senior Vice President, Human Resources; the Vice President, Assurance and Advisory Services; and the Director of Global Compliance Investigations. As defined in its charter, the Council executes the company's global ethics and compliance program and supervises subordinate regional compliance committees. The Vice President and Deputy General Counsel, Global Ethics and Compliance has access to the members of the Board of Directors' Audit Committee, including the Chair, to discuss and review matters.
2-17	Collective knowledge of the highest governance body	<a href="#">2024 Annual Report</a>
2-18	Evaluation of the performance of the highest governance body	<a href="#">Sustainability management 2024 Annual Report</a>
2-19	Remuneration policies	<a href="#">Sustainability management 2024 Annual Report</a>
2-20	Process to determine remuneration	<a href="#">2024 Annual Report</a>
2-21	Annual total compensation ratio	<a href="#">2024 Annual Report</a>
Strategy, policies and practices		
2-22	Statement on sustainable development strategy	<a href="#">CEO Letter to Stakeholders</a>
2-23	Policy commitments	Our environmental, health and safety, and ethical operations policies are described throughout our Sustainability Report. Links, applicable activities and communication processes are described in the relevant section. <a href="#">Human rights</a> <a href="#">Business integrity</a> <a href="#">Environmental, health &amp; safety management</a>
2-24	Embedding policy commitments	<a href="#">Human rights</a> <a href="#">Business integrity</a> <a href="#">Environmental, health &amp; safety management</a>

Disclosure number	GRI disclosure title	2024 direct response or location
2-25	Processes to remediate negative impacts	<a href="#">Business integrity</a>
2-26	Mechanisms for seeking advice and raising concerns	<a href="#">Business integrity</a>
2-27	Compliance with laws and regulations	Trane Technologies operates with integrity and expects all employees and business partners to uphold the same ethical standards. The number of instances of non-compliance and the monetary value of fines for instances of non-compliance are considered confidential.
2-28	Membership associations	<a href="#">Charters &amp; associations</a> <a href="#">Memberships</a>
Stakeholder engagement		
2-29	Approach to stakeholder engagement	<a href="#">Sustainable solutions</a> <a href="#">Sustainability management</a> <a href="#">Public policy</a>
2-30	Collective bargaining agreements	16% of our global workforce is covered by collective bargaining agreements.  Trane Technologies determines working conditions and terms of employment on a regional, country and industry specific basis.

### GRI 3: Material Topics 2021

Disclosure number	GRI disclosure title	2024 direct response or location
The organization and its reporting practices		
3-1	Process to determine material topics	<a href="#">Sustainability management</a>
3-2	List of material topics	<a href="#">Sustainability management</a>
Business integrity   GRI 205: Anti-Corruption 2016		
3-3	Management of material topics	<a href="#">Business integrity</a>
205-2	Communication and training about anti-corruption policies and procedures	<a href="#">Business integrity</a> Our Anti-Bribery and Corruption Policy is communicated to 100% of employees, including our Board of Directors, through our Code of Conduct and to 100% of our business partners through the Business Partner Code of Conduct. All salaried employees and the Board of Directors must complete anti-corruption training upon hire and every two or three years based on a risk analysis of their function at the company.
Climate risk   GRI 201: Economic Performance 2016		
3-3	Management of material topics	<a href="#">Climate Transition Plan</a> <a href="#">Business integrity</a> <a href="#">TCFD content index</a> <a href="#">2024 CDP Response</a>

Disclosure number	GRI disclosure title	2024 direct response or location
201-2	Financial implications and other risks and opportunities due to climate change	<a href="#">Climate Transition Plan</a> <a href="#">Business integrity</a> <a href="#">TCFD content index</a> <a href="#">2024 CDP Response</a>
Company culture   GRI 401: Employment 2016		
3-3	Management of material topics	<a href="#">Our workforce &amp; culture</a>
401-1	New employee hires and employee turnover	<a href="#">Our workforce &amp; culture</a> <a href="#">Data center</a>
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	<a href="#">Our workforce &amp; culture</a> <a href="#">Data center</a>
401-3	Parental leave	<a href="#">Our workforce &amp; culture</a> <a href="#">Data center</a>
Diversity & Inclusion   GRI 405: Diversity & Equal Opportunity 2016		
3-3	Management of material topics	<a href="#">Our workforce &amp; culture</a>
405-1	Diversity of governance body and employees	<a href="#">Our workforce &amp; culture</a> <a href="#">Data center</a>
Greenhouse gas (GHG) emissions   GRI 305: Emissions 2016		
3-3	Management of material topics	<a href="#">Climate Transition Plan</a> <a href="#">Sustainability commitments</a> <a href="#">Greenhouse gas emissions</a>
305-1	Energy direct (Scope 1) GHG emissions	<a href="#">Greenhouse gas emissions</a> <a href="#">Data center</a> Gases included in the calculation: CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs Base year for the calculation: 2019 Source of emissions factors and the GWP rates used: IPCC AR5 – Climate Change 2013; EPA Climate Leaders, Emission Factors for Greenhouse Gas Inventories, April 2023; 2017 Climate Registry Default Emissions Factors Report, Table B.2, April, 2020. Consolidated approach for emissions: Financial control Standards, methodologies, assumptions and/or calculation tools used: World Resources Institute, GHG Protocol
305-2	Energy indirect (Scope 2) GHG emissions	<a href="#">Greenhouse gas emissions</a> <a href="#">Data center</a> Gases included in the calculation: CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs and small quantities of HCFCs (e.g., R22) Base year for the calculation: 2019 Source of emissions factors and the GWP rates used: USA location factors: 2022 eGRID, eGRID2022-data.xlsx , January 30, 2024 Other locations: International Energy Agency, IEA (2021) Emission Factors Consolidated approach for emissions: Financial control Standards, methodologies, assumptions and/or calculation tools used: World Resources Institute, GHG Protocol

