Thermo Fisher Scientific Inc. - Climate Change 2021

C0. Introduction

C0.1

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

Thermo Fisher Scientific Inc. is the world leader in serving science, with annual revenue exceeding $30 billion. Our Mission is to enable our customers to make the world healthier, cleaner and safer. Whether our customers are accelerating life sciences research, solving complex analytical challenges, improving patient diagnostics and therapies or increasing productivity in their laboratories, we are here to support them. Our global team of more than 80,000 colleagues delivers an unrivalled combination of innovative technologies, purchasing convenience and pharmaceutical services through our industry-leading brands, including Thermo Scientific, Applied Biosystems, Invitrogen, Fisher Scientific, Unity Lab Services and Patheon. As the world leader in serving science, we are keenly aware of our responsibility to the global community. Our Corporate Social Responsibility ("CSR") strategy is our commitment to doing business the right way to enable a sustainable future for all stakeholders. We ensure our commitments and actions reinforce our identity as a mission-driven company by continually evaluate various Environmental, Social and Governance ("ESG") components to elevate corporate performance and serve as critical risk mitigants. Our approach is built on a CSR framework of four key pillars - Operations, Colleagues, Communities and Environment - that reinforce our Mission, align with our strategy and are material to our stakeholders.

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.

Australia
Austria
Belgium
Canada
China
Costa Rica
Czechia
Democratic People's Republic of Korea
Denmark
Finland
France
Germany
India
Israel
Italy
Japan
Lithuania
Malaysia
Mexico
Netherlands
New Zealand
Norway
Russian Federation
Singapore
Spain
Sweden
Switzerland
United Kingdom of Great Britain and Northern Ireland
United States Minor Outlying Islands
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-level committee	The chair of the nominating and corporate governance committee oversees the Company's corporate responsibility and sustainability efforts and associated risks

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 – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The Nominating and Corporate Governance Committee of the Board of Directors periodically reviews and reports to the Board of Directors on Thermo Fisher's corporate responsibility and sustainability efforts, including the impact of environmental and social issues on the company. In 2020 the Committee reviewed the Company's corporate social responsibility progress, roadmap and key initiatives in depth during two of its meetings Enterprise risk management is presented to the Board of Directors annually. This presentation includes climate change risk as it pertains to weather pattern risks for the company's operations globally. Individual risk topics are presented to the Board of Directors periodically at the Board's regularly scheduled meetings.

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
Risk manager *Vice President, Risk Manager*	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	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).

This position is located in the Legal department which oversees the Risk Management and EHS function for the Company. These positions perform these functions globally, and all of these functions are engaged in the sustainability of the company. These functions work in tandem with the Company's CSR department that sits within the Corporate Development and Strategy group.

Asset-related and weather-related risks are managed on a company-wide basis by the risk management department. In the case of acquisitions, the Company completes a risk assessment during the due diligence process so that potential risks are known prior to purchase. For example, the handling of greenhouse gases by potential acquisitions are identified and investigated during the due diligence process and a risk analysis is completed prior to the acquisition.

Weather-related risk assessments use models and insurance industry information and focus on protecting Company assets (factories) from weather-related events that appear to be increasing in frequency and severity as a result of climate change. The necessity of this evaluation process has been underscored by the impact wildfires have had on the company's facilities in Northern California, as well as the hurricanes in Puerto Rico and Houston the year prior. These events helped galvanize the company to develop more comprehensive and multidisciplinary emergency preparedness and disaster response plans.

The company's EHS policy states that "all locations must have an effective emergency response plan that is periodically tested, reviewed and updated." The policy also directs all employees to be responsible for minimizing our environmental impact and singles out leadership within the company as retaining ultimate responsibility for ensuring compliance.

The CSR Department compliments these efforts by reviewing and analyzing company-wide data as it relates to climate change. Specifically looking at site and divisional energy usage intensity, efficiency initiatives, renewable energy projects and opportunities, as well as employee-led environmental improvement efforts. This is done to ensure continuous monitoring and success of GHG reduction efforts. In late 2019 a new GHG emissions reduction target was set by the Company. This target was announced to the Company in January of 2020. This new absolute GHG reduction target requires that scope 1 and 2 emissions are monitored and reported on internally to senior leadership on a quarterly basis to ensure progress towards the 2030 target.

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	With the adoption of the Company's new GHG emissions reduction target in 2019, and announcement in 2020 there is now an incentive for all employees to ensure that the company achieves this goal because of the representational impact that not achieving it will have on the Company's public standing.

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 inventivized	Comment
Other, please specify (VP, Risk Management)	Monetary reward	Emissions reduction target	
Energy manager	Monetary reward	Emissions reduction target Energy reduction target Efficiency project	
Environment/Sustainability manager	Monetary reward	Emissions reduction project Emissions reduction target	
Corporate executive team	Monetary reward	Emissions reduction target	
Please select	Please select	Please select	

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	1	4	this short-term definition comes from the company's operating budget terms.
Medium-term	5	9	This falls outside of annually reviewed budget timelines but within the long-term set goals of the company.
Long-term	10	11	This timeline corresponds to the company's long-term vision goals.

C2.1b

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

These are risks that could potentially have an impact on the business, both from a financial impact as well as from a reputational risk standpoint. Most regulatory risks and opportunities are considered material at the business unit level if they (1) have the ability to affect a product or product design in the pipeline, (2)will increase operating costs to the point where margins are eroded, (3) affect the reputation of the business, its products or services, or (4) require capital investment above the maximum that the general manager of a factory can approve. Significant risks and opportunities that can have a material financial impact on a business would be reported to senior leadership on a quarterly basis (or sooner).

