

## C0. Introduction

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### C0.1

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#### **(C0.1) Give a general description and introduction to your organization.**

Trane Technologies plc is a \$12.5b global climate innovator. We bring efficient and sustainable climate solutions to buildings, homes and transportation driven by strategic brands Trane® and Thermo King® and an environmentally responsible portfolio of products and services. Prior to the separation of our Industrial segment on February 29, 2020, we announced a new organizational model and business segment structure designed to enhance our regional go-to-market capabilities, aligning the structure with our strategy and increased focus on climate innovation. Under the revised structure, we created three new regional operating segments from the former climate segment, which also serve as our reportable segments.

- Our Americas segment innovates for customers in the North America and Latin America regions. The Americas segment encompasses commercial heating and cooling systems, building controls, and energy services and solutions; residential heating and cooling; and transport refrigeration systems and solutions.
- Our EMEA segment innovates for customers in the Europe, Middle East and Africa region. The EMEA segment encompasses heating and cooling systems, services and solutions for commercial buildings, and transport refrigeration systems and solutions.
- Our Asia Pacific segment innovates for customers throughout the Asia Pacific region and India. The Asia Pacific segment encompasses heating and cooling systems, services and solutions for commercial buildings and transport refrigeration systems and solutions.

We generate revenue and cash primarily through the design, manufacture, sale and service of a diverse portfolio of market-leading brands, including Thermo King® and Trane® • We have approximately 36,000 employees and manufacturing and assembly operations in 34 plants globally: 23 plants in United States; 8 plants in Europe and the Middle East; 3 plants in Asia. Trane Technologies also maintains offices, warehouses and repair centers throughout the world. Trane Technologies plc is headquartered in Dublin, Ireland with executive offices in Davidson, North Carolina, USA.

Since 2009, we have focused on long-term sustainability goals to advance our environmental performance. In 2019 we announced our 2030 commitments which include:

Our Gigaton Challenge is aimed at reducing customer carbon emissions by one billion metric tons. This will require reducing emissions from products and services by 48% by 2030, which has been validated by the Science Based Targets initiative (SBTi). The Gigaton Challenge will be accomplished by:

- Accelerating clean technologies that heat and cool buildings in sustainable ways
- Increasing energy efficiency in buildings, homes, and transport environments
- Reducing food loss in the global cold chain
- Transitioning out of high-global warming potential refrigerants by 2030 (ahead of regulation)
- Designing systems for circularity
- Increasing access to cooling and fresh food

Our leading Leading by Example commitment is our operational goals with include:

- Achieving carbon neutral operations
- Delivering zero waste to landfills
- Becoming net positive with water use
- Reducing absolute energy consumption by 10%, compared to the 2019 baseline

Our Opportunity for All is Trane Technologies' initiative to achieve workforce diversity reflective of its communities and create pathways to green and STEM careers. We will:

- Achieve workforce diversity reflective of our communities
- Achieve gender parity (50% women) in leadership roles
- Maintain world-class safety metrics
- Provide market-competitive wages, benefits, and leading wellness offerings for workforce
- Invest \$100 million in building sustainable futures for under-represented students
- Dedicate 500,000 employee volunteer hours in our communities

Each year since 2008 we (as Trane Inc.) have responded affirmatively to the Carbon Disclosure Project Investor Questionnaire. In 2020, we were honored to be recognized by a variety of highly esteemed organizations. Most notably: • Listed on the 2020 Dow Jones Sustainability World Index and North America Index • listed as a constituent of the FTSE4Good Index Series .

Note about the data in this response:

On February 29, 2020 (Distribution Date), we completed our Reverse Morris Trust transaction (the Transaction) with Gardner Denver Holdings, Inc. (Gardner Denver) whereby we separated our former Industrial segment (Ingersoll Rand Industrial) through a pro rata distribution to shareholders of record as of February 24, 2020

We define our organizational boundary using the financial control approach. In 2014 we completed a corporate-wide review of Scope 1 and 2 GHG emissions for all owned and leased assets using the Greenhouse Gas Protocol accounting standards. We feel this more accurately reflects the direct impact of our operational footprint.

## C0.2

**(C0.2) State the start and end date of the year for which you are reporting data.**

|                | Start date     | End date         | Indicate if you are providing emissions data for past reporting years | Select the number of past reporting years you will be providing emissions data for |
|----------------|----------------|------------------|---|--|
| Reporting year | January 1 2020 | December 31 2020 | No  | <Not Applicable>   |

## C0.3

**(C0.3) Select the countries/areas for which you will be supplying data.**

Belgium  
 Brazil  
 Canada  
 China  
 Czechia  
 France  
 Germany  
 Ireland  
 Italy  
 Mexico  
 Puerto Rico  
 Saudi Arabia  
 Spain  
 Thailand  
 United States of America

## C0.4

**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

USD

## C0.5

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

Financial control

## C1. Governance

### C1.1

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

### C1.1a

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

| Position of individual(s)     | Please explain  |
|-------------------------------|---|
| Board-level committee         | Sustainability and climate change risks are a formal responsibility of our Board of Directors' Sustainability, Corporate Governance and Nominating Committee. The Committee sets the strategic direction for Trane Technologies' sustainability approach and is responsible for overseeing our carbon footprint and environmental health and safety performance. The committee meets quarterly to evaluate the company's sustainability performance and is informed regularly by the company's EVP and Chief Technology and Sustainability Officer (CTO). The CTO has the role of providing these and other updates to this Committee on a regular basis. The use of our products is our single largest source of greenhouse gas emissions, consequently our innovative solutions for buildings and transportation markets have the potential for greatest impact on climate change. Thus both Innovation and Trane Technologies' sustainability office report directly to the Office of the CTO. Example: In 2020, our Board voted to have all managers compensation tied to ESG, specifically to Scope 1 and 2 ghg reduction as well as Scope 3 product use ghg emission reduction. |
| Chief Executive Officer (CEO) | - Our strategy for addressing climate-related risks is endorsed by our President and CEO - The President and CEO is a member of the Board of Directors. The Board of Directors Compensation Committee reviews and approves the goals and objectives relevant to the compensation of the CEO, evaluates the CEO's performance against those goals and objectives and sets the CEO's compensation level based on this evaluation. - Greenhouse Gas reduction of our products is a CEO level performance metric, measured quarterly and annually and reviewed by the Compensation Committee annually.  |

**C1.1b**

**(C1.1b) Provide further details on the board's oversight of climate-related issues.**

| Frequency with which climate-related issues are a scheduled agenda item | Governance mechanisms into which climate-related issues are integrated   | Scope of board-level oversight | Please explain   |
|---|--|--------------------------------|--|
| Scheduled – all meetings  | <ul style="list-style-type: none"> <li>Reviewing and guiding strategy</li> <li>Reviewing and guiding major plans of action</li> <li>Reviewing and guiding risk management policies</li> <li>Reviewing and guiding business plans</li> <li>Setting performance objectives</li> <li>Monitoring implementation and performance of objectives</li> <li>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</li> </ul> | <Not Applicable>               | - The Sustainability, Corporate Governance and Nominating Committee oversees risks associated with sustainability; Climate change is integrated into our enterprise risk management process - Performance against our 2030 Sustainability Commitments is reviewed at least quarterly at the board level as part of our strategy development and reporting of progress. - GHG reduction of our products is a CEO level performance metric, measured quarterly and annually. |

**C1.2**

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

| Name of the position(s) and/or committee(s)   | Reporting line   | Responsibility  | Coverage of responsibility | Frequency of reporting to the board on climate-related issues |
|---|------------------|---|----------------------------|---|
| Other C-Suite Officer, please specify (Chief Technology and Sustainability Officer) | <Not Applicable> | Both assessing and managing climate-related risks and opportunities | <Not Applicable>           | Quarterly   |

**C1.2a**

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

- (i) The EVP and Chief Technology and Sustainability Officer (CTO) reports to the President and CEO.
- (ii) The use of our products (HVAC and refrigerated transport) is our single largest source of greenhouse gas emissions, consequently our innovative solutions for buildings and transportation markets processes have the potential for greatest impact on climate change. Thus Trane Technologies' sustainability office reports directly to the CTO
- (iii) The Office of the CTO works with business leadership teams to accelerate sustainable innovation and technology-led growth strategies and promote an innovation-centric mindset for the organization. He leads the enterprise strategy organization and oversees the full spectrum of innovation, technology and growth initiatives within the company, including advanced technologies; product, system and solution design; engineering; and product, service and sales commercialization. The CTO leads Trane Technologies' enterprise sustainability work (the VP of Sustainability reports to the Office of the CTO) and serves on various boards and advisory councils: our External Sustainability Advisory Council, an advisory group comprised of global thought leaders in infrastructure, energy policy and technology. Accountability for best practices is governed by our Internal Sustainability Strategy Council, of which our CTO is the executive sponsor. The CTO also serves on the board of The Alliance to Save Energy; is a member of the US Department of Energy's National Renewable Energy Lab Energy System Integration Technical Review Panel; Chair for the Board of Trustees for Discovery Place Science & Technology Center; member of the external advisory council for the P.C. Rossin College of Engineering and Applied Science at Lehigh University.
- (iv) Product GHG is a metric on the CTO's goals, monitored quarterly and annually. The External Sustainability Advisory Council (of which our CTO is a member) meets three times a year to review progress and advise on strategic direction. The Internal Sustainability Strategy Council (of which our CTO is the executive sponsor) meets quarterly to review progress against all sustainability targets, including greenhouse gas emissions of our operations and products, best practices. This Council has accountability for sustainability best practices.

### C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

|       | Provide incentives for the management of climate-related issues | Comment |
|-------|---|---------|
| Row 1 | Yes   |         |

### C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

| Entitled to incentive         | Type of incentive | Activity incentivized      | Comment  |
|-------------------------------|-------------------|----------------------------|--|
| Chief Executive Officer (CEO) | Monetary reward   | Emissions reduction target | Our management's Annual Incentive Matrix remuneration scheme includes environmental, sustainability and workforce diversity goals, in addition to financial targets. We have both a Scope 1 and 2 ghg reduction target as well as a Scope 3 ghg reduction target |
| Management group              | Monetary reward   | Emissions reduction target | Our management's Annual Incentive Matrix remuneration scheme includes environmental, sustainability and workforce diversity goals, in addition to financial targets. We have both a Scope 1 and 2 ghg reduction target as well as a Scope 3 ghg reduction target |

## C2. Risks and opportunities

### C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

### C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

|             | From (years) | To (years) | Comment   |
|-------------|--------------|------------|---|
| Short-term  | 0            | 1          |   |
| Medium-term | 1            | 5          |   |
| Long-term   | 5            | 10         | The range here is really intended to be 5 to 10 years plus. |

### C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

"Substantive impact" to our business may vary depending upon the circumstances. There is no single threshold that would appropriately measure impact in all cases. We align the goals for our company to strategic targets taking into account the Company's shareholders, other stakeholders, our business operations and strengths and our values.