Disclosure number	GRI disclosure title	2024 direct response or location
305-3	Other indirect (Scope 3) GHG emissions	<a href="#">Greenhouse gas emissions Data center</a> Gases included in the calculation: All Scope 3 categories covered by the GHG Protocol Base year for the calculation: 2019 Standards, methodologies, assumptions and/or calculation tools used: Data sources and calculation methodologies vary based on the most relevant Scope 3 categories calculated
305-4	GHG emissions intensity	<a href="#">Greenhouse gas emissions Data center</a> Gases included in the calculation: CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O Organization-specific metric (the denominator): Million USD Types of GHG emissions included in the intensity ratio: Scope 1 and market-based Scope 2 GHG emissions
305-5	Reduction of GHG emissions	<a href="#">Greenhouse gas emissions Data center Climate Transition Plan</a> Gases included in the calculation: CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O Base year for the calculation: 2019 Scopes in which reductions took place: Scope 1 and 2 Standards, methodologies, assumptions and/or calculation tools used: GRI 305: Emissions 2016, Disclosure 305-5
305-6	Emissions of Ozone-Depleting Substances (ODS)	Trane Technologies is not a manufacturer of ODSs based on our interpretation of GRI 305-6.
305-7	Nitrogen Oxides (NO <sub>x</sub> ), Sulfur Oxides (SO <sub>x</sub> ), and other significant air emissions	<a href="#">Data center</a> Persistent organic pollutants, volatile organic compounds, hazardous air pollutants, particulate matter and other standard categories of air emissions identified in relevant regulations are not significant air emissions for Trane Technologies. Source of emissions factors and the GWP rates used: U.S. EPA, Compilation of Air Pollution Emission Factors (AP-42), U.S. EPA Updated Emission Factors of Air Pollutants from Vehicle Operations in GREET Using MOVES; and vendor technical data sheets Standards, methodologies, assumptions and/or calculation tools used: General calculation method is material usage multiplied by emissions factor
Energy   GRI 302: Energy 2016		
3-3	Management of material topics	<a href="#">Energy</a>
302-1	Energy consumption within the organization	<a href="#">Energy Data center</a> Source of the conversion factors used to understand the energy consumption within the organization: EPA Climate Leaders, Emission Factors for Greenhouse Gas Inventories, 18 April 2023; Climate Change, 2013, The Physical Science Basis, Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Chapter 8, Appendix 8.A, Table 8.A.1; 2017 Climate Registry Default Emission Factors report, Table B.2, April, 2020 Standards, methodologies, assumptions and/or calculation tools used: GRI 302: Energy 2016, Disclosure 302-2

Disclosure number	GRI disclosure title	2024 direct response or location
302-2	Energy consumption outside the organization	All energy was consumed within the organization
302-3	Energy intensity	<a href="#">Energy Data center</a> Organization-specific metric (the denominator): Revenue Types of energy included in the intensity ratio: Fuel, heating and electricity All energy was consumed within the organization
302-4	Reduction of energy consumption	<a href="#">Energy Data center Climate Transition Plan</a> Base year for the calculation: 2019 Types of energy included in the reductions: Fuel, heating and electricity Standards, methodologies, assumptions and/or calculation tools used: GRI 302: Energy 2016: 302-4
Energy efficient & low-emission Products   GRI: Custom Disclosure		
3-3	Management of material topics	<a href="#">Sustainable solutions</a>
Sustainable product design & life cycle   GRI 301: Materials 2016		
3-3	Management of material topics	<a href="#">Product sustainability &amp; circularity: A life cycle approach</a>
301-2	Recycled input materials as a percentage of total input materials used to manufacture the organization's primary products and services	<a href="#">Product sustainability &amp; circularity: A life cycle approach Data center</a>
Technology & innovation   GRI: Custom Disclosure		
3-3	Management of material topics	<a href="#">Innovation</a>
Custom	Innovation Revenue: Revenue from the current reporting year derived from new solutions or new markets launched within the prior 36 months	<a href="#">Innovation Data center</a>

SASB content index

Disclosure number	Disclosure	Industry	Unit	2024 direct response or location
Accounting metrics				
RT-EE-000.A; RTIG-000.A	Number of units produced by product category	Electrical and Electronic Equipment Industrial Machinery and Goods	Number	Proprietary
RT-EE-000.B; RTIG-000.B	Number of employees	Electrical and Electronic Equipment Industrial Machinery and Goods	Number	<a href="#">Our workforce &amp; culture</a> Global Workforce (employees + contractors): 46,371
Energy management				
RT-EE-130a.1; RTIG-130a.1	1. Total energy consumed	Electrical and Electronic Equipment Industrial Machinery and Goods	Megawatt Hours, (MWh)	<a href="#">Energy</a> 848,418
	2. Percentage grid electricity	Electrical and Electronic Equipment Industrial Machinery and Goods	Percentage (%)	31.9
	3. Percentage renewable	Electrical and Electronic Equipment Industrial Machinery and Goods	Percentage (%)	68.1
Product life cycle management				
RT-EE-410a.1	Percentage of products by revenue that contains IEC 62474 declarable substances	Electrical and Electronic Equipment	Percent (%) by revenue	Data not available