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
Annually

Time horizon(s) covered
Short-term
Medium-term

Description of process
A robust risk assessment process represents a continuous cycle to ensure risks are systematically evaluated and managed. Since 2019 the ERM framework has taken the following approach: Identify, Assess, Control, Monitor, Improve, Report

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	There are a number of regulations that affect operational facility building codes in areas prone to impacts from climate change. Currently the company's sites in Sweden are subject to regulation on carbon emissions. The country of Sweden is attempting to become carbon neutral and therefore has and is continuing to expect carbon reductions by all parties operating in the country. The Company's sites in the U.K. are subject to a carbon tax based on sites' fossil fuel usage which led the company to transition to renewable electricity in the U.K. in late 2019.
Emerging regulation	Relevant, always included	Thermo Fisher anticipates more robust global regulation around GHG emissions due to the U.N. Paris Climate Agreement and associated national reduction targets (NDCs). Because the company operates in 52 countries around the world, many of which are attempting to reduce their carbon emissions, operations in those locations will be subject to climate change legislation. The Company's sites in Europe are increasingly subject to regulatory changes. With the passage of emissions reduction law in the E.U. in 2021 we anticipate more regulation to come. With the U.S.A.'s return to the Paris Climate Agreement in 2020 and subsequent legislation efforts we expect future regulation to increase in the United States where the majority of our sites are located.
Technology	Relevant, always included	Technology plays a large role in the company's business continuity plan and is identified as a source of risk for the company within the Company's annual 10-K filing. Thermo Fisher includes our server electricity needs when planning our carbon reduction roadmap.
Legal	Relevant, always included	The company has a fiduciary responsibility to shareholders and part of that duty is to manage risk within the company's portfolio. Climate change and its effect on temperature and weather patterns will impact how asset risk is managed.
Market	Relevant, sometimes included	The Company considers market risk to be partially driven by reputational risk. If the Company is seen as not responsive to the customers' perception of climate change there is a risk of financial impact.
Reputation	Relevant, always included	Reputation is important as it can determine market-share and customer loyalty based on company perception as it pertains to climate change.
Acute physical	Relevant, always included	The Company has a program for periodic inspection and audit of facilities in order to ensure they are prepared to withstand climate related threats. Thermo Fisher Scientific's insurance carrier also identifies and reports on weather and fire related risk.
Chronic physical	Relevant, sometimes included	Risks are primarily vetted around temperature fluctuations and weather pattern shifts impacting the associated changing building system needs to ensure sites adapt to those shifts.

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?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Other, please specify (heat waves)

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
With the rise in global temperatures the company anticipates there will be a greater need for climate control within operational facilities. This will involve greater strain on cooling systems with a possibility of more frequent maintenance as well as a need for greater efficiency within those systems. This is particularly true in sites acquired in 2017 that manufacture pharmaceuticals as they require precise temperature and air control for quality of product.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
10000000

Potential financial impact figure – maximum (currency)
15000000

Explanation of financial impact figure
The financial impact will occur when cooling systems will need to be installed or upgraded at company sites for greater capacity and/or efficiency. Increased maintenance of existing systems will also contribute to this figure

Cost of response to risk
10000000

Description of response and explanation of cost calculation
Maintenance of all current cooling systems and budget for future installation and upgrade of systems.

Comment
This is an estimate of per year cost to maintain systems, including man hours and repairs to installed equipment.

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 capital expenditures

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
In 2018 the company had sites in proximity to the California forest fires. The impact on production was minimal but HVAC systems were shut down in order to reduce the impact of smoke on indoor air quality. The company also has facilities in Puerto Rico that are at elevated risk due to more frequent and severe hurricanes. In order to make sure those sites remain operational the Company has taken steps to upgrade the building envelopes and improve reliability of power generation.

Time horizon
Short-term

Likelihood

More likely than not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure
These numbers are based on one Puerto Rico facility only. Other efforts to reduce the impact of weather on facilities is subjective.

Cost of response to risk

Description of response and explanation of cost calculation
The company has enhanced the systems of the sites in Puerto Rico with greater awareness of potential future risk. This includes contingency plans and back-up systems in place. We cannot fully anticipate future financial risk.

Comment
These systems are still being put in place, such as solar panels and a CHP plant so the cost of management is not yet known.

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact
Increased insurance claims liability

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
In 2018 due to the California wildfires company employees were impacted by property and other loss due to the fires. HVAC systems also were shut down in order to preserve indoor air quality at one site. Local site employees held a volunteer event and ran experiments with children who had been displaced by the fires to keep them occupied while they were in temporary shelters.

Time horizon
Short-term

Likelihood
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)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
There is no immediate financial impact figure because the scenario above did not impact Thermo Fisher financially, however there is a possibility that a wildfire could impact our employees and their ability to function in their position within the company due to hardship from extreme weather.

Cost of response to risk

Description of response and explanation of cost calculation
There is no immediate financial impact figure because the scenario above did not impact Thermo Fisher financially, however there is a possibility that a wildfire could impact our employees and their ability to perform their duties within the company due to hardship from extreme weather.

Comment

Identifier
Risk 4

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

Risk type & Primary climate-related risk driver

Market	Increased cost of raw materials

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
There is a risk of increase in prices for fuel and petroleum based resins. Due to the carbon footprint of fossil fuels and the potential for steep increases if carbon pricing/accounting is implemented there is a risk that the company's cost of goods could rise significantly.

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
This is a hypothetical risk that has not yet impacted our commodities purchasing therefore it is not yet known what level of impact it will have on our business.

Cost of response to risk

Description of response and explanation of cost calculation
The company looks at ways to purchase or generate renewable energy within the portfolio to reduce fossil fuel pricing fluctuation at sites. The Company also has some hybrid and electric vehicles within the fleet that reduce reliance on fossil fuels for transport. With an R&D budget of over $1.2B in 2020 Thermo Fisher is also consistently looking for new solutions to product material risks.

Comment
The figure above is the company's annual R & D budget for 2020. This budget is used to develop new products and solutions to fossil fuel use.

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?
Direct operations

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
Thermo Fisher produces products which help customers to identify and monitor effects of climate change such as air quality, water quality, and other measures of climate change that can be scientifically observed. These products will become more necessary and the market is expected to grow as GHG regulation and study of climate change effects increase globally.