### C2.2

**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Medium-term  
Long-term

**Description of process**

Climate related risks are integrated in our Enterprise Risk Management process with a time horizon of medium term or 1-5 years for the ranking of risks. We perform a sustainability Materiality Assessment, including climate-related issues within that time frame (1-5 years), or when there are substantial changes to the organization (M&A) to assess relevant sustainability topics including those related to climate change. Our most recent Materiality Assessment was performed in September 2018. Ranking of sustainability topics is based on a 10 year time frame. We perform climate related scenario assessments, specifically for refrigerant transition, and the time horizon for consideration of such transition risks is 2029 or 10 years. We monitor climate-related risks quarterly by reporting progress and updates during Enterprise Risk Management committee meetings. For example, the use of our products is our single largest source of greenhouse gas emissions, consequently our innovative solutions for buildings, transportation markets and industrial processes have the potential for greatest impact on climate change, in order to assess risk we conduct a transition risk case study. In this study, we aim to act as a catalyst to address greenhouse gas emissions industry-wide. To do this, we are addressing our own operations but, more significantly, our products. Many of our products use refrigerants, a significant source of greenhouse gas emissions. We are leading the industry by committing to reduce the greenhouse gas refrigerant footprint of our products and incorporate lower GWP alternatives across our portfolio by 2030. The majority of the carbon footprint of our products is from the use of energy, specifically, electricity. Emissions from refrigerants are approximately 10% of the total carbon footprint. We are addressing efficiency and carbon reductions with a target of reducing our customers' emissions by 1 billion metric tons CO<sub>2</sub>e from business as usual by 2030. Another example: in 2015 we launched the EcoWise portfolio of products; an endorsement given to products with next-generation, low global warming potential refrigerants and high efficiency operation. In 2019 we increased the EcoWise portfolio and since 2013 have avoided approximately 21 million metric tons of CO<sub>2</sub>e globally. Physical risk case study: Annually, as a part of our climate change risk management process, we conduct a risk assessment using the World Resources Institute (WRI) Aqueduct (TM) tool and designate sites that score medium-high or high for water stress. We consider physical risk quality and quantity, as well as regulatory and reputational risk. Some of our manufacturing sites are considered to be in areas of medium-high to high water stress. For these sites we have instituted a net positive water commitment by 2030. In addition, we have enterprise water management policies for Water supply management, Storm water management and Wastewater discharge management. Planning for an extreme weather event, and other crises, is consistent with our core corporate values. For example: The Trane Technologies Crisis Management Resource Guide and our Facility Crisis Management Plans, have been developed to help manage a crisis successfully at the local level by minimizing impact through a structured, timely and practiced response.

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**C2.2a**

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**(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?**

|                     | Relevance & inclusion              | Please explain   |
|---------------------|------------------------------------|--|
| Current regulation  | Relevant, always included          | Integrated into materiality assessment using the description: Regulatory Compliance. Our operations are subject to a number of laws and regulations, including laws related to the environment. Any violations of applicable laws could lead to significant penalties, fines or other sanctions. For example: many of our products (Trane HVAC and Thermo King) use refrigerants. Current laws (eg. Section 608 of the Clean Air Act) regulate the handling of refrigerants. Federal law prohibits refrigerant venting but state and local enforcement is severely lacking.  |
| Emerging regulation | Relevant, always included          | Integrated into enterprise risk management using the description: The risk that global climate change may negatively affect Trane Technologies' operations due to changes in legislative and regulatory requirements or potential defunding of climate-related international agreements or initiatives. Either of these factors could result in increased volatility of renewable and non-renewable energy prices; increased cost of compliance (e.g. price on carbon) or other increases in production costs. Example risk: Refrigerants are essential to many of our products (for example, Trane HVAC equipment and Thermo King refrigerated transport equipment) and there is a growing awareness and concern regarding global warming potential of such materials. As such, national, regional and international regulations and policies are being implemented to curtail their use. An example of this risk is: Regulation is passed in a region that forces us to curtail the use of a particular refrigerant that is widely used in our HVAC products resulting in stranded operational assets. The Kigali Amendment to the Montreal Protocol requires ~80% reduction in HFCs based on CO2eq, but some jurisdictions are regulating phase out dates of particular equipment and setting GWP limits like California, which is proposing a regulation that will no longer allow R410A in the majority of HVAC equipment around the world.   |
| Technology          | Relevant, always included          | Integrated into materiality assessment using the description: Technology and Innovation: Innovation in products, systems, and manufacturing processes to meet different market needs and megatrends such as climate change. Integration of automation into product design and customer solutions. Example risk: We must develop and commercialize new products and services in a rapidly changing technological and business environment in order to remain competitive in our current and future markets and in order to continue to grow our business. The development and commercialization of new products and services require a significant investment of resources and an anticipation of the impact of new technologies and the ability to compete with others who may have superior resources in specific technology domains. We cannot provide any assurance that any new product or service will be successfully commercialized in a timely manner, if ever, or, if commercialized, will result in returns greater than our investment. Investment in a product or service could divert our attention and resources from other projects that become more commercially viable in the market. We also cannot provide any assurance that any new product or service will be accepted by our current and future markets. Failure to develop new products and services that are accepted by these markets could have a material adverse impact on our competitive position, results of operations, financial condition, and cash flows. For example, 90% of our portfolio addresses greater need for energy efficiency (Trane air conditioning, Thermo King APUs), a risk could be failure to develop new products that are accepted in markets demanding more energy efficient solutions. |
| Legal               | Not relevant, explanation provided | For Trane Technologies, because our biggest climate-related impact is from the energy and refrigerant use of our products, climate change related legal risks stem from regulation of refrigerants and energy efficiency. We address both future and current legal risk under current and emerging regulation.   |
| Market              | Not relevant, explanation provided | Climate-related risks from market shifts in demand for our products would stem from regulatory changes (refrigerant and/or energy efficiency -Trane HVAC) and our ability to innovate to meet the changing needs of customers. This risk category is therefore covered under current regulation, emerging regulation and technology.   |
| Reputation          | Relevant, always included          | Integrated into Enterprise Risk Management using the description: The risk that actual or perceived incidents or actions (e.g. environmental damage) at Trane Technologies may lead to reputation or brand damage. For example: many of our products (Trane HVAC and Thermo King) use refrigerants. Current laws regulate the handling of refrigerants. Failure to properly manage refrigerants could lead to reputation damage. Federal law prohibits refrigerant venting but state and local enforcement is severely lacking.  |
| Acute physical      | Relevant, always included          | Integrated into materiality assessment using the description: Disaster preparedness and response - Emergency preparedness and disaster relief strategy, deployment of company resources and talent to disaster areas Example risk: Natural disasters or other unexpected events may disrupt our operations, adversely affect our results of operations and financial condition, and may not be covered by insurance. The occurrence of one or more unexpected events including hurricanes, fires, earthquakes, floods and other forms of severe weather, health epidemics or pandemics or other contagious outbreaks or other unexpected events in the U.S. or in other countries in which we operate (for example our manufacturing plants in Arecibo PR and Lynn Haven FL) or are located could adversely affect our operations and financial performance. Natural disasters, power outages, health epidemics or pandemics or other contagious outbreaks or other unexpected events could result in physical damage to and complete or partial closure of one or more of our plants, temporary or long-term disruption of our operations by causing business interruptions or by impacting the availability and cost of materials needed for manufacturing. Existing insurance arrangements may not provide full protection for the costs that may arise from such events, particularly if such events are catastrophic in nature or occur in combination. The occurrence of any of these events could increase our insurance and other operating costs or harm our sales in affected areas.   |
| Chronic physical    | Relevant, always included          | Integrated into materiality assessment using the description: Climate Risk Management - Business resilience and adaptation to climate-related physical and transitional risks and opportunities. For example: 13 of our manufacturing and large offices are in areas of medium high or high water stress (Bari Italy, Charnes France, Golbey France, Monterrey MX, Southampton UK, Taicang China (2), Bangplee Thailand, Zhongshan China, Trenton NJ, Atlanta GA, Barcelona Spain, Hastings NE).   |

**C2.3**

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

**C2.3a**

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Risk 1

**Where in the value chain does the risk driver occur?**

Downstream

**Risk type & Primary climate-related risk driver**

|                     |  |
|---------------------|--|
| Emerging regulation | Mandates on and regulation of existing products and services |
|---------------------|--|

**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Global climate change and related regulations could negatively affect our business. Refrigerants are essential to many of our products and there is concern regarding the global warming potential of such materials. As such, national, regional and international regulations and policies are being implemented to curtail their use. As regulations reduce the use of the current class of widely used refrigerants, our next generation solutions (EcoWise portfolio) are already being adopted globally, with sales in more than 30 countries to date. Our 2030 sustainability targets encourage our product teams to offer a full line of next generation, lower global warming potential products by 2030 without compromising safety or energy efficiency. Currently we call this our EcoWise portfolio. Additionally, we are committed to increase energy efficiency and reduce the

greenhouse gas footprint of our operations by 50 percent by 2030. While we are committed to pursuing these sustainable solutions, there can be no assurance that our commitments will be successful, that our products will be accepted by the market, that proposed regulation or deregulation will not have a negative competitive impact or that economic returns will match the investment that we are making in new product development. Concerns regarding global climate change have resulted in the Kigali amendment to the Montreal Protocol, pursuant to which countries have agreed to a scheduled phase down of certain high global warming potential refrigerants. Countries may pass regulations that are even more restrictive than this international accord. Some countries, including the U.S., have not yet ratified the amendment and there could be lower customer demand for next generation products in these countries. There continues to be a lack of consistent climate legislation, which creates economic and regulatory uncertainty. In addition, the U.S. withdrawal from the Paris Accord could affect our competitiveness in certain markets. Such regulatory uncertainty extends to future incentives for energy efficient buildings and vehicles and costs of compliance, which may impact the demand for our products, obsolescence of our products and our results of operations.

**Time horizon**

Medium-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

4980000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The above is an estimate based on: Approximately 40% of our portfolio revenue relies on the use of refrigerants. Our total revenue was \$12.45b in 2020.

**Cost of response to risk**

500000000

**Description of response and explanation of cost calculation**

Costs associated with refrigerant evaluation and development of technologies are primarily in R&D. As part of our global climate commitment we have invested \$500 million from 2015-2020 in product-related research and development to catalyze the long term reduction of GHG emissions industry-wide. Many of our products use refrigerants. We have committed to reduce the greenhouse gas refrigerant footprint of our products by 48% per product sold by 2030 and incorporate lower GWP alternatives across our portfolio by 2030. In 2015 we launched the EcoWise portfolio of products - next-generation, low global warming potential refrigerants and high efficiency operation. In 2019 we expanded the EcoWise portfolio with new high-efficiency chillers, and since 2013 have avoided approximately 35 million metric tons of CO2e globally. We want our customers to have choices and guidance about how and when to transition to low GWP refrigerant alternatives. We continue to introduce and evaluate next-generation refrigerants for global markets to ensure we have the best balance of performance, safety, reliability and availability as well as a strong service organization and supply chain in place to support the transition. Our next-generation chillers are being sold in more than 30 countries, most of which do not have regulations in place. Many countries and U.S. states are acknowledging the benefits of these products on emissions and are introducing regulations that require them. We continue working with suppliers through our 2030 Sustainability Commitments to identify and develop a viable, safe, long-term, low GWP alternative to R-410A, which is the most prevalent hydrofluorocarbon (HFC) used in heating, ventilation and air conditioning (HVAC) today. This alternative is crucial to the success of the Kigali Agreement to the Montreal Protocol, which seeks to phase down HFCs globally by approximately 85% by 2046.