Disclosure number	Disclosure	Industry	Unit	2024 direct response or location
RT-EE-410a.2	Percentage of eligible products, by revenue, that meet Energy Star® criteria	Electrical and Electronic Equipment	Percent (%) by revenue	16% of revenue is from products that can meet the efficiency metrics specified by Energy Star® for Residential Furnaces and Residential & Light Commercial Central Air-conditioners and Heat Pumps.
RT-EE-410a.3	Revenue from renewable energy-related and energy efficiency-related products	Electrical and Electronic Equipment	Percent (%) by revenue	Approximately 45.5% of revenue is from products and services that contribute to the clean energy transition.
Hazardous waste management				
RT-EE-150a.1	Amount of hazardous waste generated, percentage recycled	Electrical and Electronic Equipment	Metric tons (mt), Percentage (%)	Amount of hazardous waste generated: 1,134 metric tons Based on SASB's assessment test, we've determined this isn't material. Learn more about our waste reduction strategy in the <a href="#">Waste</a> section.
RT-EE-150a.2	Number and aggregate quantity of reportable spills, quantity recovered	Electrical and Electronic Equipment	Number, Kilograms (kg)	0 reportable spills in 2024
Product safety				
RT-EE-250a.1	Number of recalls issued, total units recalled	Electrical and Electronic Equipment	Number	Based on SASB's assessment test, we've determined this isn't material. For more information on product reliability and safety, please see our <a href="#">Sustainable solutions</a> section.
RT-EE-250a.2	Total amount of monetary losses as a result of legal proceedings associated with product safety	Electrical and Electronic Equipment	Reporting currency	Based on SASB's assessment test, we've determined this isn't material. For more information on product reliability and safety, please see our <a href="#">Sustainable solutions</a> section.

Disclosure number	Disclosure	Industry	Unit	2024 direct response or location
Materials sourcing				
RT-EE-440a.1; RT-IG-440a.1	Description of the management of risks associated with the use of critical materials	Electrical and Electronic Equipment Industrial Machinery and Goods	N/A	<a href="#">Conflict Minerals Report</a> <a href="#">Supply chain sustainability, transparency &amp; performance</a> <a href="#">Human rights</a>
Business ethics				
RT-EE-510a.1	Description of policies and practices for prevention of: 1. Corruption and bribery and 2. Anti-competitive behavior	Electrical and Electronic Equipment	N/A	<a href="#">Business integrity</a>
RT-EE-510a.2	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	Electrical and Electronic Equipment	Reporting currency	Based on SASB's assessment test, we've determined this isn't material. For more information on our business ethics, please see the <a href="#">Business integrity</a> section.
RT-EE-510a.3	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	Electrical and Electronic Equipment	Reporting currency	Based on SASB's assessment test, we've determined this isn't material. For more information on our business ethics, please see the <a href="#">Business integrity</a> section.
Employee health & safety				
RT-IG-320a.1	Total recordable incident rate (TRIR)	Industrial Machinery and Goods	Rate	TRIR: 0.7
	Fatality rate	Industrial Machinery and Goods	Rate	Fatality rate: 0
	Near miss frequency rate (NMFR)	Industrial Machinery and Goods	Rate	Trane Technologies tracks lost-time incident rates among employees and contractors. For more information, please see the <a href="#">Occupational health &amp; safety</a> section.

Disclosure number	Disclosure	Industry	Unit	2024 direct response or location
Fuel economy & emissions in use-phase				
RT-IG-410a.1	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	Industrial Machinery and Goods	Gallons per 1,000 ton-miles	Based on SASB's assessment test, we've determined this isn't material. For more information on this topic, please see the <a href="#">Greenhouse gas emissions</a> section.
RT-IG-410a.2	Sales-weighted fuel efficiency for non-road equipment	Industrial Machinery and Goods	Gallons per hour	Based on SASB's assessment test, we've determined this isn't material. For more information on this topic, please see the <a href="#">Greenhouse gas emissions</a> section.
RT-IG-410a.3	Sales-weighted fuel efficiency for stationary generators	Industrial Machinery and Goods	Watts per gallon	Based on SASB's assessment test, we've determined this isn't material. For more information on this topic, please see the <a href="#">Greenhouse gas emissions</a> section.
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	Industrial Machinery and Goods	Grams per kilowatt-hour	Based on SASB's assessment test, we've determined this isn't material. For more information on this topic, please see the <a href="#">Greenhouse gas emissions</a> section.
Remanufacturing design & services				
RT-IG-440b.1	Revenue from remanufactured products and remanufacturing services	Industrial Machinery and Goods	Reporting currency	2024 Revenue: \$215.1 million (USD)  <a href="#">Product sustainability &amp; circularity: A life cycle approach</a>

# TCFD content index

Disclosure	2024 source	
Governance		
a) Describe the board's oversight of climate-related risks and opportunities.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Sustainability Report	<a href="#">Sustainability management</a>
	2024 CDP Response	<a href="#">Question 4.1.2</a>
b) Describe management's role in assessing and managing climate-related risks and opportunities.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Sustainability Report	<a href="#">Sustainability management</a> <a href="#">Business Integrity</a>
	2024 CDP Response	<a href="#">Questions 4.3 and 4.3.1</a>
Strategy		
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Annual Report	<a href="#">2024 Annual Report</a>
	2024 Sustainability Report	<a href="#">Innovation</a> <a href="#">Sustainable solutions</a> <a href="#">Climate change impact</a> <a href="#">Greenhouse gas emissions</a> <a href="#">Public policy</a>
	2024 CDP Response	<a href="#">Questions 3.1.1 and 3.6.1</a>
b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Annual Report	<a href="#">2024 Annual Report</a>
	2024 Sustainability Report	<a href="#">Innovation</a> <a href="#">Sustainable solutions</a> <a href="#">Climate change impact</a> <a href="#">Greenhouse gas emissions</a> <a href="#">Public policy</a>
	2024 CDP Response	<a href="#">Questions 5.3.1 and 5.3.2</a>
c) Describe the potential impact of different scenarios, including a 2°C scenario, on the organization's businesses, strategy and financial planning.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 CDP Response	<a href="#">Questions 5.1.1, 5.1.2, 3.1.1 and 3.6.1</a>
Risk management		
a) Describe the organization's process for identifying and assessing climate-related risks.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Sustainability Report	<a href="#">Business integrity</a>
	2024 CDP Response	<a href="#">Question 2.2.2</a>