Time horizon
Long-term

Likelihood
More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure
The financial impact is uncertain since these are forward looking statements.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
Thermo Fisher spends significant money annually on research and development, the highest in the industry. The total spent in 2020 was over $1.2 Billion.

Comment
2020 annual research and development budget was more than $1.2 Billion

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Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Use of more efficient production and distribution processes

Primary potential financial impact
Increased revenues resulting from increased production capacity

Company-specific description
Thermo Fisher uses a practical process improvement system to remove waste from processes around the company. This means all employees are expected to review and refine processes throughout the company on an ongoing basis to find efficiencies. This process improvement framework is an essential tool in the Company's efforts to reduce energy usage and is an in-place system ready to apply to energy reduction efforts and overall sustainability.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure
The financial impact range is an estimate range for annual PPI savings based on numbers reported in our Company CSR report

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
This is an existing process improvement framework that the Company already utilizes when evaluating most potential projects

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
The lithium-ion battery market will exceed $100 billion by 2025, and such reliance has put greater focus on safety and efficiency. Poor battery performance can limit energy output, while potentially dangerous defects create an unacceptably small window of battery life between first use and landfill disposal. Scientists developing batteries for electric vehicles, mobile phones, energy systems and other innovations rely on our analytical instruments to improve storage potential and output, creating a more efficient,

cleaner and safer energy source. They use our electron microscopy technologies to see structures at levels down to atomic scale, and spectroscopy tools to discover critical changes in materials that cause defects and inefficiency.

Time horizon
Medium-term

Likelihood
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)
100000000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The lithium ion battery market is expected to exceed $100 billion by 2025. This is not to indicate that Therrmo Fisher will achieve this revenue, rather that is the size of the expected market.

Cost to realize opportunity
1200000000

Strategy to realize opportunity and explanation of cost calculation
This was the Company's 2020 R&D budget. Without innovation we will not be able to compete in this market.

Comment

Identifier
Opp4

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Primary potential financial impact
Reduced indirect (operating) costs

Company-specific description
Thermo fisher plans to adopt greater use of renewable energy sources to provide electricity to the facilities in our portfolio. We anticipate that will protect us from potential risk of fossil fuel price fluctuation as well as maintain a stable and competitive price for electricity usage.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
0

Potential financial impact figure – maximum (currency)
2000000

Explanation of financial impact figure
The range above accounts for renewable electricity purchases from vendors in the UK and Germany that were negotiated in 2019 and 2020. We cannot predict future pricing for renewable energy procurement but we do anticipate adopting more renewable electricity.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
Most renewable energy opportunities have little-to-no upfront cost, therefore we cannot estimate the financial impact. Renewable energy purchase from the grid, PPAs and VPPAs are all currently viable options

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	With the recently announced 2050 net-zero SBTi target (July 2021) the company will be incorporating our low carbon transition planning as needed in annual meetings.

C3.2

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

Yes, qualitative and quantitative

C3.2a

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

Climate-related scenarios and models applied	Details
2DS Nationally determined contributions (NDCs)	Climate change is integrated into the Company's short-term and long-term business strategies. Short-term strategies focus on product-related issues, regulatory risks and opportunities, and weather-related risks. Long-term strategies are related to the Company's corporate social responsibility program, which is tasked with ensuring business sustainability. Both short-term and long-term strategies are linked to the Company's emission reduction targets. Short-term strategies are woven into the Company's business processes related to product development, annual operating plans, and plant operations/efficiencies. The most important aspects of the short-term strategy are related to managing regulatory risk and opportunity around the Company's products. These strategies are developed by cross-functional teams and, in some cases, through external collaborations. The Company is helping China improve its air quality with The Freedom System that uses the Company's unique atomic fluorescence technology, providing continuous monitoring of stack gases to detect mercury levels down to parts per trillion. Short-term strategies around plant operations and product development are enhanced by Practical Process Improvement (PPI). Our PPI Business System is a core operational discipline that supports business productivity, operational efficiency and sustainable growth. Through PPI-driven initiatives the Company has boosted productivity and reduced waste as a result of implementing electrical efficiency programs, developing reusable packaging, increasing recycling and reducing landfill impact, and improving space efficiency to reduce the need for new buildings as the Company grows. Our long-term business strategy around the construction of new facilities has been influenced by climate change. The Company has an overall strategy to consolidate smaller, less efficient operations into larger more efficient Centers of Excellence. Additional long-term strategy managed by the corporate social responsibility function includes managing opportunities to enhance the Company's reputation. This process is managed through periodic meetings of key employees. Externally, voluntary reporting is accomplished by the Company's corporate social responsibility report. The Company has continued to offer assistance to victims of natural disasters, including matching employee donations and hands-on volunteering through our community outreach teams. This program is thought to be increasingly important as climate change may increase the frequency of weather-related events such as hurricanes, wildfires and other catastrophic events. The long-term strategy to manage reputational opportunities through corporate social responsibility provides several competitive advantages. One of which is a commitment to reducing our GHG emissions so we can align with larger reduction efforts in a favorable and scientific way.

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	Yes, Thermo Fisher developed the greener product line to offer environmentally preferable alternatives to some products. Beyond that we are innovating to improve our shipping footprint and product end-of-life longevity
Supply chain and/or value chain	Yes	In 2020 the Company expanded the request for data program by increasing the number of our supply chain members to disclose CSR data via EcoVadis, including carbon footprint, in an effort to increase awareness of this topic within our supply chain.
Investment in R&D	Evaluation in progress	Climate change is a force for innovation and we spent over $1.2 billion dollars on R&D in 2020 to develop new products to assist scientific work and enable customers trying to realize a lower carbon future.
Operations	Yes	The operations function within Thermo Fisher is part of the core group of functions that are responsible for energy efficiency and renewable energy purchases throughout the company in order to achieve our 2030 target

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	Direct costs Capital expenditures Capital allocation	Unseasonable weather, extreme weather events, floods, and extreme heat all have an impact on direct operating costs at the Company's sites. For example two sites in the southern United States will be installing AC onsite due to increased heat events that would otherwise disrupt production. Preparing a site for renewable energy installation or resiliency in the face of climate change generally falls under capital expenditures. For example a site in Franklin, MA used capex to ready conduit to enable solar panel arrays in their parking lot. The Company's energy procurement team has allocated capital for renewable energy and retrofits throughout the company. In 2019 their budget exceeded $10M. In 2020 the budget was closer to $2M due to COVID restrictions limiting vendor onsite access to complete climate change related projects.

