

C0. Introduction

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C0.1

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

Cummins Inc., a global power technology leader, is a corporation of complementary business segments that design, manufacture, distribute and service a broad portfolio of power solutions. The company's products range from internal combustion, electric and hybrid integrated power solutions to components including filtration, aftertreatment, turbochargers, fuel systems, controls systems, air handling systems, automated transmissions, electric power generation systems, microgrid controls, batteries, electrolyzers and fuel cell products. Headquartered in Columbus, Indiana (U.S.), since its founding in 1919, Cummins employs approximately 73,600 people committed to powering a more prosperous world through three global corporate responsibility priorities critical to healthy communities: education, environment and equality of opportunity. Cummins serves its customers online, through a network of company-owned and independent distributor locations, and through thousands of dealer locations worldwide and earned about \$2.2 billion on sales of \$28.1 billion in 2022.

C0.2

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**(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.**

**Reporting year**

**Start date**

January 1 2022

**End date**

December 31 2022

**Indicate if you are providing emissions data for past reporting years**

Yes

**Select the number of past reporting years you will be providing Scope 1 emissions data for**

4 years

**Select the number of past reporting years you will be providing Scope 2 emissions data for**

4 years

**Select the number of past reporting years you will be providing Scope 3 emissions data for**

Not providing past emissions data for Scope 3

C0.3

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**(C0.3) Select the countries/areas in which you operate.**

Angola  
Argentina  
Australia  
Austria  
Belgium  
Bolivia (Plurinational State of)  
Botswana  
Brazil  
Canada  
China  
Colombia  
Costa Rica  
Czechia  
El Salvador  
France  
Germany  
Ghana  
Honduras  
India  
Ireland  
Italy  
Japan  
Kazakhstan  
Malaysia  
Mexico  
Mongolia  
Morocco  
Mozambique  
Netherlands  
New Zealand  
Nigeria  
Norway  
Panama  
Papua New Guinea  
Philippines  
Poland  
Qatar  
Republic of Korea  
Romania  
Russian Federation  
Senegal  
Serbia  
Singapore  
South Africa  
Spain  
Sweden  
Turkey  
United Arab Emirates  
United Kingdom of Great Britain and Northern Ireland  
United States of America  
Zambia

**C0.4**

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

USD

**C0.5**

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**(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

**C-T00.7/C-TS0.7**

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**(C-T00.7/C-TS0.7) For which transport modes will you be providing data?**

Light Duty Vehicles (LDV)  
Heavy Duty Vehicles (HDV)

**C0.8**

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**(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a CUSIP number	231021106

**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 or committee	Responsibilities for climate-related issues
Board Chair	As of July 12, 2023, the roles of Board Chairman, Chief Executive Officer and President are held by one person. The combined roles of Chair and CEO will allow leadership of the company into future, leveraging technical expertise, deep understanding of Cummins' business and powering customers' success throughout the energy transition. The Chair/CEO will retain the direct responsibility for climate-related issues as climate strategy and action are integrated into Cummins overall strategy and operations through implementation and execution of PLANET 2050, our environmental sustainability strategy. Environmental sustainability - including product innovation and facilities and operations - are aligned with Cummins business strategy. The executive is very engaged in our sustainability work, and as in prior practice, will meet at least once a year for strategic feedback on sustainability strategy and target progress in addition to regular board updates every other month. The executive was directly involved in creating Destination Zero, which is the corporate strategy business approach to product decarbonization. CEO Technical Strategy sessions are focused on prioritized sector product decarbonization.
Chief Executive Officer (CEO)	As of July 12, 2023, the roles of Board Chairman, Chief Executive Officer and President are held by one person. The combined roles of Chair and CEO will allow leadership of the company into future, leveraging technical expertise, deep understanding of Cummins' business and powering customers' success throughout the energy transition. The Chair/CEO will retain the direct responsibility for climate-related issues as climate strategy and action are integrated into Cummins overall strategy and operations. Environmental sustainability - including product innovation and facilities and operations - are aligned with Cummins business strategy. The executive is very engaged in our sustainability work, and as in prior practice, will meet at least once a year for strategic feedback on sustainability strategy and target progress in addition to regular board updates every other month. The executive was directly involved in creating Destination Zero, which is the corporate strategy business approach to product decarbonization. CEO Technical Strategy sessions are focused on prioritized sector product decarbonization.
Board-level committee	The board committee with responsibility for climate-related issues is the Safety, Environment and Technology committee. Key responsibilities of this committee related to climate change are: Reviews the company's progress on its major sustainability initiatives from Planet 2050 and the environmental management of our facilities and operations; reviews our Destination Zero initiative and key technology developments that may impact product competitiveness for both core and new business areas; reviews public policy developments, strategies and positions taken by us with respect to safety, environmental and technological matters that significantly impact us or our products.

**C1.1b**

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets Reviewing innovation/R&D priorities Monitoring progress towards corporate targets Overseeing and guiding public policy engagement	<Not Applicable>	The board ensures that the \$1.2 billion spent on research and development in 2022 was aligned with our climate strategy. The board receives and reviews PLANET 2050 goal progress scorecards at every board meeting. Three of the nine strategic PLANET 2050 goals are directly tied to climate change and GHG reduction. Government relations informs the board through regular written reports of public policy engagement activity. The board is actively involved in the budgeting process to ensure decarbonization initiatives are properly funded.
Scheduled – some meetings	Overseeing major capital expenditures	<Not Applicable>	As Cummins is aligning its manufacturing capabilities in alignment with the transition to a lower carbon economy, the board has reviewed the capital required to successfully make that transition.
Scheduled – some meetings	Overseeing acquisitions, mergers, and divestitures	<Not Applicable>	Cummins has actively pursued acquisitions in the past several years as part of its product decarbonization strategy. Pages 3 and 4 of our 2023 Proxy Statement list key acquisitions in 2022.
Scheduled – some meetings	Overseeing and guiding employee incentives	<Not Applicable>	The board has had discussions about employee incentives. Cummins detailed its current thinking regarding climate-related management incentive targets on page 87 of its 2023 proxy statement. Both PLANET 2050 and Destination Zero are our strategies to reduce GHG emissions from products and facilities and operations in a way that is best for our customers and all stakeholders.

C1.1d

**(C1.1d) Does your organization have at least one board member with competence on climate-related issues?**

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Criteria used to assess competence of board members on climate related issues include: deep technology expertise for product decarbonization, health, safety and environment function knowledge, risk analysis, general environmental sustainability expertise in both strategy and execution of plans.	<Not Applicable>	<Not Applicable>

C1.2

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

**Position or committee**

Chief Executive Officer (CEO)

**Climate-related responsibilities of this position**

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)  
 Managing climate-related acquisitions, mergers, and divestitures

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

Reports to the board directly

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

The positions of Board Chair and CEO are held by the same person. This position has deep technology expertise for product decarbonization and expertise in both strategy and execution of plans. The position has regular meetings with business unit and technology leaders who are responsible for product development and customer engagement. This position has ultimate accountability for Destination Zero, the company's product decarbonization strategy that is aligned with PLANET 2050. This position ensures that capital and operational expenditures are aligned with our climate transition plan and that we are acquiring the right expertise in our acquisitions. Two such actions in 2022 include 1) completed the acquisition of Meritor, which will accelerate the development of economically viable decarbonized powertrain solutions. Meritor also delivers complementary synergies to our core business by expanding our product offerings, sales and service network and customer relationships; and 2) invested in Germany-based VoltStorage to innovate new solutions for energy storage systems that are crucial to the conversion of conventional electric power to 100% renewable energy.

**Position or committee**

Chief Risks Officer (CRO)

**Climate-related responsibilities of this position**

Conducting climate-related scenario analysis  
 Monitoring progress against climate-related corporate targets  
 Assessing climate-related risks and opportunities  
 Managing climate-related risks and opportunities

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

Other, please specify (Chief Administrative Officer)

**Frequency of reporting to the board on climate-related issues via this reporting line**

Half-yearly

**Please explain**

The Executive Director of Global Risk oversees global risk across the company. This work includes includes Global Integrated Services (GIS), Enterprise Risk Management (ERM), Enterprise Content Management (ECM) and Environmental, Social and Governance Strategy (ESG). He leads the cross-functional management review group (MRG) that oversees the company's ESG initiatives. ESG strategy has been a focus of Cummins throughout our history, and there is critical ESG work taking place in different functions across the company. Growing regulatory and stakeholder demands make it more important than ever that we ensure our ESG strategic direction is aligned with our business objectives and stakeholder needs. Working across Cummins and staying connected with internal ESG experts, this position provides clarity on the accountability for the strategic direction of ESG and serve as a single point of contact for the Cummins Leadership Team and Board of Directors. The risk management group includes climate in its risk analysis and has been involved in assessing the climate-related scenario analysis as referenced in question 3.2.

**Position or committee**

Chief Government Relations Officer (CGRO)

**Climate-related responsibilities of this position**

Managing public policy engagement that may impact the climate

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

Other, please specify (Chief Administrative Officer)

**Frequency of reporting to the board on climate-related issues via this reporting line**

Quarterly

**Please explain**

The Cummins Chief Government Relations Officer and function partner with business leaders as well as external policymakers and regulators to advocate for a positive business environment that fosters profitable growth, a cleaner environment, and more prosperous communities. In 2021 and 2022, the Government Relations team worked to educate policymakers on the company’s commitment to Destination Zero, Cummins’ strategy to reduce greenhouse gases (GHGs) quality, and the importance of federal, state and local investment in low carbon and zero emission fuels, now and in the future. The Government Relations team in Latin America, meanwhile, worked with policymakers and business leaders across the region to ensure emissions standards for nitrogen oxides (NOx) and particulate matter (PM) standards were strict but achievable with available technology, especially in the off highway and power generation market segments.

**Position or committee**

Chief Technology Officer (CTO)

**Climate-related responsibilities of this position**

- Managing annual budgets for climate mitigation activities
- Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
- Implementing a climate transition plan
- Monitoring progress against climate-related corporate targets

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

CEO reporting line

**Frequency of reporting to the board on climate-related issues via this reporting line**

Quarterly

**Please explain**

Innovation and technology are at the heart of the company’s mission to reduce the carbon impact of its core products and bring to market the low-carbon technologies that will power the future—all while maintaining the durability and dependability customers count on. The CTO is positioned to advocate and appropriately budget for technology development that will meet the needs of a climate transition plan. The CTO is briefed quarterly and often more regularly on progress against climate-related corporate targets. The Environmental Sustainability (PLANET 2050) office has a reporting line up to the CTO; therefore the CTO at least once a month monitors progress against climate-related corporate targets as part of regular staff meetings. The CTO also conducts two multi-day events each year called CTO Tech Days, which bring together Cummins technical experts.

**Position or committee**

Environment/ Sustainability manager

**Climate-related responsibilities of this position**

- Implementing a climate transition plan
- Setting climate-related corporate targets
- Monitoring progress against climate-related corporate targets

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

Other, please specify (Chief Technology Officer)

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

The Environmental Sustainability (PLANET 2050) office has a reporting line up to the CTO . This program office runs the cross-functional group called the Action Committee for Environmental Sustainability (ACES). ACES, formed in 2012, integrates climate change actions into overall business strategy. The executive sponsor and the head of this group both report up through the Chief Technical Officer. The group is the voice and catalyst for environmental action beyond compliance in the company and provides tools and resources for employees go further and faster in reaching environmental goals. The group meets monthly and reports progress to the CTO through its executive sponsor at least monthly. ACES directs the development and implementation of the environmental sustainability plan and reports out on progress in meeting goals. The corporate ACES team has a global focus includes as its stakeholders nearly all businesses and all functions. The individual stakeholder and goal owner areas of ACES ensure that all aspects of the environment and relevant areas of the business are included and data is collected and reported that inform decision making and goal setting. Additional Executive Sponsor meetings align functional and business leaders across the organization to align and prioritize actions required for goal progress A major outcome of the working group was the company’s first global comprehensive environmental sustainability plan in 2014. In 2019, the team announced the next sustainability plan that includes 2050 aspirations with nine goals timed to 2030 along the glide path. Goals in the areas of addressing climate change and air emissions, natural resource efficiency and the circular economy and resilience in the communities in which we operate are included.

**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	Cummins detailed its current thinking regarding climate-related management incentive targets on page 87 of its 2023 proxy statement. Both PLANET 2050 and Destination Zero are our strategies reduce GHG emissions from products and facilities and operations in a way that is best for our customers and all stakeholders. We recognize the importance of addressing climate change, and we have taken a number of steps on our journey towards creating a more sustainable future for our company. Over the past several years, Cummins has acted to increase the understanding and management of the complicated factors impacting climate-related matters, as well as show meaningful outcomes that demonstrate our commitment to addressing them. While we are committed to furthering our sustainability efforts, our core values guide how we approach fulfilling that commitment. As such, we believe it is important to take the necessary foundational steps before formalizing any such incentive plan.

**(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**

Chief Executive Officer (CEO)

**Type of incentive**

Monetary reward

**Incentive(s)**

Salary increase

**Performance indicator(s)**

Achievement of climate transition plan KPI  
 Progress towards a climate-related target  
 Implementation of an emissions reduction initiative  
 Reduction in absolute emissions

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

A workplan is a Cummins talent management tool in which an employee and manager agree to a set of goals, actions and timing to be done during the year. Employees receive a salary increase in accordance with how successful they were in completing the tasks on the workplan.

**Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan**

The nine PLANET 2050 public goals are part of the CEO's workplan, and she must report on the plan's progress to the Board of Directors as part of the performance review. Three of the nine goals are directly tied to climate change action.

**Entitled to incentive**

Environmental, health, and safety manager

**Type of incentive**

Monetary reward

**Incentive(s)**

Salary increase

**Performance indicator(s)**

Progress towards a climate-related target  
 Implementation of an emissions reduction initiative  
 Reduction in absolute emissions  
 Increased share of renewable energy in total energy consumption

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

A workplan is a Cummins talent management tool in which an employee and manager agree to a set of goals, actions and timing to be done during the year. Employees receive a salary increase in accordance with how successful they were in completing the tasks on the workplan.

**Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan**

The climate-related facilities and operations goals in PLANET 2050 are implemented by EHS experts throughout the company. They carry out the actions that are part of the climate transition plan/ public commitments.

**Entitled to incentive**

Environment/Sustainability manager

**Type of incentive**

Monetary reward

**Incentive(s)**

Salary increase

**Performance indicator(s)**

Progress towards a climate-related target  
 Increased engagement with customers on climate-related issues  
 Implementation of employee awareness campaign or training program on climate-related issues

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

A workplan is a Cummins talent management tool in which an employee and manager agree to a set of goals, actions and timing to be done during the year. Employees receive a salary increase in accordance with how successful they were in completing the tasks on the workplan.

**Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan**

The Environmental Sustainability program office developed PLANET 2050 and remains integral in acting as the voice and catalyst for success in all nine goals, three of which are directly climate related. This program office developed the Customer Sustainability Framework designed to increase engagement with customers on climate-related issues and work with internal account managers to better equip them to talk with customers about meeting their climate goals. The office also leads the annual June Environmental Month; 2023 was the 10th year. Employees can participate in online sessions, executive speakers, community projects and consume varied communications across numerous channels to learn more about PLANET 2050 and the company's climate action.

**Entitled to incentive**

All employees

**Type of incentive**

Non-monetary reward

**Incentive(s)**

Internal company award

**Performance indicator(s)**

Implementation of an emissions reduction initiative  
Energy efficiency improvement

**Incentive plan(s) this incentive is linked to**

This position does not have an incentive plan

**Further details of incentive(s)**

Cummins has a global employee recognition framework called the Impact Awards. Employees who led a project, employees who were involved with a project or employees who served as the project sponsor can self-nominate their work and can be judged and then recognized for their work that represents an outstanding effort that supports overall business goals. Beginning in 2017, there are now three different Impact Awards that employees can be recognized for: Business Impact; Global Impact; Chairman’s Impact

**Explain how this incentive contributes to the implementation of your organization’s climate commitments and/or climate transition plan**

There are three different Impact Awards that employees can be recognized for: Business Impact; Global Impact; Chairman’s Impact. One of the five award area categories is Environmental. Projects included in this category can range from site facility projects to product design to projects in collaboration with a customer. Many of these projects are climate related through greater energy efficiency or increased fuel economy and contribute positively to climate goal achievement.

**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	3	For a large global company like Cummins, three years or sooner is a short time horizon, especially for product development. Acquisitions would be included in this timeframe.
Medium-term	3	10	Most of Cummins planning falls into this time horizon, as engine platforms or specific product launches are not short-term.
Long-term	10	30	Cummins PLANET2050 environmental sustainability plan would fall into this category. It contains science-based targets for both 2030 and 2050.

