Welcome to your CDP Climate Change Questionnaire 2021

C0. Introduction

C0.1

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

Founded in 1912, ITW (NYSE: ITW) is a global industrial company built around a differentiated and proprietary business model. The company's seven industry leading segments leverage the ITW Business Model to generate solid growth with best-in-class margins and returns in markets where highly innovative, customer-focused solutions are required.

From state-of-the-art dishwashers, ovens and refrigerators in restaurants and hotels, to automobile components inside vehicles all over the world ... the products we manufacture and the solutions we design are all around us. The buildings where we live and work are built with ITW construction and welding products, and our test & measurement solutions help to ensure the quality and safety of millions of products.

ITW's dedicated colleagues around the world thrive in the company's decentralized and entrepreneurial culture. Our leaders have deep expertise in the ITW Business Model and leverage it to deliver superior performance and value to our customers. ITW's approximately 43,000 dedicated colleagues around the world thrive in the company's decentralized, entrepreneurial culture. In 2020, the company achieved revenues of $12.6 billion, with roughly half coming from outside North America.

ITW's Corporate Social Responsibility (CSR) strategy is built around four key elements: Our Governance & Ethics, Our People, Our Communities, and Our Environment. As part of our vision to be one of the world's best-performing, highest-quality and most-respected industrial companies, we will continue to support our communities and our employees to make a difference in the world around us.

Across all our decentralized businesses, we continually measure, manage and work to reduce the environmental footprint of our operations and products. We also partner with key suppliers to ensure that, together, we have a positive impact on our environment and use our resources responsibly.

With support from ITW's senior management, each division is directly responsible for implementing the most impactful environmental performance improvement opportunities for its unique operations. Our three-pronged approach to continuous improvement includes:

- Auditing our facilities for EHS compliance;
- Transparent reporting using the guidance of third-party frameworks and surveys including SASB and TCFD; and
- Implementing policies that guide our progress, each ITW division is responsible for recognizing the potential impacts of our operations employee has a responsibility to preserve and protect the environment.

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
Reporting year	January 1, 2020	December 31, 2020	No

C0.3

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

Argentina
Australia
Belgium
Brazil

Bulgaria
Canada
Chile
China
China, Hong Kong Special Administrative Region
Colombia
Costa Rica
Croatia
Czechia
Denmark
Finland
France
Germany
Hungary
India
Ireland
Italy
Japan
Malaysia
Mexico
Netherlands
New Zealand
Philippines
Poland
Portugal
Republic of Korea
Russian Federation
Slovakia
Slovenia
South Africa

Spain
Sweden
Switzerland
Taiwan, Greater China
Thailand
United Kingdom of Great Britain and Northern Ireland
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.

Operational 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 Chair	The Board is responsible for overall risk oversight of the Company, which includes ITW's strategic priorities, policies and goals related to environmental, social, supply chain and governance matters. ITW's Board is directly involved in the oversight of the Company's corporate social responsibility (CSR) efforts. Each year the Board receives reports of ITW's CSR related activities and progress towards the goals, including those tied to climate change. The Board ensures that the Company's efforts are approached in a manner that is consistent with its core values and best serve the interests of the Company and all ITW stakeholders. In 2020 the Board reviewed progress towards the current GHG emissions intensity reduction target and considered revising it to ensure that the Company is taking an appropriate stance towards reducing climate change.
Chief Executive Officer (CEO)	The CEO serves as the Chairman of the Board of Directors. In addition to the responsibilities of the Board, the CEO has highest level of authority and responsibility in the company for climate change and all activities that contribute to it. The CEO discusses and guides strategy periodically and provides oversight of the Company, which includes ITW's strategic priorities, policies and goals related to environmental, social, supply chain and governance matters. The CEO manages information on climate-related issues and makes decisions based on it; for example, the Corporate Social Responsibility Strategy, which includes environmental impact management and climate-change. The CEO reports to the Board annually.
Board-level committee	The annual review of environmental, safety and health matters that may have a material impact on the Company's financial statements or compliance policies is the responsibility of the Audit Committee of the Board. To date, ITW has not experienced a material climate change related impact.

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	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The Board is responsible for overall risk oversight of the Company, which includes ITW's strategic priorities as well as policies and goals related to environmental matters, including climate change. ITW's Board reviewed and approved the emissions intensity reduction target in place in 2020. The Board reviewed the company's progress towards meeting the target at period meetings. The Board has also reviewed and approved an updated target announced in 2021. The Board will continue address ITW's future climate change related goals.

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)	Responsibility	Frequency of reporting to the board on climate-related issues

Other C-Suite Officer, please specify Vice Chairman	Other, please specify Discusses and guides strategy and assesses climate-related risks and opportunities, reports to BOD at least annually	Annually
Other, please specify Vice President of Sourcing and EHSS	Both assessing and managing climate-related risks and opportunities	Annually
Corporate responsibility committee	Assessing climate-related risks and opportunities	As important matters arise
Energy manager	Managing climate-related risks and opportunities	Not reported to the board
Other, please specify Vice President General Manager	Both assessing and managing climate-related risks and opportunities	Not reported to the board
Other, please specify Director Environmental Health Safety and Sustainability	Other, please specify Provides oversight	Annually
Other, please specify General Counsel	Both assessing and managing climate-related risks and opportunities	Annually

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).

VPGM – Reports to Executive Vice Presidents of each operating segment. The VPGMs are responsible for division level climate change related risks are assessed and mitigated and opportunities are capitalized on. VPGMs receive a semi-annual report to monitor the progress of their divisions towards the emissions intensity reduction target. They are then able to provide additional support to businesses as needed.
VP of Sourcing and EH&S – Reports to the Vice-Chairman of the Board and is a member of the Corporate Responsibility Committee. The VP of Sourcing and EH&S is responsible for ensuring that high level climate change related risks and opportunities impacting ITW are assessed annually. Each year the VP of Sourcing receives a report of ITW's Clean Tech revenue, GHG emissions and energy consumption. The energy and emissions data are used to guide the energy procurement strategy.

