

## C0. Introduction

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### C0.1

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

Eaton's vision is to improve the quality of life and the environment through the use of our power management technologies and services. And we live this vision by being active stewards of our environment. We believe we have the power to make a difference – and we're doing just that throughout the world. Every day, Eaton people are developing solutions that drive sustainable growth by efficiently using and conserving our natural resources, developing energy-efficient products and protecting the health and safety of our employees and communities. As you can tell by our vision, we take our stewardship of the environment seriously and are guided by three key initiatives: • We provide sustainable products and solutions that help our customers solve their most critical power management challenges. • We are committed to improving our own environmental footprint, including the reduction of greenhouse gas (GHG) emissions that can lead to climate change. • We are transparent in reporting progress toward our goals. Our sustainable products include: electrical power distribution and circuit protection, backup power protection, LED lighting and control systems for the safe and efficient use of power in buildings and homes; fuel and hydraulics systems that decrease jet fuel consumption and GHG emissions; engine air management solutions that improve fuel economy; hydraulic products for solar and wind turbine systems; and filtration technologies that reduce the need for disposable materials. We engage our employees in all aspects of our approach to sustainability, from design and manufacturing to community outreach, and more. More than 10,000 employees participate in Eaton's annual World Environment Month program to raise awareness and help reduce our environmental footprint. These efforts continue throughout the year and capture the spirit of Eaton's promise to improve the environment. With this foundation firmly in place, we're taking a step forward by examining the full equation for sustainability – how our actions and products affect the environment by giving more back into society, the environment and the global economy than we take. We're partnering with leading institutions and thought leaders to focus on the “net positive” impact that our business, technologies and people can make on the world. We believe it's about doing more of what matters for the world and for people in need. We owe it to future generations – within our organization and communities where we operate – to make a difference and leave the world a better place than we found it.

### C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2018	December 31 2018	Yes	3 years

### C0.3

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

Argentina  
Australia  
Austria  
Belgium  
Brazil  
Canada  
Chile  
China  
Colombia  
Costa Rica  
Czechia  
Denmark  
Dominican Republic  
Finland  
France  
Germany  
Hungary  
India  
Indonesia  
Italy  
Japan  
Malaysia  
Mexico  
Morocco  
Netherlands  
Norway  
Philippines  
Poland  
Puerto Rico  
Republic of Korea  
Romania  
Saudi Arabia  
Serbia  
Singapore  
South Africa  
Spain  
Taiwan, Greater China  
Thailand  
Turkey  
United Arab Emirates  
United Kingdom of Great Britain and Northern Ireland  
United States of America

**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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.**

Operational control

## C1. Governance

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### C1.1

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

Yes

#### C1.1a

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

Position of individual(s)	Please explain
Board-level committee	The Board of Directors member who chairs the Governance committee is responsible for environmental issues, including climate change issues. The governance committee was given the responsibility for climate related issues because of its past experience in managing all company environmental issues that needed Board review. As part of its governance responsibilities, this committee's oversight includes significant public policy issues with respect to our relationships with shareholders, employees, customers, competitors, suppliers and the communities in which we operate, including such areas as ethics, compliance, environmental (including climate change), and health and safety issues.

#### C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	Governance mechanism: Reviewing and guiding risk management policies: Under the direct supervision of the Board of Directors, strategic, financial, operational, legal and compliance risks and opportunities are continually assessed at the company level by Eaton’s Senior Leadership Committee (SLC), which is the most senior management committee within the corporation. The Executive Vice President, Eaton Business System (EBS) and Sustainability, is a member of the SLC, which meets quarterly. Risk is managed on an enterprise-wide basis using a unified risk management framework. A wide range of risks faced by the company, including climate change, are evaluated and the top risks that could materially affect the company’s businesses financial condition or results of operations are typically identified each year. The SLC appoints company task forces (led by SLC members) to manage these risks, and additional risks that are not in the top risks are managed within the appropriate division of the company. Results on material risks, including climate change issues, are reported to the Board of Directors on an annual basis or more frequently depending on circumstances, and other risks are reported as scheduled. In the case of climate change, all aspects are included in the twice-yearly report-out to the Board by the EVP, EBS and Sustainability. Our risk processes address a wide array of issues associated with climate change, including but not limited to customer requirements/issues (e.g., need for energy efficient products to address climate change regulations, consumer demands, profitability); operational issues (including new climate-related regulations and voluntary actions and norms); and supply chain (including weather related disruptions influenced by climate change).

**C1.2**

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify (Executive VP, Sustainability and Eaton Business System)	Both assessing and managing climate-related risks and opportunities	Quarterly