**C2.1b**

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

Substantial financial and strategic impacts to Cummins business are discussed within applicable SEC documents such as the Annual Report on Form 10-K. Cummins defines substantive financial or strategic impacts in terms of generally accepted accounting principles (GAAP). Cummins includes climate-related risk factors in the 10-K (pages 25 and 27). We may be adversely impacted by the effects of climate change and may incur increased costs and experience other impacts due to new or more stringent climate change regulations, accords, mitigation efforts, GHG regulations or other legislation designed to address climate change. The potential impacts of climate change on our customers, product offerings, operations, facilities and suppliers are accelerating and uncertain, as they will be particular to local and customer-specific circumstances. These potential impacts may include, among other items, physical long-term changes in freshwater availability and the frequency and severity of weather events as well as customer product changes either through preference or regulation. Concerns regarding climate change may lead to additional international, national, regional and local legislative and regulatory responses, accords and mitigation efforts. Various stakeholders, including legislators and regulators, shareholders and non-governmental organizations, are continuing to look for ways to reduce GHG emissions, and consumers are increasingly demanding products and services resulting in lower GHG emissions. We could face risks to our brand reputation, investor confidence and market share due to an inability to innovate and develop new products that decrease GHG emissions. Increased input costs, such as fuel, utility, transportation and compliance-related costs could increase our operating costs and negatively impact customer operations and demand for our products. As the impact of any future climate related legislative or regulatory requirements on our global businesses and products is dependent on the timing, scope and design of the mandates or standards, we are currently unable to predict its potential impact which could have a material adverse effect on our results of operations, financial condition and cash flows. Climate change may exacerbate the frequency and intensity of natural disasters and adverse weather conditions, which may cause disruptions to our operations, including disrupting manufacturing, distribution and our supply chain. In recent years, there has been an increased focus from stakeholders on ESG matters, including GHG emissions and climate-related risks, renewable energy, water stewardship, waste management, diversity, equity and inclusion, responsible sourcing and supply chain, human rights and social responsibility. Given our commitment to certain ESG principles, we actively manage these issues and have established and publicly announced certain goals, commitments and targets which we may refine, or even expand further, in the future. These goals, commitments and targets reflect our current plans and aspirations and are not guarantees that we will be able to achieve them. Evolving stakeholder expectations and our efforts to manage these issues, report on them and accomplish our goals present numerous operational, regulatory, reputational, financial, legal and other risks, any of which could have a material adverse impact, including on our reputation. Such risks and uncertainties include: reputational harm, including damage to our relationships with customers, suppliers, investors, governments or other stakeholders; adverse impacts on our ability to sell and manufacture products; the success of our collaborations with third parties; increased risk of litigation, investigations or regulatory enforcement action; unfavorable ESG ratings or investor sentiment; diversion of resources and increased costs to control, assess and report on ESG metrics; our ability to achieve our goals, commitments and targets within the timeframes announced; access to and increased cost of capital and adverse impacts on our stock price. Any failure, or perceived failure, to meet evolving stakeholder expectations and industry standards or achieve our ESG goals, commitments and targets.

**C2.2**

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

**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term  
Medium-term  
Long-term

**Description of process**

Cummins has a multi-disciplinary company-wide management process to identify, assess, and respond to climate-related risks and/or opportunities that could have a substantive financial or strategic impact. Risks and opportunities are identified and assessed on a global basis by experienced internal management in many functions independently and collectively such as: risk management and the Executive Risk council, product planning, technical and environmental systems, HSE management, and the environmental sustainability program office and its extended team of environmental sustainability plan goal owners. Cummins gathers insights using external stakeholder engagement including frequent collaborations with partners, suppliers, government agencies and customers to identify risks from increasing regulations, changing customer preferences, new disruptive technology and public policy support for low carbon products. As referenced in the governance section, potential impacts that are identified and assessed are reported to Cummins Board of Directors.

Case study: how this process is applied to physical risks and/or opportunities. Cummins has done much work on identifying physical climate-related water risk. Cummins conducted detailed watershed assessments to facilities scoring above the 150 'at risk' threshold. A watershed assessment was conducted to better understand and evaluate water sourcing risks, alternatives, and overall watershed conditions. In addition to continued water conservation measures and technologies, additional response measures may include deployment of additional water storage and low/no water use processes such as air cooled chiller systems where warranted, and upgrades to the wastewater treatment system to allow for 100% reuse. Cummins encourages community engagement projects each year focusing on employee volunteer hours and sustainable projects that will be owned by the community upon completion. Cummins has a grant process to fund these projects and allows sites to fund smaller ones within their budget.

Case study: how this process is applied to transitional risks. This process was an integral part of Cummins strategy to pursue electrified products, hydrogen and other low-carbon future options identified as a transitional opportunity. In alignment Cummins announced in 2021 a number of initiatives aligned to Destination Zero, accelerating development of internal combustion engines fueled by low-carbon hydrogen for commercial-industrial markets, launching a new near-zero emission natural gas engine for heavy-duty trucks, and, in early 2022, unveiling plans for internal combustion engines with a common architecture capable of optimization for the low-carbon fuel they use. The company in 2021 also opened a fuel cell systems production facility in Herten, Germany, and announced plans to build a new plant in Spain to manufacture electrolyzers, critical technology for increasing the supply of no-carbon, green hydrogen. In addition, Cummins unveiled a partnership to pursue large scale hydrogen production projects in Europe and a joint venture to produce green hydrogen in China.

**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	<p>Risk type: Global regulation complexity.</p> <p>Our engines are subject to extensive statutory and regulatory requirements that directly or indirectly impose standards governing emissions and noise. These standards are imposed by the EPA, the EU, state regulatory agencies (such as the CARB) and other regulatory agencies around the world. We have made, and will be required to continue to make, significant capital and research expenditures to ensure our engines comply with these emission standards. Developing engines and components to meet numerous changing government regulatory requirements, with different implementation timelines and emission requirements, makes developing engines efficiently for multiple markets complicated and could result in substantial additional costs that may be difficult to recover in certain markets. In some cases, we are required to develop new products to comply with new regulations, particularly those relating to air emissions and now increasingly GHG emissions. While we have met previous deadlines, our ability to comply with other existing and future regulatory standards will be essential for us to maintain our competitive advantage in the engine markets we serve.</p> <p>Management method/risk assessment: Cummins in 2019 created the Product Compliance and Regulatory Affairs organization to focus on strengthening the company's collaboration with the environmental agencies that set emissions regulations and certification processes. Cummins is working to ensure continued compliance with increasingly-challenging global emissions regulations. The new organization will function independently from, and provide oversight to, the product development teams and business functions, reporting directly into the Chief Executive Officer. Working in tandem with our Policy Analysis &amp; Technology Portfolio team, PCRA manages this climate-related risk by monitoring global regulations and climate change sentiment and policy in countries where we sell products.</p>
Emerging regulation	Relevant, always included	<p>Risk type: timing of government implementation and enforcement of increasingly stringent emission standards in emerging markets are unpredictable and subject to change.</p> <p>The nature and timing of government implementation and enforcement of increasingly stringent emission standards in emerging markets are unpredictable and subject to change. Any delays in implementation or enforcement could result in the products we developed or modified to comply with these standards becoming unnecessary or becoming necessary later than expected thereby, in some cases, negating our competitive advantage. This in turn can delay, diminish or eliminate the expected return on capital and research expenditures that we have invested in such products and may adversely affect our perceived competitive advantage in being an early, advanced developer of compliant engines.</p> <p>Management method/risk assessment: Cummins Technical &amp; Environmental Systems (TES) working in tandem with product strategy, marketing management and government relations, monitor the likelihood of emerging climate-related regulations in the countries where we sell products.</p>
Technology	Relevant, always included	<p>Risk type: The nature and timing of government implementation and enforcement of increasingly stringent emission standards in emerging markets are unpredictable and subject to change.</p> <p>We are investing in new products and technologies, including electrified powertrains and hydrogen fuel cells, for planned introduction into certain existing and new markets. Given the early stages of development of some of these new products and technologies, there can be no guarantee of the future market acceptance and investment returns with respect to these planned products. The increased adoption of electrified powertrains in some market segments could result in lower demand for current diesel or natural gas engines and components and, over time, reduce the demand for related parts and service revenues from diesel or natural gas powertrains. Furthermore, it is possible that we may not be successful in developing segment-leading electrified powertrains and some of our existing customers could choose to develop their own electrified or alternate fuel powertrains, or source from other manufacturers, and any of these factors could materially adversely impact our results of operations, financial condition and cash flows.</p> <p>Management method/risk assessment: Cummins Technical &amp; Environmental Strategic Planning team, working in tandem with environmental (climate) strategy and our corporate strategy and growth office, routinely assesses the sentiment about climate change risk and the perception of that risk by our current and potential customers and use that data gathering in product planning.</p>
Legal	Relevant, always included	<p>Cummins code of business conduct says "we will follow the law everywhere." Legal risks are identified and assessed regularly on a global basis by experienced internal management and through external stakeholder engagement including frequent collaborations with partners, suppliers, government agencies and customers to identify risks from increasing laws and regulations, changing customer preferences, new disruptive technology and public policy support.</p> <p>Our engines are subject to extensive statutory and regulatory requirements governing emissions and noise, including standards imposed by the EPA, the EU, state regulatory agencies (such as the CARB) and other regulatory agencies around the world. Regulatory agencies are making certification and compliance with emissions and noise standards more stringent and subjecting diesel engine products to an increasing level of scrutiny. The discovery of noncompliance issues could have a material adverse impact on our results of operations, financial condition and cash flows. Similarly, our plants and operations are subject to increasingly stringent environmental laws and regulations in all of the countries in which we operate, including laws and regulations governing air emission, discharges to water and the generation, handling, storage, transportation, treatment and disposal of waste materials</p> <p>Product or transition related risks including legal compliance are identified and evaluated globally and reported to the Board of Directors quarterly. Evaluation of legal risks includes determination of the magnitude of the financial risk. The significance of the financial impact of identified risks including climate-related risk is based on probabilities of both the likelihood of occurrence and potential financial impacts.</p>
Market	Relevant, always included	<p>Risk type: success of new or existing products and services in the marketplace</p> <p>Although we conduct market research before launching new or refreshed engines and introducing new services, many factors both within and outside our control affect the success of new or existing products and services in the marketplace. Offering engines and services that customers desire and value can mitigate the risks of increasing price competition and declining demand, but products and services that are perceived to be less than desirable (whether in terms of price, quality, overall value, fuel efficiency or other attributes) can exacerbate these risks. With increased consumer inter-connectedness through the internet, social media and other media, mere allegations relating to poor quality, safety, fuel efficiency, corporate responsibility or other key attributes can negatively impact our reputation or market acceptance of our products or services, even if such allegations prove to be inaccurate or unfounded.</p> <p>Management method/risk assessment: Product planners use the intelligence gathered by our stakeholder feedback process to help plan for market expansion in areas that have emerging climate-related regulation or have need for lower carbon products.</p>
Reputation	Relevant, always included	<p>Risk type: Harm to reputation as a product provider and/or environmental leader</p> <p>Offering engines and services that customers desire and value can mitigate the risks of increasing price competition and declining demand, but products and services that are perceived to be less than desirable (whether in terms of price, quality, overall value, fuel efficiency or other attributes) can exacerbate these risks. With increased consumer inter-connectedness through the internet, social media and other media, mere allegations relating to poor quality, safety, fuel efficiency, corporate responsibility or other key attributes can negatively impact our reputation or market acceptance of our products or services, even if such allegations prove to be inaccurate or unfounded.</p> <p>Management method/risk assessment: Cummins marketing, communications, government relations and environmental strategy have developed a power of choice action plan to help customers decide which technology is right for them, and meets their climate goals. Cummins is committed to investing in an energy diverse future where its customers have a broad portfolio of power options – including clean diesel, natural gas, electrified power and even fuel cell technology – so they can choose what works best for them. Cummins believes, for example, that some of its customers may opt for clean diesel as an infrastructure is developed across the country for electrified power.</p>
Acute physical	Not relevant, included	<p>Risk type: Water scarcity due to climate change</p> <p>Climate-related risks that are physical in nature are typically water related. We have not recognized any acute water risks. Potential for inadequate or unreliable water supplies in the long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits.</p> <p>Management method/risk assessment: Facilities and operations environmental management monitors and assesses climate related water risks and have business continuity plans accordingly. Cummins has already met its 2020 goal for water intensity reduction of 50% (achieved 54%) and has set a 2030 absolute reduction target of 30%.</p>
Chronic physical	Relevant, sometimes included	<p>Risk type: Water scarcity due to climate change</p> <p>Climate-related risks that are physical in nature are typically water related. We have not recognized any acute water risks. Potential for inadequate or unreliable water supplies in the long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits.</p> <p>Management method/risk assessment: Facilities and operations environmental management monitors and assesses climate related water risks and have business continuity plans accordingly. Cummins has already met its 2020 goal for water intensity reduction of 50% (achieved 54%) and has set a 2030 absolute reduction target of 30%.</p>

**(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**

Technology	Transitioning to lower emissions technology
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**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

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

<Not Applicable>

**Company-specific description**

Cummins risk related to technology substitution is the end result of a number of drivers, among them emerging regulation, infrastructure readiness, shift in consumer preference, increasingly lower cost of ownership and the customers' own sustainability goals. We are investing in new products and technologies, including electrified powertrains and hydrogen solutions, for planned introduction into certain existing and new markets. Given the early stages of development of some of these new products and technologies, there can be no guarantee of the future market acceptance and investment returns with respect to these planned products. The increased adoption of electrified powertrains in some market segments could result in lower demand for current diesel or natural gas engines and components; however, we expect that lower demand for our current diesel or natural gas engines and components would result in increased demand for the zero emission products we are developing.

**Time horizon**

Long-term

**Likelihood**

About as likely as 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)**

1000000000

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

2500000000

**Explanation of financial impact figure**

Depending upon the rate of adoption of zero emission technologies, Cummins estimates that revenues from its legacy base business of diesel engines could be reduced in the \$1 to \$2.5 billion dollar range as customers transition to lower carbon and zero emission technologies. The company is actively investing in and developing competitive zero emission technologies for the applications it serves, and anticipates that a decrease in demand for internal combustion engines would be more than offset by increasing demand for the zero emission technologies it is developing, estimating \$6-\$13 billion of revenue attributed to battery electric, hydrogen fuel cell, and electrolyzers by 2030. Please reference C2.4a for further discussion of this opportunity.

**Cost of response to risk**

1300000000

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

[Situation]The description of response and explanation of cost calculation in this case study refers to Accelera by Cummins [Task] This segmentPower segment designs, manufactures, sells and supports hydrogen production solutions as well as electrified power systems with innovative components and subsystems, including battery, fuel cell and electric powertrain technologies. [Action] Accelera is currently in the early stages of commercializing these technologies with efforts primarily focused on the development of our electrolyzers for hydrogen production and electrified power systems and related components and subsystems. We anticipate our customer base for this business' offerings will be highly diversified, representing multiple end markets with a broad range of application requirements. [Result] We continue to serve all our markets as they adopt electrification and alternative power technologies, meeting the needs of our OEM partners and end customers. We will continue to leverage existing customer relationships as well as pursue new relationships in markets as they adopt hydrogen and electric solutions. As of the end of 2021, the company has produced more than 6,200 battery modules and packs as part of its work on battery-electric technologies and has deployed more than 2,000 hydrogen fuel cells, powering a number of global firsts, including the world's first hydrogen-powered passenger train with Alstom. Cummins expects and has communicated externally a \$1.3 billion cash outflow from operations over 2022-2027, including SG&A, production, R&D, maintenance, etc, to support Accelera growth.

**Comment**

**Identifier**

Risk 2

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

Direct operations

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

Acute physical	Drought
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**Primary potential financial impact**

Decreased revenues due to reduced production capacity

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

<Not Applicable>

**Company-specific description**

Potential for inadequate or unreliable water supplies in the long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits. The regions we have identified are China ( Hai Ho river basin); India (Krishna river basin); Mexico (Panuco river basin) and India (Krishna).

**Time horizon**

Medium-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)**

5000000

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

20000000

**Explanation of financial impact figure**

Cummins conducted detailed watershed assessments to facilities identified as at risk. Overall, 46 percent of Cummins water use is in water stressed areas. Financial implications would be periods of plant inactivity or closure, loss of production and possible customer deadline ramifications. The maximum \$20 million figure would represent the maximum amount of lost revenue due to a high estimate of 5-7 days of plant shutdown due to lack of water for operations.

**Cost of response to risk**

13500000

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

[Situation] To manage this risk, Cummins has established a goal to reduce absolute water consumption in facilities and operations by 30%. Management method varies by site, but can include continued water conservation measures in existing operations, increase in water storage capacity, and deployment of low/no water use processes such as air cooled chiller systems where warranted based upon facility water dependency. These systems increased capital expenditure and increased operating costs related to higher energy use, but off-set the potential risks associated with interruption of operations. However, Cummins is also using technologies such as regenerative dynos to manage the costs associated with the energy impact.