Energy Manager – Reports to the VP of Sourcing and EH&S and is responsible for ensuring that ITW has available the tools required to reduce energy consumption and greenhouse gas emissions. The Energy Manager works closely with the EH&S department to monitor global energy consumption and cost. The manager then works with ITW facilities to implement energy and emissions reduction strategies, which sometimes includes purchasing clean energy and/or renewable energy credits.
Director EH&S – Reports to the VP of Sourcing and EH&S and is responsible for day-to-day environmental-related responsibilities, including overseeing the execution of ongoing environmental, safety and regulatory compliance initiatives, including climate change. Provides oversight for the collection of climate change related data and the production of CSR, CDP and other related stakeholder reports.
Sr. Sustainability and Product Stewardship Engineer - Reports to the Director EH&S and is a member of the Corporate Responsibility Committee, responsible for collecting environmental data from ITW facilities and working with them to ensure they understand their GHG emissions footprint and practical steps they can take to reduce emissions, as well as completing customer environmental scorecards. Provides data used for the CSR, CDP and other related stakeholder reports, as well as completing those reports.
General Counsel, Secretary – Reports to the CEO/Chairman of the Board and is a member of the Corporate Responsibility Committee, is responsible for ensuring that stakeholders are informed of ITW's ESG related impacts, including climate change.
Corporate Responsibility Committee – A multifunctional team which collaborates throughout the year to discuss corporate social responsibility and environmental, social, and governance issues at ITW. The environmental component of these discussions focus on energy, GHG emissions, reduction strategies and targets among other topics. This team is responsible for all ESG reporting.

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	No, and we do not plan to introduce them in the next two years	No comment

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	No comment
Medium-term	2	4	No comment
Long-term	5	100	No comment

C2.1b

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

We would consider a substantive impact to exist only where any of our businesses changed their operations, sources of supply or customer base due to matters that would cause a change in any one of our seven business segments that was considered significant by that segment or ITW overall.

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

Risk management process

A specific climate-related risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Long-term

Description of process

Each year, senior management reviews the long-range plans of our segments/divisions. These plans consider, as appropriate, long-term sustainability implications and the ability to meet customer needs related to sustainability and clean technology.
As part of their long-range plans, our businesses focus on long-term sustainability as appropriate to meet customer needs relative to clean technology (clean-tech), including water conservation, renewable energy use and emissions reduction.

Value chain stage(s) covered

Direct operations

Risk management process

A specific climate-related risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term

Description of process

Legal compliance is a key business risk to ITW. To identify climate change related regulatory risks, the ITW EHSS Department monitors climate change regulations in the regions where ITW has significant operations. The department looks for regulations that limit the amount of GHG emissions, carbon emissions trading schemes and carbon taxes. We then assess the potential cost of the risks and determine if they are substantive to ITW. To mitigate the GHG Regulatory risks, the EHSS Department and the Energy Manager within ITW Strategic Sourcing work with the facilities to reduce their GHG emissions first through energy consumption reduction efforts, followed by the consideration of purchasing renewable energy credits or generating renewable energy. The final decision is made by the businesses affected.

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term

Description of process

ITW has identified several key business risks, significant external events is one such area, which includes physical climate change risks We work with our insurance providers to identify the facilities that are subject to the following physical risks related to climate change: flood, windstorms, hurricanes, and wildfires. We also consider earthquakes. After identifying the at-risk facilities, we assess the level of financial risk that would be incurred by the loss of these facilities. We then determine if this potential loss would be substantive to ITW.

Each physical risk has a different mitigation method. To mitigate the risk of flooding, we reassess our facilities annually. We apply various levels of mitigation based on the level of risk exposure, which we identify with our insurance provider. The facilities have outlined Flood Emergency Response Plans along with lists of emergency contacts. We require that these plans be kept current. Some locations require physical improvements to reduce the flood levels in an emergency, such as flood gates and flood walls, these capital improvements are given priority.

To mitigate the risk of windstorms and hurricanes we use a Hurricane Emergency Response Plan, with emergency contacts to outline procedures as storms develop. ITW Risk Management tracks windstorms and hurricanes and alerts affected businesses to begin their emergency response measures. In cases where identify facilities that require structural improvements to handle windstorms and hurricanes, we make the improvements as they are identified to prevent future loss.

In the cases of earthquakes and fires we use an Emergency Response Plan and implement additional physical protections to prevent physical loss.

Each affected division of ITW makes plans to ensure they have access to the materials needed periods where their suppliers may be at

increased risk of natural disaster, for example, hurricane season. The plans often include by ordering extra raw material ahead of time. In cases where their own facilities are at risk, they plan to shift production to either a sister division or a supplier to ensure they can continue to provide for their customers.

Value chain stage(s) covered

Upstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term

Description of process

Supply Chain Integrity and Continuity is a key business risk for ITW. To identify our overall supply chain risks, we use a combination of internal analysis and risk information from a third-party service, Bureau van Dijk. We examine financial, geopolitical, physical, reputational, and regulatory risks.

Each year we perform a risk assessment of our direct supply chain partners. The results are shared with the Vice Chairman of the Board.

When assessing the supply chain risks, we begin with what we consider an internal assessment. We examine several financial indicators, delivery rate, quality of goods and services, consistency of performance, and outcomes from site visits and the results from our internal audits. From this we create an “ITW” score, which is the weighted average of the scores of the indicators we review, financial indicators have the greatest weight. We then rank the suppliers either low or high risk. We then examine the risk information from Bureau van Dijk for the high-risk suppliers. Bureau van Dijk analyzes and compares public facing company information to determine levels of risk, mainly financial, but also includes an environmental, social and governance risks ranking.

In addition to what has been shared, we identify the physical risks of our suppliers individually by location. We identify suppliers that are in

areas sensitive to natural disasters and extreme weather events, such as hurricane/tornado zones. Many of our supply chain partners face the same level of physical risks as our own facilities. In our overall supply chain, approximately 45 percent of global third-party spend is with suppliers who are near the ITW facilities they serve.
To mitigate the risk of supply disruption due to natural disasters we keep additional inventory from suppliers on hand. We store the inventory at either our locations or at third party warehouses, not at the suppliers' facilities, keeping it out of harm's way should a natural disaster or weather event affect the supplier.