**C1.2a**

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

The Executive Vice President, Eaton Business System (EBS) and Sustainability, is a member of Eaton's Senior Leadership Committee (SLC), and reports climate-related issues on a quarterly basis. This position was selected for responsibility for climate change due to its required knowledge and experience in Sustainability, Environment, Health and Safety, and climate change issues. The SLC is the highest level non-Board committee, and its members report directly to the Board of Directors on major corporate and business issues. The EVP of EBS and Sustainability is responsible for the Eaton Business System (the core operating system for the entire company), Environmental Health and Safety, and Sustainability. EBS provides a disciplined set of internal processes and tools that ensure enterprise-wide alignment and compliance, collection and reporting information to influence various business strategies, and rapid recognition and transfer of best practices. EBS encompasses Eaton's core values, policies and processes used to conduct business and measure, assess and improve performance, including climate related issues. For example, EBS provides these processes: • Eaton Lean Six Sigma – ELSS eliminates waste, simplifies processes, reduces cycle times and enables us to more effectively deploy resources within quality-intensive systems • PROLaunch – a set of integrated processes designed to guide our program and project management processes, including product development from concept through production launch. These products include Eaton's wide variety of innovative products and solution that improve energy efficiency and reduce greenhouse gas emissions. For example, The APR48-ES Energy Saver Rectifier helps communications network operators cut energy costs across the network through greater operating efficiency resulting in a reduction in carbon footprint. The Energy Saver rectifier operates with over 96% efficiency (4% waste), reducing waste energy by at least 50% compared to normal industry efficiencies of 89-92%. It offers potential global annual savings of one million metric tons of CO2 emissions for the telecom sector. For monitoring Governance mechanisms including climate-related issues such as implementation, targets and performance objectives, Eaton utilizes MESH (Management of Environment, Safety, Security and Health), a globally deployed, unified system that consolidates all EHS risk and compliance programs into one integrated management system. MESH has three components: Process & Compliance; Culture; and Results. Process & Compliance sets requirements in 10 EHS categories and drives regulatory compliance and voluntary action at the company's facilities. Culture relates to how well each facility demonstrates EHS engagement at all levels. The Results component focuses on achieving performance metrics, including climate related issues. Targets, objectives, priorities and performance goals are set for each component. Eaton facilities conduct self-assessments each year, and undergo a corporate MESH assessment every three years. Results are reported each year to EVP, EBS and Sustainability, and if necessary, to the chief executive of the appropriate Eaton business, the Eaton CEO and the Board of Directors.

### C1.3

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

Yes

### C1.3a

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

**Who is entitled to benefit from these incentives?**

Corporate executive team

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction target

**Comment**

Meet or exceed the following emissions reduction targets: For 2018 our absolute reduction target was 2 percent, and we exceeded this goal; we achieved an absolute reduction of 5.6 percent. For 2018, our indexed to sales reduction target was to stay flat, and we exceeded this goal; we achieved an indexed reduction of 11 percent.

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**Who is entitled to benefit from these incentives?**

All employees

**Types of incentives**

Recognition (non-monetary)

**Activity incentivized**

Energy reduction project

**Comment**

During Eaton's June, 2018 celebration of World Environment Month (WEM) more than 10,000 employees from 35 sites across the globe participated in sustainability projects that reduced waste, conserved water and energy, supported community projects and much, much more. Awards are given for employee engagement, environmental footprint reduction, and handprint creation (a "handprint" results from positive contributions to the environment and our health). Handprints can be created by helping other people reduce their environmental impact, or footprint.

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**Who is entitled to benefit from these incentives?**

All employees

**Types of incentives**

Recognition (non-monetary)

**Activity incentivized**

Emissions reduction target

**Comment**

Eaton focuses on reducing the impact of our waste and our Zero Waste to Landfill (ZWTL) initiatives are championed by our senior leadership. By the end of 2018, 148 of our sites had achieved ZWTL certification meaning nearly 50 percent of our manufacturing sites were diverting at least 98% of waste from landfill. And every year, a third-party verifier assesses a random, representative sample of our certified sites. In 2018, we set a target for 100 percent of our manufacturing sites to achieve ZWTL by 2030. We also committed to reducing our waste to landfill by 3 percent annually, indexed to sales. On an absolute basis, we decreased our waste generation by 3.4 percent (from 26,402 metric tons in 2017 to 25,498 in 2018), a total decrease of 904 metric tons. Since 2015, we have reduced waste sent to landfill by our operations by 24 percent. By reducing the volume of waste sent to landfills, we help minimize the release of GHG emissions. Our waste reductions in 2018 resulted in a decrease of 317 metric tons of GHG emissions (using US EPA WARM v14 emission factors and allocating tonnage based on a 2015 waste composition study). Each ZWTL facility is awarded with a plaque from the CEO, a celebration at the site, and recognition in a variety of internal communications vehicles.

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## C2. Risks and opportunities

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### C2.1

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**(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.**

	From (years)	To (years)	Comment
Short-term	1	3	This time horizon for assessing climate-related risks and opportunities is generally aligned with other business practice time horizons.
Medium-term	4	10	This time horizon for assessing climate-related risks and opportunities is generally aligned with other business practice time horizons
Long-term	10	25	This time horizon for assessing climate-related risks and opportunities is generally aligned with other business practice time horizons

**C2.2**

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**(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.**

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

**C2.2a**

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**(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.**

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	Under the oversight of the Board of Directors, risks/opportunities are assessed at the company level through a standardized enterprise risk management (ERM) process.

**C2.2b**

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**(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.**