**Comment**

**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

|                |  |
|----------------|--|
| Acute physical | Increased severity and frequency of extreme weather events such as cyclones and floods |
|----------------|--|

**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

The occurrence of one or more unexpected events including hurricanes, fires, earthquakes, floods and other forms of severe weather, health epidemics or pandemics or other contagious outbreaks or other unexpected events in the U.S. or in other countries in which we operate (we have specifically identified our Commercial HVAC plant in Lynn Haven FL and our Thermo King plant in Arecibo PR ) or are located could adversely affect our operations and financial performance. Natural disasters, power outages, health epidemics or pandemics or other contagious outbreaks or other unexpected events could result in physical damage to and complete or partial closure of one or more of our plants, temporary or long-term disruption of our operations by causing business interruptions or by impacting the availability and cost of materials needed for manufacturing. Existing insurance arrangements may not provide full protection for the costs that may arise from such events, particularly if such events are catastrophic in nature or occur in combination. The occurrence of any of these events could increase our insurance and other operating costs or harm our sales in affected areas.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium-low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

3979000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

the above is an estimate based on: Currently 28% of our production plants representing approximately 46% of Cost of Goods Sold are located in locations at risk from typhoons and cyclones. 46% of our 2020 COGS ( \$8.65 B )= 3.979B As water quality and availability are the greatest risks to production, we anticipate that this represents the majority of our risks associated with physical climate parameters.

**Cost of response to risk**

0

**Description of response and explanation of cost calculation**

Annually, we conduct a risk assessment using the World Resources Institute (WRI) Aqueduct (TM) tool and designate sites that score medium-high or high for water stress. We consider physical risk quality and quantity, as well as regulatory and reputational risk. In 2019 13 sites globally were considered to be in areas at risk. For these sites we have a 2020 target in place to reduce water consumption by 25%, and a 2030 target to be net water positive. Trane Technologies achieved the 2020 targets given these sites reduced their water consumption by 39% since 2013. We have enterprise water management policies for Water supply management, Storm water management and Wastewater discharge management. There is no cost of response to this risk as it is rolled into our water management process. Planning for an extreme weather event, and other crisis, is consistent with our core corporate values. For example: The Trane Technologies Crisis Management Resource Guide and our Facility Crisis Management Plans, have been developed to help manage a crisis successfully at the local level by minimizing impact through a structured, timely and practiced response

**Comment**

**Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

|                     |  |
|---------------------|--|
| Emerging regulation | Other, please specify (Impact due to changes in climate related regulations or initiatives ) |
|---------------------|--|

**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Higher energy and materials prices could adversely affect our financial results. We are exposed to large fluctuations in the price of petroleum-based fuel due to the instability of current market prices as well as fluctuations in raw materials and component pricing. Higher energy and materials costs increase our operating costs and the cost of shipping our products, and supplying services, to customers around the world. Also, refrigerants are essential to many of our products (for example, Trane HVAC equipment and Thermo King refrigerated transport equipment) and there is a growing awareness and concern regarding global warming potential of such materials. As such, national, regional and international regulations and policies are being implemented to curtail their use which could impact the pricing of refrigerants. Trane Technologies is a diversified, global company. We generate revenue and cash primarily through the design, manufacture, sale and service of a portfolio of commercial products.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

2595000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Although energy costs are only ~5% of COGS, materials and supplies that also are highly energy intensive make up about ~25% of our COGS. 8.65B x 30% (energy + energy intensive materials/components)= 2.595B

**Cost of response to risk**

0

**Description of response and explanation of cost calculation**

We have this risk built into enterprise risk management using the description: The risk that global climate change may negatively affect Trane Technologies' operations due



to changes in legislative and regulatory requirements or potential defunding of climate-related international agreements or initiatives. We have a commitment to reduce absolute energy consumption by 10% by 2030 as well as a commitment to be 100% renewable energy powered by 2040.

**Comment**

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**C2.4**

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**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

**C2.4a**

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**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

Energy Efficiency: Nearly half of all global energy consumption takes place in commercial, industrial and residential buildings, with heating, ventilation and air conditioning (HVAC) and lighting systems representing the greatest opportunity for improvement. Given the prevalence of energy consuming Trane Technologies products in the built environment, product efficiency regulation is important to us. Energy efficient and low emission products, and Technology and innovation are the two most material climate-related issues for the company. More than 90 percent of our product portfolio directly addresses demands for greater energy efficiency with lower greenhouse gas (GHG) emissions in buildings, homes, and transport markets around the world. Examples include Trane Technologies ECTV CenTraVac Chiller, Pueblo Chiller, Trane Sintesis eXcellent, EU Trane CenTraVac, MEA Trane CenTraVac, Thermo King Truck & Trailer SLXe and SLXi, and Cryotech refrigeration. Therefore, we make reducing energy use and improving the carbon footprint of our products two primary objectives of our sustainability efforts.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

2320000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The above is an estimate based on: More than 90 percent of our product portfolio directly addresses demands for greater energy efficiency with lower greenhouse gas (GHG) emissions in buildings, homes and transport markets around the world. We reported net revenues of \$12.45 B in 2020. We expect demand for our energy-efficient products and services will increase with effective product efficiency regulation. In 2020 we launched 54 new products and services, spanning nearly every business and region, and our average innovation revenue from 2016 through 2020 was 18.6 percent. We estimate that 18.6 percent of our 2020 revenue is the potential financial impact.  $.186 \times 12.45B = 2.32B$

**Cost to realize opportunity**

165000000

**Strategy to realize opportunity and explanation of cost calculation**

Product development and innovation: Our portfolio most directly affects the environment during the in-use phase of the product's life cycle, so designing for energy efficient operation is paramount. Trane Technologies supports cost effective policies that facilitate market transition to more energy efficient technologies. We actively advocate for legislative efforts to facilitate the increased use of energy efficiency technologies in the residential and commercial sectors while fostering job creation. Costs associated with development of energy efficient technologies and management of policy advocacy are primarily in R&D. Our R&D spend in 2020 was 165m USD. We define our customer carbon footprint as those emissions we are able to avoid through the use of our products when compared to a business as usual scenario. For example, we are able to optimize the HVAC system of a building through controls and monitoring, in a way that reduces degradation in performance over time. The emissions avoided are what we count. If not for our actions the emissions from the use of energy and refrigerants would be much greater. Our proprietary Trane Intelligent Services can monitor, analyze and provide recommendations for energy reduction changes to the building mechanical system and HVAC operations that can directly reduce electricity consumption and demand in real time. Another example would be increasing energy efficiency of refrigerated transport and the reduction of food loss in developing markets by innovating and deploying new solutions for the cold chain there. Trane Technologies recently introduced "Advancer," Thermo King's (TK) all new refrigeration unit. This design offers significant performance and sustainability improvements over previous trailer refrigeration units. Field trials were conducted with comparison tests against both TK's predecessor unit and competitive units proving the Advancer is up to 40 percent quicker to pull down and up to 30 percent more fuel-efficient than the market

average. On-the-road and in-use, the new product results in a 30 percent reduction of CO2 emissions compared to previous units. Advancer also provides sustainability gains in production – the manufacturing process for the product uses 65 percent less energy than our current trailer units.

#### Comment

---

#### Identifier

Opp2

#### Where in the value chain does the opportunity occur?

Downstream

#### Opportunity type

Products and services

#### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

#### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

#### Company-specific description

Changes in weather patterns and seasonal fluctuations affect certain segments of our business. Demand for certain segments of our products and services is influenced by weather conditions. For instance, Trane's sales of Heating, Ventilating and Air Conditioning equipment have historically tended to be seasonally higher in the second and third quarters of the year because, in the U.S. and other northern hemisphere markets, summer is the peak season for sales of air conditioning systems and services. Therefore, unseasonably warm trends during the summer season could positively affect certain segments of our business and impact overall results of operations.

#### Time horizon

Short-term

#### Likelihood

Very likely

#### Magnitude of impact

Medium-high

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

3735000000

#### Potential financial impact figure – minimum (currency)

<Not Applicable>

#### Potential financial impact figure – maximum (currency)

<Not Applicable>

#### Explanation of financial impact figure

The above is an estimate based on: Total Revenues (which includes Trane and American Standard Heating and Air Conditioning; energy services and building automation through Trane Building Advantage and Nexia; and Thermo King transport temperature control solutions) were \$12.45b USD in 2020. We have calculated our Clean Revenue based on the Corporate Knights definition and methodology to be 30% of our total revenue. 30% of 12.45B is 3.735B

#### Cost to realize opportunity

165000000

#### Strategy to realize opportunity and explanation of cost calculation

Innovation and Growth: Our growth strategy is guided by the Trane Technologies business operating system, which is foundational to what we do and how we run the company. Our business operating system extends from strategy development, to how we connect with our customers and help make them successful to how Trane Technologies is paid for the customer value we create. Leveraging our business operating system, we use customer analytics tools to gain greater insight into our customers and competitors to make strategic choices about the most promising and profitable growth opportunities. Our Product Growth Teams (PGT) bring together leaders in product management, global integrated supply chain (GISC) and engineering to evaluate the entire value stream. Costs associated with development of energy efficient technologies and management of policy advocacy are primarily in R&D. Our R&D spend in 2020 was 165m USD.

#### Comment

---

#### Identifier

Opp3

#### Where in the value chain does the opportunity occur?

Downstream

#### Opportunity type

Products and services

#### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

#### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

#### Company-specific description

A little less than half of the world's population today lives in an urban environment, but trends suggest that an additional 350 million people will be added to the urban population over the next 15 years. This means that significant additions to urban capacity, in the form of housing, infrastructure and facilities, will be required to help cities keep up with a rapid influx of people. Driving innovation for developing markets is an issue of significant importance to our stakeholders and Trane Technologies. We are working strategically to increase our exposure to emerging markets. We are also strategically committed to addressing social and environmental imperatives to assist in expanding energy and other resource efficiency knowledge in developing regions. As a company that provides solutions for energy efficiency, economic productivity and greenhouse gas mitigation - through brands such as Trane and American Standard that provide heating, ventilation and air conditioning systems for commercial and residential buildings; Thermo King provider of transport temperature control solutions - we are positioned to help meet these challenges. The expected population shift can

lead to an increased demand for these products and solutions.

**Time horizon**

Long-term

**Likelihood**

Likely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1992000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

the above is an estimate based on: We expect the global socio-economic trend of increased urbanization will result in accelerated growth in developing markets. Overall, emerging market revenues made up 16% of the company's revenue for 2020. We reported net revenues of \$12.45B in 2020.  $.16 \times 12.45B = 1.992B$

**Cost to realize opportunity**

165000000

**Strategy to realize opportunity and explanation of cost calculation**

To accelerate growth in emerging markets we are focusing on innovation to serve these markets. We use a three-step process to prioritize our investments in these markets. 1) we consider the macroeconomic and geopolitical conditions of an emerging market at the country level 2) we perform an analytical assessment of the current attractiveness of our business, considering competitors, customers and channels 3) we consider how the attractiveness of this business will evolve. We employ approximately 3,400 technologists at 14 engineering and technology centers globally, including facilities in Prague, Czech Republic and Shanghai, China. Our innovation effort have been particularly successful in China which makes up approximately 75% of our emerging market revenue. We have established large local teams with manufacturing facilities and strong local channel partners. For example: The Trane HVAC business in China is participating in the 'Coal to Electricity' program which is intended to significantly lower coal consumption for winter heating in North China, prevent air pollution and improve the air quality in China over the long term. Costs associated with development of energy efficient technologies and management of policy advocacy are primarily in R&D. Our R&D spend in 2020 was 165m USD.