C3.4a

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

Climate change is integrated into the Company's short-term and long-term business strategies. Short-term strategies focus on product-related issues, regulatory risks and opportunities, and weather-related risks. Long-term strategies are related to the Company's

corporate social responsibility program, which is tasked with ensuring business sustainability. Both short-term and long-term strategies are linked to the Company's emission reduction targets.

In order to align on the accepted science on the detrimental effects of climate change, in 2019 Thermo Fisher approved a new greenhouse gas reduction target of 30% by the year 2030. This goal was announced company-wide in January of 2020. This new target calibrates Thermo Fisher's goal with the United Nations Paris Climate Agreement which aims to limit worldwide average temperatures to below a 2°C increase in order to avoid the worst effects of global warming.

The new target aligns with the pillars of the Company's overall strategy which are (1) continuously developing high-impact, innovative products and (2) delivering a unique value proposition to our customers. Our mission is to enable our customers to make the world healthier, cleaner, safer and in order for them to do that we must innovate and provide more environmentally friendly products with the same level of quality as any other product on the market. Doing the right thing makes good business sense. Our stakeholders customers, employees and shareholders want to be associated with a company that delivers outstanding performance, responsibly. As we strive to fulfill our Mission, Thermo Fisher recognizes our own obligation to global sustainability. Acting responsibly is the way we manage our operations and how we source, manufacture and ship our products.

C4. Targets and performance

C4.1

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

Absolute target

C4.1a

(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
2019

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (location-based)

Base year
2018

Covered emissions in base year (metric tons CO2e)
513900

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 (%)
30

Covered emissions in target year (metric tons CO2e) [auto-calculated]
359730

Covered emissions in reporting year (metric tons CO2e)
512360

% of target achieved [auto-calculated]
0.998897321139002

Target status in reporting year
Underway

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain (including target coverage)
This target was formulated using the science based target setting tool (v. 1.1) and is in line with keeping Thermo Fisher's portion of global GHG emissions under the 2 degrees Celsius cap. The absolute contraction approach was used within the tool to calculate the target. Thermo Fisher made good progress toward our 30% reduction target in 2019 but due to production increases in 2020 due to our COVID-19 pandemic response we were unable to continue our reduction of emissions as planned. However, due to transition from fossil-fuel generated electricity to renewable sources at our U.K. and Germany sites we were able to blunt the impact of our production increases on emissions. While our revenue rose over 25% in 2020 our emissions did not as evidenced in the numbers above.

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	8	100
To be implemented*	11	5682
Implementation commenced*	6	2140
Implemented*	17	3400
Not to be implemented	1	500

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	Maintenance program

Estimated annual CO2e savings (metric tonnes CO2e)
3619

Scope(s)
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
340000

Investment required (unit currency – as specified in C0.4)
6250000

Payback period
11-15 years

Estimated lifetime of the initiative
16-20 years

Comment
cogen turbine overhaul, LED retrofits

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)
300

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
50000

Investment required (unit currency – as specified in C0.4)
42000

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment
Variable frequency drives, water cooled chillers (HVAC)

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)
5216

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
16540

Investment required (unit currency – as specified in C0.4)
0

Payback period
1-3 years

Estimated lifetime of the initiative

3-5 years

Comment
Renewable electricity via utility contract signed in 2020, starting in 2021

C4.3c

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

Method	Comment
Employee engagement	The company has Green Teams that are site-level groups of employees who volunteer their time to encourage environmentally friendly practices throughout their sites. The company promotes an internal involvement campaign for Earth Day annually where employees can share their environmental commitment publicly and collaborate on environmentally focused projects. In 2020 employees were also encouraged to participate in a socially-distanced World Cleanup Day in September.
Compliance with regulatory requirements/standards	The Carbon Reduction Commitment program is driving carbon reduction efforts (energy surveys, lighting retrofits, motor upgrades, etc.) in the U.K. In addition, governments in the U.K. and Germany have added mandatory facility energy survey programs to help businesses identify site-related efficiency project opportunities. As of 2020 all sites in the U.K. and Germany have signed utility contracts providing for renewable electricity to cover the electricity usage. Sweden is striving to be the first country to be 100% fossil fuel free. Since 2015, our sites throughout Sweden have implemented the following initiatives to reduce their overall environmental impact: Construction of biological wastewater treatment plant that treats 70,000 cubic meters of water annually. Construction of a BREEAM certified distribution center in 2017. Provision of 22% of the sites' power usage by renewable energy sources–approx. 2,645 MWh.
Financial optimization calculations	The Company consults with third parties on emission reduction projects and these projects are reviewed internally. Detailed cost/savings and environmental impact analyses are performed, including investigation of the availability of utility rebates, federal and/or state incentives such as DSIRE in the U.S., and energy pricing escalation. Part of that program is using the vendors to help accurately track GHG data throughout the year and make it available for site leads to use internally via a site level energy dashboard to improve their energy efficiency and reduce overhead costs.
Dedicated budget for energy efficiency	There is a corporate level energy procurement team that has a budget allocated annually for energy efficiency projects. This is a financial resource for sites that may not otherwise be able to cover the cost of an efficiency project via their regular CapEx or budget process. This budget was restricted in 2020 due to COVID-19 but is expected to grow again in 2021.