Value chain stage(s) covered

Upstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Description of process

Each quarter a supplier risk assessment is performed by operating segment. The Segment Sourcing Directors review and distribute the information to the businesses within their segments to assess and to act on.

C2.2a

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

	Relevance & inclusion	Please explain

Current regulation	Relevant, always included	Current climate-related regulation is important and included in our risk assessment at the corporate, division, and business levels. Examination of environmental regulatory requirements is included because it helps to understand the full costs of doing business, influences new product development opportunities related to eco-efficiency and guides future business decisions. For example, we consider the impact of the EU's GHG emissions reduction goals and how it impacts our cost of energy in the EU. We also consider the additional costs of "green" energy. Several ITW businesses are able to improve the eco-efficiency of their products, enabling their customers to reduce their GHG emissions. Products in the Food Equipment Group offer reduced energy consumption compared to competitor products, allowing customers to meet their energy and GHG emissions reduction goals.
Emerging regulation	Relevant, always included	Our businesses also consider emerging regulations and how they may create risks and opportunities related to the products and services they offer. New regulations inform our product innovation process as needed. For example, the US has committed to a nationwide GHG emissions reduction target, listing electric vehicles and charging infrastructure as components of reaching the target. ITW's Automotive OEM Segment has been preparing for future regulation in the US to expand existing production of lightweight plastic automotive components including fasteners, wire harnesses, and vehicle charging components to name a few of the vehicle components we manufacture. This regulation will continue to drive innovation at ITW.
Technology	Relevant, always included	Customer-Back Innovation is a key part of ITW's Business Model, which creates our competitive advantage. Our businesses are technology based and seek to innovate to assist in solving customer problems-including those related to climate change opportunities. Being mindful that reducing GHG emissions will lead to the obsolescence of many engines that burn fossil fuels, replacing them with electric motors, and shifting technology; ITW GSE introduced a low-emission battery powered ground power unit to their product offerings. This allows customers an option to replace diesel powered units.
Legal	Not evaluated	Although we have dedicated time to understanding the potential litigation claims as they relate to product stewardship, we have not yet evaluated the potential for climate-related litigation claims.

Market	Relevant, sometimes included	Our businesses always consider the market issues related to climate change and how they may affect them going forward, both positively and negatively. Being mindful that reducing GHG emissions will lead to the obsolescence of many engines that burn fossil fuels, replacing them with electric motors and shifting technology; ITW GSE introduced a low-emission battery powered ground power unit to their product offerings. This allowed customers an option to replace diesel powered units. This is one example of how ITW adjusts to market changes driven by climate change.
Reputation	Relevant, sometimes included	Because the majority of ITW's businesses supply products to other businesses, their climate change related reputational risk level is much lower than that of businesses that supply products that are sold to consumers. The ITW businesses that supply products directly to the consumer market consider the reputational risks of climate change in their long-range plans. ITW Hi-Cone, a leading supplier of plastic-based multi-packaging systems for global beverage and general products industries, is committed to ensuring its products are effective and environmentally friendly for both customers and communities. As evidence of this focus, Hi-Cone is committed to transforming 100 percent of its product portfolio to RingCycles™ – a more than 50 percent post-consumer recycled content solution that is expected to eliminate Hi-Cone's use of more than 25 million pounds of virgin plastic per year. Compared to paperboard six-pack options, RingCycles™ demonstrates sustainable advantages in every impact category*: • 73 percent less greenhouse gasses contributed to climate change • 90 percent less energy consumed during; manufacturing and use • 73 percent less water used in manufacturing and use; and • 86 percent less solid waste contributed to landfills Taking environmental stewardship a step further, by 2025, Hi-Cone is committed to providing a solution that is 100 percent recyclable, compostable or biodegradable. Hi-Cone's Ring RecycleMe program allows consumers to collect and return their carriers for recycling. The recycled materials are converted back into resin and used to make new carriers, reducing the carbon footprint and reducing the amount of waste sent to landfills, improving the reputation of the company and products. https://hi-cone.com/

Acute physical	Relevant, always included	ITW uses a risk-based approach to identify and assess physical risks to our global operations. We review areas of more significant exposure to ensure we are taking the proper steps to minimize exposure. Most business units also have formal emergency response plans and many have developed business continuity plans that address physical threats and their planned responses. ITW's wide distribution of diversified operations, locations and end markets reduces the risk of severe weather conditions to our overall enterprise.
Chronic physical	Not relevant, explanation provided	We have reviewed our global operations and do not believe that we have any operations with substantive chronic physical risks. Because of the nature of our business, our operations and material procurement are not impacted by changes in temperature, drought or land degradation. Most of our facilities are inland and not expected to be impacted by rising sea levels.

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?

No

C2.3b

(C2.3b) Why do you not consider your organization to be exposed to climate-related risks with the potential to have a substantive financial or strategic impact on your business?

	Primary reason	Please explain
Row 1	Risks exist, but none with potential to have a substantive financial or strategic impact on business	Although we face inherent risks driven by changes in climate change related regulation, these risks are not expected to generate a substantive change in our business operations, revenue or expenditure. ITW does not generally engage in heavy manufacturing and its decentralized structure with many operating units in geographically diverse locations and end markets help mitigate these risks. Examples of climate change risks include:

		ITW is impacted by the Energy Efficiency Directive in the European Union and Energy Savings Opportunity Scheme in the UK, where approximately 25% of the 2020 operating revenue was generated. Although this portion of revenue is significant, the costs associated with the mandated energy audits are not material to ITW and do not pose a substantive risk.

C2.4

(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

(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 of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

ITW manufactures numerous products that enable our customers to reduce GHG emissions, energy consumption and operating costs. One example is the battery powered ground power unit (GPU) developed by ITW GSE. The GPU provides electricity to power an aircraft's electrical system while parked at a gate. The battery powered GPU offers an energy efficient alternative to traditional diesel-powered units and is estimated to reduce GHG emissions by 90% over a year.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

This is proprietary information to ITW and while this product is financially positive to our portfolio, we have chosen to not share this information publicly.