**Comment**

**C3. Business Strategy**

**C3.1**

**(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?**

Yes, and we have developed a low-carbon transition plan

**C3.1a**

**(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?**

|       | Is your low-carbon transition plan a scheduled resolution item at AGMs?              | Comment  |
|-------|--|--|
| Row 1 | No, but we intend it to become a scheduled resolution item within the next two years | In 2020, our Board of Directors published a letter in our Proxy on the Urgency of Sustainability of our low carbon transition commitments. |

**C3.2**

**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**

Yes, qualitative

**C3.2a**

**(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.**

| Climate-related scenarios and models applied                                       | Details  |
|--|--|
| Other, please specify (ratification of Kigali, Global HFC transition based on GWP) | We regularly perform scenario assessments to determine climate-related strategy, specifically related to product strategy with respect to climate related drivers such as greenhouse gas emissions and energy efficiency. These scenario assessments are at the business unit level and incorporate standard work. Our most critical climate-related scenarios center around the use and phase-out of high – GWP refrigerants. More than 25% of our revenue is from products that use refrigerants and the phase-out of high GWP refrigerants impacts two thirds of our businesses globally. These include Trane commercial and residential HVAC, Thermo King refrigerated transport. Boundaries: All business units that sell products that use refrigerants, across all regions globally, Time horizon: To align with the Kigali Amendment, our refrigerant scenarios assume a 2029 horizon because that is when the technology is available. We also consider a longer-term horizon of 2046. Methodology: Inputs: regulatory drivers, sales, competitive new releases, efficiency of new refrigerants, availability of options, supplier adoption. Assumptions: early movers, ratification of Kigali, Global HFC transition based on GWP. Analytical methods: testing new refrigerants Outcomes: led to new product development and technology projects to explore new solutions. Changes to strategy: We made a global commitment to reduce the refrigerant related footprint of our products by 48% per product sold by 2030, as approved by SBTi. and also a commitment to reduce our customer carbon emissions by 1 gigaton. Case study: We introduced the EcoWise portfolio of products designed to lower environmental impact with next generation, low global warming potential refrigerants and high efficiency operation. We expanded the EcoWise portfolio in 2020 with the introduction of new high efficiency chillers. Monitoring: we measure and report quarterly the greenhouse gas emissions of our products in order to report progress against our Climate Commitment Reporting: EcoWise revenue is reported quarterly at the business unit level. Product GHG emissions are reported quarterly at the CEO and CTO level. The results are reported in our annual sustainability supplement and annual report. |

**C3.3**

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

|                                 | Have climate-related risks and opportunities influenced your strategy in this area? | Description of influence  |
|---------------------------------|---|---|
| Products and services           | Yes   | Our climate commitment requires us to offer a full line of next generation, lower global warming potential products by 2030 without compromising safety or energy efficiency. From 2021-2024 we plan to introduce high efficiency products that will aim to help us meet our gigaton challenge, which is reducing our customer carbon footprint by 1 gigaton, which includes our Scope 3 product emissions. From 2022-2024 we are also have strategies in place to transition from high GWP refrigerants before regulations. Also, there continues to be a lack of consistent climate legislation, which creates economic and regulatory uncertainty. In addition, the U.S. withdrawal from the Paris Accord could affect our competitiveness in certain markets. Such regulatory uncertainty extends to future incentives for energy efficient buildings and vehicles and costs of compliance, which may impact the demand for our products, obsolescence of our products and our results of operations. An example of a substantial decision and product related investments we have made is in the development of Ecowise offerings, specifically in Trane® CenTraVac™ chillers that can Operate with either R-123 or with one of our next-generation refrigerants, R-514A or R-1233zd, both of which offer ultra-low GWP levels of less than 2. By offering multiple refrigerant options in our larger-tonnage chillers, we have the flexibility to better optimize solutions for our customers’ application needs. Working with other industry leaders, Trane is helping find new refrigerant solutions like R-452B, a next-generation, low GWP refrigerant with strong safety, design and sustainability performance. |
| Supply chain and/or value chain | Yes   | We source raw materials and certain critical parts from suppliers around the world. Many sourced goods from suppliers originate in countries that are prone to physical climate risks associated with severe weather events, global pandemics, and other climate related disruptions. We have robust management processes in place to monitor our supply base to detect any such disruptions, which requires substantial managerial and technology investments. We also require suppliers to report on climate related targets such as energy usage and ghg emissions as a part of our sourcing selection. We use risk management and assessment tools to create transparency to such risks in the supplier eco-system.   |
| Investment in R&D               | Yes   | As regulations require changes in refrigerants, current products will have to be optimized or redesigned which increases our product development and marketing costs. Costs associated with refrigerant evaluation and development of technologies are primarily in R&D. As part of our global climate commitment planned to invest \$500m from 2015 - 2020 in product-related research and development to catalyze the long-term reduction of GHG emissions industry-wide. One example is our strategic decision to invest in the development of lower GWP refrigerants like R-452B that can help the industry transition to lower GWP but still deliver strong safety and performance in a more sustainable way.  |
| Operations                      | Yes   | Trane understands the large role heating and cooling plays on the worlds emissons (~25% of global emissions come from heating and cooling buildings) and therefore we have set strong goals based on climate science and aligned with SBTi. As part of our 2030 sustainability commitments, we are targeting to achieve carbon neutral operations, net positive water position in water stressed areas and zero waste to landfill. In order to support the green energy transition we also have committed to achieving 10% absolute energy reduction by 2030 as well as 100% renewable energy by 2040. All of these are to enable a low carbon economy. These sustainability objectives for our operations have been incorporated as central tenets of our enterprise strategy. All businesses have incorporated these goals into their strategies. As an example, Trane’s Columbia, SC, facility innovates, produces and tests Trane heating, cooling and ventilation products, including HVAC components and units for the company’s Commercial HVAC business. Trane applies expertise in environmental technology and energy conservation to reduce energy use, greenhouse gas emissions and waste-to-landfill. Trane installed a 1,342 kW GE Solar PV power system, which reduces more than 74,000 metric tons of greenhouse gas emissions over the 25 year lifespan of the system, and puts power directly back onto the grid. The energy produced over the lifetime of the solar power system is equivalent to 4,006,810 passenger car miles driven; 1,220,258 gallons of water used by a coal fired power plant; energy consumed by 153 houses each year; or planting 43,150 trees                                   |

**C3.4**

**(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

|       | Financial planning elements that have been influenced | Description of influence  |
|-------|---|---|
| Row 1 | Revenues  | We have SBU level targets for revenue and performance related to emissions reductions from our products and solutions. Each SBU develops a plan for meeting the tar our portfolio of products designed to lower environmental impact with next generation, low global warming potential refrigerants and high efficiency operation. As part of our annual and 3 year planning process, we focus our investment prioritization decisions on a variety of factors, including the impact of proposed investments on our ability to deliver on our sustainability commitments. Investments in products and plants are favourably considered if they advance our sustainability objectives. The businesses are encouraged to shift their product and service offerings that advance our commitments to energy efficiency and sustainability through reduction of emissions etc. Our plans extend such prioritization beyond internal organic growth initiatives to include customer choices that favour reduction of greenhouse gas emissions, and also acquisition target evaluations. For example, we made a considerable investment in upgrading one of our manufacturing facilities in Trenton NJ by installing solar panels at the plant location thereby reducing the energy consumption, this project was a material capital investment for the business that was evaluated, approved, and implemented as part of the financial planning process. Using the Corporate Knights methodology for Clean Revenue we have calculated that 30% of our revenue in 2020 is considered clean revenue which is 12.45B x .3= \$3.735B |

### C3.4a

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(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

N/A

## C4. Targets and performance

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### C4.1

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(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

### C4.1a

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(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

**Target reference number**

Abs 1

**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s) (or Scope 3 category)**

Scope 3: Use of sold products

**Base year**

2019

**Covered emissions in base year (metric tons CO2e)**

244000000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

100

**Target year**

2030

**Targeted reduction from base year (%)**

48

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

126880000

**Covered emissions in reporting year (metric tons CO2e)**

242000000

**% of target achieved [auto-calculated]**

1.70765027322404

**Target status in reporting year**

Underway

**Is this a science-based target?**

Yes, and this target has been approved by the Science-Based Targets initiative

**Target ambition**

1.5°C aligned

**Please explain (including target coverage)**

We have committed reduce scope 3 GHG emissions 48% per product sold from the use of sold products from our 2019 baseline. Our 2019 baseline is 244 M mt CO2e.

---

**Target reference number**

Abs 2

**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s) (or Scope 3 category)**

Scope 1+2 (market-based)

**Base year**

2019

**Covered emissions in base year (metric tons CO2e)**

423537

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

100

**Target year**

2030

**Targeted reduction from base year (%)**

50

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

211768.5

**Covered emissions in reporting year (metric tons CO2e)**

348771

**% of target achieved [auto-calculated]**

35.3055341091805

**Target status in reporting year**

Underway

**Is this a science-based target?**

Yes, and this target has been approved by the Science-Based Targets initiative

**Target ambition**

1.5°C aligned

**Please explain (including target coverage)**

Our Scope 1 and 2 ghg reduction target is to reduce GHG emissions 50% by 2030 from a 2019 baseline year.