Disclosure	2024 source	
b) Describe the organization's processes for managing climate-related risks.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Sustainability Report	<a href="#">Business integrity</a> <a href="#">Sustainability management</a> <a href="#">Climate change impact</a> <a href="#">Greenhouse gas emissions</a>
	2024 CDP Response	<a href="#">Question 2.2.2</a>
c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Sustainability Report	<a href="#">Business integrity</a>
	2024 CDP Response	<a href="#">Question 2.2.2</a>
Metrics & targets		
a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Sustainability Report	<a href="#">Sustainability commitments</a> <a href="#">Climate change impact</a> <a href="#">Greenhouse gas emissions</a> <a href="#">Energy</a> <a href="#">Waste</a> <a href="#">Water</a> <a href="#">Innovation</a> <a href="#">Product sustainability &amp; circularity: A life cycle approach</a> <a href="#">Supply chain sustainability, transparency &amp; performance</a> <a href="#">Data center</a>
b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Sustainability Report	<a href="#">Greenhouse gas emissions</a> <a href="#">Data center</a>
	2024 CDP Response	<a href="#">Questions 7.6, 7.7 and 7.8</a>
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Climate Transition Plan	<a href="#">Climate Transition Plan</a>
	2024 Sustainability Report	<a href="#">Sustainability commitments</a> <a href="#">Climate change impact</a> <a href="#">Greenhouse gas emissions</a> <a href="#">Energy</a> <a href="#">Waste</a> <a href="#">Water</a> <a href="#">Product sustainability &amp; circularity: A life cycle approach</a> <a href="#">Data center</a>
	2024 CDP Response	<a href="#">Questions 7.53.1 and 7.53.2</a>



# WEF content index

Theme	Disclosure	2024 location or direct response
Governance pillar		
Governing purpose	The company's stated purpose, as the expression of the means by which a business proposes solutions to economic, environmental and social issues. Corporate purpose should create value for all stakeholders, including shareholders.	<a href="#">Sustainability strategy</a>
Quality of governing body	Composition of the highest governance body and its committees by: competencies relating to economic, environmental and social topics; executive or non-executive; independence; tenure on the governance body; number of each individual's other significant positions and commitments, and the nature of the commitments; gender; membership of under-represented social groups; stakeholder representation.	<a href="#">2024 Annual Report Sustainability management</a>
Stakeholder engagement	A list of the topics that are material to key stakeholders and the company, how the topics were identified and how the stakeholders were engaged.	<a href="#">Sustainability management</a>
Ethical behaviour: Anti-corruption	<ol style="list-style-type: none"><li>1. Total percentage of governance body members, employees and business partners who have received training on the organization's anti-corruption policies and procedures, broken down by region.</li><li>2. a) Total number and nature of incidents of corruption confirmed during the current year but related to previous years. b) Total number and nature of incidents of corruption confirmed during the current year, related to this year.</li><li>3. Discussion of initiatives and stakeholder engagement to improve the broader operating environment and culture, in order to combat corruption.</li></ol>	<a href="#">Business integrity</a>
Ethical behaviour: Protected ethics advice and reporting mechanisms	A description of internal and external mechanisms for: <ol style="list-style-type: none"><li>1. Seeking advice about ethical and lawful behaviour and organizational integrity; and</li><li>2. Reporting concerns about unethical or unlawful behaviour and lack of organizational integrity</li></ol>	<a href="#">Business integrity</a>
Risk and opportunity oversight	Company risk factor and opportunity disclosures that clearly identify the principal material risks and opportunities facing the company specifically (as opposed to generic sector risks), the company appetite in respect of these risks, how these risks and opportunities have moved over time and the response to those changes. These opportunities and risks should integrate material economic, environmental and social issues, including climate change and data stewardship.	<a href="#">Form 10-K: Part I, Item 1A Business integrity</a>

Theme	Disclosure	2024 location or direct response
Planet pillar		
Climate change: GHG emissions	For all relevant greenhouse gases (e.g. carbon dioxide, methane, nitrous oxide, F-gases etc.), report in metric tonnes of carbon dioxide equivalent (tCO <sub>2</sub> e) GHG Protocol Scope 1 and Scope 2 emissions.  Estimate and report material upstream and downstream (GHG Protocol Scope 3) emissions where appropriate.	<a href="#">Greenhouse gas emissions Data center</a>
Climate change: TCFD implementation	Fully implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). If necessary, disclose a timeline of at most three years for full implementation. Disclose whether you have set, or have committed to set, GHG emissions targets that are in line with the goals of the Paris Agreement – to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C – and to achieve net-zero emissions before 2050.	<a href="#">Sustainability strategy TCFD content index</a>
Nature loss	Report the number and area (in hectares) of sites owned, leased or managed in or adjacent to protected areas and/or key biodiversity areas (KBA).	<a href="#">Nature Assessment Climate change impact</a>
Freshwater availability	Report for operations where material, megalitres of water withdrawn, megalitres of water consumed and the percentage of each in regions with high or extremely high baseline water stress according to WRI Aqueduct water risk atlas tool.  Estimate and report the same information for the full value chain (upstream and downstream) where appropriate.	<a href="#">Water 2024 CDP Response</a>
People pillar		
Dignity and equality	Percentage of employees per employee category, by age group, gender and other indicators of diversity (e.g., ethnicity).	<a href="#">Our workforce &amp; culture Data center</a>
	Ratio of the basic salary and remuneration for each employee category by significant locations of operation for priority areas of equality: women to men, minor to major ethnic groups and other relevant equality areas.	Proprietary
	1. Ratios of standard entry-level wage by gender compared to local minimum wage. 2. Ratio of the CEO's total annual compensation to the median total annual compensation of all employees (excluding the CEO).	1. Proprietary 2. <a href="#">2024 Annual Report</a>
	An explanation of the operations and suppliers considered to have significant risk for incidents of child labour, forced or compulsory labour. Such risks could emerge in relation to type of operation (such as manufacturing plant) and type of supplier; or countries or geographic areas with operations and suppliers considered at risk.	Proprietary
Health and well-being	1. The number and rate of fatalities as a result of work-related injury; high-consequence work-related injuries (excluding fatalities); recordable work-related injuries; main types of work-related injury; and the number of hours worked. 2. An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided for employees and workers.	<a href="#">Occupational health &amp; safety Data center</a>