Cost to realize opportunity

1

Strategy to realize opportunity and explanation of cost calculation

The strategy taken to improve our chances of realizing this opportunity is the ITW Customer-Back-Innovation approach. We engage with our customers to provide effective solutions to regulatory driven pain points as they relate to stricter emissions laws being promulgated throughout the world, and other customer changing needs.

Comment

No additional comments

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

The EU Green Deal and Waste Directive Framework led ITW Hi-Cone, a leading supplier of plastic-based multi-packaging systems for global beverage and general products industries, to commit to ensuring its products are effective and environmentally friendly for both customers and communities. Hi-Cone committed to transforming 100 percent of its product portfolio to RingCycles™ – a more than 50 percent post-consumer recycled content solution that is expected to eliminate Hi-Cone's use of more than 25 million pounds of virgin plastic per year. Compared to paperboard six-pack options, RingCycles™ demonstrates sustainable advantages in every impact category*:

• 73 percent less greenhouse gasses contributed to climate change
• 90 percent less energy consumed during manufacturing and use

These products are manufactured in the US, EU and South America, they are sold globally with sales heaviest in the EU and US.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

These sales will have a high financial impact for ITW Hi-Cone.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

We have chosen to not share the cost to realize this opportunity.
The strategy included working closely with customers (Customer Back Innovation), non-government agencies to define the problem. They worked with materials experts to develop the new resin and test various levels of recycled content.
Hi-Cone also works with industry groups to find additional solutions to the problem, including ways to increase recycling rates and are working to further improve the plastics recycling infrastructure in the future.

Comment

C3. Business Strategy

C3.1

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

Yes

C3.1b

(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?

	Intention to publish a low-carbon transition plan	Intention to include the transition plan as a scheduled resolution item at Annual General Meetings (AGMs)	Comment

Row 1	Yes, in the next two years	No, we do not intend to include it as a scheduled AGM resolution item	During this reporting period ITW surpassed the original emissions intensity reduction target, showing us that we can certainly accomplish greater improvements. ITW is exploring a commitment to Net-Zero Carbon goal. We need to determine how we can reach this goal, remain profitable and continue to grow, which requires the development of a low-carbon transition plan. We will rely on the ITW Business Model as we create a plan that benefits the environment, while creating a competitive advantage and adding value to all our divisions and meets the needs of our stakeholders. At the time of this response we have not completed the plan and are not able to commit to including it as a scheduled AGM resolution.

C3.2

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

No, but we anticipate using qualitative and/or quantitative analysis in the next two years

C3.2b

(C3.2b) Why does your organization not use climate-related scenario analysis to inform its strategy?

Climate related scenario analysis is not used today as part of our business strategy, because climate change has not been considered a material risk to ITW. We see the value in expanding our approach to assessing the impact of climate change and are open to using climate-related scenario analysis in the near future.

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	Climate change has created opportunities for the development of new products that reduce GHG emissions and energy consumption for our customers. Examples include battery-operated ground power units for aircraft, energy and water efficient commercial kitchen appliances, and plastic automotive components. Each of the products listed have global opportunities.
Supply chain and/or value chain	Yes	ITW is a global, diversified company, with operations in diverse locations. Our businesses seek out and engage suppliers who may be able to offer insight and assistance as we seek to develop our next generation products that serve our customers. Additionally, ITW has undertaken, and continues to undertake, reviews of our supply chain where we may have opportunity to streamline the supply chain and reduce transportation which supports a reduction in related GHG's (mitigation). A specific example is ITW Hi-Cone's partnership with TerraCycle®, Avangard Innovative and others, to collect and recycle their products to be used for raw materials to create new products.
Investment in R&D	Yes	Climate change has created opportunities for the research and development of new products that reduce GHG emissions and energy consumption for our customers (mitigation). Examples include the research of alternative use of vehicle batteries for systems such as our ground power unit for aircraft. Investments in seeking out and developing new more durable plastics for use in automotive applications are also a result of climate change related opportunities as vehicle fuel efficiency requirements increase. The outcomes of this research and development can have global reach.
Operations	Yes	ITW facilities in the United Kingdom are required by law to have energy use assessments every four years. The goal is to identify cost effective means to improve energy efficiency and reduce GHG emissions, a mitigation strategy. In deregulated energy markets in Europe and the US we have expanded our Energy Purchasing activities to include low carbon energy to reduce the emissions of our operations, a second mitigation strategy.

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 Direct costs Capital expenditures	Each of our businesses factors in necessary investments related to changing environment and product opportunities in their long range and annual planning processes.

C3.4a

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

In our decentralized business structure, each of our businesses considers climate related risks and opportunities relative to their unique business. The risk and opportunity profile for each business is different, as they offer unique products or services to a variety of industry segments and customers. For example, in our automotive business segment, the business teams have identified light-weighting and improved fuel economy (including electric vehicles) as two large business opportunities related to a lower carbon economy. The business is investing in engineering and product development that supports alternative designs to take weight out of vehicles and to improve engine or overall vehicle efficiency related to fuel economy.

In our Food Equipment Segment, reducing the energy and water consumption of our products is a primary driver of product development.; our customers require more efficient products. Additionally, we continue to offer and explore other lower GWP refrigerants for our commercial refrigeration equipment.

Each year our businesses create long-range plans that look forward at least five years. In this long-range planning process, the businesses consider applicable risks and opportunities, of which climate-related issues is one area of consideration. The plans are reviewed by senior leadership, including our CEO. While the product strategies of our businesses are unique to each of them, these strategies are informed and guided by overall risk and opportunity assessments, which include climate-related risks and opportunities.

C4. Targets and performance

C4.1

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

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Year target was set

2019

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Intensity metric

Metric tons CO2e per unit revenue

Base year

2017

Intensity figure in base year (metric tons CO2e per unit of activity)

49

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure

100

Target year

2027

Targeted reduction from base year (%)

20

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]

39.2

% change anticipated in absolute Scope 1+2 emissions

-15

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year (metric tons CO2e per unit of activity)

36

% of target achieved [auto-calculated]

132.6530612245

Target status in reporting year

Achieved

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

Target ambition

Please explain (including target coverage)

ITW is committed to continuous improvement in reducing greenhouse gas (GHG) emissions. In 2019, ITW established a company-wide GHG emissions intensity reduction target: By 2027, reduce combined Scope 1 and 2 GHG emissions per U.S. dollar of operating revenue by 20 percent below 2017 levels.