**C4.2**

**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

No other climate-related targets

**C4.3**

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

**C4.3a**

**(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

|                           | Number of initiatives | Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *) |
|---------------------------|-----------------------|--|
| Under investigation       | 14                    | 0  |
| To be implemented*        | 25                    | 13954  |
| Implementation commenced* | 4                     | 39443  |
| Implemented*              | 25                    | 3644   |
| Not to be implemented     | 0                     | 0  |

**C4.3b**

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

**Initiative category & Initiative type**

|                                |   |
|--------------------------------|---|
| Energy efficiency in buildings | Building Energy Management Systems (BEMS) |
|--------------------------------|---|

**Estimated annual CO2e savings (metric tonnes CO2e)**

12

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Adjustment of office heating schedule

---

**Initiative category & Initiative type**

|                                |  |
|--------------------------------|--|
| Energy efficiency in buildings | Heating, Ventilation and Air Conditioning (HVAC) |
|--------------------------------|--|

**Estimated annual CO2e savings (metric tonnes CO2e)**

155.96

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

28709

**Investment required (unit currency – as specified in C0.4)**

905000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

Replacement and upgrades to HVAC equipment

---

**Initiative category & Initiative type**

|                                |          |
|--------------------------------|----------|
| Energy efficiency in buildings | Lighting |
|--------------------------------|----------|

**Estimated annual CO2e savings (metric tonnes CO2e)**

244.4

**Scope(s)**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

31350

**Investment required (unit currency – as specified in C0.4)**

38000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

Upgrade system to LED

---

**Initiative category & Initiative type**

|                                |                     |
|--------------------------------|---------------------|
| Energy efficiency in buildings | Maintenance program |
|--------------------------------|---------------------|

**Estimated annual CO2e savings (metric tonnes CO2e)**

10

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Boiler tune up and steam trap maintenance

---

**Initiative category & Initiative type**

|   |                 |
|---|-----------------|
| Energy efficiency in production processes | Electrification |
|---|-----------------|

**Estimated annual CO2e savings (metric tonnes CO2e)**

990

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

250800

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Electrification of process heating

---

**Initiative category & Initiative type**

|   |                               |
|---|-------------------------------|
| Energy efficiency in production processes | Machine/equipment replacement |
|---|-------------------------------|

**Estimated annual CO2e savings (metric tonnes CO2e)**

165

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

199500

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Boiler replacement

---

**Initiative category & Initiative type**

|   |                      |
|---|----------------------|
| Energy efficiency in production processes | Process optimization |
|---|----------------------|

**Estimated annual CO2e savings (metric tonnes CO2e)**

74

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary



**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Heated paint booth removal

---

**Initiative category & Initiative type**

|   |                      |
|---|----------------------|
| Energy efficiency in production processes | Process optimization |
|---|----------------------|

**Estimated annual CO2e savings (metric tonnes CO2e)**

13.85

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

3161

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Reduced operating temperature of parts washer bath with a corresponding reduction in natural gas usage

---

**Initiative category & Initiative type**

|                               |   |
|-------------------------------|---|
| Fugitive emissions reductions | Other, please specify (Paint reformulation and elimination of painting process) |
|-------------------------------|---|

**Estimated annual CO2e savings (metric tonnes CO2e)**

426.4

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

---

**Initiative category & Initiative type**

|                               |                 |
|-------------------------------|-----------------|
| Low-carbon energy consumption | Liquid biofuels |
|-------------------------------|-----------------|

**Estimated annual CO2e savings (metric tonnes CO2e)**

15.7

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Switched to bio-LPG

---

**Initiative category & Initiative type**

|                               |          |
|-------------------------------|----------|
| Low-carbon energy consumption | Solar PV |
|-------------------------------|----------|

**Estimated annual CO2e savings (metric tonnes CO2e)**

450

**Scope(s)**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

17100

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Contact for a direct supply of electricity generated via a solar/photovoltaic system.

---

**Initiative category & Initiative type**

|  |                 |
|--|-----------------|
| Waste reduction and material circularity | Waste reduction |
|--|-----------------|

**Estimated annual CO2e savings (metric tonnes CO2e)**

1086.34

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

10000

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Waste minimization practices and recycling

---

C4.3c

**(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

| Method  | Comment  |
|---|--|
| Compliance with regulatory requirements/standards     | Our corporate Environment, Health and Safety (EHS) management systems requirements apply to all majority-owned operations worldwide. In 2014, Trane Technologies completed a major revision and update to our internal EMS which is now posted to the Company's Business Operating System (BOS) platform which governs and standardizes how all functions within the Company operate. The basis of our EMS is now derived from our existing corporate operational excellence program and applies the same principles to EHS by incorporating tools that have already proven successful. As a result of the company's push for an EHS strategy and EMS that is oriented toward operational excellence, EHS is now viewed as an embedded component of the jobs themselves and thus exposed to the value stream. Additionally, we have updated our Environment, Health and Safety policy, originally published in 2015. The policy has been signed by Michael Lamach, Executive Chairman. |
| Internal incentives/recognition programs              | President's Awards recognize achievements in areas that support Trane Technologies' goals including energy efficiency and greenhouse gas emission reductions.  |
| Partnering with governments on technology development | We are engaged with policymakers to bring solutions to topics that are material to our business, with two areas where the company is most active including energy and refrigerant policy. Trane Technologies supports cost-effective policies that facilitate market transition to more energy-efficient, climate friendly technologies. We actively participate in international forums, such as the United Nations Framework Convention on Climate Change and the Montreal Protocol, to help create an organized approach to global refrigerant transitions without compromising on energy efficiency. We are also working proactively with government agencies and refrigerant suppliers to help identify alternatives and facilitate a practical transition that reduces greenhouse gas emissions as early as possible.  |

**C4.5**

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

**C4.5a**

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

**Level of aggregation**

Group of products

**Description of product/Group of products**

EcoWise™ is a portfolio of products designed to lower environmental impact with next generation, low global warming potential refrigerants and high efficiency operation. HVAC and refrigeration systems, products or initiatives designed to lower environmental impact with next generation, low global warming potential refrigerants and high efficiency operation are part of an exclusive product portfolio known as EcoWise™. These products can be recognized by their use of the EcoWise™ name and logo in their communications and marketing materials.

**Are these low-carbon product(s) or do they enable avoided emissions?**

Avoided emissions

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (We use scope 3 product guidance from GHG protocol to calculate the emissions from our high efficiency and low GWP products to compare to the industry standard. )

**% revenue from low carbon product(s) in the reporting year**

30

**% of total portfolio value**

<Not Applicable>

**Asset classes/ product types**

<Not Applicable>

**Comment**

30% of our revenue is classified as Clean Revenue based on the Corporate Knights methodology

**C5. Emissions methodology**

**C5.1**

**(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

**Scope 1**

**Base year start**

January 1 2019

**Base year end**

December 31 2019

**Base year emissions (metric tons CO2e)**

312853

**Comment**

**Scope 2 (location-based)**

**Base year start**

January 1 2019

**Base year end**

December 31 2019

**Base year emissions (metric tons CO2e)**

154641

**Comment**

**Scope 2 (market-based)**

**Base year start**

January 1 2019

**Base year end**

December 31 2019

**Base year emissions (metric tons CO2e)**

110683

**Comment**

**C5.2**

---

**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

ISO 14064-1

The Climate Registry: General Reporting Protocol

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol: Scope 2 Guidance

US EPA Center for Corporate Climate Leadership: Direct Emissions from Stationary Combustion Sources

US EPA Center for Corporate Climate Leadership: Direct Emissions from Mobile Combustion Sources

**C6. Emissions data**

---

**C6.1**

---

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?**

**Reporting year**

**Gross global Scope 1 emissions (metric tons CO2e)**

273621

**Start date**

<Not Applicable>

**End date**

<Not Applicable>

**Comment**

**C6.2**

---

**(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**

**Row 1**

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We are reporting a Scope 2, market-based figure

**Comment**

C6.3

---

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?**

**Reporting year**

**Scope 2, location-based**

139193

**Scope 2, market-based (if applicable)**

75149

**Start date**

<Not Applicable>

**End date**

<Not Applicable>

**Comment**

C6.4

---

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

C6.5

---

**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

**Purchased goods and services**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

LCA footprint studies are required for all new products. In addition, we have completed numerous full Life Cycle Analyses on select products representing all of our businesses and major product lines. The findings of these LCAs show that more than 90% of the impact of the product is from energy consumed during the use of the product, and less than 2% is from the supply chain. Therefore, 90% of the impact of Trane Technologies' portfolio is in the use phase and captured in 'Use of Sold Products'. Our purchased goods and services are primarily COGS (69% of revenues) all other purchased goods and services are scope 1, 2 or other scope 3 categories (employee travel and commuting, transportation and distribution, etc.).

**Capital goods**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Capital expenditures, treated as plant, property and equipment plus depreciation, were less than 3% of total revenue in 2020. Our investments continue to improve manufacturing productivity, reduce costs and provide environmental enhancements and advanced technologies for existing facilities. Additionally, as a provider of capital goods, we realize, through LCA work, that more than 90% of the impact of the product is during the use phase. We capture the use phase emissions of our purchase of capital goods in our scope 1 and 2 emissions. For these reasons, we have determined that the emissions from capital goods are not relevant to our company.

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Trane technologies considers all fuel and energy used in manufacturing and services vehicles in Scope 1 and 2 emissions.

## Upstream transportation and distribution

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

34108

### Emissions calculation methodology

Trane Technologies is a shipping partner of the EPA SmartWay (TM) program. SmartWay provides a comprehensive and well- recognized system for tracking, documenting and sharing information about fuel use and freight emissions across supply chains. Freight emissions are classified into two parts: upstream and downstream. Upstream is about 25% of our spend and downstream is about 75% of our spend. Because SmartWay data is broken down by carrier we have used spend to determine relative upstream and downstream emissions. SmartWay data is delayed therefore the number represented here is from the prior reporting period (FY 2019)

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Waste generated in operations

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

97106

### Emissions calculation methodology

Trane Technologies manages data of waste production in operations. These are categorized as hazardous waste and non-hazardous waste. For each waste category there are different disposal types. Using emissions factors from GHG Protocol Scope 3 guidance for Waste Generated in Operations for each disposal method and the total weight of each stream of disposal method we calculated total carbon emissions.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Business travel

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

3788

### Emissions calculation methodology

BCD is the travel management company for Trane Technologies. They share annual reports for all flights taken by Trane Technologies employees in the calendar year. Flights are classified as Long, Short or Medium haul flights. Based on the flight classification, emissions are calculated using EFRA and GHCP emissions factors and total miles. This data has been verified by an independent third party, the assurance statement is attached in C10.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

### Please explain

## Employee commuting

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

51164

### Emissions calculation methodology

We have used the average data method as detailed in the Scope 3 calculation guidance for 'Employee Commuting'. We used the U.S. Census Bureau's annual American Community Survey 2011 on employee commuting. We have, for the lack of better information, assumed the same ratio for the rest of the world as well. We have 36,000 employees in 60 different countries.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Upstream leased assets

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

65613

### Emissions calculation methodology

We have classified all our leased assets (office, warehouse, services) as Scope 3 based on our shift in 2014 to the financial control approach. Using emissions factors taken from IEA (International Energy Agency) for average electricity consumption per square foot for a building type, we have calculated total emissions across all our facilities based on total area. We have over 14,000,000 ft<sup>2</sup> of leased space globally.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Downstream transportation and distribution

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

102326

### Emissions calculation methodology

Emissions calculation methodology Trane Technologies is a shipping partner of the EPA SmartWay (TM) program. SmartWay provides a comprehensive and well-recognized system for tracking, documenting and sharing information about fuel use and freight emissions across supply chains. Freight emissions are classified into two parts: upstream and downstream. Upstream is about 25% of our spend and downstream is about 75% of our spend. Because SmartWay data is broken down by carrier we have used spend to determine relative upstream and downstream emissions. SmartWay data is delayed therefore the number represented here is from the prior reporting period (FY 2019)

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Processing of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Trane Technologies is a manufacturer of capital equipment, sold as finished goods. Our sales of intermediate goods is negligible. Since there is no further processing of our sold products this category is not relevant.