Theme	Disclosure	2024 location or direct response
Skills for the future	1. Average hours of training per person that the organization's employees have undertaken during the reporting period, by gender and employee category (total number of trainings provided to employees divided by the number of employees). 2. Average training and development expenditure per full time employee.	<a href="#">Our workforce &amp; culture Data center</a>
Prosperity pillar		
Employment and wealth generation	1. Total number and rate of new employee hires during the reporting period, by age group, gender, other indicators of diversity and region. 2. Total number and rate of employee turnover during the reporting period, by age group, gender, other indicators of diversity and region.  1. Direct economic value generated and distributed (EVG&D), on an accruals basis, covering the basic components for the organization's global operations, ideally split out by: <ul style="list-style-type: none"> <li>• Revenue</li> <li>• Operating costs</li> <li>• Employee wages and benefits</li> <li>• Payments to providers of capital</li> <li>• Payments to government</li> <li>• Community investment</li> </ul> 2. Financial assistance received from the government: total monetary value of financial assistance received by the organization from any government during the reporting period.	<a href="#">Our workforce &amp; culture Data center</a>  <a href="#">2024 Annual Report 2024 financial highlights</a>
Wealth creation and employment	1. Total capital expenditures (CapEx) minus depreciation, supported by narrative to describe the company's investment strategy. 2. Share buybacks plus dividend payments, supported by narrative to describe the company's strategy for returns of capital to shareholders.	<a href="#">Form 10-K: Part II</a>
Innovation in better products and services	Total costs related to research and development.	<a href="#">Innovation Data center</a>
Community and social vitality	The total global tax borne by the company, including corporate income taxes, property taxes, non-creditable VAT and other sales taxes, employer-paid payroll taxes and other taxes that constitute costs to the company, by category of taxes.	<a href="#">Form 10-K: Part II</a>

# Sustainability data center

Purple text references data related to 2030 Sustainability Commitments and other key sustainability success metrics.

Please be advised that figures have been rounded, which may result in minor discrepancies in subtotals.

## Environmental

Greenhouse gas emissions	Baseline (2019)	2022	2023	2024
Scope 1 GHG emissions (metric tons CO <sub>2</sub> e)				
Total Scope 1 GHG emissions	319,240	241,683	205,645	204,962
Emissions from refrigerant leaks in manufacturing processes and cooling equipment	198,536	116,155	86,983	85,934
Emissions from fuels used in service vehicles	62,154	63,646	69,440	76,866
Emissions from fuels used in manufacturing	55,242	59,162	46,740	39,667
Emissions from fugitive volatile organic compound (VOC) from manufacturing processes	3,308	2,718	2,482	2,495
Scope 2 GHG emissions (metric tons CO <sub>2</sub> e)				
Total unadjusted market-based Scope 2 GHG emissions	153,611	134,762	126,841	134,670
Total adjusted market-based Scope 2 GHG emissions	123,500	55,535	40,748	44,003
Total location-based Scope 2 GHG emissions	158,890	118,603	112,055	116,834
Scope 1 and 2 GHG emissions (metric tons CO <sub>2</sub> e)				
Total absolute Scope 1 and market-based Scope 2 GHG emissions	442,740	297,218	246,393	248,965
Percent reduction in absolute Scope 1 and market-based Scope 2 GHG emissions from 2019 baseline	—	33%	44%	44%
Total Scope 1 and location-based Scope 2 GHG emissions	478,130	360,285	317,699	321,796
Scope 1 and 2 carbon intensity performance				
Carbon intensity for Scope 1 and adjusted market-based Scope 2 GHG emissions for the organization (mtCO <sub>2</sub> e/million USD)	33.86	18.59	13.94	12.55
Reduction of GHG emissions intensity, including adjusted market-based Scope 2 GHG emissions, from a 2019 baseline (metric tons/USD)	—	15.27	19.92	21.31
Reduced emissions through energy from renewable sources				
Total reduced GHG emissions from renewable energy (metric tons CO <sub>2</sub> e)	30,111	79,128	86,390	90,665
Reduced GHG emissions from VPPA renewable energy credits (metric tons CO <sub>2</sub> e)	26,568	45,173	41,632	42,368
Reduced GHG emissions from purchased or supplier-provided RECs (metric tons CO <sub>2</sub> e)	1,244	24,930	31,734	32,719
Reduced GHG emissions from electricity generated by on-site solar/ photovoltaic systems (metric tons CO <sub>2</sub> e)	2,299	9,026	13,023	15,579

Greenhouse gas emissions	Baseline (2019)	2022	2023	2024
Reduction in Scope 2 GHG emissions by renewable energy since 2019	20%	59%	68%	67%
Reduction in total Scope 1 and Scope 2 GHG emissions by renewable energy	6%	22%	27%	28%
Scope 1 regional GHG emissions (metric tons CO <sub>2</sub> e)				
North America	247,802	182,280	156,466	159,008
Latin America	22,064	21,111	18,026	15,970
Europe, the Middle East, Africa	32,353	30,639	25,089	22,987
Asia Pacific	17,020	7,653	6,064	6,997
Scope 2 regional GHG Emissions (metric tons CO <sub>2</sub> e)				
North America	77,245	21,247	10,990	11,188
Latin America	12,451	7,749	5,066	5,704
Europe, the Middle East, Africa	11,166	3,635	2,979	3,191
Asia Pacific	22,637	22,904	21,714	23,921
Scope 3 GHG emissions (million metric tons CO <sub>2</sub> e)				
Total Scope 3 GHG emissions	369	308	271	238
Product use (assured)	365	303	266	234
Purchased goods and services (assured)	4	5	5	4
Other air emissions (metric tons)				
NO <sub>x</sub>	106	111	106	107
SO <sub>x</sub>	7	7	6	6
Volatile organic compound (VOC) emissions	276	227	203	201
Biogenic emissions (metric tons CO <sub>2</sub> e)				
Biogenic emissions	0	36	76	99