Eaton management continuously monitors material risks facing the company, including strategic, financial, operational, legal and compliance risks. Under the oversight of the Board of Directors, risks/opportunities are assessed at the company level through a standardized enterprise risk management (ERM) process. Every business unit, region and corporate function participates in this process. Risks are measured using standard evaluation criteria. Results are consolidated and reviewed by senior leadership and presented to the Board. Through the ERM process, Eaton identifies top risks each year as priorities. The top risks are assigned to management of the appropriate business or corporate divisions under the supervision of the Senior Leadership Committee (“SLC”) and the CEO. The EVP, EBS and Sustainability is a member of the SLC and is primarily responsible for climate related issues. The SLC meets on a regular basis on major business issues, including environmental issues, a subset of which is climate change. Updates on mitigation activities and risk management are reported to the Board annually or more frequently, if necessary. Through the ERM process and other standard procedures and practices, our business addresses climate change issues, including but not limited to customer requirements/issues (e.g., need for energy efficient products to address climate change regulations, consumer demands, profitability); operational issues (including new regulations influenced by climate change and voluntary norms); and supply chain (including weather related disruptions influenced by climate change, disruptions). This process also determined that a substantive financial risk is defined as lost sales, lost profits, monetary damages or penalties is an amount greater than \$5 million, and/or significant loss of brand reputation. Example of managing transitional risk/opportunity: Our EBS process determined that technology will be a major global factor in reducing emissions, mitigating risk and offering new opportunities for Eaton. To manage this risk/opportunity, Eaton spent \$584 million in 2018 and a total of \$3.7 billion in R-D development over the past 6 years, the majority of which was devoted to products and services that improve efficiency, reduce emissions, and mitigate climate change. We estimate that research and development investments could help raise segment margins from 16.8% in 2018 to 17.1-17.5% in 2019. A 1% increase in segment margins in 2018 would have represented an increase in segment operating profit of about \$215 million. Asset level: Eaton conducts strategic planning and risk analysis at all of its facilities and associated businesses. One of the factors considered involves potential environmental impacts to the business. Physical risks such as changing weather patterns, rising temperatures, intense storms/flooding and other natural disasters (such as volcanic eruptions) are reviewed. An outcome of these meetings is the development of local response plans designed to address these occurrences. Voluntary projects to reduce carbon emissions are also assessed, along with mandatory requirements. For environmental and safety risks, issues planning, prioritizing, and assessing the size and scope of identified risks, Eaton uses MESH (Management of Environment, Safety, Security and Health), a globally deployed, unified system that consolidates all EHS and compliance programs and voluntary action into one integrated management system that conforms to the well-known ISO14001 standard and OHSAS 18001. MESH has three components: Process & Compliance; Culture; and Results. Process & Compliance sets requirements in 34 elements grouped into 10 EHS categories and drives compliance with EHS legal requirements and Eaton's global EHS requirements and voluntary action at the facility. Culture relates to cross-functional leadership and engagement of all employees. Results component focuses on achieving performance metrics. Targets, objectives, priorities and performance goals are set for each component. Eaton facilities conduct self-assessments each year, and undergo a corporate MESH assessment and OpA assessment led by independent internal teams every three years. Results are reported each year to Business operations leadership; EVP, EBS and Sustainability; and, if necessary, the Board. Example of physical risk: A series of blizzards in the southeast US recently shut down transportation lines at Eaton's Roanoke VA warehouse facility. Approximately \$1 million in orders per day needed to be processed. The facility was prepared for the incident due to pre-planning through Eaton's global ERM program, and assistance from an ERM team members for legal, customer, shipping & receiving and other issues. As a result, the facility was able to complete orders during three days of harsh weather. Without BCM planning and teamwork, the company was facing a possible loss of about \$3 million in shipping orders over 3 days.