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
Green Leaf products - By incorporating principles of green chemistry and green engineering into our product design, we are minimizing chemical hazards, increasing reaction efficiency, and minimizing waste. Our greener product alternatives can help advance sustainability in the lab by minimizing the use of hazardous chemicals, minimizing waste and material consumption, and increasing energy efficiency. There are over 48 product categories represented and over 100 products are Energy Star certified. The company's TSX (an ultra-low temperature freezer that reduces energy consumption and CO2 emissions by 50% compared to conventional freezers by using a natural, SNAP compliant, refrigerant) became the first ENERGY STAR certified laboratory-grade refrigerator available on the market. The company made a pledge to the White House to reduce the use of HFCs by transitioning its entire cold storage platform to more environmentally friendly, natural refrigerants. This transition took place over a five year period ending in 2020, providing a 49% reduction in CO2 emissions. As of year-end 2020 the Company had transitioned over 90% of refrigerants from HFCs to lower emitting refrigerants. The remaining HFCs are set to transition of In that same time period, the Company also plans to reduce the energy consumption of these products by more than 50%.

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

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Due to a lack of environmental rating system for products in our industry Thermo Fisher developed a rigorous, science-based testing approach to determine any positive environmental aspects of specially designed products)

% revenue from low carbon product(s) in the reporting year
4

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
All Green Leaf products are accompanied by a two page brief which outlines the environmentally preferable aspects of the product including methodology and what kind of testing it has undergone to receive the designation.

Level of aggregation
Group of products

Description of product/Group of products
ACT Label, a lab consumables product label, developed by My Green Labs. Several NUNC brand products received the ACT Label initially and in 2020 the list expanded to include chemicals & reagents, and ULT freezers.

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 (The ACT Label from My Green Lab)

% revenue from low carbon product(s) in the reporting year
1

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
ACT was a new eco-label developed by My Green Lab for laboratory consumable products in 2017. Thermo Fisher was one of the early adopters of this label and anticipate the number of products certified by this label to grow as the certification process becomes more robust.

Level of aggregation
Product

Description of product/Group of products
Same-day bike delivery of orders in the San Diego area. In 2018, an on-demand delivery program was piloted for customers in Southern California. For this program we leveraged our Supply Center technology, infrastructure and support, which facilitates convenient and customizable solutions for the products our customers use most. In addition to providing convenience to our customers, our Supply Centers save an estimated 700,000 pounds of packaging waste each year while also reducing our shipping and transaction costs.

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 (Bike delivery uses no fossil fuels for transportation purposes)

% revenue from low carbon product(s) in the reporting year
0

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
This describes a service, not a product, that avoids emissions by using a non-fossil fuel based transportation system where possible.

Level of aggregation
Group of products

Description of product/Group of products
This Paper Cooler is a fully curbside-recyclable, 100% paper-based container for shipping temperature sensitive products and is an environmentally preferable alternative to expanded polystyrene (EPS) coolers. It is fully recyclable alongside other paper and corrugated box materials. It eliminates difficult-to-recycle EPS waste, reducing disposal issues and is intended for overnight shipments.

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 (replacing a styrofoam cooler with a 100% recyclable cardboard cooler)

% revenue from low carbon product(s) in the reporting year
0

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
This product is an alternative shipping method for products that need to be shipped at and maintain a constant temperature, not the product itself. The main environmental benefit of this packaging is that it replaces EPS (extruded polystyrene) coolers used during transportation.

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 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
155257

Comment
This number is a restatement from 2018's initially reported CO2 emissions. The main driver behind the restatement is the use of better location-based conversion factors that more accurately reflect 2018 emissions. To a lesser extent there were slight adjustments due to material business divestitures, acquisitions and inclusion of previously uncaptured data. Please see emissions detail section of this module for specifics.

Scope 2 (location-based)

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
333616

Comment
This number is a restatement from 2018's initially reported CO2 emissions. The main driver behind the restatement is the use of better location-based conversion factors that more accurately reflect 2018 emissions. To a lesser extent there were slight adjustments due to material business divestitures, acquisitions and inclusion of previously uncaptured data. Please see emissions detail section of this module for specifics.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
The company does not calculate emissions entirely via market-based methodology yet. Due to the maturity of the data, as evidenced by the external assurance being sought this year for scope 1 and 2 emissions, the company started using the IEA location-based conversion factors and where available appropriate market-based conversions. Thermo Fisher applied this more granular approach in 2019.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
IEA CO2 Emissions from Fuel Combustion
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance
US EPA Emissions & Generation Resource Integrated Database (eGRID)

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)
199885

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
The Company was able to reduce emissions in accordance with our 2030 30% emissions reduction goal in 2019 but due to COVID-19 related increases in production in 2020 we could not achieve the initially expected emissions reduction. However, even though our revenue increased over 25% our emissions only rose back to our baseline year which indicates we have begun to successfully decouple our emissions from from energy usage.

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 have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment
The company does not calculate emissions entirely via market-based methodology yet. Due to the maturity of the data, as evidenced by the external assurance being sought this year for scope 1 and 2 emissions, the company started using the IEA location-based conversion factors, eGrid conversion factors and where available appropriate market-based conversions. Thermo Fisher applied this more granular approach in 2019.

C6.3

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

Reporting year

Scope 2, location-based
310526

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
The Company was able to reduce emissions in accordance with our 2030 30% emissions reduction goal in 2019 but due to COVID-19 related increases in production in 2020 we could not achieve the initially expected emissions reduction. However, even though our revenue increased over 25% our emissions only rose back to our baseline year which indicates we have begun to successfully decouple our emissions from from energy usage.

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
Relevant, calculated

Metric tonnes CO2e
9195000

Emissions calculation methodology
Initial calculation was made based on Company spend using 2012 DEFRA emissions factors in the reporting year 2020

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This calculation used full year 2020 Company spend with members of the supply chain for purchased goods and services as the determining factor for emissions calculation. We anticipate moving to a more accurate calculation method in the coming years.