To achieve our target, we are taking the following approach:
1. Reducing energy consumption and improving operational efficiency in our manufacturing and ITW-owned facilities, implemented in accordance with our division-led environmental management systems.
2. Expanding our purchase of energy from renewable sources, including wind and solar, across our global footprint where possible.

In early 2021, as a result of the progress made toward achieving our initial target, we increased
our target. Our current GHG emissions intensity reduction target is: By 2030, reduce combined Scope 1 and Scope 2 GHG emissions per U.S. dollar of operating revenue by 40 percent below 2017 levels.

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	1	0
To be implemented*	3	38
Implementation commenced*	0	0
Implemented*	32	2,257
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

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

750.5

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

143,000

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

343,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings

Building Energy Management Systems (BEMS)

Estimated annual CO2e savings (metric tonnes CO2e)

27.9

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

5,600

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

1,200

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings

Draught proofing

Estimated annual CO2e savings (metric tonnes CO2e)

6

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

1,200

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

45,000

Payback period

>25 years

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings

Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)

66.3

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

2,200

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

2,180

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes

Automation

Estimated annual CO2e savings (metric tonnes CO2e)

50

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

280,000

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

398,272

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes

Compressed air

Estimated annual CO2e savings (metric tonnes CO2e)

47.2

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

3,500

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

0

Payback period

No payback

Estimated lifetime of the initiative

3-5 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes

Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)

325

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

47,000

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

350,000

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings
Maintenance program

Estimated annual CO2e savings (metric tonnes CO2e)
140

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
31,000

Investment required (unit currency – as specified in C0.4)
13,300

Payback period
<1 year

Estimated lifetime of the initiative
1-2 years

Comment

Initiative category & Initiative type
Energy efficiency in production processes
Other, please specify
Audit System

Estimated annual CO2e savings (metric tonnes CO2e)

140

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

42,000

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

11,500

Payback period

<1 year

Estimated lifetime of the initiative

11-15 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Equipment Insulation

Estimated annual CO2e savings (metric tonnes CO2e)

709

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

32,000

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

0

Payback period

No payback

Estimated lifetime of the initiative

21-30 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

33

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1,500

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

0

Payback period

No payback

Estimated lifetime of the initiative

16-20 years

Comment

C4.3c

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

Method	Comment
Financial optimization calculations	ITW compares costs and benefits of proposed projects and uses net present value (NPV) calculations as we consider opportunities to improve performance.
Internal finance mechanisms	ITW uses internal finance mechanisms to drive emissions reductions through improving building services such as lighting and process improvements that include equipment upgrades.

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

Company-wide

Description of product/Group of products

ITW has a broad base of eco-efficient products that on their own are more energy efficient or enable customers to be more energy efficient or support reduced emissions in other ways by solving customer problems. In 2020 28% of revenue was from clean tech products. As an example, ITW Ground Support Equipment has developed a battery-operated Ground Power Unit (GPU) for aircraft to offer as an alternative to diesel powered units. When compared to a diesel engine unit, the battery powered GPU offers customers a 90% reduction in CO2 emissions over a year's time when operating for 5.5 hours a day. Another example includes light weight products which ITW provides to the auto industry, which contribute to their improved vehicle fuel efficiency. Another example includes increased energy efficiency related to our warewash and refrigeration equipment.

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 the amount of revenue from products that allow our customers to reduce their energy consumption.

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

28

Comment

For additional information please visit https://itw-csr.com

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, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

131,204

Comment

2017 Scope 1 emissions were recalculated in 2020 for the following reasons: updated UK Government GHG Conversion Factors for Company Reporting, published July 2020; National Greenhouse Accounts Factors: 2020, published September 2020; and corrections to reported figures.

Scope 2 (location-based)

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

548,642

Comment

2017 Scope 2 location-based emissions were recalculated in 2020, because we updated UK Government GHG Conversion Factors for Company Reporting, published July 2020; National Greenhouse Accounts Factors: 2020, published September 2020; and corrections to reported figures.

Scope 2 (market-based)

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

548,642

Comment

2017 Scope 2 location-based emissions were recalculated in 2020, because we updated UK Government GHG Conversion Factors for Company Reporting, published July 2020; National Greenhouse Accounts Factors: 2020, published September 2020; and corrections to reported figures.

We had not calculated market-based emissions, many of the emissions/residuals we needed were not available. We used the grid average emissions factors/location-based to calculate the market-based GHG emissions.

C5.2

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

Australia - National Greenhouse and Energy Reporting Act
Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

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)

103,961

Comment

Includes the greenhouse gas emissions from the combustion of natural gas, heating/fuel oil, diesel, gasoline, propane and liquefied natural gas and foam blowing agents.

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

We use grid average figures to calculate the location-based emissions and remove the emissions covered by RECs, REGOs and solar energy production to calculate our market based emissions.

C6.3

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

Reporting year

Scope 2, location-based

437,216

Scope 2, market-based (if applicable)

354,939

Comment

We use grid average figures to calculate the location-based emissions and remove the emissions covered by RECs, REGOs and solar energy production to calculate our market-based emissions.

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?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

wood

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions excluded

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions excluded

Explain why this source is excluded

We have two locations that burn wood (Scope 1) as an energy source. We do not include it in the reporting boundary, it represented less than 0.5% of our total 2020 GHG emissions.

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

Relevant, not yet calculated

Please explain

The total volumes and types of purchased goods and services were not collected at the enterprise level in 2020; we are not able to calculate the emissions related to this.

Capital goods

Evaluation status

Relevant, not yet calculated

Please explain

The cost and categorization of all capital goods was not collected at the enterprise level in 2020; we are not able to calculate the emissions related to this.