[Action]The Cummins' engine plant at Rocky Mount, North Carolina (U.S.), RMEP has a [task] new system brought online in 2020 employing multiple technologies including hydroponics – using plants as a filter – to treat millions of gallons of water annually so it can be returned to the facility for non-potable use . A similar system – minus the greenhouse – is conserving millions of gallons annually at Cummins' Jamestown Engine Plant in western New York (U.S.). Both plants expect to cut city water use by about a third – [result] collectively saving more than 25 million gallons annually.

[Action] In 2021, Cummins announced a [task] new global community program called Cummins Water Works. [Result] On July 14, 2023, the \$13 million program marked its second anniversary, addressing the global water crisis, by strengthening communities through increased water quantity, improved water quality, and access to hygiene and sanitation supplies. Through partnerships with global nonprofits, Cummins Water Works has helped more than 527,117, people since its 2021 launch, and provided approximately 6.1 billion gallons in Annual Water Benefits to communities around the world (5.9 billion gallons in calendar year 2022). The company's 2030 goal calls for Cummins to produce net water benefits— also called water neutrality—that exceed the company's annual water use in all Cummins' regions. The Water Works program is currently active in 11 different countries, including Mexico, Brazil, India, South Africa and the United States, and is continuing to expand . This program has a specific goal in Cummins PL.ANET 2050 strategy to produce net water benefits that exceed Cummins' annual water use in all Cummins regions by 2030.

**Comment****Identifier**

Risk 3

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

Downstream

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

Emerging regulation	Mandates on and regulation of existing products and services
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**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

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

<Not Applicable>

**Company-specific description**

The need to develop new technology to meet emissions regulations could result in substantial additional costs that may be difficult to recover in certain markets. In some cases, we are required to develop new products to comply with new regulations, particularly those relating to air emissions. While we have met previous deadlines, our

ability to comply with other existing and future regulatory standards will be essential for us to maintain our competitive advantage in the engine markets we serve. The successful development and introduction of new and enhanced products in order to comply with new regulatory requirements are subject to other risks, such as delays in product development, cost over-runs and unanticipated technical and manufacturing difficulties. During 2017, the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (EPA) selected certain of our pre-2013 model year engine systems for additional emissions testing. Some of these engine systems failed CARB and EPA tests as a result of degradation of an aftertreatment component. In the second quarter of 2018, we reached agreement with the CARB and EPA regarding our plans to address the affected populations. From the fourth quarter of 2017 through the second quarter of 2018, we recorded charges for the expected costs of field campaigns to repair these engine systems.

**Time horizon**

Medium-term

**Likelihood**

About as likely as 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)**

0

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

430000000

**Explanation of financial impact figure**

The campaigns launched in the third quarter of 2018 are being completed in phases across the affected population. The total engine system campaign charge, excluding supplier recoveries, was \$410 million. The amount accrued represents expected cost of field campaigns to repair. In the fourth quarter of 2020, we recorded an additional \$20 million charge related to this campaign, as a change in estimate, to bring the total campaign, excluding supplier recoveries, to \$430 million.

**Cost of response to risk**

1055000000

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

[Situation] We continue to make R&D investments to develop new products and improve our current technologies [task] to meet future emission requirements around the world and improve fuel economy performance of diesel and natural gas-powered engines. Research and development expenditures include salaries, contractor fees, building costs, utilities, testing, technical information technology expenses, administrative expenses and allocation of corporate costs and are expensed, net of contract reimbursements, when incurred. The combined R&D expenses associated with our Engine, Power Systems, and Components businesses in 2022 were \$1 billion, noting that this does not include the capital investments being made for the fuel agnostic platform. million. [Action] As an example of a major R&D initiative, Cummins wanted to help its trucking fleet customers decarbonize sooner and faster. In 2022, Cummins unveiled its fuel-agnostic engine platform to accomplish this, allowing customers to choose a familiar engine that runs on a more sustainable, lower emission fuel of their choosing. [Result] This approach allows for easier integration into a fleet due to 80% parts commonality and ease of training technicians and lower up front costs compared to moving to battery electric or fuel cell. The fuel agnostic engine platform delivers lower total cost of ownership than some other options and more closely matches current range and duty-cycle requirements. And choosing one of these engines, gives fleets the option of selecting an alternative fuel type they're comfortable with so they can immediately start moving toward zero.

**Comment**

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C2.4

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

Yes

C2.4a

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

**Identifier**

Opp1

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

Downstream

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

Cummins has been very public with its intent on introducing electrified products and its expansion into hydrogen. With battery capacity improving and prices dropping, electrified powertrains are becoming more affordable and practical for certain types of commercial vehicles, particularly urban bus fleets and pickup and delivery trucks. We see electric as a great option for return to base, short-run commercial vehicle routes that do not require large torque, such as transit bus. We expect hydrogen fuel cell solutions to become an increasingly-viable option for other applications requiring higher power needs, such in mining, long-haul, and heavy duty truck, and demand for our electrolyzers to increase as a result of growing demand for green hydrogen. We will provide the entire electrified powertrain solution, as well as some of the most critical components that have the largest impact on performance, quality, and power of the system to deliver the most value to our customers. Cummins anticipates that an

increase in demand for these products will result in a decrease in demand for our legacy diesel products, as discussed in C2.3a.

**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)**

6000000000

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

13000000000

**Explanation of financial impact figure**

The potential financial impact represents the expected revenue for battery electric, electrolyzers, and hydrogen fuel cells by 2030, dependent upon the pace of adoption of zero emission technologies.

**Cost to realize opportunity**

1300000000

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

[Situation]The description of response and explanation of cost calculation in this case study refers to Accelera by Cummins. [Task] This segment designs, manufactures, sells and supports hydrogen production solutions as well as electrified power systems with innovative components and subsystems, including battery, fuel cell and electric powertrain technologies. [Action] Accelera by is currently in the early stages of commercializing these technologies with efforts primarily focused on the development of our electrolyzers for hydrogen production and electrified power systems and related components and subsystem. We anticipate our customer base for New Power offerings will be highly diversified, representing multiple end markets with a broad range of application requirements. In the past two years , Cummins had made significant announcements regarding its commitment to lower carbon technology. [Result] They include 1) the formation of a 50:50 joint venture with Sinopec to form Cummins Enze, which will accelerate the affordability and availability of green hydrogen in China ; 2) An agreement with Sion Power Corporation to design and supply battery cells based on their proprietary lithium metal technology for commercial vehicle applications; 2) partnership with Iberdrola, one of the world’s largest energy companies, to announce its plans for one of the world’s largest electrolyzer plants for the production of green hydrogen to be located in Castilla-La Mancha, Spain; 4) The announcement of strategic collaborations to advance the development and integration of hydrogen fuel cells, including Daimler Truck North America and Scania in Europe. Cummins expects and has communicated externally a \$1.3 billion cash outflow from operations over 2022-2027, including SG&A, production, R&D, maintenance, etc, to support New Power growth. [Result] We continue to serve all our markets as they adopt electrification and alternative power technologies, meeting the needs of our OEM partners and end customers. We will continue to leverage existing customer relationships as well as pursue new relationships in markets as they adopt hydrogen and electric solutions. The company has produced more than 6,200 battery modules and packs as part of its work on battery-electric technologies and has deployed more than 2,000 hydrogen fuel cells, powering a number of global firsts, including the world’s first hydrogen-powered passenger train with Alstom.

**Comment**

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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**

Reduced direct costs

**Company-specific description**

Cummins has a climate-related opportunity in resource efficiency and circular economy. Cummins implementation of returnable packaging, specifically for inbound material to our manufacturing and logistics facilities, is the largest opportunity to meet our goal to reduce packaging related waste by over 84 million pounds per year. The opportunity to replace expendable corrugated material, wood pallets and dunnage materials with standardized returnable packaging will not only reduce packaging related waste, but will also offer improvements to our manufacturing operations, quality and safety. We will also be using RFID tracking technology to ensure Cummins maintains a clean, safe and available packaging for our operations. Tracking packaging will also ensure that we optimize the packaging fleet to avoid bottlenecks to avoid as much waste as possible.

**Time horizon**

Medium-term

**Likelihood**

More likely than not

**Magnitude of impact**

Medium

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

22900000

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

<Not Applicable>

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

<Not Applicable>

**Explanation of financial impact figure**

This estimate is the expected savings from implementing our packaging strategy.

**Cost to realize opportunity**

26000000

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

[Situation] Currently, expendable, single use packaging makes up over 75% of total packaging used to transport inbound material to Cummins' manufacturing facilities. This causes us to have over 140 million pounds a year in packaging related waste from our operations. In addition, packaging related waste reduction projects only produce roughly 10-14 million pounds of waste reduction per year. Packaging Waste is also highly correlated to revenue growth, meaning that the more Cummins produces the more packaging waste we produce. To break this correlation, it was determined that a large-scale returnable packaging program should be introduced. After 2 years of intensive study by consultants and pilot programs, The Cummins Returnable Packaging Program was officially launched in 2022.

[Task] After launching the Returnable Packaging Program in early 2022, the newly formed Packaging Program Team got to work wrapping up the pilot programs and determining the efficacy of the RFID tracking program. Satisfied that the system did indeed produce greater than 95% read accuracy, the team then looked to a returnable packaging deployment strategy. Tasked with reducing packaging related waste by over 84M lbs. annually, the team determined a supplier deployment plan, led procurement activities for a Southern Indiana Container Management Center (CMC) and engaged in a part-by-part packaging transformation analysis. The returnable packaging deployment plan consists of supplier and facility groups classed into waves. The team is currently on Wave 1, with Waves 2 and 3 set to deploy by the end of 2023. The Returnable Packaging Program is also determining Packaging KPIs, training and cleanliness specifications.

[Result] With an investment of \$122 million over the next 5 years (an average of \$25 million per year) in returnable packaging, tracking software, hardware, 3PL packaging services, warehousing and reverse logistics, the company will increase returnable packaging usage by over 75% of all domestic inbound material to North

**Comment**

The cost to realize is primarily related to 1) the dramatic expansion of the packaging scope and 2) additional employees required who have expertise in specialized design optimization systems and software as well as costs for the material optimization software and design for lifecycle tools. Estimate of material savings from design optimization not yet included as the company currently has limited project-specific savings.

**Identifier**

Opp3

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

Direct operations

**Opportunity type**

Resilience

**Primary climate-related opportunity driver**

Participation in renewable energy programs and adoption of energy-efficiency measures

**Primary potential financial impact**

Reduced indirect (operating) costs

**Company-specific description**

Cummins is committed to energy efficiency and renewable energy both for cost savings and resiliency. We are currently working on our fourth energy efficiency / GHG reduction goal since 2006. We have completed more than one thousand energy projects in the last 13 years, now saving the company about \$70 million per year. We exceeded our commitment have 40 sites certified to ISO 50001 energy standard by 2020 (we certified 45). We concluded our two public 2020 goals : 1) energy intensity reduction of 32 percent by 2020 from a baseline of 2010 (we hit 27% with the shortfall in and 2) to increase renewable energy opportunities (we now have 45 solar installations globally. ) Through our PLANET 2050 strategy, we have a 2030 goal to reduce absolute greenhouse gas (GHG) emissions from facilities and operations by 50 %. In 2022, Cummins completed more than 183 projects reducing GHGs, investing approximately \$18.2 million. As a result of these projects, the company achieved GHG savings of 18,256 metric tons of CO2e (Carbon dioxide equivalent)

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-high

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

70000000

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

<Not Applicable>

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

<Not Applicable>

**Explanation of financial impact figure**

We have estimated that our annual cost savings from energy efficiency projects (cumulative since 2006) is \$66 million per year.

**Cost to realize opportunity**

18000000

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

Cummins employees in its Facilities and Operations Environmental Management group set strategy, objectives and targets, which are carried out through the business units , at site level and through Global Integrated Services. The company's Enterprise Environmental Management System (EMS), created in 2003, plays a critical role in Cummins' global environmental footprint reductions and other improvements. The company adopted a model that includes a common framework to ensure a similar look, feel and fundamental approach throughout the organization. The system has served as the framework for driving continual improvement and efforts beyond compliance at Cummins operations around the world. Our employee engagement program Environmental Champions includes energy as well as water and waste training In 2022, the

Company completed its 10th June Environmental Month, with more than half of our employees participating in some way in a site, community or personal action.

[Situation] Cummins goal has been to increase its renewable energy generation. [Task] Solar will play a major role in meeting Cummins' PLANET 2050 environmental goals. There have been significant technical improvements and price reductions that make it increasingly attractive as a low-carbon energy source.[ Action ] The company worked on 24 solar projects in 2022, bringing the total number of onsite solar installations to more than 50. [Result] Thirty eight percent of the 2022 GHG reductions can be attributed to solar projects.

**Comment**

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**C3. Business Strategy**

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**C3.1**

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**(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?**

**Row 1**

**Climate transition plan**

Yes, we have a climate transition plan which aligns with a 1.5°C world

**Publicly available climate transition plan**

Yes

**Mechanism by which feedback is collected from shareholders on your climate transition plan**

We have a different feedback mechanism in place

**Description of feedback mechanism**

Not only does Cummins solicit feedback internally, it regularly gathers external stakeholder feedback including frequent collaborations with partners, suppliers, government agencies and customers to identify risks from increasing laws and regulations, changing customer preferences, new disruptive technology and public policy support.

**Frequency of feedback collection**

More frequently than annually

**Attach any relevant documents which detail your climate transition plan (optional)**

Cummins climate transition plan.pdf

**Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future**

<Not Applicable>

**Explain why climate-related risks and opportunities have not influenced your strategy**

<Not Applicable>

**C3.2**

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

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

**C3.2a**

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

Climate-related scenario		Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios	Customized publicly available transition scenario	Company-wide	1.5°C	As part of Cummins’ own scenario planning process, the company benchmarked Shell as an example of how to use scenario planning to inform investment decisions and future business conditions. Cummins used Shell scenarios to understand various methods of conducting scenario planning analysis and how to treat various inputs. Cummins does not use the Shell scenarios as a prediction, rather, the Shell scenarios are one reference point for Cummins as a peer company that uses scenario planning. One scenario that Cummins used through this planning exercise is a climate-related scenario in which countries around the world take aggressive and globally orchestrated steps to decarbonize their economies. Cummins used a climate-related scenario to understand the extreme limits and major drivers of action within this scenario out to 2035; anything less extreme would be compared to a baseline assumption of how this scenario might play out.
Physical climate scenarios	RCP 2.6	Company-wide	<Not Applicable>	Cummins consulted with an external climate analysis expert that used data from dozens of well-vetted climate models, coupled with machine learning, land use and elevation data, and models for hydrology, wildfire, and severe weather to analyze trends in future climate scenarios. Risk due to environmental perils was quantified in risk 5-year increments from 2020 through 2100, for three carbon emissions scenarios (SSP1-2.6, SSP2-4.5, and SSP5-8.5)
Physical climate scenarios	RCP 4.5	Company-wide	<Not Applicable>	Cummins consulted with an external climate analysis expert that used data from dozens of well-vetted climate models, coupled with machine learning, land use and elevation data, and models for hydrology, wildfire, and severe weather to analyze trends in future climate scenarios. Risk due to environmental perils was quantified in 5-year increments from 2020 through 2100, for three carbon emissions scenarios (SSP1-2.6, SSP2-4.5, and SSP5-8.5)
Physical climate scenarios	RCP 8.5	Company-wide	<Not Applicable>	Cummins consulted with an external climate analysis expert that used data from dozens of well-vetted climate models, coupled with machine learning, land use and elevation data, and models for hydrology, wildfire, and severe weather to analyze trends in future climate scenarios. Risk due to environmental perils was quantified in 5-year increments from 2020 through 2100, for three carbon emissions scenarios (SSP1-2.6, SSP2-4.5, and SSP5-8.5)

**C3.2b**

**(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.**

**Row 1**

**Focal questions**

Cummins asked these key focal questions:

How will changes in the climate cause future flooding, extreme heat and cold, high winds, drought, wildfires, and hail at my locations of interest? What are the potential climate risks?

What are the inputs and scenarios for customer product changes related to climate change either through preference, policy or regulation?

**Results of the climate-related scenario analysis with respect to the focal questions**

Results of the climate-related scenario analysis were the development of the company’s overarching environmental sustainability strategy PLANET 2050 in 2019, and in 2022, its product decarbonization plan called Destination Zero.

There have many recent actions as we move to produce products along a 1.5degree C pathway: electrolyzer investments (Sinopec, Iberdrola); fuel cell success (Daimler, Scania); and reducing emissions today ( fuel agnostic engine, hydrogen internal combustion engines, natural gas products).