**C2.2c**

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

	Relevance & inclusion	Please explain

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	For current regulation, under the direct supervision of the Board of Directors, risks are assessed at the company level through a standardized enterprise risk management (ERM) process. Every business unit, every region and every corporate function participates in this formal process. Risks are measured using standard evaluation criteria. Results are consolidated and reviewed by senior leadership and presented to the Board. Through the ERM process, Eaton identifies top risks each year as ERM priorities are assigned to manage these risks, under the supervision of the Senior Leadership Committee ("SLC") and the CEO. The EVP, EBS and Sustainability, is a member of the SLC and is responsible for climate related issues. The SLC meets quarterly on major business issues, including Environment, Health and Safety, a subset of which is climate change. Updates on mitigation activities and risk management are reported to the Board of Directors on an annual basis or more frequently depending on circumstances. Through the ERM process and other standard routines, our businesses address issues associated with climate change, including but not limited to customer requirements/issues (e.g., need for energy efficient products to address climate change regulations, consumer demands, profitability); operational issues (including new regulations and voluntary norms influenced by climate change); and supply chain (including weather related disruptions influenced by climate change.) For example, this process led to Eaton's endorsement of EPA's Phase I and Phase II Corporate Average Fuel Economy (CAFÉ) standards and GHG standards for automotive passenger and commercial vehicles. The Phase II CAFÉ standards mandate that vehicle fleets ultimately achieve an average of 54.5 mpg by 2025, thereby reducing fuel use and carbon emissions. However, the process identified a risk that the current White House administration will reduce these mileage standards which will lessen the impact on climate change. The decision was relevant because freezing standards would impact Eaton's Vehicle Business which represents about 15% of Eaton's annual sales, or \$3.5 billion in 2018. If we sold 1-3% fewer VEH products in the USA as a result of lower CAFE standards, the amount of reduced income could be approximately \$2.15 million to \$6.5 million, a medium to high impact on the corporation.
Emerging regulation	Relevant, always included	For environmental and safety risks, issues planning, prioritizing, and assessing the size and scope of identified risks, Eaton uses MESH (Management of Environment, Safety, Security and Health), a globally deployed, unified system that consolidates all EHS and compliance programs and voluntary action into one integrated management system that conforms to the well-known ISO14001 standard and OHSAS 18001. MESH has three components: Process & Compliance; Culture; and Results. Process & Compliance sets requirements in 34 elements grouped into 10 EHS categories and drives compliance with EHS legal requirements and Eaton's global EHS requirements and voluntary action at the facility. Culture relates to how well each facility drives ownership of EHS management through cross-functional leadership and engagement of all employees. Results component focuses on achieving performance metrics. Targets, objectives, priorities and performance goals are set for each component. Eaton facilities conduct self-assessments each year, and undergo a corporate MESH assessment and OpA assessment led by independent internal teams every three years. Results are reported each year to Business operations leadership; EVP, EBS and Sustainability; and, if necessary, the Board of Directors. In particular, we have targeted emerging regulations focusing on climate change that can impact our sustainable products and processes (both positively and negatively). Roughly 60-80 percent of the products we manufacture are tied, in some way, to sustainability and the impacts of climate change. For example, in 2018, Eaton continued to develop a new business segment, eMobility, to be a leading global player in vehicle electrification; electric power capabilities; and managing electrical power, in response to the climate change aspect of global demand for innovative products and processes that reduce emissions, conserve energy and help fight climate change. We are targeting additional revenue of \$2-4 billion by 2030, a high financial impact for Eaton.
Technology	Relevant, always included	As a power management company, we develop products and services that reduce GHG emissions. There is a risk of falling behind on technologies necessary to combat climate change for our customers, consumers and our own operations. In 2018, Eaton invested \$584 million in research and development, most of which was used to develop energy efficient products that reduce emissions. Examples of Eaton's innovative products, their function and the amount of GHG emissions that are eliminated by product use, include: The APR48-ES Energy Saver Rectifier helps communications network operators cut energy costs across the network through greater operating efficiency resulting in a reduction in carbon footprint. The Energy Saver rectifier operates with over 96% efficiency (4% waste), reducing waste energy by at least 50% compared to normal industry efficiencies of 89-92%. It offers potential global annual savings of one million metric tons of CO2 emissions for the telecom sector. Protection Station 650 and 800 are combined Uninterruptible Power System (UPS), surge suppressor, and multiple socket devices with improved energy efficiency provided by an EcoControl function that automatically disables peripherals when the master drive is turned off. Laboratory testing of a typical home computer system demonstrated annual power consumption of 165 kWh for the Protection Station compared to 231 kWh for similar products without the EcoControl function. For 100,000 computers, the annual savings of 6,600,000 kWh reduces carbon emissions by 4,551 metric tons. Eaton Electrical Solutions combine several energy saving products into the most energy efficient package to address specific customer needs. Michigan's Detroit Metropolitan Airport selected Eaton's Cooper Lighting business to replace 6,050 existing parking garage fixtures with Eaton's energy-saving lighting products (from 210 watts to 60 watts). The conversion – using Eaton's McGraw-Edison Valet and Ventus light-emitting diode (LED) luminaires – will result in a 66 percent reduction in power consumption. The LED products also incorporate Eaton's Cooper Lighting LumaWatt Outdoor Wireless Control and Monitoring System to make it easier for the airport to effectively manage its lighting levels. The system reduces power usage by ~5 million kWh, resulting in a reduction of 35,000 metric tons of CO2 in a 5-year period.
Legal	Relevant, always included	Eaton's Legal Team plays an important role in Eaton's Business Continuity Management (BCM) Program, which is focused on protecting our employees and assets and establishing mitigation and recovery strategies for crisis events, including climate change threats. Given that conditions surrounding our products, customers, suppliers, personnel, equipment, operating conditions and tooling are constantly evolving, regular reviews and validations are performed at every level of the enterprise to ensure a constant state of readiness when the need/event arise. Part of this effort includes examination at the site level to ensure that facilities' plans are up to date. The results from these regular reviews are summarized and reported to the Senior Leadership Team (which reports directly to the Board of Directors) and the Corporate Risk Management (CRM) Group. The Legal Team's overall responsibilities for addressing climate change include: support reviews of/impact of/planning for current and emerging Green House Gas regulation; support business continuity planning/preparedness in relation to climate risks from a facility/physical protection end, from a customer and supply product end, and from an employee safety end; and key support of legal aspects of product development that saves energy and reduces carbon emissions. For example, the Legal team reviewed compliance with global energy efficiency mandates for Eaton manufacturing plants in Mexico to comply with the 2018 Energy Reform Law, or "Codigo de Red". This law is a package of legislation to improve electrical system reliability, including requirements for upgrades in end-user electrical system infrastructure. The law is expected to result in the modernization of infrastructure to increase systemic efficiency, reliability, quality, continuity, security, and sustainability.