## Use of sold products

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

242000000

### Emissions calculation methodology

Emissions from the use of our products are calculated as follows: the indirect and direct emissions of each product category are calculated for the lifespan and disposal of the product in the year in which it was sold. All product categories that use refrigerants and / or energy are included. This is over 90% of our portfolio. Using variables for efficiency, refrigerant charge and product life, the indirect and direct emissions of each product category are calculated using globally recognized emissions conversion factors: IPCC AR5 100 year for refrigerants; US EPA eGRID factors and International Energy Agency 2013 report CO2e factors by country for electricity; EPA factors for fuels. We track CO2e associated with the use of our products across the company and report against our commitment of reducing our customer carbon footprint by 1 gigaton of emissions.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## End of life treatment of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

LCA footprint studies are required for all new products. In addition, we have completed numerous full Life Cycle Analyses on select products representing all of our businesses and major product lines. The findings of these LCAs show that more than 90% of the impact of the product is from energy consumed during the use of the product, and less than 2% is from end of life treatment. Because over 90% of our portfolio uses energy, the impact of end of life treatment of sold products is de minimis and not relevant to the total scope of emissions.

## Downstream leased assets

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Our downstream leased assets are short term, typically office space, with a de minimis footprint. Emissions from these facilities minimal. Therefore this emissions category is not relevant to our company.

## Franchises

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

We do not have franchises. Company owned distributors are included in the scope 3 category of upstream leased assets. Therefore this emissions category is not relevant to our company.

## Investments

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Trane Technologies does not invest in any projects outside of our financial control which generate emissions. Therefore this category is not relevant to our company.

## Other (upstream)

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Trane Technologies has no other relevant upstream emissions.



**Other (downstream)**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Trane Technologies has no other relevant downstream emissions.

**C-CG6.6**

**(C-CG6.6) Does your organization assess the life cycle emissions of any of its products or services?**

|       | Assessment of life cycle emissions | Comment |
|-------|------------------------------------|---------|
| Row 1 | Yes                                |         |

**C-CG6.6a**

**(C-CG6.6a) Provide details of how your organization assesses the life cycle emissions of its products or services.**

|       | Products/services assessed  | Life cycle stage(s) most commonly covered | Methodologies/standards/tools applied | Comment  |
|-------|---|---|---------------------------------------|--|
| Row 1 | Products/services meeting certain criteria (please specify) (EcoWise Portfolio) | Cradle-to-grave                           | ISO 14025                             | The majority of the carbon footprint of our products is from the use of energy, specifically, electricity. Emissions from refrigerants are approximately 10% of the total carbon footprint. We are addressing efficiency with a target of reducing our customers' emissions by 1 billion metric tons CO2e from business as usual by 2030. The specific branding for leading energy efficiency products will be created in the near future. We have tracked product-use emissions reductions from energy and refrigerants against our 2020 commitment and will continue to do so through 2030. In the future, while we will continue our complete transition out of high GWP refrigerants by 2030, using the EcoWise brand to communicate our progress, we will also focus on helping customers reduce their emissions. A portfolio with world-class energy efficiency products will help us do that. We anticipate establishing a new brand which signifies this world-class efficiency. |

**C6.7**

**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No

**C6.10**

**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

**Intensity figure**

0.00003315

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

412814

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

12454700000

**Scope 2 figure used**

Location-based

**% change from previous year**

7

**Direction of change**

Decreased

**Reason for change**

Emissions reduction initiatives including: full year of operation of our of onsite solar PV at our Taicang, China plant. Additional lighting retrofits. HVAC optimization. Compressed air audits. Fuel switching in our fleet. Revenues decreased 4.7% YOY due to the COVID pandemic.

## C7. Emissions breakdowns

### C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

#### C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

| Greenhouse gas | Scope 1 emissions (metric tons of CO2e) | GWP Reference                                 |
|----------------|---|---|
| CO2            | 103189                                  | IPCC Fifth Assessment Report (AR5 – 100 year) |
| HFCs           | 170432                                  | IPCC Fifth Assessment Report (AR5 – 100 year) |

### C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

| Country/Region                                  | Scope 1 emissions (metric tons CO2e) |
|---|--------------------------------------|
| North America                                   | 199053                               |
| Latin America (LATAM)                           | 20891                                |
| Eastern Europe, Middle East, and Africa (EEMEA) | 39594                                |
| Asia Pacific (or JAPA)                          | 14084                                |

### C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

#### C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

| Business division                           | Scope 1 emissions (metric ton CO2e) |
|---|-------------------------------------|
| Trane HVAC (Commercial)                     | 179830                              |
| Trane HVAC (Residential)                    | 62628                               |
| Thermo King (Transport)                     | 29584                               |
| Enterprise (corporate, engineering centers) | 1580                                |

### C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

| Country/Region                        | Scope 2, location-based (metric tons CO2e) | Scope 2, market-based (metric tons CO2e) | Purchased and consumed electricity, heat, steam or cooling (MWh) | Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh) |
|---------------------------------------|--|--|--|--|
| North America                         | 119401                                     | 54327                                    | 237  | 108768   |
| Latin America (LATAM)                 | 168  | 776                                      | 22598  | 0  |
| Europe, Middle East and Africa (EMEA) | 4984                                       | 1021                                     | 19583  | 9555   |
| Asia Pacific (or JAPA)                | 14639                                      | 18846                                    | 25994  | 2476   |

### C7.6

**(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

By business division

**C7.6a**

**(C7.6a) Break down your total gross global Scope 2 emissions by business division.**

| Business division                           | Scope 2, location-based (metric tons CO2e) | Scope 2, market-based (metric tons CO2e) |
|---|--|--|
| Trane HVAC (Commercial)                     | 76213                                      | 50959                                    |
| Trane HVAC (Residential)                    | 37827                                      | 7594                                     |
| Thermo King (Transport)                     | 13769                                      | 4147                                     |
| Enterprise (corporate, engineering centers) | 11834                                      | 12450                                    |

**C7.9**

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

**C7.9a**

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.**

|   | Change in emissions (metric tons CO2e) | Direction of change | Emissions value (percentage) | Please explain calculation  |
|---|--|---------------------|------------------------------|---|
| Change in renewable energy consumption  | 5752                                   | Decreased           | 4                            | Trane Technology increased the amount of direct renewable energy (electricity) consumption in 2020 vs 2019 by more than 100% (9,224 MWhr in 2020 vs 4,344 MWhr for 2019). This was achieved by the ongoing operation of onsite solar generation/photovoltaic systems and by sourcing direct electricity supplies from renewable power generation companies. Trane Technologies has also increased the amount of indirect electricity consumption by acquiring and retiring Renewable Energy Credits (RECs) in the USA and Green Energy Credits in Europe. Our global Scope 2 market-based GHG emissions are adjusted through 7,455 MWhr of direct green electricity, 7,926 MWhr from RECs related to onsite solar PV systems and power supply company certificates, and 105,420 MWhr of zero carbon RECs from a long-term US virtual power purchase agreement (VPPA). Our unadjusted market-based Scope 2 GHG for 2020 is 131,959 tonnes and the combined avoided emissions from RECs is 56,810 tonne. This translates to Trane Technologies operating at 75,149 tonnes of market-base Scope 2 GHG for 2020 or 43% adjusted emissions (56,810 / 131,959). The 5,752 tonne of GHG reduction from use of direct renewable electricity is 4% of the unadjusted market-based Scope 2 GHG emissions (5,752 / 131,959). |
| Other emissions reduction activities    | 27329                                  | Decreased           | 14                           | Through equipment changes, strengthened work practices, and initial work to convert to use of refrigerants with lower global warming potentials, Trane Technologies has reduced 2020 Scope 1 GHG CO2e losses related to refrigerants used in our HVAC equipment manufacturing by 14% compared to 2019. Annual refrigerant losses are calculated with the site specific material balances to account for annual losses. The mass losses are converted to CO2e using the refrigerant specific 100-year global warming potential. The 14 percent refrigerant related GHG reduction is calculated: Annual refrigerant GHG manufacturing losses = Sum of individual refrigerant loss X 100-year global warming potential 2019 refrigerant GHG manufacturing losses = 198,480 tonne 2020 refrigerant GHG manufacturing losses = 170,432 tonne Percent reduction in refrigerant manufacturing losses = (2018/2019 -1) X 100 = -14%   |
| Divestment                              |  | <Not Applicable >   |                              |   |
| Acquisitions                            |  | <Not Applicable >   |                              |   |
| Mergers                                 |  | <Not Applicable >   |                              |   |
| Change in output                        |  | <Not Applicable >   |                              |   |
| Change in methodology                   |  | <Not Applicable >   |                              |   |
| Change in boundary                      |  | <Not Applicable >   |                              |   |
| Change in physical operating conditions |  | <Not Applicable >   |                              |   |
| Unidentified                            |  | <Not Applicable >   |                              |   |
| Other                                   |  | <Not Applicable >   |                              |   |

**C7.9b**

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

## C-CG7.10

---

(C-CG7.10) How do your total Scope 3 emissions for the reporting year compare to those of the previous reporting year?

Decreased

## C-CG7.10a

---

(C-CG7.10a) For each Scope 3 category calculated in C6.5, specify how your emissions compare to the previous year and identify the reason for any change.

### Upstream transportation and distribution

**Direction of change**

Increased

**Primary reason for change**

Unidentified

**Change in emissions in this category (metric tons CO2e)**

604.5

**% change in emissions in this category**

0.59

**Please explain**

We consider anything under 2% to be no direction of change.

### Waste generated in operations

**Direction of change**

Decreased

**Primary reason for change**

Other emissions reduction activities

**Change in emissions in this category (metric tons CO2e)**

3037

**% change in emissions in this category**

25

**Please explain**

Increased initiatives due to zero waste to landfill goals and Decreased operations due to COVID

### Business travel

**Direction of change**

Decreased

**Primary reason for change**

Change in physical operating conditions

**Change in emissions in this category (metric tons CO2e)**

26552

**% change in emissions in this category**

88

**Please explain**

Decreased travel due to COVID

### Employee commuting

**Direction of change**

No change

**Primary reason for change**

<Not Applicable>

**Change in emissions in this category (metric tons CO2e)**

<Not Applicable>

**% change in emissions in this category**

<Not Applicable>

**Please explain**

We are continuing to use the average data method as detailed in the Scope 3 calculation guidance for 'Employee Commuting'. We used the U.S. Census Bureau's annual American Community Survey 2011 on employee commuting. We have, for the lack of better information, assumed the same ratio for the rest of the world as well. We have 36,000 employees in 60 different countries

**Upstream leased assets**

**Direction of change**

Decreased

**Primary reason for change**

Unidentified

**Change in emissions in this category (metric tons CO2e)**

1387

**% change in emissions in this category**

2

**Please explain**

We allocate the slight decrease due to impacts from COVID

**Downstream transportation and distribution**

**Direction of change**

Increased

**Primary reason for change**

Unidentified

**Change in emissions in this category (metric tons CO2e)**

201.5

**% change in emissions in this category**

0.59

**Please explain**

We consider anything under 2% to be no direction of change

**Use of sold products**

**Direction of change**

Decreased

**Primary reason for change**

Change in product efficiency

**Change in emissions in this category (metric tons CO2e)**

2000000

**% change in emissions in this category**

0.81

**Please explain**

Through our 2030 commitment our Gigaton Challenge, we will sell more efficient equipment and use lower GWP refrigerants to achieve our SBT of reducing product use emissions 48% per product sold by 2030.