Results of the climate-related scenario analysis for our locations are now in 2023 being reviewed and analyzed. They are helping Cummins understand how our locations may be affected by climate change, the risks to which assets may be exposed, the segments and locations of greatest impact, and how that plays out over time and across varying carbon emissions scenarios. Cummins will then determine what mitigation efforts we need to make that are location-based in addition to the corporate objectives for energy and water that are included in PLANET 2050.

**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	<p>Climate-related risks and opportunities were a major driver in the development of the company's sustainability strategy PLANET 2050, as well as in the development of Destination Zero, the company's product decarbonization strategy for its scope 3 emissions along a 1.5 degree C pathway.</p> <p>In response to its climate scenario analysis, Cummins developed a science-based target in 2019 in conjunction with the Science-based Target Initiative, pledging by 2030 to reduce scope 3 absolute lifetime GHG emissions from newly sold products by 25 percent. By 2050, the company aspires to power customer success by carbon neutral technologies that address air quality.</p>
Supply chain and/or value chain	Yes	<p>A climate-related opportunity in the value chain lies with the opportunity to help customers achieve their own sustainability goals and reduce costs and GHG emissions. Cummins has completed more than 700 projects with its customers since 2014. While the company had done fuel economy projects with customers since 2014, our climate scenario analysis and resulting sustainability plan accelerated those efforts.</p> <p>In meeting its 2030 goal, the company will dramatically expand its partnership with customers to reduce scope 3 GHG emissions from products in the field by 55 million metric tons (cumulative since 2014) by 2030.</p>
Investment in R&D	Yes	<p>Cummins has said publicly that climate change is the existential crisis of our time, and our actions demonstrate our pursuit of climate-related opportunities. Cummins is committed to investing in an energy diverse future where customers have a broad portfolio of power options, including new technology diesel, natural gas, electrified power, fuel cell technology and alternative fuels – so they can choose what works best for them as they move toward a zero emission future.</p> <p>Cummins in 2022 invested \$1.278 billion in research, technology and engineering as the company enhanced its diesel and natural gas products and brought to market new low-carbon technologies such as hydrogen fuel cells. This investment supports meeting the company's science-based target to reduce scope 3 absolute lifetime GHG emissions from newly sold products by 25 percent by 2030. The capital investments being made over the next few years for the fuel agnostic platform are significant.</p> <p>This investment is significantly driven as the company's climate change response and has accelerated a result of its climate scenario work.</p> <p>A recent investment decision was in 2021, when Cummins announced its plans for one of the world's largest electrolyzer plants for the production of green hydrogen to be located in Castilla-La Mancha, Spain. This investment comes on the heels of Iberdrola (one of the world's largest energy companies) and Cummins' decision to partner together on large-scale hydrogen production projects in Spain and Portugal.</p>
Operations	Yes	<p>Cummins activities in its operations have long been driven by climate-related opportunities as well as cost reduction. PLANET 2050 includes Cummins 4th energy / GHG reduction target – to reduce absolute greenhouse gas (GHG) emissions from facilities and operations by 50% by 2030. Our activities have only increased as we work to meet our fourth aggressive goal.</p> <p>Two significant decisions recently have been driven by climate change. Solar will play a major role in meeting Cummins' PLANET 2050 environmental goals, and Cummins goal has been to increase its renewable energy generation. The company worked on 24 solar projects in 2022, spending \$5.4 million. There have been significant technical improvements and price reductions that make it increasingly attractive as a low-carbon energy source.</p> <p>Another significant decision involving renewable energy was to enter into a virtual power purchase agreement with a windfarm in northwest Indiana. The 2017 agreement helped the Meadow Lake Wind Farm expand by guaranteeing a fixed price for its power. The expansion was completed in 2018 and began sending renewable energy to the grid in December of that year. Cummins' share of the expansion was 75 megawatts of capacity. While none of the power generated goes directly to a Cummins' facility, it essentially offsets all of the electricity used from traditional sources at company facilities across the state with renewable electricity.</p>

**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	Capital expenditures Acquisitions and divestments	<p>Cummins has made several announcements in the past year related to capital expenditures and acquisitions.</p> <p>Capital expenditures: In addition to the previously mentioned electrolyzer plant for the production of green hydrogen in Spain, Cummins cap ex budget for energy efficiency has grown to reflect the company's commitment to climate response as well as very favorable financial returns on energy efficiency projects. The capital investments being made over the next few years for the fuel agnostic engine platform are significant. Cummins has completed more than 1,000 projects since starting its journey in energy efficiency in 2007.</p> <p>Acquisitions: Cummins announced acquisition of Meritor in February 2022 provides additional electrified powertrain integration capabilities and accelerated capability in our climate change response. Owning technology that comes with the acquisition unlocks significant value and allows us to further develop and be an integrator for new power components.</p> <p>Another example from is the acquisition of Hydrogenics Corporation in September 2019, providing Cummins with both proton exchange membrane (PEM), alkaline fuel cells, and electrolyzers used to generate hydrogen.</p>

**C3.5**

**(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?**

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with our climate transition plan	<Not Applicable>

**C3.5a**

**(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.**

**Financial Metric**

Revenue/Turnover

**Type of alignment being reported for this financial metric**

Alignment with our climate transition plan

**Taxonomy under which information is being reported**

<Not Applicable>

**Objective under which alignment is being reported**

<Not Applicable>

**Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)**

198000000

**Percentage share of selected financial metric aligned in the reporting year (%)**

0.7

**Percentage share of selected financial metric planned to align in 2025 (%)**

8

**Percentage share of selected financial metric planned to align in 2030 (%)**

15

**Describe the methodology used to identify spending/revenue that is aligned**

These numbers are for our Accelera by Cummins business only, the business unit with the sole focus on zero emissions technologies. They do not include the contributions from existing internal combustion engine technology, which would make the revenue contribution higher. We are actively developing internal combustion technologies that offer economically viable solutions to reduce carbon emissions today ahead of widespread adoption of zero emission technologies.

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**Financial Metric**

CAPEX

**Type of alignment being reported for this financial metric**

Alignment with our climate transition plan

**Taxonomy under which information is being reported**

<Not Applicable>

**Objective under which alignment is being reported**

<Not Applicable>

**Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)**

17000000

**Percentage share of selected financial metric aligned in the reporting year (%)**

1.9

**Percentage share of selected financial metric planned to align in 2025 (%)**

**Percentage share of selected financial metric planned to align in 2030 (%)**

**Describe the methodology used to identify spending/revenue that is aligned**

This figures includes only capex for facilities and operations and not for capital associated with our fuel agnostic engine platform. Facility and operations cap ex is aligned with our PLANET 2050 science based target for facilities and operations , which was approved at the 1.5 degree Celsius ambition.

For 2025 and 2030 , facilities and operations capex is planned at \$35 million with variances in the interim years.

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**C4. Targets and performance**

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**C4.1**

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

Absolute target

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**C4.1a**

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

**Target reference number**

Abs 2

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

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

**Target ambition**

Well-below 2°C aligned

**Year target was set**

2019

**Target coverage**

Company-wide

**Scope(s)**

Scope 3

**Scope 2 accounting method**

&lt;Not Applicable&gt;

**Scope 3 category(ies)**

Category 11: Use of sold products

**Base year**

2018

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)**

1094000000

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year total Scope 3 emissions covered by target (metric tons CO2e)**

1094000000

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

1094000000

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

&lt;Not Applicable&gt;

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)**

100

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

99

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

99

**Target year**

2030

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

25

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

820500000

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

1108700000

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

1108700000

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

1108700000

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**% of target achieved relative to base year [auto-calculated]**

-5.37477148080439

**Target status in reporting year**

Underway

**Please explain target coverage and identify any exclusions**

Cummins Inc committed to reduce absolute scope 3 GHG emissions from the use of sold products 25% by 2030 from a 2018 base year. On June 21, 2019, the SBTi's Target Validation Team approved the target. The target encompasses all of Cummins products.

**Plan for achieving target, and progress made to the end of the reporting year**

Initiatives are underway to reduce the carbon produced by Cummins' products such as the development of internal combustion engines fueled by low-carbon hydrogen for commercial-industrial markets, launching a new near-zero emission natural gas engine for heavy-duty trucks, and, in early 2022, unveiling plans for internal combustion engines with a common architecture capable of optimization for the low-carbon fuel they use. Achieving this goal will require Cummins to work with its stakeholders to achieve significant carbon reductions. Key enablers include:

- Strong regulatory support for GHG reductions.
- Continued machine and powertrain efficiency improvements.
- Broader availability of lower carbon fuels.
- Advancements in new technology powertrains.
- Market adoption of new technology powertrains.
- Customer and industry partnerships to reduce carbon.

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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**Target reference number**

Abs 3

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

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

**Target ambition**

1.5°C aligned

**Year target was set**

2019

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

**Scope 2 accounting method**

Market-based

**Scope 3 category(ies)**

&lt;Not Applicable&gt;

**Base year**

2018

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

367470

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

705934

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year total Scope 3 emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

1073404

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

100

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

100

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1:****Purchased goods and services (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

<Not Applicable>

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2030

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

50

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

536702

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

310944

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

426216

**Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

737160

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**% of target achieved relative to base year [auto-calculated]**

62.6500367056579

**Target status in reporting year**

Underway

**Please explain target coverage and identify any exclusions**

Cummins, Inc committed to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2018 base year. On June 21, 2019, the SBTi's Target Validation Team classified the scope 1 and 2 target ambition and determined that it is in line with a 1.5°C trajectory, and approved the target.

**Plan for achieving target, and progress made to the end of the reporting year**

From the goal's baseline year of 2018 to 2022, GHGs decreased by approximately 336,244 metric tons, equivalent to a 31% reduction from the baseline. Note that these totals incorporate the acquisitions that occurred in 2022 into the baseline, per the GHG Protocol. The overall reduction in emissions can be attributed to a variety of factors including:

- The installation of on-site solar arrays in India, China, the United States, and other regions.
- A virtual power purchase agreement with an Indiana wind farm.
- LED lighting, equipment replacement, energy management, and compressed air efficiency projects throughout the company.

While most locations had returned to normal operations in 2022, some offices remained closed or partially occupied in cases where employees could work from home.

Cummins completed 219 GHG reduction projects in 2022, resulting in GHG savings of about 25,500 metric tons of CO2e (carbon dioxide equivalent).

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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## C4.2

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

Target(s) to increase low-carbon energy consumption or production

Other climate-related target(s)

---

## C4.2a

**(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.**

**Target reference number**

Low 1

**Year target was set**

2019

**Target coverage**

Country/area/region

**Target type: energy carrier**

Electricity

**Target type: activity**

Production

**Target type: energy source**

Renewable energy source(s) only

**Base year**

2018

**Consumption or production of selected energy carrier in base year (MWh)**

7127

**% share of low-carbon or renewable energy in base year**

0.5

**Target year**

2030

**% share of low-carbon or renewable energy in target year**

10

**% share of low-carbon or renewable energy in reporting year**

2.1

**% of target achieved relative to base year [auto-calculated]**

16.8421052631579

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

One of the 9 goals of PLANET 2050 is an absolute GHG emissions reduction from facilities and operations of 50%. One of the ways Cummins has identified to meet this goal is to provide more renewable electricity through onsite solar photovoltaics.

**Is this target part of an overarching initiative?**

Other, please specify (US EPA Green Power Partners)

**Please explain target coverage and identify any exclusions**

The renewable energy target is applicable to all of the facilities within Cummins emissions reporting scope. The boundary of the emissions inventory is defined using the operational control criterion outlined in the GHG Protocol.

**Plan for achieving target, and progress made to the end of the reporting year**

Approximately 17% of the target had been achieved by the end of the reporting period. This was due in part to the 24 solar projects Cummins worked on in 2022. The total number of on-site solar installations is now more than fifty. Additional installations are planned or in progress, with capital from the central sustainability fund helping where needed to drive progress on this goal.

**List the actions which contributed most to achieving this target**

<Not Applicable>

---

**C4.2b**

---

**(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.**

**Target reference number**

Oth 1

**Year target was set**

2014

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Engagement with customers	Other, please specify (Partner with customers to reduce Scope 3 GHG emissions of engines in the field by 55 million metric tons of carbon dioxide (CO <sub>2</sub> ).)
---------------------------	--

**Target denominator (intensity targets only)**

<Not Applicable>

**Base year**

2014

**Figure or percentage in base year**

0

**Target year**

2030

**Figure or percentage in target year**

55

**Figure or percentage in reporting year**

30.5

**% of target achieved relative to base year [auto-calculated]**

55.454545454545

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

This goal is not part of an emissions target.

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain target coverage and identify any exclusions**

Target customers are original equipment manufacturers as well as end-user customer fleets.

**Plan for achieving target, and progress made to the end of the reporting year**

From optimizing products for specific market segments, to the use of sophisticated digital tools to assist in the truck specification process, to the ability to customize electronic engine settings and parameters, Cummins helps customers reduce their carbon footprint throughout the life of the company's products. Since first surpassing the company's 2020 goal in 2018, Cummins has continued partnering with customers to implement fuel savings projects and is on track to exceed its 2030 goal. In 2022, an additional 21 customer projects were completed, bringing the cumulative total since 2014 to more than 720.

**List the actions which contributed most to achieving this target**

<Not Applicable>

**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 CO<sub>2</sub>e savings.**

	Number of initiatives	Total estimated annual CO <sub>2</sub> e savings in metric tonnes CO <sub>2</sub> e (only for rows marked *)
Under investigation	351	
To be implemented*	118	6682
Implementation commenced*	126	21034
Implemented*	219	25508
Not to be implemented	50	

C4.3b

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

**Initiative category & Initiative type**

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

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

464

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

80000

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

593000

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

21 projects

**Initiative category & Initiative type**

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

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

3281

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

546000

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

3224000

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

42 projects

**Initiative category & Initiative type**

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

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

1260

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

294

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

2455000

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

29 projects

**Initiative category & Initiative type**

Energy efficiency in production processes	Compressed air
---	----------------

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

1134

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

173000

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

533000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

17 projects

**Initiative category & Initiative type**

Energy efficiency in buildings	Other, please specify (Test Cell Efficiency)
--------------------------------	--

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

2260

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

639000

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

2031000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

12 projects

**Initiative category & Initiative type**

Energy efficiency in production processes	Motors and drives
---	-------------------

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

244

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

172000

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

818000

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

7 projects

**Initiative category & Initiative type**

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

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

190

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

67000

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

742000

**Payback period**

11-15 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

4 projects

**Initiative category & Initiative type**

Energy efficiency in production processes	Smart control system
---	----------------------

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

1290

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

254000

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

201000

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

11-15 years

**Comment**

14 Projects

**Initiative category & Initiative type**

Low-carbon energy generation	Solar PV
------------------------------	----------

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

7134

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

1477000

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

5440000

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

21-30 years

**Comment**

24 projects

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

Method	Comment
Dedicated budget for energy efficiency	Since 2007, Cummins has implemented an energy efficiency capital fund to finance energy-related projects. Cummins has a comprehensive investment plan designed to achieve the Company's PLANET 2050 Strategy, as well as the 2030 energy and GHG intensity goals.
Internal price on carbon	\$15 per metric ton CO <sub>2</sub> e; except where local external price on carbon is higher, in which case the higher price is used. See question 11 for additional detail.
Dedicated budget for other emissions reduction activities	A central budget is provided to fund corporate energy and GHG initiatives, including the Cummins Environmental Champion program (updated Energy Champion program integrating Water and Waste) and implementing ISO 50001 across the Cummins Enterprise and SEP Superior Energy Performance at select sites. Cummins beat its 2020 goal of 40 certified sites and by the end of 2022 has 45 sites globally certified to ISO 50001. In addition, Cummins has an internal goal to achieve 10% of electrical use to be provided by on-site renewable solar energy installations by 2030. The central fund has been increased to support the 2030 goals.
Employee engagement	Cummins continues to have a successful Environmental Champions program. To date, Cummins has trained 671 Environmental Champions. Environmental Champions take 32 hours of training over five days. Conformance with this program is a requirement for the 50 priority sites that comprise 90 percent of Cummins environmental footprint. In addition, Cummins issues internal newsletters and blogs, and conducts a company-wide June Environmental Month where more than two-thirds of the company's employees have participated in learning or site activities. In 2021, Cummins launched the PLANET 2050 Influencer program, where employees attend monthly sessions to learn more about our sustainability strategy in order to promote awareness in the company, educate others and act as a catalyst for action in their functions and the community. The company currently has more than 600 employees in the Influencer program.
Financial optimization calculations	Cummins uses a model of the internal rate of return to establish a baseline IRR for funded energy efficiency projects. Use of common financial analysis tools and calculators. Cummins prioritizes all ECO Projects with a C&E that looks GHG savings/\$ invested as well as IRR, simple payback.
Internal incentives/recognition programs	Cummins has conducted company-wide environmental awards since 2005. Each year, sites and individuals are encouraged to submit applications for the awards, using a common template and judged by a panel of Cummins energy and environmental leaders. Award winners are entered into the recognition framework called the Impact Awards. Employees who led a project, employees who were involved with a project or employees who served as the project sponsor can self-nominate their work and can be judged and then recognized their work represents an outstanding effort that supports overall business goals. Beginning in 2017, there are now three different Impact Awards that employees can be recognized for: Business Impact; Global Impact; Chairman's Impact. One of the five award area categories is Environmental. Projects included in this category can range from site facility projects to product design to projects in collaboration with a customer. Many of these projects are climate related through greater energy efficiency or increased fuel economy from products
Partnering with governments on technology development	The company's recent portfolio of government co-funded technology development and system integration programs stands at hundreds of millions of dollars in total public / private research investment since 2010. Cummins is a Department of Energy (DOE) Better Plants Program partner as we are a US EPA Green Power partner. Cummins lists key Dept. of Energy partnerships in its Sustainability Report year. The latest list in the 2021 report is on page 68.
Compliance with regulatory requirements/standards	In the UK, reporting to the streamlined energy and carbon reporting (SECR) framework. In India, we report in accordance with the Business Responsibility and Sustainability Reporting format.
Internal finance mechanisms	In addition to the dedicated capital fund, energy and GHG reduction projects are also implemented through normal channels. Sites implement energy efficiency projects and select energy efficient options for projects by using the same financial tools and investment criteria as are used for the dedicated capital fund.