	Relevance & inclusion	Please explain
Market	Relevant, always included	Markets could be disrupted by increasingly intense storms due to climate change. Any such disruption could cause delays in shipments of products, damage to inventory, leading to the loss of sales and customers. The physical risks of increased storm and hurricane/typhoon activity, as well as flooding and droughts, may place a temporary financial burden on Eaton facilities, supply chain and markets to sustain operations and protect our employees and communities. Eaton conducts strategic planning and risk analysis at all of its facilities and associated businesses. One of the factors considered involves potential environmental impacts to the business. Physical risks such as changing weather patterns, rising temperatures and other natural disasters are reviewed. An outcome of these meetings is the development of local response plans designed to address catastrophic occurrences. Beyond the asset level, Eaton has developed an Enterprise Risk Management (ERM) plan and a related Crisis Communications plan to protect the health and safety of its employees and the public ; to settle markets; and to preserve the assets and reputation of the company. The plan identifies the coordinated actions and processes that the businesses and Corporate Communications function will uses in any crisis or emergency situation, including weather events influenced by climate change. For example, a series of blizzards in the southeast US recently shut down transportation lines at Eaton's Roanoke VA warehouse facility. Approximately \$1 million in orders per day needed to be processed. However, the facility was prepared for the incident due to pre-planning through Eaton's global ERM program, and assistance from corporate ERM team members for legal, customer, shipping & receiving and other issues. As a result, the facility was able to complete orders during three days of harsh weather. Without planning and teamwork, the company was facing a possible loss of about \$3 million in shipping orders over 3 days, a small impact on Eaton. However, climate change could increase these risks to markets and the company's 200+ facilities around the globe, resulting in higher costs. For example, if 5 plants had events similar to Roanoke, Eaton could be facing a potential impact of \$5 million per day while the events last, a high impact on the company.
Reputation	Relevant, always included	In the event of changing climate conditions, e.g. droughts, or other extreme weather events, Eaton could be called upon (and expected) to do more to address the increasing humanitarian demands, particularly if the extreme weather events are severe and widespread. If a company ignores the needs of others during these crises, they do so at the risk of their reputation. For example, after Hurricane Odile battered Mexico's Baja California peninsula, employees of Eaton's aerospace facility in Tijuana provided emergency supplies for storm victims. Hurricane Odile leveled cities, communities and resort areas – leaving many residents and about 15,000 vacationers stranded without water, food, electricity and medical care. It was one of the most destructive storms in modern history to strike the peninsula. In the days following the storm, Eaton organized a supply drive and collected 500 kilograms (more than 1,100 pounds) of donated supplies from employees – including bottled water, canned food, rice, beans, cereal, powdered milk, toothpaste, soap, toilet paper and diapers. Also, to support humanitarian efforts, Eaton corporate contributions matched employee gifts of \$25 or more to the Mexican Red Cross. Climate change would increase these risks for Eaton by causing our contributions budget to grow beyond company's budget which in 2018 was \$11.6 million. Climate change would increase these risks for Eaton by requiring our contributions budget to grow beyond its current \$11.6 million budget in order to maintain the same level of commitment to community needs. Today, the impact to our budget is minimal, but a significant increase in need due to climate change could require an increased contributions budget to meet increased needs and maintain Eaton's reputation for "doing business right."
Acute physical	Relevant, always included	Eaton conducts strategic planning and risk analysis at all of its facilities and associated businesses. One of the factors considered involves potential environmental impacts to the business. Physical risks such as changing weather patterns, rising temperatures and other natural disasters are reviewed. An outcome of these meetings is the development of local response plans designed to address catastrophic occurrences. Voluntary projects to reduce carbon emissions and contribute to climate change mitigation are also assessed, along with mandatory projects for environmental remediation and/or regulation. For example, a series of blizzards in the southeast US recently shut down transportation lines at Eaton's Roanoke VA warehouse facility. Approximately \$1 million in orders per day needed to be processed. However, the facility was prepared for the incident due to pre-planning through Eaton's global ERM program, and assistance from corporate ERM team members for legal, customer, shipping & receiving and other issues. As a result, the facility was able to complete orders during three days of harsh weather. Without planning and teamwork, the company was facing a possible loss of about \$3 million in shipping orders over 3 days, a small impact on Eaton. However, climate change could increase these risks to markets and the company's 200+ facilities around the globe, resulting in higher costs. For example, if 5 plants had events similar to Roanoke, Eaton could be facing a potential impact of \$5 million per day while the events last, a high impact on the company.
Chronic physical	Relevant, always included	Eaton conducts strategic planning and risk analysis at all of its facilities and associated businesses. One of the factors considered involves potential environmental impacts to the business, both short-term and long-term. Physical risks such as changing weather patterns, rising temperatures and other natural disasters are reviewed. One of the outcomes of these meetings is the development of local response plans designed to address catastrophic occurrences. Voluntary projects to reduce carbon emissions are also assessed, along with mandatory projects for environmental regulation. For opportunities at both the company and asset level, Eaton uses the Eaton Business System (EBS), which provides internal processes and tools that ensure enterprise-wide alignment and compliance, collection and reporting information to influence various business opportunities, strategies and priorities, and rapid recognition and transfer of best practices. EBS encompasses Eaton's core values, policies and processes used to conduct business and measure, assess and improve performance, including factors influenced by climate change. For example, a series of blizzards in the southeast US recently shut down transportation lines at Eaton's Roanoke VA warehouse facility. Approximately \$1 million in orders per day needed to be processed. However, the facility was prepared for the incident due to pre-planning through Eaton's global ERM program, and assistance from corporate ERM team members for legal, customer, shipping & receiving and other issues. As a result, the facility was able to complete orders during three days of harsh weather. Without planning and teamwork, the company was facing a possible loss of about \$3 million in shipping orders over 3 days, a small impact on Eaton. However, climate change could increase these risks to markets and the company's 200+ facilities around the globe, resulting in higher costs, if physical risks become chronic. For example, if 5 plants had events similar to Roanoke, Eaton could be facing a potential impact of \$5 million per day while the events last, a high impact on the company.