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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

113,433

Emissions calculation methodology

We used the GHG Protocol/Quantis Scope 3 Evaluator to estimate the amount of emissions from Fuel-and-energy related activities that are not included in Scope 1 or 2. This year's value is 11% less than last year's estimate.

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

0

Please explain

Fuel-and-energy-related activities not included in Scope 1 or 2 are not collected at the enterprise level nor is any related data from out value chain partners or supplier.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

244,917

Emissions calculation methodology

To calculate the emissions from Upstream transportation and distribution we used the mode of shipment, weight and cost of each shipment provided by our service providers. We cleansed the data to make sure we had all the information needed. We next calculated the distance traveled for each shipment using the latitude and longitude of the locations, we then added 20% to the calculated value to account for actual routes that may have been taken. Using the calculated distances and the modes of travel, we calculated the GHG emissions using the US EPA's 2018 Upstream Transportation and Distribution and Downstream Transportation and Distribution emissions factors and the IPPC AR5 global warming potential values.

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

100

Please explain

We relied on data provided by our freight carriers to calculate the emissions. The information used included weight and cost of each shipment. This year's value is 5% less than last year's estimate.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

16,493

Emissions calculation methodology

We used the Quantis Scope 3 Evaluator to calculate this estimated value based on the waste to landfill removal cost. It includes solid and liquid wastes.

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

100

Please explain

We used the Quantis Scope 3 Evaluator to calculate this estimated value based on the waste to landfill removal cost. It includes solid and liquid wastes. This estimated value is 3% lower than last year's estimate.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

5,000

Emissions calculation methodology

Using flight mileage provided by the corporate travel agency and emissions factors from the US EPA, the flight related business travel emissions are calculated.

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

100

Please explain

Using flight mileage provided by the corporate travel agency and emissions factors from the US EPA, the flight related business travel emissions are calculated. The business travel related emissions are 75% lower than the last reporting year, there was a decreased amount of air travel due to the pandemic.

This emissions value has been third party verified.

Employee commuting

Evaluation status

Not evaluated

Please explain

We do not collect employee personal travel information. We are not able to provide a reliable estimate of the emissions for employee commuting. We have chosen not to use the Quantis Scope 3 evaluator to estimate this value, because it does not take any actual information that would be used to calculate the emissions into account.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Our reporting boundary for Scopes 1 and 2 emissions includes leased manufacturing facilities. The remaining leased facilities are a minor contributor to our footprint, they include office space, warehouses and service centers.

Downstream transportation and distribution

Evaluation status

Not evaluated

Please explain

The downstream transportation and distribution of goods are managed at the division level and not available at the enterprise level. We were not able to calculate or estimate this emissions value for 2020.

Processing of sold products

Evaluation status

Not evaluated

Please explain

The processing of sold products is managed at the division level and not available at the enterprise level. We are not able to calculate this emissions value. We do not have the mass of the sold products needed to use the Quantis Scope 3 Evaluator to estimate the value.

Use of sold products

Evaluation status

Not evaluated

Please explain

The use of sold products is managed at the division level and not available at the enterprise level. There is a small number of products whose emissions from use are known, but the percentage is immaterial (<1% of products). We are not able to calculate the total value and we do not have the mass of the sold products needed to use the Quantis Scope 3 Evaluator to estimate this emissions value for 2020.

End of life treatment of sold products

Evaluation status

Not evaluated

Please explain

There is a small number of products whose emissions from end of life use are known, but the percentage is immaterial (<1% of products). We are not able to calculate or estimate this emissions value for 2020.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

In 2020 we had one downstream leased facility and the tenant is responsible for the utilities, we do not consider this to be a material contributor to our Scope 3 footprint.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

ITW has no franchises

Investments

Evaluation status

Not evaluated

Please explain

We do not have information available to either calculate or estimate this emissions value.

Other (upstream)

Evaluation status

Not evaluated

Please explain

No other potential Scope 3 emissions sources are evaluated.

Other (downstream)

Evaluation status

Not evaluated

Please explain

No other potential Scope 3 emissions sources are evaluated.

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	ITW Hi-Cone uses life cycle assessment to calculate the total GHG emissions and waste from their products.

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	On a case-by-case basis	Other, please specify	ISO 14040 & 14044	ITW Hi-Cone, a leading supplier of plastic-based multi-packaging systems for global beverage and general products industries, assesses the life cycle emissions of their products. They invested in a study with their new post consumer resin supplier to analyze the financial and environmental savings from moving from virgin LDPE to recycled LDPE. This supports our movement toward a circular economy. By 2025, Hi-Cone is committed to providing a packaging solution that is 100 percent recyclable, compostable or biodegradable. Compared to paperboard six-pack options, Hi-Cone's new RingCycles™ demonstrates (from Lifecycle Assessment): • 73 percent less greenhouse gasses contributed to climate change; and • 90 percent less energy consumed during manufacturing and use.

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

43

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

541,177

Metric denominator

unit total revenue

Metric denominator: Unit total

12,688,589,829

Scope 2 figure used

Location-based

% change from previous year

0

Direction of change

No change

Reason for change

No change

C7. Emissions breakdowns

C7.1

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

No

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Argentina	30
Australia	3,301
Belgium	4,138
Brazil	597
Bulgaria	6
Canada	1,220
China	1,984
Colombia	19
Costa Rica	1
Czechia	618
Denmark	931
Finland	323
France	1,705

Germany	5,463
Hungary	104
India	249
Ireland	443
Italy	1,305
Japan	7
Malaysia	427
Mexico	255
Netherlands	399
New Zealand	298
Poland	156
Russian Federation	105
Slovenia	64
Republic of Korea	2,163
Spain	2,073
Sweden	44
Switzerland	290
United Kingdom of Great Britain and Northern Ireland	6,032
United States of America	69,585
South Africa	0
Slovakia	1,313
Portugal	151

Croatia	444

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)
Automotive OEM	23,564
Construction Products	10,931
Corporate	961
Food Equipment	11,744
Polymers & Fluids	7,699
Specialty Products	25,063
Test & Measurement and Electronics	9,791
Welding	13,299
Other	909