**C8. Energy**

---

**C8.1**

---

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 0% but less than or equal to 5%

**C8.2**

---

**(C8.2) Select which energy-related activities your organization has undertaken.**

|  | Indicate whether your organization undertook this energy-related activity in the reporting year |
|--|---|
| Consumption of fuel (excluding feedstocks)         | Yes   |
| Consumption of purchased or acquired electricity   | Yes   |
| Consumption of purchased or acquired heat          | No  |
| Consumption of purchased or acquired steam         | No  |
| Consumption of purchased or acquired cooling       | No  |
| Generation of electricity, heat, steam, or cooling | Yes   |

**C8.2a**

---

**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

|   | Heating value              | MWh from renewable sources | MWh from non-renewable sources | Total (renewable and non-renewable) MWh |
|---|----------------------------|----------------------------|--------------------------------|---|
| Consumption of fuel (excluding feedstock)               | HHV (higher heating value) | 0                          | 474987                         | 474987                                  |
| Consumption of purchased or acquired electricity        | <Not Applicable>           | 4978                       | 269358                         | 301337                                  |
| Consumption of purchased or acquired heat               | <Not Applicable>           | <Not Applicable>           | <Not Applicable>               | <Not Applicable>                        |
| Consumption of purchased or acquired steam              | <Not Applicable>           | <Not Applicable>           | <Not Applicable>               | <Not Applicable>                        |
| Consumption of purchased or acquired cooling            | <Not Applicable>           | <Not Applicable>           | <Not Applicable>               | <Not Applicable>                        |
| Consumption of self-generated non-fuel renewable energy | <Not Applicable>           | 4245                       | <Not Applicable>               | 4245                                    |
| Total energy consumption                                | <Not Applicable>           | 9224                       | 771345                         | 780569                                  |

**C8.2b**

**(C8.2b) Select the applications of your organization's consumption of fuel.**

|   | Indicate whether your organization undertakes this fuel application |
|---|---|
| Consumption of fuel for the generation of electricity   | No  |
| Consumption of fuel for the generation of heat          | Yes   |
| Consumption of fuel for the generation of steam         | No  |
| Consumption of fuel for the generation of cooling       | No  |
| Consumption of fuel for co-generation or tri-generation | No  |

**C8.2c**

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

**Fuels (excluding feedstocks)**

Aviation Gasoline

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

1996.97

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

69.493

**Unit**

kg CO2e per million Btu

**Emissions factor source**

EPA Climate Leaders, Emission Factors for Greenhouse Gas Inventories, 19 November 2015 & 9 March 2018

**Comment**

**Fuels (excluding feedstocks)**

Diesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

49322.51

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

74.203

**Unit**

kg CO2 per million Btu

**Emissions factor source**

EPA Climate Leaders, Emission Factors for Greenhouse Gas Inventories, 19 November 2015 & 9 March 2018

**Comment**

---

**Fuels (excluding feedstocks)**

Motor Gasoline

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

194046

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

70.436

**Unit**

lb CO2 per million Btu

**Emissions factor source**

EPA Climate Leaders, Emission Factors for Greenhouse Gas Inventories, 19 November 2015 & 9 March 2018

**Comment**

---

**Fuels (excluding feedstocks)**

Propane Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

15485.63

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

63.113

**Unit**

kg CO2 per million Btu

**Emissions factor source**

EPA Climate Leaders, Emission Factors for Greenhouse Gas Inventories, 19 November 2015 & 9 March 2018

**Comment**

---

**Fuels (excluding feedstocks)**

Natural Gasoline

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

214135.43

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

53.1145

**Unit**

kg CO2e per million Btu

**Emissions factor source**

EPA Climate Leaders, Emission Factors for Greenhouse Gas Inventories, 19 November 2015 & 9 March 2018

**Comment**

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C8.2d

---

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

|             | Total Gross generation (MWh) | Generation that is consumed by the organization (MWh) | Gross generation from renewable sources (MWh) | Generation from renewable sources that is consumed by the organization (MWh) |
|-------------|------------------------------|---|---|--|
| Electricity | 6222.49                      | 4245.14   | 6222.49                                       | 4245.14  |
| Heat        | 0                            | 0   | 0   | 0  |
| Steam       | 0                            | 0   | 0   | 0  |
| Cooling     | 0                            | 0   | 0   | 0  |

C8.2e

---

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

**Sourcing method**

Unbundled energy attribute certificates, International REC Standard (I-RECs)

**Low-carbon technology type**

Solar

**Country/area of consumption of low-carbon electricity, heat, steam or cooling**

United States of America

**MWh consumed accounted for at a zero emission factor**

15380.42

**Comment**

For 2020 electricity usage, Trane Technologies increased the amount of consumed electricity derived from onsite or offsite photovoltaic systems. Regions with solar derived electricity include the US, China, and Europe.

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**Sourcing method**

Unbundled energy attribute certificates, International REC Standard (I-RECs)

**Low-carbon technology type**

Wind

**Country/area of consumption of low-carbon electricity, heat, steam or cooling**

United States of America

**MWh consumed accounted for at a zero emission factor**

105418.92

**Comment**

Trane Technologies increased the quantity of electricity generated by renewable wind projects during 2020. The regions with wind derived electricity include the US and Europe.

---



C-CG8.5

**(C-CG8.5) Does your organization measure the efficiency of any of its products or services?**

|       | Measurement of product/service efficiency | Comment  |
|-------|---|--|
| Row 1 | Yes                                       | The majority of the carbon footprint of our products is from the use of energy, specifically, electricity. Emissions from refrigerants are approximately 10% of the total carbon footprint. We are addressing efficiency with a target of reducing our customers' emissions by 1 billion metric tons CO2e from business as usual by 2030. The specific branding for leading energy efficiency products will be created in the near future. We have tracked product-use emissions reductions from energy and refrigerants against our 2020 commitment and will continue to do so through 2030. In the future, while we will continue our complete transition out of high GWP refrigerants by 2030, using the EcoWise brand to communicate our progress, we will also focus on helping customers reduce their emissions. A portfolio with world-class energy efficiency products will help us do that. We anticipate establishing a new brand which signifies this world-class efficiency. |

C-CG8.5a

**(C-CG8.5a) Provide details of the metrics used to measure the efficiency of your organization's products or services.**

**Category of product or service**

Heating & cooling systems

**Product or service (optional)**

Heating & cooling systems rated above min standard efficiency with next generation, low GWP refrigerant: Res a/c are rated according to their seasonal energy efficiency ratio (SEER). SEER indicates the relative amount of energy needed to provide a specific cooling output. Commercial systems are rated according to ASHRAE 90.1 standards. Transport Refrigeration Systems with higher efficiency & next gen refrigerant.

**% of revenue from this product or service in the reporting year**

25

**Efficiency figure in the reporting year**

7.7

**Metric numerator**

Btu

**Metric denominator**

watt-hour

**Comment**

7.7M refers to the product emissions savings for 2020

C9. Additional metrics

C9.1

**(C9.1) Provide any additional climate-related metrics relevant to your business.**

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

**(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?**

|       | Investment in low-carbon R&D | Comment |
|-------|------------------------------|---------|
| Row 1 | Yes                          |         |

C-CG9.6a

**(C-CG9.6a) Provide details of your organization's investments in low-carbon R&D for capital goods products and services over the last three years.**

**Technology area**

Other, please specify (R&D spend associated to innovating and deploying low GWP refrigerants for our refrigerant-bearing product portfolio)

**Stage of development in the reporting year**

Large scale commercial deployment

**Average % of total R&D investment over the last 3 years**

41 - 60%

**R&D investment figure in the reporting year (optional)**

165000000

**Comment**

**Technology area**

Smart systems

**Stage of development in the reporting year**

Large scale commercial deployment

**Average % of total R&D investment over the last 3 years**

21 - 40%

**R&D investment figure in the reporting year (optional)**

165000000

**Comment**

Total company R&D spend (\$165,000,000) split between low GWP refrigerant options and building automation technology services

**C10. Verification**

**C10.1**

**(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

|  | Verification/assurance status                          |
|--|--|
| Scope 1                                  | Third-party verification or assurance process in place |
| Scope 2 (location-based or market-based) | Third-party verification or assurance process in place |
| Scope 3                                  | Third-party verification or assurance process in place |

**C10.1a**

**(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.**

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Moderate assurance

**Attach the statement**

CY20 Trane Assurance Statement-ASRauthorized-Final-03252020.pdf

**Page/ section reference**

The verification of the direct, energy indirect and other indirect GHG emissions is conducted in accordance with ISO 14064-3:2006, 'Specification with guidance for validation and verification of GHG assertions' to provide limited assurance that GHG emissions data as presented in the Assertion have been prepared in conformance with the World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

**C10.1b**

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

**Scope 2 approach**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

CY20 Trane Assurance Statement-ASRauthorized-Final-03252020.pdf

**Page/ section reference**

The verification of the direct, energy indirect and other indirect GHG emissions is conducted in accordance with ISO 14064–3:2006, 'Specification with guidance for validation and verification of GHG assertions' to provide limited assurance that GHG emissions data as presented in the Assertion have been prepared in conformance with the World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

CY20 Trane Assurance Statement-ASRauthorized-Final-03252020.pdf

**Page/ section reference**

The verification of the direct, energy indirect and other indirect GHG emissions is conducted in accordance with ISO 14064–3:2006, 'Specification with guidance for validation and verification of GHG assertions' to provide limited assurance that GHG emissions data as presented in the Assertion have been prepared in conformance with the World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

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## C10.1c

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(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

**Scope 3 category**

Scope 3: Business travel

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

CY20 Trane Assurance Statement-ASRauthorized-Final-03252020.pdf

**Page/section reference**

The verification of the direct, energy indirect and other indirect GHG emissions is conducted in accordance with ISO 14064–3:2006, 'Specification with guidance for validation and verification of GHG assertions' to provide limited assurance that GHG emissions data as presented in the Assertion have been prepared in conformance with the World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

## C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

## C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

| Disclosure module verification relates to | Data verified   | Verification standard | Please explain   |
|---|---|-----------------------|--|
| Please select                             | Other, please specify (Verification of 2020 Scope 1,2,3 ghg emissions, energy consumption, and other key metrics) | ISO 14064             | Trane Technologies engages a licensed and qualified external consultant to complete a data verification and assurance assessment of our GHG Emissions data and other supporting metrics. The verification of the direct, energy indirect and other indirect GHG emissions is conducted in accordance with ISO 14064-3:2006, 'Specification with guidance for validation and verification of greenhouse gas assertions' to provide limited assurance that GHG emissions data as presented in the Assertion have been prepared in conformance with the World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol: A corporate accounting and reporting standard, revised edition (hereafter referred to as the WRI/WBCSD GHG Protocol). The consultant conducted a limited assurance assessment that involved the following tasks as part of the evidence gathering process for this verification engagement: 1) review of organizational boundaries, operational boundaries, and data management processes, 2) interviews with relevant staff of the organization responsible for managing data and records, 3) completing a strategic assessment/risk analysis of each data set to determine an adequate sample, and 4) verifying data and records at an aggregated level for Calendar Year 2020. CY20 Trane Assurance Statement-ASRauthorized-Final-03252020.pdf |

## C11. Carbon pricing

### C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

### C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

### C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

### C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

**Objective for implementing an internal carbon price**

Drive energy efficiency  
Drive low-carbon investment

**GHG Scope**

Scope 1  
Scope 2

**Application**

Ad-hoc

**Actual price(s) used (Currency /metric ton)**

16

**Variance of price(s) used**

No variance, price is set.