**C4.5****(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?**

Yes

**C4.5a**

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.**

**Level of aggregation**

Product or service

**Taxonomy used to classify product(s) or service(s) as low-carbon**

No taxonomy used to classify product(s) or service(s) as low carbon

**Type of product(s) or service(s)**

Road	Other, please specify (Remanufactured engines and components, lower carbon product offerings in Accelera by Cummins. )
------	--

**Description of product(s) or service(s)**

Remanufactured engines and components, lower carbon product offerings in Accelera by Cummins.

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

Yes

**Methodology used to calculate avoided emissions**

Other, please specify (Data from Ecoinvent and the Inventory of Carbon and Energy (ICE) database)

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Cradle-to-gate + end-of-life stage

**Functional unit used**

per engine

**Reference product/service or baseline scenario used**

15 liter heavy duty engine

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Cradle-to-gate + end-of-life stage

**Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario**

30

**Explain your calculation of avoided emissions, including any assumptions**

Industry accepted energy savings from remanufacturing of 85 percent was applied to the life cycle analysis on a heavy duty engine completed for Cummins . This also includes impact of Accelera

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

11

**C5. Emissions methodology**

**C5.1**

**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

**C5.1a**

**(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?**

**Row 1**

**Has there been a structural change?**

Yes, an acquisition

**Name of organization(s) acquired, divested from, or merged with**

Cummins acquired Meritor, Inc., Westport JV, Jacobs Vehicle Systems, Inc., and Siemens Commercial Vehicles Propulsion.

**Details of structural change(s), including completion dates**

Cummins, Inc. acquired four commercial entities in 2022. The acquisition of Westport JV was completed on February 7, Jacobs Vehicle Systems, Inc. on April 8, Meritor, Inc. on August 3, and Siemens Commercial Vehicles Propulsion on November 30. On the date of acquisition, Meritor, Inc. was included in the Components and New Power segments, Siemens CVP was added to the New Power segment, Jacobs Vehicle Systems was included in the Components segment, and Westport JV was incorporated into the Engine segment. Emissions from facilities that are now operated by Cummins are considered to be within the boundary of its emissions inventory.

Cummins is reporting emissions associated with facilities it acquired in 2022 and over which it now has operational control, regardless of the dates on which they were purchased (per the GHG Protocol). Historic emissions from the acquisitions are included in the restatements of Scope 1 and 2 presented below. These restatements use the best data available to us at this time. In cases where data has not or cannot be obtained for recently acquired entities, the reported totals may incorporate estimations based on data gathered by the facility in other years. While these facilities are included in Cummins Scope 3 emissions for 2022, restatements of historic Scope 3 categories are not a part of this disclosure. Additional data is being collected to reliably determine Scope 3 emissions for Meritor, Jacobs, Westport JV, and Siemens CVP back to Cummins 2018 baseline. Cummins plans to restate its Scope 3 emissions prior to 2022 once these gaps have been filled.

C5.1b

**(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?**

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.1c

**(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?**

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1 Scope 2, location-based Scope 2, market-based	The threshold above which acquisitions, mergers, and other organizational changes trigger an adjustment of Cummins base year is 0.1%. Changes with cumulative impacts of less than 0.1% are considered insignificant. The four commercial entities acquired by Cummins in 2022 exceeded this threshold, setting in motion the recalculation of Cummins emissions from 2018 to 2021. Note that Cummins is not including restatements of its Scope 3 emissions in this disclosure. Additional data is being collected to reliably calculate historic Scope 3 emissions from recently acquired facilities.	Yes

C5.2

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

**Scope 1**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

367470

**Comment**

Scope 1 emissions include (1) Stationary combustion, (2) Generation of sold electricity, (3) Fugitive SF6, CO2, (4) Mobile sources and (5) Refrigerant emissions.

**Scope 2 (location-based)**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

695091

**Comment**

Scope 2 emissions include (1) Electricity, (2) Hot Water, (3) Steam.

**Scope 2 (market-based)**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

705934

**Comment**

Scope 2 emissions include (1) Electricity, (2) Hot Water, (3) Steam.

**Scope 3 category 1: Purchased goods and services**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

4269000

**Comment**

**Scope 3 category 2: Capital goods**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

450000

**Comment**

**Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

176000

**Comment**

**Scope 3 category 4: Upstream transportation and distribution**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

765000

**Comment**

**Scope 3 category 5: Waste generated in operations**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

8000

**Comment**

**Scope 3 category 6: Business travel**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

40800

**Comment**

**Scope 3 category 7: Employee commuting**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

124000

**Comment**

**Scope 3 category 8: Upstream leased assets**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

27300

**Comment**

**Scope 3 category 9: Downstream transportation and distribution**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

765000

**Comment**

**Scope 3 category 10: Processing of sold products**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

3000

**Comment**

**Scope 3 category 11: Use of sold products**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

1094000000

**Comment**

**Scope 3 category 12: End of life treatment of sold products**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

64500

**Comment**

**Scope 3 category 13: Downstream leased assets**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

52000

**Comment**

**Scope 3 category 14: Franchises**

**Base year start**

**Base year end**

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

**Comment**

Not relevant to Cummins.

**Scope 3 category 15: Investments**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

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

54300

**Comment**

**Scope 3: Other (upstream)**

**Base year start**

**Base year end**

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

**Comment**

Not evaluated.

**Scope 3: Other (downstream)**

**Base year start**

**Base year end**

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

**Comment**

Not evaluated.

C5.3

---

**(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

ISO 14064-1

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

The Greenhouse Gas Protocol: Scope 2 Guidance

The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

US EPA Center for Corporate Climate Leadership: Indirect Emissions From Purchased Electricity

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

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

US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

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C6.1

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**(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)**

310944

**Start date**

January 1 2022

**End date**

December 31 2022

**Comment**

Scope 1 emissions during the reporting period reflect facilities acquired during that time. Emissions from acquired locations were added to Cummins Scope 1 total regardless of whether they were acquired at the start of 2022 or at some point during it.

**Past year 1**

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

333174

**Start date**

January 1 2021

**End date**

December 31 2021

**Comment**

The acquisition of Meritor, Jacobs Vehicle Systems, Siemens CVP, and Westport JV in 2022 increased the number of facilities that fell within Cummins organizational boundary. Restated historic emissions reflect this new reporting scope using the best available data for the recently acquired sites. Estimations of historic emissions based on more recent data were made in cases where measured values could not be obtained or validated for the reporting year in question. Cummins continues to gather and verify data for these facilities to better quantify their impact.

**Past year 2**

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

324136

**Start date**

January 1 2020

**End date**

December 31 2020

**Comment**

The acquisition of Meritor, Jacobs Vehicle Systems, Siemens CVP, and Westport JV in 2022 increased the number of facilities that fell within Cummins organizational boundary. Restated historic emissions reflect this new reporting scope using the best available data for the recently acquired sites. Estimations of historic emissions based on more recent data were made in cases where measured values could not be obtained or validated for the reporting year in question. Cummins continues to gather and verify data for these facilities to better quantify their impact.

**Past year 3**

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

368534

**Start date**

January 1 2019

**End date**

December 31 2019

**Comment**

The acquisition of Meritor, Jacobs Vehicle Systems, Siemens CVP, and Westport JV in 2022 increased the number of facilities that fell within Cummins organizational boundary. Restated historic emissions reflect this new reporting scope using the best available data for the recently acquired sites. Estimations of historic emissions based on more recent data were made in cases where measured values could not be obtained or validated for the reporting year in question. Cummins continues to gather and verify data for these facilities to better quantify their impact.

**Past year 4**

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

367470

**Start date**

January 1 2018

**End date**

December 31 2018

**Comment**

The acquisition of Meritor, Jacobs Vehicle Systems, Siemens CVP, and Westport JV in 2022 increased the number of facilities that fell within Cummins organizational boundary. Restated historic emissions reflect this new reporting scope using the best available data for the recently acquired sites. Estimations of historic emissions based on more recent data were made in cases where measured values could not be obtained or validated for the reporting year in question. Cummins continues to gather and verify data for these facilities to better quantify their impact.

**C6.2**

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

**Row 1**

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We are reporting a Scope 2, market-based figure

**Comment**

Cummins reports both Scope 2 location based and market based figures.

**C6.3**

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

## Reporting year

### Scope 2, location-based

532645

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

426216

### Start date

January 1 2022

### End date

December 31 2022

### Comment

Scope 2 market-based emissions in 2022 were significantly less than location-based emissions in part because of the inclusion of renewable energy certificates (RECs) retained by Cummins for approximately 119,573 metric tons of CO<sub>2</sub>e (carbon dioxide equivalent) associated with a virtual power purchase agreement (VPPA). Updated emission factors increased greenhouse gases (GHGs) associated with electricity purchased from the grid by approximately 5,000 metric tons of CO<sub>2</sub>e. The following sources were used to calculate location-based emissions:

1) US EPA eGRID 2021, (16th edition), January 30, 2023.

2) Canada: National Inventory Report 1990-2020: Greenhouse Gas Sources and Sinks in Canada, Part 3. Annex 13: Emission Factors, Tables A13-1 to A13-14.

3) Facilities outside of the United States and Canada used factors for 2020 from the "CO<sub>2</sub> Emissions from Fuel Combustion" (2022 Edition) published by the International Energy Agency (IEA) in Paris.

For market-based calculations, Cummins used residual mix factors for European facilities from the Association of Issuing Bodies, "European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Version 1.0, 2022-05-31. The calculations default to location-based factors for facilities outside of Europe where residual mix factors are not currently available or integrated into the calculation methodology.

## Past year 1

### Scope 2, location-based

564758

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

450714

### Start date

January 1 2021

### End date

December 31 2021

### Comment

The acquisition of Meritor, Jacobs Vehicle Systems, Siemens CVP, and Westport JV in 2022 increased the number of facilities that fell within Cummins organizational boundary. Restated historic emissions reflect this new reporting scope using the best available data for acquired sites. Estimations of historic emissions based on more recent data were made in cases where measured values could not be obtained or validated for the reporting year in question. Cummins continues to gather and verify data for these facilities to better quantify their impact.

## Past year 2

### Scope 2, location-based

536730

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

431533

### Start date

January 1 2020

### End date

December 31 2020

### Comment

The acquisition of Meritor, Jacobs Vehicle Systems, Siemens CVP, and Westport JV in 2022 increased the number of facilities that fell within Cummins organizational boundary. Restated historic emissions reflect this new reporting scope using the best available data for acquired sites. Estimations of historic emissions based on more recent data were made in cases where measured values could not be obtained or validated for the reporting year in question. Cummins continues to gather and verify data for these facilities to better quantify their impact.

## Past year 3

### Scope 2, location-based

623737

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

508759

### Start date

January 1 2019

### End date

December 31 2019

### Comment

The acquisition of Meritor, Jacobs Vehicle Systems, Siemens CVP, and Westport JV in 2022 increased the number of facilities that fell within Cummins organizational boundary. Restated historic emissions reflect this new reporting scope using the best available data for acquired sites. Estimations of historic emissions based on more recent data were made in cases where measured values could not be obtained or validated for the reporting year in question. Cummins continues to gather and verify data for these facilities to better quantify their impact.

## Past year 4

### Scope 2, location-based

695091

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

705934

### Start date

January 1 2018

### End date

December 31 2018

### Comment

The acquisition of Meritor, Jacobs Vehicle Systems, Siemens CVP, and Westport JV in 2022 increased the number of facilities that fell within Cummins organizational boundary. Restated historic emissions reflect this new reporting scope using the best available data for acquired sites. Estimations of historic emissions based on more recent data were made in cases where measured values could not be obtained or validated for the reporting year in question. Cummins continues to gather and verify data for these facilities to better quantify their impact.

## C6.4

### (C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 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

##### Emissions in reporting year (metric tons CO2e)

5236076

##### Emissions calculation methodology

Spend-based method

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

100

##### Please explain

Cummins and Meritor total spend data for direct purchasing (including raw materials - metals and commodities usage) as well as total 2022 indirect purchase expenses (including supply chain services, facilities services, IT and engineering, corporate services, etc.) were used to estimate the associated Scope 3 emissions. For raw materials purchased by Cummins, a cradle to gate approach was used to estimate the scope 3 emissions using 2011 purchase data. 2022 emissions was calculated based on revenue change factor. For indirect purchasing goods and services, UK DEFRA's Standard Industrial Classification (SIC) Codes closest to the spend category and 2009 emission factors were utilized to estimate the scope 3 emissions (Reference/Source of Emission factors: Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance; March 2019; defra.uk).

- Supply Chain Services: 20% assumed as ancillary transport services (SIC Code 63) under purchased goods and services; 80% is assumed transportation and distribution of products and parts.

- Corporate Services: 10% as insurance and pension funds (SIC Code 66); 10% auxiliary financial services (SIC Code 66); and 80% as legal, consultancy, other business activities (SIC Code 74)

Facilities Services: 75% assumed as purchased goods and services and rest 25% as capital goods. Of the 75%, assumed 50% as real estate activities (SIC Code 70); 25% as legal, consultancy, other business activities - industrial cleaning (SIC Code 74); 25% sewage and refuse services (SIC Code 90)

- Product Testing and Manufacturing Services: 75% assumed as research and development (SIC Code 73) under purchased goods and services and 25% as capital goods;

- IT & Engineering Services: 50% assumed as purchased goods and services and 50% as capital goods. Within purchased goods 50% is assumed as computer services (SIC Code 72) and 50% as metal products – general mechanical engineering services (SIC Code 28)

- Indirect/Undefined: 50% assumed as office machinery and computers (SIC Code 30) under purchased goods and services and 50% as capital goods

#### Capital goods

##### Evaluation status

Relevant, calculated

##### Emissions in reporting year (metric tons CO2e)

535623

##### Emissions calculation methodology

Spend-based method

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

100

##### Please explain

Cummins total 2022 spend data for capital goods purchases in facilities & construction, IT, engineering and machinery was used to estimate the scope 3 emissions. UK DEFRA's SIC Codes closest to the spend category and 2009 emission factors were utilized to estimate the scope 3 emissions (Reference/Source of Emission factors: Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance; March 2019; defra.uk). We assume that 100 percent of the indirect purchasing on facilities and construction is towards capital goods purchases.

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

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

181018

### Emissions calculation methodology

Average data method

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

100

### Please explain

Energy consumption data for activities not included in Scope 1 or 2 is grouped by type (e.g. natural gas) and multiplied by activity specific emission factors. Life-cycle analysis software is used as the basis of emission factors for upstream emissions of purchased fuels. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US and on UK Defra 2012 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US and on UK Defra 2012 guidelines for other countries. GWPs are IPCC Fourth Assessment Report (SAR - 100 year).

## Upstream transportation and distribution

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

2009195

### Emissions calculation methodology

Spend-based method

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

100

### Please explain

2022 transportation and distribution was assumed to be equal to 80 percent of the supply chain services spend. Also it was assumed 70 percent of the logistics was through road, 10 percent through rail, 10 percent through water and 10 percent through air. UK DEFRA's SIC Codes for Rail, Road, Water and Air categories and 2009 emission factors were utilized to estimate the scope 3 emissions (Reference/Source of Emission factors: Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance; March 2019; defra.uk).