	Relevance & inclusion	Please explain
Upstream	Relevant, always included	Upstream issues are evaluated by Eaton's Supply Chain and EHS teams, and data are gathered on a subset of key suppliers through CDP's Supply Chain initiative and analyzed for risks. Upstream issues are also part of Eaton's Enterprise Risk Management (ERM) process and business continuity planning. Planning identifies the coordinated actions and processes that the businesses and supply chain function will use in any crisis or emergency situation, including weather events influenced by climate change. This process is applied to upstream interruptions in receiving parts and supplies to complete customer orders. For example, a series of blizzards in the southeast US recently shut down transportation lines at Eaton's Roanoke VA warehouse facility. Approximately \$1 million in orders per day needed to be processed. However, the facility was prepared for the incident due to pre-planning through Eaton's global ERM program, and assistance from corporate ERM team members for legal, customer, shipping & receiving and other issues. As a result, the facility was able to complete orders during three days of harsh weather. Without planning and teamwork, the company was facing a possible loss of about \$3 million in shipping orders over 3 days, a small impact on Eaton. However, climate change could increase these risks to markets and the company's 200+ facilities around the globe, resulting in higher costs. For example, if 5 plants had events similar to Roanoke, Eaton could be facing a potential impact of \$5 million per day while the events last, medium impact on the company.
Downstream	Relevant, always included	Physical risks such as changing weather patterns, rising temperatures and other natural disasters are reviewed at the asset level on a monthly basis. An outcome of these meetings is the development of local response plans designed to address catastrophic occurrences. Beyond the asset level, Eaton has developed an Enterprise Risk Management (ERM) plan and a related Crisis Communications plan to protect the health and safety of its employees and the public and to preserve the assets and reputation of the company. The plan identifies the coordinated actions and processes that the businesses and Corporate Communications function will use in any crisis or emergency situation, including weather events influenced by climate change. This process is applied to downstream interruptions in shipping finished products to customers. The physical risks of increased storm and hurricane/typhoon activity, as well as flooding and droughts, may place a temporary financial burden on Eaton facilities and supply chain to sustain operations and protect our employees and communities. Downstream, our ability to transport goods to our customers could be interrupted. For example, a series of blizzards in the southeast US recently shut down transportation lines at Eaton's Roanoke VA warehouse facility. Approximately \$1 million in orders per day needed to be processed. However, the facility was prepared for the incident due to pre-planning through Eaton's global ERM program, and assistance from corporate ERM team members for legal, customer, shipping & receiving and other issues. As a result, the facility was able to complete orders during three days of harsh weather. Without planning and teamwork, the company was facing a possible loss of about \$3 million in shipping orders over 3 days, a small impact on Eaton. However, climate change could increase these risks to markets and the company's 200+ facilities around the globe, resulting in higher costs. For example, if 5 plants had events similar to Roanoke, Eaton could be facing a potential impact of \$5 million per day while the events last.

## C2.2d

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**(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.**

To manage climate related opportunities, we use the Eaton Business System (EBS) which provides a disciplined set of internal processes and tools that ensure enterprise-wide alignment and compliance, collection and reporting information to influence various business strategies, and rapid recognition and transfer of best practices. EBS encompasses Eaton's core values, policies and processes used to conduct business and measure, assess and improve performance, including climate related issues. For example, EBS provides these processes: • Eaton Lean Six Sigma – ELSS eliminates waste, simplifies processes, reduces cycle times and enables us to more effectively deploy resources within quality-intensive systems • PROLaunch – a set of integrated processes designed to guide our program and project management processes, including product development from concept through production launch. These products include Eaton's wide variety of innovative products and solution that improve energy efficiency and reduce greenhouse gas emissions. The Executive VP of EBS and Sustainability is responsible for the Eaton Business System, and is a member of Eaton Senior Leadership Committee which reports directly to Eaton's Board of Directors. For environmental and safety risks, issues planning, and prioritizing, Eaton uses MESH (Management of Environment, Safety, Security and Health), a globally deployed, unified system that consolidates all EHS and compliance programs and voluntary action into one integrated management system that conforms to the well-known ISO14001 standard and OHSAS 18001. MESH has three components: Process & Compliance; Culture; and Results. Process & Compliance sets requirements in 34 elements grouped into 10 EHS categories and drives compliance with EHS legal requirements and Eaton's global EHS requirements and voluntary action at the facility. Culture relates to how well each facility drives ownership of EHS management through cross-functional leadership and engagement of all employees. Results component focuses on achieving performance metrics. Targets, objectives, priorities and performance goals are set for each component. Eaton facilities conduct self-assessments each year, and undergo a corporate MESH assessment and OpA assessment led by independent internal teams every three years. Results are reported each year to Business operations leadership; EVP, EBS and Sustainability; and, if necessary, the Board of Directors. Example of managing transitional risk/opportunity: Our EBS process determined that technology will be a major global factor in reducing emissions, mitigating risk and offering new opportunities for Eaton. To manage this risk/opportunity, Eaton spent \$584 million in 2018 and a total of \$3.7 billion in Research and Development over the past six years, the majority of which was devoted to products and services that improve efficiency and reduce emissions. For example, Eaton created a new business segment called eMobility to address opportunities/risks created by the need for technologies that help mitigate climate change. Eaton expects to invest \$500 million over 5 years in our eMobility segment to design, manufacture, market and supply electrical and hybrid solutions for on- and off-road vehicles. By 2030, we expect to be a leading global player in the electrified vehicle market with annual revenues between \$2 billion to \$4 billion – that's roughly the same level of annual revenue our Vehicle Group generates today - \$3.5 billion in 2018, a high financial impact. Example of managing physical risks: Eaton's Business Continuity Management (BCM) Program focuses on protecting our employees and assets and establishing mitigation and recovery strategies for crisis events, including climate change threats. Given that conditions surrounding our products, customers, suppliers, personnel, equipment, operating conditions and tooling are constantly evolving, regular reviews and validations are performed at every level of the enterprise to ensure a constant state of readiness when the need/event arise. Part of this effort includes examination at the site level to ensure that facilities' plans are up to date. The results from these regular reviews are summarized and reported to the Senior Leadership Team (which reports directly to the Board of Directors) and the Corporate Risk Management (CRM) Group. For example, a series of blizzards in the southeast US recently shut down transportation lines at Eaton's Roanoke VA warehouse facility. About \$1 million in orders per day needed to be processed. However, the facility was prepared for the incident due to pre-planning through Eaton's BCM program and assistance from corporate BCM team members for legal, customer, shipping & receiving and other issues. The facility was able to complete orders during three days of harsh weather. Without BCM planning and teamwork, the company was facing a possible loss of about \$3 million in shipping orders over 3 days.