Energy	Baseline (2019)	2022	2023	2024
Absolute energy use (MWh)				
Total energy consumption	876,706	883,148	839,891	848,418
Indirect (electricity)	329,645	312,243	300,764	312,482
Direct (fuel use)	547,061	570,904	539,127	535,936
Natural gas	231,021	233,840	204,727	172,943
Gasoline	224,273	236,873	246,116	279,244
Diesel	64,248	70,813	59,265	52,368
Propane	16,663	15,999	15,555	14,393
Solar electricity generated and used	4,344	5,491	7,015	10,083
Fuel oil	1,594	3,501	1,656	2,506
Vegetable oil	0	128	236	282
Aviation fuel	4,919	4,260	4,152	3,270
Biopropane	0	0	210	214
Biodiesel	0	0	39	82
Propylene	0	0	156	551
Normalized energy use (MWh/million USD)	67.05	55.23	47.51	42.77
Energy consumption and sales (MWh)				
Total electricity consumption	333,989	317,734	307,779	322,565
Total heating consumption	232,615	237,341	206,384	175,449
Total cooling consumption	0	0	0	0
Total steam consumption	0	0	0	0
Total electricity sold	262	670	436	664
Total heating sold	0	0	0	0
Total cooling sold	0	0	0	0
Total steam sold	0	0	0	0
Reduction in energy consumption achieved as a direct result of conservation and efficiency initiatives	692	5,583	10,339	10,444
Renewable energy data				
Renewable energy generated (MWh)	6,404	7,678	8,922	12,300
Renewable energy generated and sold to grid (MWh)	262	670	436	664
Renewable energy generated and used (MWh)	4,344	5,491	7,015	10,083
Renewable energy purchased (MWh)	65,275	178,086	211,222	219,545
Percentage grid electricity	80%	44%	31%	32%
Percentage renewable electricity (purchased vs total; excludes solar used)	20%	56%	69%	68%
Number of RE100-compliant sites	0	20	25	27

Trane Technologies renewable energy sources						
Sites using green electricity obtained directly/indirectly from renewable energy generation systems			Produced or purchased renewable electricity (MWh)			REC treatment
			2022 production	2023 production	2024 production	
Bangplee Solar PV System	Bangkok, Thailand	On-site solar PV	0	0	468	N/A — No RECs: Company owns renewable energy attributes from 100% of generation
Columbia Solar PV System	Columbia, SC, USA	On-site solar PV	1,462	1,470	1,549	Utility owns RECs <sup>[1]</sup>
Galway Solar PV System	Galway, Ireland	On-site solar generation	0	1	711	N/A — No RECs: Company owns renewable energy attributes from 100% of generation
Monterrey Solar PV System	Monterrey, México	On-site solar PV	0	110	440	N/A — No RECs: Company owns renewable energy attributes from 100% of generation
Pueblo Solar PV System	Pueblo, CO, USA	On-site solar PV	0	1,189	2,386	RECs held in reserve per State Environmental Agency requirements through 2025
Prague Engineering & Technology Center Solar PV System	Prague, Czech Republic	On-site solar PV	0	0	89	N/A — No RECs: Company owns renewable energy attributes from 100% of generation
Southampton Solar PV System	Southampton, United Kingdom	On-site solar PV	0	0	180	N/A — No RECs: Company owns renewable energy attributes from 100% of generation
Taicang Solar PV System	Taicang, China	On-site solar PV	2,599	2,757	2,749	N/A — No RECs: Company owns renewable energy attributes from 100% of generation
Trenton Solar PV System	Trenton, NJ, USA	On-site solar PV	2,149	2,172	2,343	Utility owns RECs <sup>[1]</sup>
Zhongshan Solar PV System	Zhongshan, China	On-site solar PV	798	786	718	N/A — No RECs: Company owns renewable energy attributes from 100% of generation
MWh = megawatt hours; PV = photovoltaic; RECs = Renewable Energy Credits						

1 The RECs from these on-site systems are owned by the utilities. We purchase replacement RECs equal to the amount of solar generated by the PV system from other renewable energy facilities in the U.S.

Trane Technologies renewable energy sources						
Sites using green electricity obtained directly/indirectly from renewable energy generation systems	Location	Type	Produced or purchased renewable electricity (MWh)			REC treatment
			2022 production	2023 production	2024 production	
Sourced zero carbon electricity for 100% of power used	Bari, Italy; Galway and Shannon, Ireland; Essen, Germany; La Crosse, Wisconsin, USA	All electricity used by the location is 100% derived from renewable generation processes	5,750	5,454	4,873	No RECs: Power supplier certifies electricity provided is 100% derived from renewable generation processes
Sourced zero carbon electricity for a portion of power used	Monterrey, México; Taicang, China (two factories & Technology Center); Zhongshan, China	A portion of the electricity used by the location is sourced from renewable generation processes	11,312	19,382	24,066	No RECs: Power supplier certifies electricity provided is 100% derived from renewable generation processes
Seymour Hill Wind Farm VPPA	Northern Texas, USA	Wind VPPA	103,283	101,053	100,374	Company owns and retires RECs
Electricity supplier provided or Trane Technologies purchased RECs or GOs	Barcelona, Spain; Clarksville, Tennessee, USA; Columbia, SC, USA; Conselve, Italy; Hastings, Nebraska, USA; Prague and Kolin, Czech Republic; Lynn Haven, Florida, USA; Trenton, NJ, USA; Tribano, Italy; Tyler, Texas, USA	Power company or Trane Technologies purchases and retires RECs/GOs for a portion or 100% of Trane Technologies' electricity	57,740	85,333	90,231	Power provider retires RECs/GOs on behalf of Trane Technologies