## Waste generated in operations

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

14555

### Emissions calculation methodology

Waste-type-specific method

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

100

### Please explain

The US EPA EF Hub Table 9 provides Scope 3 Category 5: Waste Generated in Operations and Category 12: End-of-Life Treatment of Sold Products. Previously we directly used the Waste Reduction Model (WARM) Version 15 created by the U.S. Environmental Protection Agency (EPA) to quantify the scope 3 emissions for the landfilled waste, combusted waste and composted waste from Cummins global facilities for the reporting year. As there were no separate categories available for incinerated waste and waste that was burned for energy recovery, both were included in the combusted waste category and default factors in the tool were used to calculate the GHG emissions. Due to non-availability of exact categories, the general refuse / garbage generated was categorized as Mixed Organics as it includes primarily food waste from canteen, grass clippings from lawn etc. and the process derived industrial waste was categorized as Mixed MSW. Composted waste data from global facilities and the same was included in the emissions analysis (Reference/Source: EPA WARM Model).

## Business travel

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

13764

### Emissions calculation methodology

Distance-based method

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

100

### Please explain

All air travel data are tracked through a service provided to Cummins by AmEx. Emissions are calculated using the short, medium, and long haul air travel categories and associated emission factors given in Table 10 of US EPA EF Hub March 2023. Car rental mileage is provided by rental car companies (Hertz and Enterprise). The total emissions for Enterprise are calculated using US EPA EF Hub Passenger Car factors in the March 2023 edition. Total CO2e emissions were calculated by Hertz using "industry standard calculation protocols." However, the precise methodology and data upon which this total was based were not provided by Hertz.

## Employee commuting

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

131417

### Emissions calculation methodology

Average data method

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

75

### Please explain

Calculations derived from general country (outside of US) direct data and assumptions plus per state employee headcount data. Some direct and some derived assumptions of commuter mileage and mode of transportation. (Source of Emission factors: US EPA (2008); Greenhouse Gas Inventory Protocol Core Module Guidance - Direct Emissions from Mobile Combustion Sources, EPA Climate Leaders, Tables A-6 and A-7)

## Upstream leased assets

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

19336

### Emissions calculation methodology

Average data method

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

90

### Please explain

Cummins leased facilities exempt from environmental reporting that are shared facilities with no operational control, separate meter and utility bills is considered under this category. Based on the Area Business Organization (ABO), Business Unit (BU) and facility type (Eg: Office, Warehouse etc), scope 1 and scope 2 emissions intensity were estimated and applied based on the occupied square footage. The total square footage is based on an updated report that includes 2022 acquisitions of Meritor and Jacobs Vehicle Systems. The Scope 1 and Scope 2 intensity is based on the average country specific Scope 1 and Scope 2 emission intensities that CMI owned/managed facilities.

## Downstream transportation and distribution

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

2009195

### Emissions calculation methodology

Other, please specify (Result of the spend-based method used for upstream transportation and distribution)

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

0

### Please explain

Most Cummins customers pay for the transportation of products sold to them, either directly or via part of an overall invoice. Since separate data is not available, the assumption was made that downstream transportation and distribution emissions of shipping and distribution of final products to customers are same as upstream transportation and distribution of parts and input materials.

## Processing of sold products

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

1976

### Emissions calculation methodology

Average data method

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

100

### Please explain

Engine weights used in the general categories of mid-range, heavy-duty and high-horsepower were derived by updating the 2012 calculation of weighted-average by volume of the various engine families within those three categories. Custodial engine volumes were taken from annual report Form 10-K and JV engine volumes were estimated using JV revenue growth. Assumptions were made on the power of the power tools / hoist used and the time taken to install each unit.

## Use of sold products

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

1108700000

### Emissions calculation methodology

Methodology for direct use phase emissions, please specify (Products that directly consume energy (fuels or electricity) during use)

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

100

### Please explain

Cummins use of sold product emissions were calculated using overall volumes by segment and engine model, which were then multiplied by the attrition rates to determine the volumes in operation each year moving forward. Emissions for products sold in 2022 were calculated by adjusting overall 2022 engine volumes against 2018 volumes. We used the long-standing Cummins newly sold products calculation model as well as customer engineering analysis to determine the attrition rate. We multiplied each of these yearly figures by an age factor (i.e., a 10-year-old truck will not operate the same number of hours or miles as a brand-new truck) and converted miles per gallon or gallons per hour to million metrics tons of CO2e. The CO2e conversion factor for diesel was applied based on the EPA's EF Hub and AR 4.

## End of life treatment of sold products

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

57117

### Emissions calculation methodology

Waste-type-specific method

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

100

### Please explain

Cummins conducted a hot spot analysis to evaluate the impact of the end of life treatment of sold products. The waste related to sold product is primarily iron and steel (more than 90%). The estimates are based on landfilling, processing, and recycling of the generated wastes associated with those products. The assumption is 5% of the products are scrapped – 90% is melted / processed.. The emissions were adjusted based on the change in the number of engine units shipped between 2011 and 2022.

## Downstream leased assets

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

57291

### Emissions calculation methodology

Average data method

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

100

### Please explain

This represents our rental generator fleet. We have made assumptions on generator use - as some generators are used as backup power and others operate full time. The total number of rental fleet generators at North American distributor locations were collected for 2012. Total fuel usage was estimated based on the number of generators from each kW category, efficiency and monthly average run time. The emissions were adjusted to the change in power systems business as a proxy for power solutions. The Diesel emission factor is updated with US EPA EF Hub from April 2022.

## Franchises

### Evaluation status

Not relevant, explanation provided

### Emissions in reporting year (metric tons 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

Cummins does not have any franchises.

**Investments**

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

45949

**Emissions calculation methodology**

Other, please specify (Emissions are calculated using unconsolidated revenue data and proportionate market-based emissions from the consolidated and 50:50 JV revenues.)

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

0

**Please explain**

Emissions from 50:50 joint venture investments in China and India are included in Scope 1 and Scope 2 based on operational control scope. The remaining minority and unconsolidated joint venture operations where Cummins does not have operational or administrative control are included in this category. Cummins holds a minority stake (<20% and 20-50% equity investee) in several distributor businesses and manufacturing operations, primarily in regions other than India and China. Emissions are calculated using unconsolidated revenue data and proportionate market-based emissions from the consolidated and 50:50 JV revenues.

**Other (upstream)**

**Evaluation status**

Not evaluated

**Emissions in reporting year (metric tons 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**

Cummins has not evaluated other upstream scope 3 emissions.

**Other (downstream)**

**Evaluation status**

Not evaluated

**Emissions in reporting year (metric tons 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**

Cummins has not evaluated other upstream scope 3 emissions.

**C6.7**

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

Yes

**C6.7a**

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**(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.**

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	178.4	Calculated using the percentage of biodiesel in diesel fuel and ethanol in gasoline.

**C6.10**

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

**Intensity figure**

0.000029

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

737160

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

25051260534

**Scope 2 figure used**

Market-based

**% change from previous year**

0

**Direction of change**

No change

**Reason(s) for change**

Change in renewable energy consumption

Other emissions reduction activities

Acquisitions

Change in output

Change in revenue

Change in methodology

**Please explain**

Scope 1 and Scope 2 market-based emissions in 2022 decreased by 6% compared to restated emissions in 2021, but a similar decline in revenue (approximately 8% adjusted for inflation to 2018 dollars) contributed to the overall intensity remaining essentially the same. Renewable energy certificates (RECs) totaling approximately 119,573 metric tons of CO2e (carbon dioxide equivalent) retained by Cummins for energy produced at the Meadow Lake VI wind farm in northwest Indiana (U.S.) continued to reduce the company's Scope 2 emissions. Emission factor updates in 2022 also impacted greenhouse gases (GHGs) associated with the grid, contributing to an overall increase of approximately 5,000 metric tons of CO2e.

In 2022, Cummins invested over \$16.7 million to complete 156 GHG reduction projects (183 projects if carry-over projects that started in 2022 are included), saving 17,884 metric tons of GHG emissions, with an average return on investment of four years. Key projects completed in 2022 include:

- 20 onsite projects to increase the use of renewable energy, with 10 additional projects underway expected to be complete in 2023. The completed projects reduced 7,879 metric tons of carbon dioxide equivalent (CO2e).

- 65 facility efficiency projects, such as LED lighting and heating, ventilation and air conditioning (HVAC) upgrades and building envelope improvements. Saving around 5,000 MT of CO2e.

- \$1.7 million invested over 32 projects in manufacturing and compressed air improvement projects, leading to a more efficient manufacturing process and 2,453 metric tons of CO2e in GHG reductions. Over 40% of the savings in 2022 can be attributed to on-site solar projects across all regions, with India representing the biggest footprint of solar projects completed in 2022.

**C7. Emissions breakdowns**

**C7.1**

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

Yes

**C7.1a**

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	291127	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	192	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	473	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	17814	IPCC Fourth Assessment Report (AR4 - 100 year)
Other, please specify (Fugitive SF6, CO2)	1319	IPCC Fourth Assessment Report (AR4 - 100 year)

**C7.2**

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

Country/area/region	Scope 1 emissions (metric tons CO2e)
Angola	0
Argentina	295
Australia	7388
Belgium	1620
Bolivia (Plurinational State of)	6
Botswana	118
Brazil	4134
Canada	5571
Costa Rica	301
China	46405
Colombia	48
Czechia	137
France	2629
Germany	1219
Ghana	49
Honduras	95
India	20526
Ireland	35
Italy	10616
Japan	26
Kazakhstan	33
Malaysia	356
Mexico	9494
Mongolia	181
Morocco	41
Mozambique	0
Netherlands	101
New Zealand	11
Nigeria	1333
Norway	18
Panama	104
Papua New Guinea	136
Philippines	111
Poland	165
Romania	1521
Russian Federation	125
Saudi Arabia	0
Senegal	19
Serbia	56
Singapore	316
South Africa	1520
Republic of Korea	1977
Spain	86
Sweden	6257
Turkey	553
United Arab Emirates	316
United Kingdom of Great Britain and Northern Ireland	19870
United States of America	162031
Zambia	297
Austria	6
Chile	2333
Qatar	133
Thailand	226

**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)
Components Segment	71968
Corporate Segment	8483
Distribution Segment	63538
Engine Segment	99857
New Power Segment	1216
Supply Chain Segment	7743
Power Systems Segment	58139

**C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4**

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions, metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	231180	<Not Applicable>	Emissions from Cummins' engine, new power, power systems, and components business segments were included within the scope of transport OEM activities.
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C7.5**

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

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Angola	0	0
Argentina <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	50	50
Australia <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	4593	4593
Belgium <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	554	500
Bolivia (Plurinational State of) <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	10	10
Botswana <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	24	24
Brazil <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	6269	6269
Canada <i>Location-based emissions were calculated using the most recent Canadian National Inventory Report. See "Canada: National Inventory Report 1990-2020: Greenhouse Gas Sources and Sinks in Canada, Part 3. Annex 13: Emission Factors, Tables A13-1 to A13-14" for additional details. Per the GHG Protocol, market-based emissions were also estimated using the provincial factors from the national inventory report in the absence of applicable market-based factors.</i>	2006	2006
Costa Rica	0	0
China <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	124750	124750
Colombia <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	44	44

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Czechia <i>For market-based calculations, Cummins used residual mix factors for European facilities from the Association of Issuing Bodies, "European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2018," Version 1.2, 2019-07-11. The calculations default to location-based factors for facilities outside of Europe where residual mix factors are not currently available.</i>	320	427
France <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	2905	2745
Germany <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	1082	2138
Ghana <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	78	78
Honduras <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	72	72
India <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	77752	77752
Ireland <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	12	25
Italy <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	3235	5559
Japan <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	88	88
Kazakhstan <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	68	68
Malaysia <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	237	237
Mexico <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	26675	26675
Mongolia <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	322	322
Morocco <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	11	11
Mozambique	0	0
Netherlands <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	38	57
New Zealand <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	42	42
Nigeria <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	301	301
Norway <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	1	78
Panama <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	34	34
Papua New Guinea <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	32	32
Philippines <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	74	74
Poland <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	58	79
Romania <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	2323	2387
Russian Federation <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	382	383
Saudi Arabia	0	0

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Serbia <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	98	97
Singapore <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	2597	2597
South Africa <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	2736	2736
Republic of Korea <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	5125	5125
Spain <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	18	34
Turkey <i>For market-based calculations, Cummins used residual mix factors for European facilities from the Association of Issuing Bodies, "European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2018," Version 1.2, 2019-07-11. The calculations default to location-based factors for facilities outside of Europe where residual mix factors are not currently available.</i>	64	64
United Arab Emirates <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	1019	1019
United Kingdom of Great Britain and Northern Ireland <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	9625	17306
United States of America <i>Location-based emissions were calculated using the eGRID subregion factors published by the United States Environmental Protection Agency (US EPA) in January of 2023. Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	256582	137009
Zambia <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	10	10
Austria <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	15	0
Qatar <i>Location-based emissions were calculated using the 2022 grid emission factor set from the International Energy Agency (IEA). Per the GHG Protocol, market-based emissions for this locality were also estimated with the country-specific factor from the IEA in the absence of an applicable market-based factor.</i>	1	1
Sweden <i>Cummins used a residual mix factor from the Association of Issuing Bodies (AIB) to calculate market-based emissions for this locality ("European Residual Mixes: Results of the calculation of residual mixes for the calendar year 2021," Association of Issuing Bodies, Version 1.0, 2022-05-31). Location-based emissions were determined using the 2022 grid emission factor set from the International Energy Agency (IEA).</i>	313	2308

## 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)
Components Segment	192768	181458
Corporate Segment	15660	5481
Distribution Segment	28527	26260
Engine Segment	217167	151468
New Power Segment	2063	2412
Supply Chain Segment	17159	16993
Power Systems Segment	59300	42143

## C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

**(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.**

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	471299	377482	Emissions from Cummins' engine, new power, power systems, and components business segments were included within the scope of transport OEM activities.
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C-TO7.8

**(C-TO7.8) Provide primary intensity metrics that are appropriate to your indirect emissions in Scope 3 Category 11: Use of sold products from transport.**

C7.9

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

Decreased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	3844	Decreased	0.43	On-site electricity generation from renewable sources (e.g. on-site solar panels) where Cummins retained the energy's renewable attributes increased from approximately 19,171 MWh in 2021 to 25,967 MWh in 2022. The difference between these values was the amount by which energy generation within this category increased (6,796 MWh). The metric tons of CO2e attributable to this change was determined by multiplying the electricity produced at each site in 2021 and 2022 by the applicable regional emission factors and then subtracting the resulting totals for 2022 by those for 2021 to determine the difference. The percent change in emissions attributed to renewable energy consumption was calculated by dividing -3,844 tCO2e by the combined Scope 1 and Scope 2 location-based emissions in the prior year (897,932 tCO2e) and multiplying by 100. Note that total Scope 1 and 2 emissions for 2021 have been restated to incorporate acquisitions in 2022. The percent reduction in CO2e due to increased on-site electricity generation from renewable sources for which Cummins retained credits was calculated to be 0.43%.
Other emissions reduction activities	25508	Decreased	2.84	Cummins implemented 219 emission reduction initiatives in 2022, resulting in an estimated CO2e savings of 25,508 metric tons. This was a reduction of 2.84% compared to the total Scope 1 and Scope 2 location-based emissions in 2021 (897,932 tCO2e). Note that total Scope 1 and 2 emissions for 2021 have been restated to incorporate acquisitions in 2022. The change in emissions attributed to these activities was calculated by dividing the sum of the emission reductions achieved through the projects implemented in 2022 by the total Scope 1 and Scope 2 location-based emissions in 2021. This value was then multiplied by 100 to yield the percent by which initiatives in 2022 reduced CO2e. The projects included improvements to building controls, HVAC upgrades, energy efficient lighting, compressed air optimization, test cell efficiency, and equipment upgrades.
Divestment		<Not Applicable >		
Acquisitions	0	No change	0	No acquisition-related emission changes are being reported since Cummins elected to restate its Scope 1 and 2 emissions for the prior year. This is in keeping with the guidance provided in CDP's technical note on restatements. If emissions in 2021 had not been restated, then the facilities acquired in 2022 would have contributed to an increase of approximately 148,000 metric tons of CO2e as compared to Cummins previous Scope 1 and 2 total in 2021. Emissions from acquired facilities were based on measured values obtained directly from sites or from the environmental data management systems that were already in place. While energy data for 2022 was generally available and considered to be reliable, estimations had to be made in the limited cases where measured values could not be obtained. Cummins is working to fully deploy its environmental metrics at these facilities and to fill historic data gaps. Scope 1 and 2 emissions were calculated using the methodology that Cummins applies to other sources within its reporting boundary (e.g., same combustion and electricity grid factors).
Mergers		<Not Applicable >		
Change in output	29981	Decreased	3.34	Changes in production and business activities in 2022 resulted in CO2e output decreasing by approximately 30,000 metric tons compared to the prior year. This value was calculated by subtracting the difference between restated Scope 1 and Scope 2 location-based emissions in 2021 and 2022 by the sum of the changes in emissions in 2022. In other words, output was determined to have increased in 2022 since other activities did not fully account for the change in combined Scope 1 and Scope 2 location-based emissions. This was a decrease of about 3.34% as compared to the total Scope 1 and Scope 2 location-based emissions in 2021 (897,932 tCO2e). The percentage was calculated by dividing the change in CO2e output in 2022 by the total Scope 1 and Scope 2 location-based emissions in 2021. This value was then multiplied by 100 to yield the percent by which CO2e output would have changed without emission reduction measures. The emission reduction attributable to the virtual power purchase agreement (VPPA) with the Meadow Lake VI wind farm in 2022 were not part of the change in output calculation since it was not applied to Cummins' Scope 2 location-based emissions. If the VPPA emission savings were incorporated, the difference between Scope 1 and Scope 2 emissions in 2022 and 2021 would have to be recalculated using market-based emissions in order to yield an accurate change in output value.
Change in methodology	4991	Increased	0.56	Approximately 5,000 metric tons of Cummins GHG emissions in 2022 can be attributed to an overall increase in the carbon intensity of the grid where Cummins operates. While some localities saw reductions, changes to emission factors from the U.S. Environmental Protection Agency, the International Energy Agency and other country-specific sources that were applicable to Cummins sites created a negative effect in aggregate. This was only about 0.56% of total Scope 1 and Scope 2 location-based emissions from the prior year after it was adjusted to incorporate recent acquisitions per CDP's guidance on restatements (4,991 tCO2e / 897,932 tCO2e x 100 = 0.56%).  While Scope 2 location-based emissions are the basis for these performance calculations, an additional methodological change could be attributed to Cummins' 15-year virtual power purchase agreement (VPPA) with the Meadow Lake VI wind farm if Scope 2 market-based emissions were considered here instead. Renewable energy credits (RECs) from the VPPA totaled 119,574 metric tons of CO2e in 2022. This was about 7,000 metric tons less than in 2021 due to a drop in energy production at the wind farm. These RECs were accounted for at a zero emission factor in Cummins' 2022 Scope 2 market-based emissions.
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 0% but less than or equal to 5%