Capital goods

Evaluation status
Relevant, calculated

Metric tonnes CO2e
226610

Emissions calculation methodology
Capital goods calculation is based on spend and averages based on 2012 DEFRA emissions calculations.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This calculation used full year 2020 Company spend on capital goods as the determining factor for emissions calculation. We anticipate moving to a more accurate calculation method using data provided by our supply chain members in the coming years.

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

Evaluation status
Relevant, calculated

Metric tonnes CO2e
79980

Emissions calculation methodology
Total spend on fuel and energy transportation for 2020 was used as the basis for calculation. the emissions factors used were DFRA emissions factors from 2012.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
calculation method used for initial baseline only. Subsequent years will be based on actual data wherever possible.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1466300

Emissions calculation methodology
Spend with supply chain members used for baseline calculation. Spend data is skewed high for 2020 due to COVID-19 factors; emissions factors are outdated (2012 DEFRA)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This initial number was based on Company spend with supply chain and not actual distance traveled or method of transport. This calculation is for baselining purposes only and is expected to mature in future annual reporting.

Waste generated in operations

Evaluation status
Relevant, not yet calculated

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
In 2020 a waste task force was formed to collect waste data from global sites. Previously data has only been available for U.S. sites. It is anticipated that we will report a number for thi scope 3 category in coming years.

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
13330

Emissions calculation methodology
This was calculated using spend and distance based calculation method using data provided by a third party vendor.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
A third party business travel vendor is capable of aggregating business travel data and assigning emissions and providing the Company with the totals.

Employee commuting

Evaluation status
Relevant, calculated

Metric tonnes CO2e
53320

Emissions calculation methodology
Estimate of daily distance travelled by mode; modal share by country based on publicly available information

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This is calculated using estimation averages, not based on actual data.

Upstream 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
Upstream leased assets are reported as part of the Company's Scope two emissions, and is represented within those scope two totals.

Downstream transportation and distribution

Evaluation status
Relevant, not yet calculated

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
The data for downstream transportation and distribution is difficult to obtain. The decision was made to focus on what were expected to be the largest portion of scope three emissions contained in categories one and two.

Processing of sold products

Evaluation status
Relevant, not yet calculated

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
The emissions to further process active pharmaceutical ingredients and biologicals is required from suppliers and is not yet available. We anticipate pursuing the data and developing a basic calculation of this category by next year's reporting cycle.

Use of sold products

Evaluation status
Relevant, not yet calculated

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
The diversity of products sold by the company is high and the ability to calculate the use of sold products has not been developed within the Company yet. The choice was made to defer an initial calculation of this category to enable focused efforts on what are anticipated to be the most material categories of scope three emissions: categories one and two. By next reporting cycle we anticipate to at least be able to represent a partial and material figure for this category.

End of life treatment of sold products

Evaluation status
Relevant, not yet calculated

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
The diversity of products sold by the company is high and therefore the data for this category is difficult to obtain from customers. The choice was made to defer an initial calculation of this category to enable focused efforts on what are anticipated to be the most material categories of scope three emissions: categories one and two. By next reporting cycle we anticipate to at least be able to represent a partial and material figure for this category.

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
The Company does not own or operate any downstream leased assets.

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
The Company does not own or operate any franchises.

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
The Company is not an investment firm.

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
There are no currently known other categories of upstream emissions for this Company

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
There are no currently known other categories of upstream emissions for this Company

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
15902

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
512360

Metric denominator
unit total revenue

Metric denominator: Unit total
32220000000

Scope 2 figure used
Location-based

% change from previous year
21

Direction of change
Decreased

Reason for change
The Company saw a 25% increase in revenue in 2020 due to the key role we played for customers combating the COVID-19 pandemic. We were also able to offset a portion of emissions by using renewable energy which meant that our emissions did not rise at the same pace as our revenues.

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)
Belgium	488
Canada	8891
China	37
Czechia	453
Denmark	275
France	2470
Germany	12482
India	759
Italy	21736
Lithuania	1641
Netherlands	1962
New Zealand	232
United Kingdom of Great Britain and Northern Ireland	12157
United States of America	110024
United States Minor Outlying Islands	4824
Austria	3456

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)
Analytical Instruments	3175
Corporate Offices	472
Laboratory Products and Services	129391
Life Sciences Solutions	32470
Specialty Diagnostics	16378

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)
Australia	1779		2042	
Belgium	487		2450	
Canada	1736		37188	
China	9190		14673	
Czechia	6330		13320	
Denmark	1560		9765	
Finland	1407		11976	
France	607		12317	
Germany	65			27221
India	11566		15993	
Israel	559		1028	
Italy	8378		27605	
Japan	716		1469	
Lithuania	897		12548	
Malaysia	274		420	
Mexico	10399		22461	
Netherlands	9478		22440	
New Zealand	596		5387	
Norway	17		1934	
Singapore	4899		12664	
Republic of Korea	1011		1848	
Spain	26		102	
Sweden	38		10814	
Switzerland	165		6181	
United Kingdom of Great Britain and Northern Ireland	119			59512
United States of America	217664		604565	7645
Austria	4504		30204	
United States Minor Outlying Islands	10114		23386	
Ireland	8071		23709	

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)
Analytical Instruments	26984	
Specialty Diagnostics	11984	
Laboratory Products and Services	216314	
Life Sciences Solutions	43887	
Corporate Offices	13566	

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?

Increased

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	24000	Decreased	5	The Company transitioned all sites in the U.K., Germany and several sites in Massachusetts to renewable electricity in 2020 via utility contracts. This was the biggest offset for the Company in 2020 and is the primary reason why emissions did not increase more substantially.
Other emissions reduction activities		<Not Applicable>		
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output	14000	Increased	3	The increase in total emissions from 2019 to 2020 is attributable to the Company's increase in production to make products that were necessary for the COVID-19 pandemic such as PPE and COVID testing components.
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?