MWh = megawatt hours; RECs = Renewable Energy Credits;  
VPPA = Virtual Power Purchase Agreement; GOs = Guarantee of Origins

Waste	Baseline (2019)	2022	2023	2024
Waste generated (metric tons)				
Total waste generated	34,971	35,180	34,381	36,454
Total hazardous waste generated	1,088	1,086	963	1,134
Total non-hazardous waste generated	33,883	34,093	33,418	35,319
Total solid waste generated	10,669	4,719	3,646	5,391
Reduction in solid waste generated from a 2019 baseline	—	56%	66%	49%
Normalized hazardous waste (metric tons/million USD)	0.08	0.07	0.05	0.06
Normalized non-hazardous waste (metric tons/million USD)	2.59	2.13	1.89	1.78
Number of sites that achieved zero waste to landfill at 90% diversion by year end	27	35	39	36
Waste disposal (metric tons)				
Non-hazardous waste to landfill	5,572	1,806	1,874	3,431
Non-hazardous waste recycled	24,306	30,469	30,734	31,063
Normalized non-hazardous waste to landfill (metric tons/million USD)	0.43	0.11	0.11	0.17
Normalized non-hazardous waste recycled (metric tons/million USD)	1.86	1.91	1.74	1.57
Packaging data				
Emissions avoided from returnable packaging projects (metric tons CO <sub>2</sub> e)	140	276	746	48
Solid waste avoided from returnable packaging projects (metric tons)	877	504	1,616	133

Water	Baseline (2019)	2022	2023	2024
Water use (thousand cubic meters)	2,951	2,470	1,966	1,514
Normalized water use (cubic meters/million USD)	226	154	111	76
Percent of total water use at sites in areas of high to extremely high water stress	11%	10%	12%	15%
Wastewater used in water stressed locations (thousand cubic meters)	311	246	229	226
Reduction in water use in water-stressed regions from 2019 baseline	—	21%	26%	27%
Trane Technologies sites in areas of high to extremely high water-stress <sup>[1]</sup>	17	17	17	17
Wastewater permit exceedances	2	1	1	2

<sup>1</sup> Our calendar year 2025 report will include additional sites defined using the World Resource Institute's 2023 Aqueduct Water Risk Atlas data.

Social

Global workforce						
Location (2024)	Employee Type	Women		Men		Grand Total
Asia Pacific	Hourly	6.7%	68	93.3%	941	1,009
	Salaried	26.1%	1,518	73.9%	4,291	5,809
Europe, Middle East, Africa	Hourly	6.2%	193	93.8%	2,899	3,092
	Salaried	30.5%	889	69.5%	2,023	2,912
Americas	Hourly	24.2%	4,094	75.8%	12,834	16,928
	Salaried	32.3%	4,624	67.7%	9,670	14,294
Total	Hourly	20.7%	4,355	79.3%	16,674	21,029
	Salaried	30.5%	7,031	69.5%	15,984	23,015

Gender diversity data	2020		2022		2023		2024	
	Women	Men	Women	Men	Women	Men	Women	Men
Governance body (Executive Leadership Team)	13%	87%	19%	81%	20%	80%	23%	77%
Leadership positions (director level, vice president and above)	22%	78%	26%	74%	27%	73%	28%	72%
All management positions (all levels of management)	22%	78%	24%	76%	25%	75%	26%	74%
Workforce	25%	75%	26%	74%	26%	74%	26%	74%
Members of Board of Directors <sup>[1]</sup>	5	7	5	7	6	6	6	6

1 Members of our Board of Directors as of December 31 of the reported year.

Racial & ethnic diversity data	2020	2022	2023	2024
Racially & ethnically diverse <sup>[2]</sup> (US) Overall	36%	37%	37%	37%
Salaried	18%	20%	21%	21%
Hourly	51%	53%	52%	52%

2 Classified into five minimum categories by the US Census: White, Black or African American, American Indian or Alaska Native, Asian and Native Hawaiian or Other Pacific Islander

Age groups (2024)	Under 30 years old	30-50 years old	50+ years old
Percentage of individuals within the organization's leadership positions	0.0%	47.0%	53.0%
Percentage of individuals within the organization's management positions	2.8%	56.2%	41.0%
Percentage of employees	17.3%	54.5%	28.2%

Purple text references data related to 2030 Sustainability Commitments and other key sustainability success metrics.

Please be advised that figures have been rounded, which may result in minor discrepancies in subtotals.

Global workforce data	2020	2022	2023	2024
Full-time employees	34,646	37,669	40,472	44,044
Contractors	3,108	4,711	2,368	2,327
Key talent retention rate	97%	93%	96%	98%
Total new hires	3,837	7,432	8,474	8,727

Company culture				
Employee engagement survey results	2020	2022	2023	2024
Inclusion Index	76	77	78	80
Sustainability Index	79	80	80	82
Average employee engagement survey score	80	80	80	82
Participation rate	90%	88%	87%	90%

U.S. parental leave data	2020		2022		2023		2024	
	Women	Men	Women	Men	Women	Men	Women	Men
Employees who were eligible for parental leave	4,624	11,935	5,251	13,501	5,863	14,814	7,128	17,725
Employees who took parental leave	106	254	100	261	121	305	114	293
Employees who returned to work <sup>[3]</sup>	102	248	97	255	94	249	87	252
Return to work rate	96%	98%	97%	98%	97%	99%	97%	100%
Employees who returned to work and were still employed after 12 months <sup>[4]</sup>	87%	90%	78%	86%	88%	85%	92%	90%