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

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	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)	HHV (higher heating value)	239	1394523	1394762
Consumption of purchased or acquired electricity	<Not Applicable>	251335	1305367	1556702
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	14587	14587
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	25967	<Not Applicable>	25967
Total energy consumption	<Not Applicable>	277541	2714477	2992018

**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	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
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.****Sustainable biomass****Heating value**

HHV

**Total fuel MWh consumed by the organization**

0

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

0

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

0

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

0

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

&lt;Not Applicable&gt;

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

0

**Comment**

**Other biomass**

**Heating value**  
HHV

**Total fuel MWh consumed by the organization**  
0

**MWh fuel consumed for self-generation of electricity**  
0

**MWh fuel consumed for self-generation of heat**  
0

**MWh fuel consumed for self-generation of steam**  
0

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

**MWh fuel consumed for self- cogeneration or self-trigeneration**  
0

**Comment**

**Other renewable fuels (e.g. renewable hydrogen)**

**Heating value**  
HHV

**Total fuel MWh consumed by the organization**  
239

**MWh fuel consumed for self-generation of electricity**  
0

**MWh fuel consumed for self-generation of heat**  
0

**MWh fuel consumed for self-generation of steam**  
0

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

**MWh fuel consumed for self- cogeneration or self-trigeneration**  
0

**Comment**

Renewable hydrogen produced using electrolysis powered by renewable electricity was used at a Cummins facility during the reporting period.

**Coal**

**Heating value**  
HHV

**Total fuel MWh consumed by the organization**  
0

**MWh fuel consumed for self-generation of electricity**  
0

**MWh fuel consumed for self-generation of heat**  
0

**MWh fuel consumed for self-generation of steam**  
0

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

**MWh fuel consumed for self- cogeneration or self-trigeneration**  
0

**Comment**

## Oil

### Heating value

HHV

### Total fuel MWh consumed by the organization

632731

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

89357

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

4083

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

4083

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

<Not Applicable>

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

0

### Comment

The totals reported for this category include the consumption of fuel oil #2, motor gasoline, diesel, and jet kerosene. The self-generation of electricity using distillate fuel oil #2 is derived from fuel consumption in on-site test cells using an efficiency of 50%. Distillate fuel oil #2 usage associated with boilers, furnaces, forklifts and similar sources is split evenly between heat and steam.

## Gas

### Heating value

HHV

### Total fuel MWh consumed by the organization

727815

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

13640

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

341785

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

0

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

<Not Applicable>

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

0

### Comment

Natural gas and propane consumption are included in the totals reported for this category. The cubic feet of natural gas consumed by test cells with regenerative dynamometers is used as the basis for the self-generation of electricity. Stationary natural gas consumption reported at the facility level is counted toward the self-generation of heat. Energy generation associated with mobile sources and sold electricity is tracked separately. Heat generation from propane is derived from a set proportion of fuel consumption not associated with test cells.

## Other non-renewable fuels (e.g. non-renewable hydrogen)

### Heating value

HHV

### Total fuel MWh consumed by the organization

33977

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

0

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

0

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

0

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

<Not Applicable>

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

0

### Comment

Hydrogen used as fuel at Cummins facilities is the sole contributor to this category.

**Total fuel****Heating value**

HHV

**Total fuel MWh consumed by the organization**

1394762

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

102998

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

345867

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

4083

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

&lt;Not Applicable&gt;

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

0

**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	102998	102998	28389	25967
Heat	345867	345867	0	0
Steam	4083	4083	0	0
Cooling	0	0	0	0

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

United States of America

**Sourcing method**

Financial (virtual) power purchase agreement (VPPA)

**Energy carrier**

Electricity

**Low-carbon technology type**

Wind

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

251335

**Tracking instrument used**

US-REC

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

United States of America

**Are you able to report the commissioning or re-powering year of the energy generation facility?**

Yes

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

2019

**Comment**

Cummins retained renewable energy certificates (RECs) through a virtual power purchase agreement (VPPA) with the Meadow Lake VI wind farm in northern Indiana. The recent expansion of the wind farm was made possible through Cummins' 15-year VPPA for 75 MW capacity signed in 2017. The VPPA provided a hedge against energy prices, as a slight price settlement loss was offset by reduced utility costs at the company's Indiana plants. Cummins accounted for the RECs in its Scope 2 market-based emissions by applying them to electricity purchased from the utility grid at its facilities.

**C8.2g****(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.****Country/area**

Argentina

**Consumption of purchased electricity (MWh)**

183

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

183

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**Country/area**

Australia

**Consumption of purchased electricity (MWh)**

6743

**Consumption of self-generated electricity (MWh)**

931

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

7674

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**Country/area**

Austria

**Consumption of purchased electricity (MWh)**

127

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

127

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**Country/area**

Belgium

**Consumption of purchased electricity (MWh)**

2773

**Consumption of self-generated electricity (MWh)**

582

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

3355

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**Country/area**

Bolivia (Plurinational State of)

**Consumption of purchased electricity (MWh)**

32

**Consumption of self-generated electricity (MWh)**

0

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**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

32

---

**Country/area**

Botswana

**Consumption of purchased electricity (MWh)**

18

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

18

---

**Country/area**

Brazil

**Consumption of purchased electricity (MWh)**

67125

**Consumption of self-generated electricity (MWh)**

367

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

67492

---

**Country/area**

Canada

**Consumption of purchased electricity (MWh)**

10648

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

10648

---

**Country/area**

China

**Consumption of purchased electricity (MWh)**

192129

**Consumption of self-generated electricity (MWh)**

26642

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

201

---

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

218972

---

Country/area

Colombia

Consumption of purchased electricity (MWh)

189

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

189

---

Country/area

Costa Rica

Consumption of purchased electricity (MWh)

68

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

68

---

Country/area

Czechia

Consumption of purchased electricity (MWh)

777

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

777

---

Country/area

France

Consumption of purchased electricity (MWh)

56518

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

56518

---

---

**Country/area**

Germany

**Consumption of purchased electricity (MWh)**

3460

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

&lt;Not Applicable&gt;

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**3460

---

**Country/area**

Ghana

**Consumption of purchased electricity (MWh)**

241

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

&lt;Not Applicable&gt;

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**241

---

**Country/area**

Honduras

**Consumption of purchased electricity (MWh)**

219

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

&lt;Not Applicable&gt;

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**219

---

**Country/area**

India

**Consumption of purchased electricity (MWh)**

112212

**Consumption of self-generated electricity (MWh)**

19669

**Is this electricity consumption excluded from your RE100 commitment?**

&lt;Not Applicable&gt;

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**131881

---

**Country/area**

Ireland

**Consumption of purchased electricity (MWh)**

43

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

43

---

**Country/area**

Italy

**Consumption of purchased electricity (MWh)**

12177

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

12177

---

**Country/area**

Japan

**Consumption of purchased electricity (MWh)**

185

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

185

---

**Country/area**

Kazakhstan

**Consumption of purchased electricity (MWh)**

119

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

119

---

**Country/area**

Malaysia

**Consumption of purchased electricity (MWh)**

363

**Consumption of self-generated electricity (MWh)**

3

---

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

366

---

Country/area

Mexico

Consumption of purchased electricity (MWh)

66737

Consumption of self-generated electricity (MWh)

2674

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

69411

---

Country/area

Mongolia

Consumption of purchased electricity (MWh)

294

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

294

---

Country/area

Morocco

Consumption of purchased electricity (MWh)

16

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

16

---

Country/area

Netherlands

Consumption of purchased electricity (MWh)

126

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

---

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

126

---

Country/area

New Zealand

Consumption of purchased electricity (MWh)

323

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

323

---

Country/area

Nigeria

Consumption of purchased electricity (MWh)

721

Consumption of self-generated electricity (MWh)

334

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1055

---

Country/area

Norway

Consumption of purchased electricity (MWh)

192

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

192

---

Country/area

Panama

Consumption of purchased electricity (MWh)

102

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

102

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**Country/area**

Papua New Guinea

**Consumption of purchased electricity (MWh)**

101

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

&lt;Not Applicable&gt;

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**101

---

**Country/area**

Philippines

**Consumption of purchased electricity (MWh)**

104

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

&lt;Not Applicable&gt;

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**104

---

**Country/area**

Poland

**Consumption of purchased electricity (MWh)**

93

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

&lt;Not Applicable&gt;

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**93

---

**Country/area**

Qatar

**Consumption of purchased electricity (MWh)**

2

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

&lt;Not Applicable&gt;

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**2

---

**Country/area**

Romania

**Consumption of purchased electricity (MWh)**

8476

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

8476

---

**Country/area**

Russian Federation

**Consumption of purchased electricity (MWh)**

1043

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

17

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

1060

---

**Country/area**

Serbia

**Consumption of purchased electricity (MWh)**

127

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

127

---

**Country/area**

Singapore

**Consumption of purchased electricity (MWh)**

6737

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

6737

---

**Country/area**

South Africa

**Consumption of purchased electricity (MWh)**

2947

**Consumption of self-generated electricity (MWh)**

0

---

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

2947

---

**Country/area**

Republic of Korea

**Consumption of purchased electricity (MWh)**

10972

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

10972

---

**Country/area**

Spain

**Consumption of purchased electricity (MWh)**

114

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

114

---

**Country/area**

Sweden

**Consumption of purchased electricity (MWh)**

30121

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

30121

---

**Country/area**

Turkey

**Consumption of purchased electricity (MWh)**

155

**Consumption of self-generated electricity (MWh)**

0

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

---

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

155

---

Country/area

United Arab Emirates

Consumption of purchased electricity (MWh)

1928

Consumption of self-generated electricity (MWh)

575

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

2503

---

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)

49281

Consumption of self-generated electricity (MWh)

3076

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

52357

---

Country/area

United States of America

Consumption of purchased electricity (MWh)

658249

Consumption of self-generated electricity (MWh)

13466

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

671715

---

Country/area

Zambia

Consumption of purchased electricity (MWh)

60

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

60

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## C-TO8.5

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**(C-TO8.5) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.**

**Activity**

Light Duty Vehicles (LDV)

**Metric figure**

**Metric numerator**

tCO<sub>2</sub>e

**Metric denominator**

Please select

**Metric numerator: Unit total**

**Metric denominator: Unit total**

**% change from previous year**

**Please explain**

---

## C9. Additional metrics

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### C9.1

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

**Description**

Waste

**Metric value**

8.6

**Metric numerator**

Grams

**Metric denominator (intensity metric only)**

Net sales adjusted to 2018 USD

**% change from previous year**

6.4

**Direction of change**

Increased

**Please explain**

Cummins committed to generating 25% less waste in its facilities and operations as a percent of revenue by 2030. This target is one of the nine goals the company set in its PLANET 2050 environmental sustainability strategy. Note that the intensity for the prior year was adjusted to account for revenue and waste generated by acquisitions in 2022.

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## C-TO9.3/C-TS9.3

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**(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.**

**Activity**

Heavy Duty Vehicles (HDV)

**Metric**

Sales

**Technology**

Other, please specify (Hydrogen production solutions as well as electrified power systems ranging from fully electric to hybrid along with innovative components and subsystems, including battery and fuel cell technologies. )

**Metric figure**

**Metric unit**

% of total sales

**Explanation**

As disclosed in our 10K, total sales for New Power (now Accelerera) in 2021 were \$116 million, less than one percent. However, this segment sales increased 61 percent over 2020 principally due to increased sales in North America.

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

	Investment in low-carbon R&D	Comment
Row 1	Yes	Research, development and engineering expenses for our specific Acclera by Cummins segment were: 2022 \$171 million 2021 \$ 102 million 2020 \$109 million

C-TO9.6a/C-TS9.6a

(C-TO9.6a/C-TS9.6a) Provide details of your organization’s investments in low-carbon R&D for transport-related activities over the last three years.

C10. Verification

C10.1

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

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

C10.1a

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

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

Cummins 2022-GHG Verification Opinion.pdf

**Page/ section reference**

Apex Companies, LLC (Apex) conducted an independent verification of global greenhouse gas (GHG) emissions from sources within Cummins' operational control. Limited assurance was provided on the basis of the ISO 14064-3 reference standard and criteria from the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). Scope 1 emission data is presented on page 1.

**Relevant standard**

ISO14064-3

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

100

C10.1b

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

**Scope 2 approach**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

Cummins 2022-GHG Verification Opinion.pdf

**Page/ section reference**

Apex Companies, LLC (Apex) conducted an independent verification of global greenhouse gas (GHG) emissions from sources within Cummins' operational control. Limited assurance was provided on the basis of the ISO 14064-3 reference standard and criteria from the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). Scope 2 location-based emission data is presented on page 1.

**Relevant standard**

ISO14064-3

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

100

---

**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

Cummins 2022-GHG Verification Opinion.pdf

**Page/ section reference**

Apex Companies, LLC (Apex) conducted an independent verification of global greenhouse gas (GHG) emissions from sources within Cummins' operational control. Limited assurance was provided on the basis of the ISO 14064-3 reference standard and criteria from the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). Scope 2 market-based emission data is presented on page 1.

**Relevant standard**

ISO14064-3

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

100

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**C10.1c**

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

**Scope 3 category**

- Scope 3: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting
- Scope 3: Upstream leased assets
- Scope 3: Investments
- Scope 3: Downstream transportation and distribution
- Scope 3: Processing of sold products
- Scope 3: Use of sold products
- Scope 3: End-of-life treatment of sold products
- Scope 3: Downstream leased assets

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

Cummins 2022-GHG Verification Opinion.pdf

**Page/section reference**

Apex Companies, LLC (Apex) conducted an independent verification of global greenhouse gas (GHG) emissions from sources within Cummins' operational control. Limited assurance was provided on the basis of the ISO 14064-3 reference standard and criteria from the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). Scope 3 emissions data is presented on pages 1 and 2 of the assurance statement.

**Relevant standard**

ISO14064-3

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

100

**C10.2**

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

Yes

**C10.2a**

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

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C9. Additional metrics	Waste data	Limited assurance was provided on the basis of the International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board.	Apex Companies, LLC (Apex) conducted an independent verification of waste data reported for facilities within Cummins' operational control. The determination and fair presentation of the waste quantities was the responsibility of Cummins. Apex's sole responsibility was to independently verify the accuracy of the waste quantities reported and the underlying systems and processes used to collect, analyze and review the information.

Cummins  
2022 - Waste  
Assurance  
Statement.pdf

**C11. Carbon pricing**

**C11.1**

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

No, 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?**

In October 2023, Cummins anticipates being in scope of the revision of the EU ETS which includes a Carbon Boarder Adjustment Mechanism (CBAM) for intermediary goods commonly used in our products such as iron, steel, aluminum and other simple objects made from these materials. Cummins has invested in a carbon inventory tool and intends to work with our value chain on the necessary inputs to facilitate the required reporting.