Location-based

C8. Energy

C8.1

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

More than 5% but less than or equal to 10%

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	Yes
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)	LHV (lower heating value)		999900	999900
Consumption of purchased or acquired electricity	<Not Applicable>	106092	917338	1023430
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>		12650	12650
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	106092	1929888	2035980

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	Yes

C8.2c

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

Fuels (excluding feedstocks)
Natural Gas

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
9135722

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

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
15990

Emission factor
0.053

Unit
lb CO2 per million Btu

Emissions factor source
The EPA

Comment

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	106092	106092	106092	106092
Heat	15990	15990	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C9. Additional metrics

C9.1

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

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	No third-party verification or assurance

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
Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance
Moderate assurance

Attach the statement
2020-08-24_ThermoFisherAssurance_statement_V2.0.pdf

Page/ section reference
Assurance statement - 2 pages

Relevant standard
AA1000AS

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
Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance
Moderate assurance

Attach the statement
2020-08-24_ThermoFisherAssurance_statement_V2.0.pdf

Page/ section reference
Assurance statement - 2 pages

Relevant standard
AA1000AS

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?

No, but we are actively considering verifying within the next two years

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, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

The energy procurement team has a dedicated annual budget to finance efficiency projects in the portfolio and those funds can be used for projects in the U.K. to reduce reliance on fossil fuels through efficiency measures. In Q3 2019 Thermo Fisher contracted with an electricity provider to buy all electricity to sites located in the UK from certified renewable energy sources. In 2020, in anticipation of other potential regulation, especially in the European Union, the energy procurement team pro-actively sought out other renewable energy procurement opportunities.

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

Yes, other partners in the value chain

C12.1a

(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

% total procurement spend (direct and indirect)
23

% of supplier-related Scope 3 emissions as reported in C6.5
18

Rationale for the coverage of your engagement
Thermo Fisher has requested emissions data via EcoVadis for two years. The first request year (2019) the supply chain members that were targeted were potentially higher risk and therefore responses were lower. In 2020 members of the supply chain with whom we spent more were included increasing our coverage by spend. While this data is valuable the total scope 3 emissions from supply chain that are reported for 2020 are the result of a calculation method based on the Company's total supply chain spend for the year

Impact of engagement, including measures of success
Over half of the suppliers contacted by EcoVadis have completed their scorecard. One quarter are in the process of responding and one quarter have declined to participate.

Comment
Thermo Fisher plans to add a supply chain sustainability position to increase supplier engagement on emissions in 2021.

C12.1b

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

Type of engagement
Education/information sharing

Details of engagement
Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number
25

% of customer - related Scope 3 emissions as reported in C6.5
9

Portfolio coverage (total or outstanding)
<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement
The customers listed above are among some of the Company's largest which gives us a greater scope of engagement with fewer individual touch points and because there is already a strong dialogue between companies which facilitates a deeper emissions discussion.

Impact of engagement, including measures of success
The biggest measure of success so far is that customers are now making fully informed decisions about the carbon footprint of the products they are buying and where possible they are opting for environmentally preferable product options or transportation options that cut down on transportation emissions. Part of that success can be measured in the annual revenue of the Company's greener alternative products which is over $1B annually

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

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 (air quality)	Support	A representative from our chemical analysis business sits on the board of the Institute of Clean Air Companies (ICAC) and the US Commerce Department's [confirm that's what this is] Environmental Technologies Trade Advisory Committee (ETTAC). We work with major manufacturing and business associations to ensure they're advocating for U.S. climate policies that are pragmatic and technologically feasible. We have also engaged with U.S. policymakers regarding the ongoing replacement of the country's air quality monitoring system.	We support continuation of funding to accelerate the deployment of air quality monitoring equipment in the US and globally.
Energy efficiency	Support	Engaged with the United States Government to partner on R&D projects and educate policymakers about research being conducted in partnership with National Labs on lithium-metal batteries and next generation battery technologies.	We support the continuation of funding for next gen battery research
Adaptation or resilience	Neutral	In China, Thermo Fisher Scientific supported the government's efforts in capacity building and joint standard development in the area of containing the potential emissions of dangerous chemicals during the production process by sharing the latest technology development and best practices in on-site hazard substance management, together with American National Standard Institute (ANSI) and China National institute of Standardization.	
Other, please specify (air quality/water quality)	Support	In India, as a member of the U.S.-India Strategic Partnership Forum, we are educating government stakeholders on the technologies available to analyze air and water pollutants. We have invested in local manufacturing in India to ensure that the solutions are acceptable to the India market and the India government. In this effort, we are partnering with the NITI Aayog; the Ministry of Environment, Forests, and Climate Change; the Central Pollution Control Board, the Ministry of Water Resources & Drinking Water Supply, and the Delhi Jal Board to aid in the development of air and water quality guidelines for pollutants, such as PoPs, heavy metals and antibiotics.	

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?

The government relations department communicates engagement activities as required to employees involved in climate change strategy development and implementation.

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 communications

Status
Underway – previous year attached

Attach the document
2019 Corporate Social Responsiblity Report.pdf

Page/Section reference
pgs 9, 10, & 60

Content elements
Governance
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.

In July 2021 Thermo Fisher Scientific committed to setting a Science Based Target by submitting a formal letter to the SBTi. Part of the Company's SBT is a commitment to achieving net-zero carbon emissions at the latest by 2050.