**C2.3**

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**(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**

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**(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**

Physical risk

**Primary climate-related risk driver**

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

**Type of financial impact**

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

**Company- specific description**

The physical risks of increased storm and hurricane/typhoon activity, as well as flooding and droughts, may place a temporary financial burden on Eaton facilities and supply chain to sustain operations and protect our employees and communities. Eaton's Business Continuity Management (BCM) Program focuses on protecting our employees and assets and establishing mitigation and recovery strategies for crisis events, including climate change threats. Given that conditions surrounding our products, customers, suppliers, personnel, equipment, operating conditions and tooling are constantly evolving, regular reviews and validations are performed at every level of the enterprise to ensure a constant state of readiness when the need/event arise. Part of this effort includes examination at the site level to ensure that facilities' plans are up to date. The results from these regular reviews are summarized and reported to the Senior Leadership Team (which reports directly to the Board of Directors) and the Corporate Risk Management (CRM) Group. For example, a series of blizzards in the southeast US recently shut down transportation lines at Eaton's Roanoke, VA warehouse facility. Because of the work of the BCM Committee, the facility was prepared for the incident, and the BCM helped with Legal, Customer, Shipping and Receiving and other issues. As a result, the facility was able to complete orders during three days of harsh weather. Without BCM planning and teamwork, the company was facing a possible loss of about \$3 million in shipping orders over 3 days.

**Time horizon**

Short-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)**

3000000

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

9000000

**Explanation of financial impact figure**

The physical risks of increased storm and hurricane/typhoon activity, as well as flooding and droughts, may place a temporary financial burden on Eaton facilities and supply chain to sustain operations and protect our employees and communities. For example, a series of blizzards in the southeast US shut down transportation lines at Eaton's Roanoke VA warehouse facility. About \$1 million in orders per day needed to be processed. The facility was prepared for the incident due to pre-planning through Eaton's global Business Continuity Management (BCM) program. As a result, the facility was able to complete orders during three days of harsh weather. Without BCM planning, the company faced a possible loss of about \$3 million in shipping orders over 3 days. Climate change would increase these risks for Eaton and the company's 200+ facilities resulting in higher costs and threats to employee safety. So, if three facilities were affected, the financial impact to Eaton could be \$9,000,000.

**Management method**

Eaton's Business Continuity Management (BCM) Program was developed to focus on protecting our employees and assets and establishing mitigation and recovery strategies for crisis events, including climate change threats. Given that conditions surrounding our products, customers, suppliers, personnel, equipment, operating conditions and tooling are constantly evolving, regular reviews and validations are performed at every level of the enterprise to ensure a constant state of readiness when the need/event arise. Part of this effort includes examination at the site level to ensure that facilities' plans are up to date. Costs associated with these actions are included in the annual budgets for the businesses and facilities, and represent less than \$3 million per year. For example, a series of blizzards in the southeast US recently shut down transportation lines at Eaton's Roanoke VA warehouse facility. Because of the work of the BCM Committee, the facility was prepared for the incident, and the BCM helped with Legal, Customer, Shipping and Receiving and other issues. As a result, the facility was able to successfully complete \$1 million in orders per day.

**Cost of management**

3000000

### Comment

Costs associated with these actions are included in the annual budgets for the businesses and facilities, and represent less than \$3 million per year.

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### Identifier

Risk 2

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

Direct operations

### Risk type

Transition risk

### Primary climate-related risk driver

Market: Changing customer behavior

### Type of financial impact

<Not Applicable>

### Company-specific description

Eaton supports EPA's proposed 2017-2025 LD CAFÉ/GHG standards, which represent an aggressive target of 4-5% improvement per year from a baseline of about 35 mpg (2016) for the national automotive fleet. However, these could be significantly relaxed or frozen under the current administration and result in decreased demand for Eaton's fuel saving and emissions reducing products. This will challenge the Eaton and OEM's in terms of commercializing the necessary technologies while balancing against changing regulations, consumer preferences in size, weight, safety, and performance features. Likely scenarios are a combination of solutions involving vehicle mix, powertrain alternatives, optimizing electronic controls and intelligence, innovative weight reduction, fuel source options, and major infrastructure investments. The lower CAFE standards could dampen demand for Eaton's innovative products and solutions, including superchargers and other fuel-saving products for vehicles. The Eaton Supercharger has been improving engine performance since 1985. Five generations later, the TVS® (Twin Vortices Series®) was a revolutionary design that provides an 12% efficiency improvement, which saves fuel and reduces GHG emissions. Also, in 2018, Eaton continues to develop its new initiative to be a leading global player in vehicle electrification; electric power capabilities; and managing electrical power, in response to the climate change aspect of global demand for innovation. Eaton is investing \$500 million in launching this new eMobility segment and targeting additional revenue of \$2 - \$4 billion by 2030. If CAFE standards are eased, this revenue could be reduced. The amount depends on the size of the administration cuts.