**Type of internal carbon price**

Shadow price

**Impact & implication**

Lower energy costs due to efficiency improvements; increased capacity and investment in renewable energy

## C12. Engagement

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### C12.1

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#### (C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers  
Yes, our customers

### C12.1a

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#### (C12.1a) Provide details of your climate-related supplier engagement strategy.

##### Type of engagement

Information collection (understanding supplier behavior)

##### Details of engagement

Collect climate change and carbon information at least annually from suppliers

##### % of suppliers by number

1.5

##### % total procurement spend (direct and indirect)

50.5

##### % of supplier-related Scope 3 emissions as reported in C6.5

0

##### Rationale for the coverage of your engagement

For 2020, 90% of our Preferred Supplier Base was in-scope for this request, our Preferred Supplier Program is a key initiative to identify and engage world-class suppliers. This program is for our most strategic partners and provides them with growth opportunities while helping us build a supply base that aligns with our core values. Preferred suppliers must meet several criteria in order to keep their status, one of which is to report on requested sustainability metrics annually.

##### Impact of engagement, including measures of success

We believe the reduction of energy usage and GHG emissions through our supplier engagement as it demonstrates that the supplier is committed to our Supplier Sustainability Expectations which requires annual reporting of energy, waste, water and carbon data including usage and progression of goals. In order to be a Preferred Supplier, a supplier must report on these metrics. Preferred suppliers receive have more opportunity to grow their business with Trane and we believe that long-term value partners must demonstrate their commitment to reducing their climate impact.

##### Comment

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##### Type of engagement

Compliance & onboarding

##### Details of engagement

Code of conduct featuring climate change KPIs  
Climate change is integrated into supplier evaluation processes

##### % of suppliers by number

100

##### % total procurement spend (direct and indirect)

100

##### % of supplier-related Scope 3 emissions as reported in C6.5

0

##### Rationale for the coverage of your engagement

All suppliers must meet the requirements outlined in our Business Partner Code of Conduct and Supplier Sustainability Expectations

##### Impact of engagement, including measures of success

We believe by having these requirements standard in our Terms & Conditions that apply to our entire supply base we are reaching over 14,000 suppliers with our requirements. We believe a measurement of success is to continue to have suppliers agree to our requirements. We conduct On Site Assessments for our tier 1 suppliers and cover 80% with high sustainability risk and identified 94% with corrective action plans that have showed improved ESG performance over the past 12 months. Along with these assessments we conduct annual workshops and training to provide suppliers with the support and learnings to improve their processes and overall business.

##### Comment

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### C12.1b

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**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

**Type of engagement**

Education/information sharing

**Details of engagement**

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

**% of customers by number**

25

**% of customer - related Scope 3 emissions as reported in C6.5**

99

**Portfolio coverage (total or outstanding)**

<Not Applicable>

**Please explain the rationale for selecting this group of customers and scope of engagement**

The use of sold products is our largest source of emissions. Furthermore, over 2/3 of our product use-phase emissions are from the consumption of electricity and refrigerants in our HVAC-R products. In 2014 the company made a global commitment to reduce the refrigerant footprint of our products by 50% by 2020. Trane and Thermo King introduced products over the next four years that use refrigerant with lower global warming potential and fit into the environmental plans of our customers without compromising safety, performance or efficiency. We targeted HVAC-R customers specifically for this campaign because by adoption of our Energy Efficient and low emitting products, we can have a measurable impact on global emissions.

**Impact of engagement, including measures of success**

We measure success through our product emissions calculator which measures energy and refrigerant emissions from the use of our products and shows the market adoption of lower emitting technologies over time. We have avoided 7.7 million metric tons of CO2e emissions in 2020 compared to our baseline 2019 year. Furthermore, 3.6% of the company's revenue was from the sale of certified with Ecowise products including: ECTV CenTraVac Chiller, Pueblo Chiller, Trane Sintesis eXcellent, EU Trane CenTraVac, MEA Trane CenTraVac, Thermo King Truck & Trailer SLXe and SLXi, and Cryotech refrigeration. Additionally, approximately 25% of our revenue is from the sale of energy efficient solutions that contribute to a clean energy economy. Details of engagement campaign: In 2015 the company launched a campaign called 'EcoWise' to demonstrate a roadmap to significantly increase energy efficiency and reduce climate impact from our product portfolio. HVAC and refrigeration systems, products or initiatives designed to lower environmental impact with next generation, low global warming potential refrigerants and high efficiency operation are part of an exclusive product portfolio known as EcoWise™. These products can be recognized by their use of the EcoWise™ name and logo in their communications and marketing materials. We work with building owners and industrial and transport customers to understand their needs and demonstrate the performance of next generation technologies, including EcoWise products. We have established the EcoWise brand to drive demand for climate-responsible products. Engagement methods include in person meetings and print and web correspondence.

**C12.3**

**(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

- Direct engagement with policy makers
- Trade associations
- Funding research organizations

**C12.3a**

**(C12.3a) On what issues have you been engaging directly with policy makers?**

| Focus of legislation   | Corporate position | Details of engagement  | Proposed legislative solution  |
|--|--------------------|--|--|
| Other, please specify (Federal reduction of production and consumption of HFCs)  | Support            | We lobby directly and through consultants and trade associations to secure legislative success.  | EPA to develop rules that align with the Kigali Amendment to the Montreal Protocol                           |
| Other, please specify (State reduction of production and consumption of HFCs in HVAC, which is an acceleration compared to the Kigali amendment) | Support            | We worked with regulators to help shape the proposals, submitted public comments and participated in regulatory workshops supporting the prohibition in high GWP HFCs for foams, transport refrigeration and HVAC. | State agency to develop rules that ban particular high GWP HFCs in transport refrigeration, foams, and HVAC. |

**C12.3b**

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

**C12.3c**

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

**Trade association**

Business Council for Sustainable Energy

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The Business Council for Sustainable Energy (BCSE) is a coalition of companies and trade associations from the energy efficiency, natural gas and renewable energy sectors, and also includes independent electric power producers, investor-owned utilities, public power, commercial end-users and project developers and service providers for environmental markets. Industry leaders from the energy efficiency, renewable energy and natural gas sectors came together in 1992 to form a coalition dedicated to creating a more secure and sustainable energy future. Today, these sectors continue to work together to meet U.S. energy needs and revitalize the U.S. economy. The Business Council for Sustainable Energy works to: Enable policies that accelerate the deployment of energy efficiency, renewable energy resources and natural gas. Implement cost-effective programs and policies that recognize the environmental attributes of energy sources. Increase the efficiency of the economy and improve energy security. Encourage market-based initiatives for energy and environmental policies.

**How have you influenced, or are you attempting to influence their position?**

Trane Technologies is represented on the board and works to promote goals of the BCSE because energy efficiency is the most readily available and cost-effective solution to climate change.

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**Trade association**

Alliance to Save Energy

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The Alliance to Save Energy is a coalition of prominent business, government, environmental, and consumer leaders who promote the efficient and clean use of energy worldwide to benefit consumers, the environment, the economy, and national security. The Alliance to Save Energy advocates for the most high-impact energy efficiency policies including emission reduction and strong energy codes in buildings and modernization and expansion of tax incentives to properly encourage energy efficiency in the built environment.

**How have you influenced, or are you attempting to influence their position?**

The Chief Technology and Sustainability Officer of Trane Technologies, serves on the board of directors. Trane Technologies works to promote goals of the Alliance because energy efficiency is the most readily available and cost-effective solution to climate change.

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**Trade association**

Alliance for Responsible Atmospheric Policy

**Is your position on climate change consistent with theirs?**

Mixed

**Please explain the trade association's position**

The Alliance supports an orderly transition away from the use of HCFCs and HFCs in a managed process which allows for the use of alternative substances while continuing to meet the public's increasing demand for safe, efficient products such as refrigeration, heat pumps, fire safety systems and medical devices, as living standards and societal needs increase across the world.

**How have you influenced, or are you attempting to influence their position?**

Trane Technologies is represented on the board and works to promote the goals of the Alliance for Responsible Atmospheric Policy because the transition away from high GWP HFCs in accordance with the Kigali Amendment to the Montreal Protocol has been shown to avoid global warming by 0.5 degrees C by 2050.

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**C12.3d**

**(C12.3d) Do you publicly disclose a list of all research organizations that you fund?**

No

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**C12.3f**

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

Process: Trane Technologies actively collaborates with a worldwide array of governments, business and trade associations, environmental groups and economic development organizations in efforts to address global challenges, including challenges associated with climate change. These efforts are implemented by a Government Affairs Leadership Team (GALT) consisting of 9 members, representing our SBUs and operating locations around the world. The GALT meets monthly, working with business leadership at the regional level to discuss and integrate their concerns within a company-wide policy prioritization framework. The GALT reports to the Government Affairs Steering Committee, which includes the CEO, general counsel and SBU leaders. This committee establishes the company's overall government affairs policy. We are engaged with policymakers to drive policies for a cleaner power grid, create value for energy efficiency, and require the phase down of high GWP HFCs in accordance with the Kigali Amendment to the Montreal Protocol. We actively participate in international forums, such as the United Nations Framework Convention on Climate Change and the Montreal Protocol, to help create an organized approach to global refrigerant transitions without compromising on energy efficiency. We are also working proactively with government agencies and refrigerant suppliers to help identify alternatives and facilitate a practical transition that reduces greenhouse gas emissions as early as possible. Trane Technologies engages in public policy both directly and through associations to understand and help shape future regulations. When appropriate, technical policy experts engage directly with regulators and other key stakeholders both in advance of and during the rule-making process. We periodically review our approach to issues with the impacted business or function and leadership; during this review we discuss strategies and make adjustments. Success is achieved when organizational alignment is maintained during the issue management process, when individuals and leaders feel prepared for interaction with policymakers, and when the businesses and functions are prepared to comply with regulations once final.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

**Publication**

In mainstream reports, incorporating the TCFD recommendations

**Status**

Complete

**Attach the document**

2020-ESG-Report.pdf

**Page/Section reference**

All

**Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

**Comment**

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

|       | Job title                             | Corresponding job category    |
|-------|---------------------------------------|-------------------------------|
| Row 1 | President and Chief Executive Officer | Chief Executive Officer (CEO) |

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

N/A

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

|       | Annual Revenue |
|-------|----------------|
| Row 1 | 12454700000    |

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

No



SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

| Allocation challenges  | Please explain what would help you overcome these challenges |
|--|--|
| Customer base is too large and diverse to accurately track emissions to the customer level | no comment   |

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

99% of our carbon impact is through the use of our products. The use of our products is our customers' scope 1 and 2 emissions. we strive to reduce this through management and innovation.

Accurate tracking of emissions at the customer level would be cost prohibitive.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

Please select

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

|                             | I am submitting to     | Public or Non-Public Submission | Are you ready to submit the additional Supply Chain questions? |
|-----------------------------|------------------------|---------------------------------|--|
| I am submitting my response | Investors<br>Customers | Public                          | Yes, I will submit the Supply Chain questions now              |

Please confirm below

I have read and accept the applicable Terms