3 Completed benefits in current year and were still employed 30 days after completing benefits.

4 Completed benefits in prior year and were still employed 12 months after completing benefits.

Corporate citizenship	2019	2022	2023	2024
Employee & community engagement data				
Percent of employees globally who volunteered in community or sustainability initiatives	36%	35%	26%	22%
Volunteer participants	17,044	13,571	10,402	9,559
Hours volunteered	31,682	62,274	92,517	92,148
Global contributions, thousands USD				
Total philanthropic giving	9,653	15,892	18,888	20,096
Value of employee volunteering time during paid working hours	806	1,681	2,508	2,866
Charitable fundraising	1,008	1,545	1,326	1,581
Charitable contributions	1,819	2,944	4,283	2,748
In-kind giving	416	3,768	4,782	5,777
Administrative overheads	150	183	179	314
Trane Technologies Foundation donations to community partners	5,455	5,771	5,810	6,811
Percent increase year over year in philanthropic giving	—	39%	19%	6%

Learning & development	2020	2022	2023	2024
Average number of learning & development hours				
All employees	14.0	10.2	11.5	16.3
Salaried employees	—	18.1	15.0	18.6
Hourly employees	—	3.4	8.0	13.8

Occupational health & safety data	Baseline (2019)	2022	2023	2024
Total recordable incident rate (per 200,000 hours worked) <sup>[1]</sup>	0.88	0.82	0.82	0.70
Lost-time incident rate (per 200,000 hours worked) <sup>[2]</sup>	0.11	0.14	0.12	0.09
Number of lost-time incidents per million hours worked	0.53	0.70	0.59	0.47
Employee lost-time frequency rate (per million hours worked)	0.52	0.65	0.62	0.45
Contractor lost-time frequency rate (per million hours worked)	0.58	1.35	0.17	0.84
Employee occupational illness frequency rate (per million hours worked)	0	0	0	0
Work-related fatalities	0	0	0	0
Total hours worked (among employees and supervised employee contractors)	77,964,860	81,119,193	84,646,351	87,895,102

1 (recordable injuries x 200,000) / total hours worked by employees

2 (recordable injuries resulting in lost work time x 200,000) / total hours worked by employees

Human rights data	2019	2022	2023	2024
Salaried employees trained on anti-harassment (U.S.)	100%	100%	100%	100%
Employees able to access anti-harassment policy	100%	100%	100%	100%
Required salaried employees trained on anti-corruption	100%	100%	100%	100%

Governance

Lobbying expenditures	2019	2022	2023	2024
Total monetary value of Trane Technologies' financial and in-kind lobbying contributions made directly and indirectly by the organization, thousands USD	680	921	988	1,182
Employee contributions to Trane Technologies' political action committee (U.S. Only), thousands USD	28	12	13	20
Supply chain transparency & performance	2019	2022	2023	2024
Supplier data				
Number of Trane Technologies suppliers across the globe	—	27,539	27,781	28,257
Percentage of Tier-1 spend with significant suppliers	—	—	—	53%
Percentage of significant suppliers enrolled in sustainability reporting platform	0%	100%	100%	100%
Number of significant suppliers enrolled in sustainability reporting platform / capacity building programs	—	—	—	179
Diverse-owned business spend, million USD	532	535	525	427
Percent of spend with diverse-owned businesses	—	7%	6%	5%
Supplier risk assessment data				
Total number of suppliers audited for sustainability and business risks through On-Site Assessment (OSA) audits	0	968	675 <sup>[1]</sup>	717
Percentage of direct material spend subject to On-Site Assessments	86%	95%	73% <sup>[1]</sup>	61%
Percentage of direct material spend assessed on a quarterly basis for risk	100%	100%	100%	100%
Percentage of new suppliers that were screened using environmental and social criteria	0%	100%	100%	100%
Number of suppliers assessed for environmental and social impacts	501	299	225	225
Number of suppliers identified as having significant actual and potential negative environmental or social impacts	0	0	0	0
Significant actual and potential negative environmental or social impacts identified in the supply chain	0	0	0	0
Percentage of suppliers identified as having significant actual and potential negative environmental or social impacts with which improvements were agreed upon as a result of assessment	0%	0%	0%	0%
Percentage of suppliers identified as having significant actual and potential negative environmental or social impacts with which relationships were terminated as a result of assessment	0%	0%	0%	0%
Logistics data				
Reduction in empty truck miles driven through Dedicated Carrier Program	0%	16%	87%	87%
Emissions avoided through Dedicated Carrier Program (metric tons CO <sub>2</sub> e)	0	1,895	2,553	2,858

1 The reduction in On-Site Assessments reflects the transition to a 5-year versus a 3-year renewal standard

Purple text references data related to 2030 Sustainability Commitments and other key sustainability success metrics.

Please be advised that figures have been rounded, which may result in minor discrepancies in subtotals.

Technology & innovation

Innovation & sustainable solutions	2019	2022	2023	2024
Percentage of eligible products, by revenue, that meet Energy Star® criteria	35%	32%	17%	16%
Sustainable revenue <sup>[1]</sup>	0%	0%	0%	46%
Projects meeting or exceeding quality, design, and cost goals	—	80%	78%	83%
Average revenue from innovation	19%	21%	27%	32%
Research and development spend, millions USD	236	211	252	310
Business development spend, millions USD	—	300	900	197
Percent of business development spend focused on sustainability-related objectives	—	Over 90%	Over 90%	Over 90%
New products and services launched	—	69	98	190
New patent filings	—	145+	125+	135+

1 Based on the definition and calculations provided by Corporate Knights Sustainable Economy Taxonomy for Green Products, <https://www.corporateknights.com/resources/corporate-knights-sustainable-taxonomy/>

Circularity: product life cycle & materials	2019	2022	2023	2024
Product life cycle data				
New product development projects generated or improved by the Product Development Process	—	212	230	262
Avoided emissions from refrigerant reclamation program (metric tons CO <sub>2</sub> e)	—	206,164	213,918	323,770
Materials data				
Percentage of recycled input materials used to manufacture the organization's primary products and services	—	47%	45%	46%
Revenue from remanufactured products and remanufacturing services, millions USD	—	99	104	215



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