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	Sr. Vice President	Other C-Suite Officer

SC. Supply chain module

SC0.0

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

Thermo Fisher Scientific Inc. is the world leader in serving science, with annual revenue exceeding $30 billion. Our Mission is to enable our customers to make the world healthier, cleaner and safer. Whether our customers are accelerating life sciences research, solving complex analytical challenges, improving patient diagnostics and therapies or increasing productivity in their laboratories, we are here to support them. Our global team of more than 80,000 colleagues delivers an unrivalled combination of innovative technologies, purchasing convenience and pharmaceutical services through our industry-leading brands, including Thermo Scientific, Applied Biosystems, Invitrogen, Fisher Scientific, Unity Lab Services and Patheon. As the world leader in serving science, we are keenly aware of our responsibility to the global community. Our Corporate Social Responsibility ("CSR") strategy is our commitment to doing business the right way to enable a sustainable future for all stakeholders. We ensure our commitments and actions reinforce our identity as a mission-driven company by continually evaluate various Environmental, Social and Governance ("ESG") components to elevate corporate performance and serve as critical risk mitigants. Our approach is built on a CSR framework of four key pillars - Operations, Colleagues, Communities and Environment - that reinforce our Mission, align with our strategy and are material to our stakeholders.

SC0.1

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

	Annual Revenue
Row 1	32200000000

SC0.2

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

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	US	8835561023

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.

Requesting member

U.S. General Services Administration - OMB ICR #3090-0319

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

5072

Uncertainty (±%)

3

Major sources of emissions

manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
U.S. General Services Administration - OMB ICR #3090-0319

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
8448

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Altria Group, Inc.

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
19

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Altria Group, Inc.

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
31

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
AstraZeneca

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2468

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
AstraZeneca

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
4111

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Bayer AG

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
752

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Bayer AG

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1253

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Bristol-Myers Squibb

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e

1112

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Bristol-Myers Squibb

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1852

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Intel Corporation

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
269

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Intel Corporation

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
448

Uncertainty (±%)
2

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Johnson & Johnson

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1565

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Johnson & Johnson

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2607

Uncertainty (±%)
2

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Los Angeles Department of Water and Power

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
15

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Los Angeles Department of Water and Power

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
24

Uncertainty (±%)
2

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
NHS England and NHS Improvement

Scope of emissions
Scope 1

Allocation level

Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2151

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
NHS England and NHS Improvement

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
3582

Uncertainty (±%)
2

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Samsung Electronics

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
437

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to

annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Samsung Electronics

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
728

Uncertainty (±%)
2

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
61

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
102

Uncertainty (±%)
2

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
WestRock Company

Scope of emissions
Scope 1

Allocation level
Please select

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
10

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
WestRock Company

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
16

Uncertainty (±%)
2

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member

Vale SA

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
9

Uncertainty (±%)
3

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

Requesting member
Vale SA

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
15

Uncertainty (±%)
2

Major sources of emissions
manufacturing of products

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation method for the allocation of emissions is based on customer spend with Thermo Fisher annually and that percentage of total revenue is then applied to annual emissions. The major limitations of this calculation method are the lack of product specificity. Thermo Fisher produces and sells a wide variety of items that also vary widely in the intensity of their manufacturing process. In 2021 Thermo Fisher entered into a pilot program with a customer to mutually develop a more granular and accurate emissions calculation method based on actual products purchased and site of manufacture. This pilot is still in early phases but ideally will enable us to create a repeatable calculation method for emissions based on product rather than spend.

SC1.2

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

The revenue data used for this calculation has been published in Thermo Fisher's annual report and 10-k filing. The emissions data will be published in this CDP filing and the Annual CSR Report available on Thermo Fisher's public website.

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
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	The company manufactures and sells such a diverse set of products whose market price fluctuates constantly. A full-time analyst is needed to attempt to parse out product's market and CO2 emissions value. Thermo Fisher added an associate in 2020 and plans to expand the CSR department's analysis capabilities with software and added headcount in 2021
Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult	A standardized methodology for calculating emissions. Thermo Fisher is partnering with a customer to develop a pilot calculator for product emissions that takes place of manufacture into account.

SC1.4

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

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Adding an analyst position to the CSR team that has data calculation capabilities to address the granularity of response to the question of allocation of emissions. Greater collaborate across departments to achieve more detail on type of products sold to each customer and begin to base the emissions number on actual product lines instead of overall revenue. We also plan to migrate our current data collection and reporting tool to a more robust software platform that has the capability to assess product footprint.

SC2.1

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

Requesting member

U.S. General Services Administration - OMB ICR #3090-0319

Group type of project

Other, please specify (Thermo Fisher committed to SBTi in 2021 and will be looking to partner with customers to design solutions for reducing emissions from product use and product end of life.)

Type of project

Other, please specify (product use and product end of life solutions for acheivement of net-zero)

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

3-5 years

Estimated lifetime CO2e savings

5072

Estimated payback

Cost/saving neutral

Details of proposal

Develop educational materials for our customers regarding best environmental practices for use of our products as well as product end of life alternatives to landfill. To address this we must collaborate with customers on education and infrastructure that allows for better product disposal options

SC2.2

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

Yes

SC2.2a

(SC2.2a) Specify the requesting member(s) that have driven organizational-level emissions reduction initiatives, and provide information on the initiatives.

Requesting member
U.S. General Services Administration - OMB ICR #3090-0319

Initiative ID
2019-ID19

Group type of project
Other, please specify (Emissions reduction targets)

Type of project
Other, please specify

Description of the reduction initiative
Influence from customers and other stakeholders has contributed to the development of the Company's new net-zero science based target.

Emissions reduction for the reporting year in metric tons of CO2e
0

Did you identify this opportunity as part of the CDP supply chain Action Exchange?
No

Would you be happy for CDP supply chain members to highlight this work in their external communication?
No

Requesting member
NHS England and NHS Improvement

Initiative ID
2019-ID2

Group type of project
Change to supplier operations

Type of project
Increased levels of purchased renewable energy

Description of the reduction initiative
contracted with utility provider to purchase renewable electricity at all sites in the U.K.

Emissions reduction for the reporting year in metric tons of CO2e
13575

Did you identify this opportunity as part of the CDP supply chain Action Exchange?
No

Would you be happy for CDP supply chain members to highlight this work in their external communication?
No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
No, I am not providing data

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 Customers	Public	Yes, I will submit the Supply Chain questions now

Please confirm below
I have read and accept the applicable Terms