## C11.2

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### **(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?**

No

## C11.3

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

Yes

## C11.3a

---

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

#### **Type of internal carbon price**

Shadow price

#### **How the price is determined**

Price/cost of voluntary carbon offset credits

#### **Objective(s) for implementing this internal carbon price**

Change internal behavior  
Drive energy efficiency

#### **Scope(s) covered**

Scope 1  
Scope 2

#### **Pricing approach used – spatial variance**

Uniform

#### **Pricing approach used – temporal variance**

Evolutionary

#### **Indicate how you expect the price to change over time**

We expect prices to rise over time.

#### **Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)**

15

#### **Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)**

15

#### **Business decision-making processes this internal carbon price is applied to**

Operations

#### **Mandatory enforcement of this internal carbon price within these business decision-making processes**

Yes, for all decision-making processes

#### **Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan**

The internal carbon price is built into the Cummins financial analysis tool, which is mandatory for all energy and GHG emission projects.

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## C12. Engagement

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### C12.1

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

Yes, our suppliers  
Yes, our customers/clients  
Yes, other partners in the value chain

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

Information collection (understanding supplier behavior)

**Details of engagement**

Collect GHG emissions data at least annually from suppliers

**% of suppliers by number**

0.29

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

32

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

22

**Rationale for the coverage of your engagement**

Cummins has an annual scorecard for its largest suppliers, which number 77 for 2023. This group represents ~\$5.1 billion in spend annually. The tool provides one consolidated approach to monitor areas of improvement, such as environmental sustainability. It is used for the supplier business review and assessment of the suppliers' performance for continued business with Cummins. Generally, the areas that we assess are: greenhouse gas emissions, water use, full material disclosure in the products the suppliers sell to Cummins. In addition, we ask for evidence for compliance with applicable standards, such as the ISO 14001.

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

Cummins seeks suppliers that have the same goals with respect to environmental sustainability. To that end, we track the score on the scorecards and compliance with policies, contractual language and metrics to achieve the maximum rating for the suppliers efforts towards decarbonization, water usage reduction and reduction in use of waste, among our goals.

**Comment**

In addition to data collection, Cummins has engagement in these actions: 1) procurement scorecard for large suppliers, with quarterly scorecard review with executives from large supplier(s) and Cummins; 2) senior engagement to assess performance of supplier(s) at quarterly reviews; and 3) presentation from suppliers on meeting Cummins target, such as environmental sustainability.

**Type of engagement**

Engagement & incentivization (changing supplier behavior)

**Details of engagement**

Run an engagement campaign to educate suppliers about climate change  
Climate change performance is featured in supplier awards scheme

**% of suppliers by number**

100

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

100

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

100

**Rationale for the coverage of your engagement**

Cummins PLANET 2050 program relates to all suppliers. It is part of the corporate goal tree and the business and organizational units in developing annual performance goals and metrics.

The Supplier Portal at [www.cummins.supplier.com](http://www.cummins.supplier.com) is the starting point for suppliers to begin to share their data and create a baseline to measure their efforts with Cummins. We track how we have prioritized and funding invested in capital projects that have helped us improve our environmental footprint including water usage and recycling improvements, energy reduction in manufacturing plants, LED lighting and solar array campaigns (China and Europe), returnable packaging, PPA wind farm agreements/programs, and many facility-related improvements including improved design features for new buildings and facilities. We will share highlights of the improvements relative to environmental benefits.

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

The impact that the Procurement organization makes is to prioritize Category 11, Scope 3 use of products internally with sourcing leaders and with our suppliers. For example, we launched a program with our strategic, large suppliers to create a forum to develop common goals and metrics to influence our collective actions as Tier 1 companies and our collective supply chains. Procurement is the core group that is coordinating with cross functional teams to develop standard centralized data lakes to leverage the information relevant to our goals.

**Comment**

Additional details on and tools with which Cummins educates suppliers:  
Cummins Learning Center – Green Supply Chain Principles for all procurement personnel  
Cummins Sustainability Report – annual publication  
Cummins Supplier Portal  
Cummins annual supplier conference with sustainability awards  
Annual Strategy Week – Features environmental sustainability strategy and topics  
Short films – Sustainability vision and purpose featured  
Podcast – Diversity and sustainability

**Type of engagement**

Innovation & collaboration (changing markets)

**Details of engagement**

Run a campaign to encourage innovation to reduce climate impacts on products and services

**% of suppliers by number**

1

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

1

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

1

**Rationale for the coverage of your engagement**

The Environmental Gateway program in Purchasing creates a public platform to seek innovative suppliers to pitch their ideas to Cummins management in a "SharkTank" format to help us achieve our environmental goals, mainly focused on facilities and operations and packaging. Winners are presented by an internal/external judging panel including Sustainability experts with Indiana and Purdue University etc, The top 10 ideas are considered for trials at Cummins plants to confirm the viability / impact of the ideas/products/services, and successful ideas are promoted within Cummins for broader adoption. Four ideas from the recent Gateway are in final pilot stage. It will be expanded to China and includes new companies in the United States through a similar program that we brand as Make Your Mark.

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

The Gateway program opens the door for diverse and innovative suppliers to introduce new technologies to Cummins outside our existing supply base to ensure we remain open to cutting edge technologies and services that will help us achieve our environmental goals. To date, our UK Gateway program has implemented four successful supplier innovations from furniture recycling to more energy efficient hand dryers in restrooms as well as energy recovery technologies from our test operations. Our US program is in the late evaluation/pilot stage with at least two new technologies that have passed initial pilot goals including Building Clarity which uses artificial intelligence technology to assess broad building performance data to identify energy and water usage savings. At an analysis cost of \$120,000, the resulting improvements involves a hybrid water filtration system to help us reach our water re-use goals at a major manufacturing plant. This success saves 15 million gallons of water annually from being deposited in the sewer from the plant saving \$840,000 year in water cost.

**Comment**

**C12.1b**

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

**Type of engagement & Details of engagement**

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts
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**% of customers by number**

20

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

5

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

The scope of engagement is any Cummins customer who wants to work with Cummins engineering teams on a project to improve fuel economy. Cummins estimates that when the goal is achieved, we will have worked with approximately 20% of our customers.

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

Cummins fuel teams throughout the world implemented many new products in use projects in 2021, bringing the total number of initiatives with customers since 2014 to more than 700. The company surpassed its 2020 goal of achieving an annual run rate reduction of 3.5 million metric tons of CO2. The 2020 rate was 4.9 million metric tons. Performance in 2022 built on global momentum global as fuel economy teams have been building functional capability via fuel economy forums, training and tools. Customer savings in dollars from products in use fuel economy projects since environmental sustainability goals were established in 2014 have totaled \$11.4 billion. Projects with customers also saved 3 billion gallons of fuel and avoided 30.5 million metric tons of CO2.

**C12.1d**

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

Cummins believes in partnering with others to achieve innovation in its products. We partner with many academic institutions, nongovernmental organizations and government entities on new product technology and policy advocacy. Some current examples of partnership with the U.S. Department of Energy are 1) the SuperTruck II program with Peterbilt and Eaton to demonstrate advanced engine, drivetrain, and vehicle technologies for Class 8 line-haul trucks and 2) a Cummins Reversible-Solid Oxide Fuel Cell (SOFC) System Development Project; 3) Cummins PEM Fuel Cell System for Heavy-Duty Applications. A list of such projects is found on page 68 of the 2021 Sustainability Progress Report.

**C12.2**

**(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?**

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

**C12.2a**

**(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.**

**Climate-related requirement**

Complying with regulatory requirements

**Description of this climate related requirement**

This content is found on page 12 of our Supplier Code of Conduct

[https://public.cummins.com/sites/CSP/SiteCollectionDocuments/Supplier%20Code%20of%20Conduct/Supplier\\_Code\\_of\\_Conduct.pdf](https://public.cummins.com/sites/CSP/SiteCollectionDocuments/Supplier%20Code%20of%20Conduct/Supplier_Code_of_Conduct.pdf)

Protect the environment and conserve natural resources. As our global reach grows, so does our responsibility to ensure our actions around the world reflect a commitment to the environment. We expect Cummins suppliers and their subcontractors to comply with all applicable environmental laws, regulations and standards. It is important that suppliers manage compliance, minimize environmental impact and drive continual improvement of environmental compliance.

Suppliers must maintain documentation to be able to respond to requests for information including but not limited to resource consumption, emissions, compliance, environmental risks and liabilities and other environmental sustainability metrics. Suppliers should have procedures for notifying community authorities in case of an accidental discharge or release of hazardous materials into the environment, or in case of any other environmental emergency.

Suppliers should implement an audit program for compliance to applicable environmental regulations and standards, including a means to ensure corrective actions and avoidance of recurrence.

**% suppliers by procurement spend that have to comply with this climate-related requirement**

100

**% suppliers by procurement spend in compliance with this climate-related requirement**

100

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier scorecard or rating

**Response to supplier non-compliance with this climate-related requirement**

Retain and engage

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**C12.3**

**(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?**

**Row 1**

**External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

Yes, we engage directly with policy makers

**Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?**

Yes

**Attach commitment or position statement(s)**

Climate change policy position

Climate change policy position.docx

**Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan**

The Company has several groups and processes in place to ensure that our advocacy is consistent with our environmental and climate strategies.

a. First, the Government Relations team works internally to align with Cummins' businesses, functional areas and communities to identify opportunities and barriers to profitable growth. With this alignment, the function can then go advocate globally for favorable government policies, legislation, research funding and regulatory guidelines that address business and community objectives. This is done through meetings with legislators at the local, state and federal levels as an individual company or apart of a larger stakeholder group with aligned interests. Our advocacy focuses on a broad spectrum of topics but a large portion of the advocacy is focused on Destination Zero and how we can partner with governments or as an industry to bring our customers the right technology, at the right price, meeting the necessary climate goals.

b. The Product Compliance and Regulatory Affairs group provides independent oversight to company-wide product development teams and business units as it relates to emissions and non-emissions. Our team of experts work to provide training, documentation, support systems and other resources needed so we can deliver for our customers and meet our vision.

c. The Technical & Environmental Strategic Planning exists to lead the PLANET 2050 program and strategy providing a global voice and catalyst to create, align, and accelerate environmental priorities globally including identifying new focus areas and driving actions and change management to maintain environmental leadership.

**Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

<Not Applicable>

**Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

<Not Applicable>

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**C12.3a**

**(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?**

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Inflation Reduction Act, CHIPS+, BIL, Energy and Water Appropriations, Low NOx Rule, Phase 3 GHG, Low Carbon Fuels Policy, EPA Clean Trucks Plan, Hydrogen Internal Combustion technologies, Hydrogen Hubs, Battery Policy, Build Back Better Act, Consolidated Appropriations Act of 2023

**Category of policy, law, or regulation that may impact the climate**

Climate change mitigation

**Focus area of policy, law, or regulation that may impact the climate**

Climate-related targets  
Climate transition plans  
Emissions – CO2  
Emissions – methane  
Emissions – other GHGs  
International agreement related to climate change mitigation  
Low-carbon, non-renewable energy generation  
New fossil fuel energy generation capacity  
Renewable energy generation

**Policy, law, or regulation geographic coverage**

Global

**Country/area/region the policy, law, or regulation applies to**

<Not Applicable>

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

Met with Members of Congress to discuss how this can benefit Cummins and our customers. We also have engaged with the Administration including the President to show our support for the legislation.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

**Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

**Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?**

Yes, this is central to Cummins PLANET 2050 , which has all the elements of a climate transition plan. Three of the plan's nine goals at are tied to climate-related action. In particular, we have a Science-based Target Initiative goal to reduce absolute GHG emissions from newly sold products by 25% by 2030 from a baseline year of 2018. Meeting this goal will entail developing and selling lower and no-carbon emission products .

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**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Low NOx Rule, Phase 3 GHG, Low Carbon Fuels Policy, EPA Clean Trucks Plan, Hydrogen Internal Combustion technologies, Hydrogen Hubs, Battery Policy

**Category of policy, law, or regulation that may impact the climate**

Low-carbon products and services

**Focus area of policy, law, or regulation that may impact the climate**

Energy efficiency requirements  
Low-carbon innovation and R&D  
Technology requirements

**Policy, law, or regulation geographic coverage**

Global

**Country/area/region the policy, law, or regulation applies to**

<Not Applicable>

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

Met with Members of Congress to discuss how this can benefit Cummins and our customers

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

**Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

**Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?**

Yes, this is central to Cummins PLANET 2050 , which has all the elements of a climate transition plan. Three of the plan's nine goals at are tied to climate-related action. In particular, we have a Science-based Target Initiative goal to reduce absolute GHG emissions from newly sold products by 25% by 2030 from a baseline year of 2018. Meeting this goal will entail developing and selling lower and no-carbon emission products .

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**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Build Back Better Act, Consolidated Appropriations Act of 2023, Carbon Price

**Category of policy, law, or regulation that may impact the climate**

Carbon pricing, taxes, and subsidies

**Focus area of policy, law, or regulation that may impact the climate**

Subsidies for renewable energy projects  
Subsidies for low-carbon, non-renewable energy projects  
Subsidies on products or services

**Policy, law, or regulation geographic coverage**

Global

**Country/area/region the policy, law, or regulation applies to**

<Not Applicable>

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

Yes, this is central to Cummins PLANET 2050 , which has all the elements of a climate transition plan. Three of the plan's nine goals at are tied to climate-related action. In

particular, we have a Science-based Target Initiative goal to reduce absolute GHG emissions from our facilities and operations by 50% by 2030 from a baseline year of 2018. Meeting this goal will entail increased implementation of renewable energy projects. Cummins estimates that half of the GHG reduction needed to meet this goal will come from offsite renewable energy.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

**Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

**Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?**

Cummins is in support of market mechanisms to make it more expensive to generate things we don't want and less expensive to generate things we do want – that means some kind of price on carbon. Right now, carbon is roughly free to produce. Without a market mechanism, the regulatory framework we need to get all the way there is so complex and so long from here that Cummins fears it will be too late.

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C12.4

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

**Publication**

In mainstream reports, incorporating the TCFD recommendations

**Status**

Complete

**Attach the document**

spr23-2022-cummins-tcfid.pdf

**Page/Section reference**

pages 3-26

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

**Comment**

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**Publication**

In voluntary sustainability report

**Status**

Underway – previous year attached

**Attach the document**

2020-21-cummins-sr-progress-report-08032022.pdf

**Page/Section reference**

pages 18-33

**Content elements**

Strategy  
Emissions figures  
Emission targets  
Other metrics

**Comment**

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**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

spr21-gri-index-data-book.pdf

**Page/Section reference**

pages 30-51, 75-76

**Content elements**

Strategy  
Emissions figures  
Emission targets  
Other metrics

**Comment**

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**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

2022 10k.pdf

**Page/Section reference**

pages 13, 21, 25, 27

**Content elements**

Governance  
Strategy  
Risks & opportunities

**Comment**

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C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Business Ambition for 1.5C Climate Action 100+ Race to Zero Campaign Task Force on Climate-related Financial Disclosures (TCFD) UN Global Compact We Mean Business	

## C15. Biodiversity

### C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	No, but we plan to have both within the next two years	<Not Applicable>	<Not Applicable>

### C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	No, but we plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

### C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

#### Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Value chain stage(s) covered

<Not Applicable>

Portfolio activity

<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

<Not Applicable>

#### Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Value chain stage(s) covered

<Not Applicable>

Portfolio activity

<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

<Not Applicable>

### C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

Not assessed

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
Row 1	No, we are not taking any actions to progress our biodiversity-related commitments, but we plan to within the next two years	<Not Applicable>

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	State and benefit indicators Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
No publications	<Not Applicable>	<Not Applicable>

C16. 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.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1		Environment/Sustainability manager

SC. Supply chain module

SC0.0

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

SC0.1

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

	Annual Revenue
Row 1	

SC1.1

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

SC1.2

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

SC1.3

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

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	Customer base is too large and diverse to accurately track emissions to the customer level. Cummins and its joint venture partners sell more than one million engines per year. While our GHG model is sophisticated, it must make assumptions about the in use mileage and application of each engine it sells. What could help overcome challenges would be a device on the engine that would report fuel burned to both the user and the manufacturer.

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.

Cummins is using the convergence of telecommunications and information technology to provide customers the information they need to work more efficiently, increasing uptime and decreasing costly downtime.

In recognition of the increasing importance of working across stakeholders, the Cummins environmental sustainability team in 2021 is also establishing a system that would better facilitate working collaboratively and proactively with customers on collective sustainability goals. This framework will leverage cross-business insights and commitments to align and build the right processes, data, tools, training and more to forge even stronger partnerships.

Part of this framework will include processes for allocating scopes 1, 2 and 3 emissions to customers.

SC2.1

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

SC2.2

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

SC4.1

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

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

Please select your submission options	I understand that my response will be shared with all requesting stakeholders	Response permission
	Yes	Public

**Please confirm below**

I have read and accept the applicable Terms