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)
Argentina	116	116	380.98	0
Australia	13,118	13,108	14,143.45	24.6
Belgium	2,217	86	8,520.21	8,191.44
Brazil	1,341	1,341	16,452.56	0
Bulgaria	989	989	2,206.21	0
Canada	708	708	3,842.89	0
Chile	27	27	91.35	0
China	70,480	70,480	89,335.24	0
Colombia	13	13	87.29	0
Costa Rica	58	58	1,225.92	0
Croatia	444	444	1,391.97	0
Czechia	15,383	417	29,187.87	28,397.02
Denmark	2,558	2,530	7,487.62	81.77
Finland	130	130	538.34	0
France	4,168	4,168	49,028.19	0
Germany	20,942	9,041	51,842.59	29,461.64
China, Hong Kong Special Administrative Region	20	20	22.81	0
Hungary	430	430	1,250.4	0
India	6,412	6,412	6,786.6	0

Ireland	1,391	0	2,595.49	2,595.49
Italy	6,262	6,262	15,506.96	0
Japan	249	249	594.03	0
Malaysia	13,329	13,329	20,322.95	0
Mexico	21,129	21,129	39,002.81	0
Netherlands	1,590	628	4,028.7	2,437.96
New Zealand	609	609	1,969.73	0
Philippines	543	543	1,248.24	0
Poland	5,220	5,220	7,919.3	0
Portugal	114	114	272.89	0
Russian Federation	220	220	667.83	0
Slovenia	1,524	1,524	4,589.32	0
South Africa	577	577	663.21	0
Republic of Korea	16,491	16,491	35,486.19	0
Spain	12,866	12,866	36,751.71	0
Sweden	186	43	3,871	2,967.72
Switzerland	8	8	293.5	0
Taiwan, Greater China	2,733	2,733	8,870.22	0
Thailand	1,460	1,460	2,854.44	0
United Kingdom of Great Britain and Northern Ireland	3,740	347	16,189.16	15,777.71
United States of America	206,239	158,890	414,322.05	87,549.67

Slovakia	1,183	1,183	5,289.45	0

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)
Automotive OEM	175,960	142,249
Construction Products	40,212	36,327
Corporate	3,679	1,841
Food Equipment	20,503	17,940
Polymers & Fluids	15,832	14,928
Specialty Products	90,756	66,697
Test & Measurement and Electronics	42,682	40,641
Welding	45,857	32,597
Other	1,718	1,718

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	1	Increased	0	This is the difference in the amount of energy produced and consumed by a solar array in 2019 and 2020
Other emissions reduction activities	11,078	Decreased	18	This is the change in emissions due to energy conservation projects and a change in the foam blowing agent used for our refrigerators.
Divestment	5,810	Decreased	9	This is the sum of the 2019 Scope 1 and 2 emissions from businesses that were divested and closed and did not operated in 2020.
Acquisitions	0	No change	0	There were no acquisitions in 2020.
Mergers	0	No change	0	There were no business mergers that impacted emissions in 2020.
Change in output	5,579	Decreased	9	There was a 9% decrease in operating revenue, assuming there was an equivalent change in operations, i.e. 9% of the total change in emissions is due to operations.
Change in methodology	0	No change	0	We updated the emission factors for the UK and AUS, the overall emission change was 730 t(metric) CO2e, but we are not counting it, because we are using the recalculated emissions value for 2019, nullifying the effect.
Change in boundary	0	No change	0	There were no changes to the reporting boundary in 2020
Change in physical operating conditions	0	No change	0	There were no changes in the physical operating conditions.
Unidentified	39,564	Decreased	64	This is the amount of emissions decrease that is unaccounted for.

Other	0	No change	0	There are no "other " changes .

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?

Location-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.

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

Direction of change

Decreased

Primary reason for change

Change in output

Change in emissions in this category (metric tons CO2e)

13,710

% change in emissions in this category

11

Please explain

The pandemic led to decreased production in 2020 reducing our fuel and energy-related activities.

Upstream transportation and distribution

Direction of change

Decreased

Primary reason for change

Other, please specify

Reduced production led to a reduction in upstream transportation and distribution

Change in emissions in this category (metric tons CO2e)

12,044

% change in emissions in this category

5

Please explain

The pandemic led to decreased production in 2020 reducing our upstream transportation and distribution.

Waste generated in operations

Direction of change

Decreased

Primary reason for change

Change in output

Change in emissions in this category (metric tons CO2e)

493

% change in emissions in this category

3

Please explain

Due to the pandemic many of our facilities reduced production compared to the previous year. Many operated either fewer hours or with fewer people, reducing the amount of waste generated an associated emissions.

Business travel

Direction of change

Decreased

Primary reason for change

Other, please specify

Decreased travel due to the pandemic

Change in emissions in this category (metric tons CO2e)

14,900

% change in emissions in this category

75

Please explain

Decreased travel due to the pandemic, reducing the emissions.

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	502,598	502,598
Consumption of purchased or acquired electricity		0	907,107	907,107
Consumption of self-generated non-fuel renewable energy		24.6		24.6
Total energy consumption		24.6	1,409,705	1,409,729.6

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)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

37,342

Emission factor

0.267

Unit

metric tons CO2e per MWh

Emissions factor source

Average value taken from GHG Protocol, DEFRA, and NGER

Comment

We use diesel fuel for running backup electricity generators and vehicles. We are unable to quantify the amount of diesel used for running generators.

Fuels (excluding feedstocks)

Petrol

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

11,253

Emission factor

0.252

Unit

metric tons CO2e per MWh

Emissions factor source

Average value taken from GHG Protocol, DEFRA, and NGER

Comment

We use petrol/gasoline for automobiles and engines used for product testing.

Fuels (excluding feedstocks)

Distillate Oil

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

6,424

Emission factor

0.267

Unit

metric tons CO2e per MWh

Emissions factor source

Average value taken from GHG Protocol, DEFRA, and NGER

Comment

We use distillate oil for heating our facilities.

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

9,162

Emission factor

0.222

Unit

metric tons CO2e per MWh

Emissions factor source

Average value taken from GHG Protocol, DEFRA, and NGER

Comment

It is assumed that the propane used for stationary combustion is used for heating, the remainder is used for fork trucks.

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

438,417

Emission factor

0.2

Unit

metric tons CO2e per MWh

Emissions factor source

Average value taken from GHG Protocol, DEFRA, and NGER

Comment

We use natural gas to produce heat used for heating the facilities, manufacturing processes, heating water and even cooking in our cafeterias.

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	24.6	24.6	24.6	24.6
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, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

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

Belgium

MWh consumed accounted for at a zero emission factor

8,191

Comment

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

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

Czechia

MWh consumed accounted for at a zero emission factor

28,397

Comment

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

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

Denmark

MWh consumed accounted for at a zero emission factor

81,778

Comment

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

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

Germany

MWh consumed accounted for at a zero emission factor

29,462

Comment

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

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

Ireland

MWh consumed accounted for at a zero emission factor

2,595

Comment

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

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

Netherlands

MWh consumed accounted for at a zero emission factor

2,438

Comment

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Hydropower

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

Sweden

MWh consumed accounted for at a zero emission factor

2,968

Comment

Sourcing method
Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type
Wind

Country/area of consumption of low-carbon electricity, heat, steam or cooling
United Kingdom of Great Britain and Northern Ireland

MWh consumed accounted for at a zero emission factor
0

Comment
The Renewable Energy Guarantee of Origin uses a low emission factor, it is not 0.

Sourcing method
Unbundled energy attribute certificates, Renewable Energy Certificates (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
87,550

Comment

Sourcing method

Other, please specify

On-site solar generation

Low-carbon technology type

Solar

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

Australia

MWh consumed accounted for at a zero emission factor

25

Comment

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	Where applicable, ITW businesses measure the energy efficiency of the products produced. Examples include welders, commercial kitchen equipment and ground power supply units. We are not able to provide the efficiency information for these products.

C-CG8.5a

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

C9. Additional metrics

C9.1

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

Description

Waste

Metric value

32,747

Metric numerator

US tons

Metric denominator (intensity metric only)

NA

% change from previous year

9

Direction of change

Decreased

Please explain

Decreased operations due to pandemic

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	We invested in a study with our new post-consumer resin supplier to analyze the savings from moving from virgin low density polyethylene (LDPE) to recycled LDPE and with additional stakeholders to increase plastic recycling rates and research ways to improve the plastic recycling infrastructure.

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

Recycling

Stage of development in the reporting year

Small scale commercial deployment

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

≤20%

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

0

Comment

We prefer to not disclose the amount invested in this project. For details on the project visit https://hi-cone.com/wp-content/uploads/2020/03/Hi-Cone_2020_Annual_Report_English.pdf

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

Limited assurance

Attach the statement

APEX - CDP Verification Statement ITW_Rev.1.pdf

Page/ section reference

1

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

APEX - CDP Verification Statement ITW_Rev.1.pdf

Page/ section reference

1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

(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

APEX - CDP Verification Statement ITW_Rev.1.pdf

Page/section reference

1

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

C8. Energy	Energy consumption	ISO 14064-3 Second edition 2019-04	The 2020 energy consumption data from a sampling of the locations included in the ITW reporting boundary was reviewed for completeness and accuracy. The figures were compared to the invoices from the service providers to ensure they were in agreement, any errors that were found were corrected. In addition to the data review, some sites were visited virtually to ensure that all of the required energy sources were being reported.

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?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers

C12.1a

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

Type of engagement

Compliance & onboarding

Details of engagement

Included climate change in supplier selection / management mechanism

Code of conduct featuring climate change KPIs

% 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

ITW is committed to working with suppliers who operate with similar dedication to global environmental sustainability. We strive to foster responsibility across our value chain, including partnering with our global supplier network to ensure we are all committed to the highest level of integrity and ethical standards. It is for this reason that we expect our suppliers to focus on reducing the overall environmental impact of their activities and related carbon footprint, landfill waste, and water usage. Suppliers should aim for a 1% year-over-year reduction in absolute greenhouse gas emissions, as described in the ITW Supplier Expectations.

Impact of engagement, including measures of success

We have not tracked the carbon footprint of our suppliers; we are unable to define the impact of engagement.

Comment

NA

C12.1b

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

Type of engagement

Collaboration & innovation

Details of engagement

Other, please specify

Customer back innovation is part of the ITW Business Model. We work with our customers to eliminate their pain points which often includes energy efficiency.

% of customers by number

100

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

0

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

The ITW Business Model guides our approach to innovation, which starts with our customers and their pain points. Our customers are often challenged with environmental issues, such as how to reduce energy use or emissions. We have continuous engagement with our customers and partner with them on the design and development of our solutions to ensure we are enhancing the positive impact while solving their pain points.

While every division is different, they all focus on long-term sustainability as appropriate to meet customer needs relative to clean technology (clean-tech), including water conservation, renewable energy use and emissions reduction.

Although we engage with all of our customers seeking new solutions, not all of them are seeking to reduce their climate change related impacts.

Impact of engagement, including measures of success

Regarding ITW's clean-tech products, which in turn help our customers reduce the environmental impact of their own products, ITW is proud to share that 28 percent of 2020's overall revenue was from clean-tech products. This is an increase of 1 percent from 2019's amount.

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

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 Phase out of F-gases (CA, DE, MD, OR, RI, VA, WA)	Support	Scoping Plan for Reduction of Short-Lived Climate Pollutants by 2030	For the agency to adopt a new F-gas regulation compelling high GWP transition matching federal regulatory efforts to do the same.

C12.3b

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

No

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?

ITW has a single point of contact in Washington D.C. that consults with our various businesses on relevant policy issues that may affect the environment and our businesses.

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 voluntary sustainability report

Status

Complete

Attach the document

ITW_2020CorporateSocialResponsibilityReport_FINAL.pdf

Page/Section reference

Governance, Strategy and Risks/Opportunities- page 7
Strategy - page 28
TCFD Risk - page 9-10
GHG Emissions - page 30
Emissions Target - page 28
Energy Consumption - page 30
Waste - page 30

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

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	Vice President Strategic Sourcing	Procurement manager