### 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)

2150000

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

6500000

### Explanation of financial impact figure

Eaton's Vehicle business represents about 16%, or \$3.5 billion, of Eaton's annual revenue in 2018. Without the new demand of increasingly efficient products to meet CAFE standards, Eaton could see a reduction in sales. The financial impact would depend on the level of reduction of original standards. For example : If we sold 1-3% fewer VEH products in the USA as a result of lower CAFE standards, the amount of reduced income could be approximately \$2.15 million to \$6.5 million .

### Management method

Eaton conducts research and development to continue to launch innovative products and solutions that help our customers meet their most demanding energy and emissions requirements. For example, Eaton's Vehicle business offers the world's most complete line-up of fuel-saving hybrid systems for commercial vehicle applications. Customers using the company's hybrid systems on

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delivery trucks, buses, refuse and utility vehicles and other commercial applications surpassed 2 billion miles of clean, reliable service and helped save more than 53 million gallons of fuel while reducing GHG emissions by 235,000 metric tons (using EPA conversion factor) over the past 13 years. Eaton hybrid electric, plug-in hybrid electric and hybrid hydraulic power systems achieve up to a 37 percent improvement in average fuel economy. Eaton spent \$584,000,000 on Research and Development in 2018. We estimate that about 70 percent of Eaton's R-D was invested in products and solutions that reduce energy use, improve fuel economy, improve power management, cut GHG emissions and address climate change. Cost of management for 70% of R-D is about \$408 million.

#### **Cost of management**

408000000

#### **Comment**

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#### **Identifier**

Risk 3

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

Direct operations

#### **Risk type**

Transition risk

#### **Primary climate-related risk driver**

Technology: Costs to transition to lower emissions technology

#### **Type of financial impact**

<Not Applicable>

#### **Company- specific description**

The national power grid could be impacted as more renewable energy and other new sources of power affect the quality, efficiency, availability and cost of energy. This situation may affect the grid's ability to supply peak power to prevent brownouts in the near-term, causing business disruptions and price spikes that may temporarily interrupt Eaton production, as well as that of our customers. These interruptions could impact operations at our manufacturing plants, as well as those of our suppliers, while the cost of electricity steadily increases due to reliance on more expensive and less reliable renewable sources of power. However, in the long-term, risk impacts can be offset by new economic opportunities for Eaton, including products and services for plant retrofits to accommodate natural gas fuel; electrical power control systems for the efficient use of power and lower carbon emissions; wind and solar installations; and more. For example, Uninterruptible Power Systems (UPS) help reduce electricity consumption in data centers. These award-winning systems use less energy, require less cooling, and take up less space, significantly reducing our customers' energy use, carbon emissions and operating costs. Each 9395 UPS installed avoids about 4.8 metric tons of CO<sub>2</sub> compared to our legacy product over the product's 25 year useful life.

#### **Time horizon**

Short-term

#### **Likelihood**

About as likely as not

#### **Magnitude of impact**

Medium-low

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

Yes, a single figure estimate

#### **Potential financial impact figure (currency)**

50400000

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

<Not Applicable>

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

<Not Applicable>

#### **Explanation of financial impact figure**

To help improve our energy efficiency and minimize the impact of potential brownouts, Eaton facilities completed 89 energy reduction projects in 2018 that have resulted in reducing a cumulative 8,228 metric tons of GHGs at a cost of \$1.37 million. To address potential price spikes and improve energy efficiency, Eaton has focused on projects for its facilities that save energy and reduce emissions. In the past six years, Eaton has completed 404 energy-saving at a cost of about \$22.5 million. These projects included lighting and machine efficiency upgrades, manufacturing process optimization, heat recovery, building shell insulation,

equipment upgrades, compressed air installation, ventilator control and energy management. These projects have also reduced GHG emissions by 45,604 metric tons, and generate savings of about \$8.4 million per year. Eaton could be paying about \$50.4 million future energy costs if the company does not continue these projects over the next 6 years.

#### Management method

To manage this risk, Eaton reduces its energy use, power load and costs every year through a variety of efficiency projects. Throughout our facilities we completed 89 energy reduction projects in 2018 that have resulted in reducing a cumulative 8,228 metric tons of GHGs at a management cost of \$1.37 million. To address potential price spikes and improve energy efficiency Eaton has focused on projects for its facilities that save energy and reduce emissions. In the past 6 years, Eaton has completed 404 energy-saving projects at a management cost of \$22.5 million. These projects included lighting and machine efficiency upgrades, manufacturing process optimization, heat recovery, building shell insulation, equipment upgrades, compressed air installation, ventilator control and energy management. These projects have also reduced GHG emissions by 45,604 metric tons, and generated savings of about \$8.4 million per year. Eaton could be paying about \$8.4 million more per year in future energy costs if the company does not continue these projects over the next 6 years.

#### Cost of management

22500000

#### 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?

Direct operations

#### Opportunity type

Energy source

#### Primary climate-related opportunity driver

Shift toward decentralized energy generation

#### Type of financial impact

Returns on investment in low-emission technology

#### Company-specific description

U.S. federal tax credits for renewable energy, specifically wind and solar power will be good through 2019. After that, the credit will begin to drop, declining to 10% by 2022 where it will remain. These actions provide market certainty for Eaton, and offer the opportunity for the company's portfolio of wind and solar energy-related products. For example, Eaton's Microgrid Energy Systems help provide electrical energy surety independent of power provided by the utility grid or can also help provide demand/load management. To accomplish this, a combination of multiple generation sources, including gensets, solar arrays, wind turbines and energy storage, can be integrated on a common grid structure with necessary loads seamlessly islanded from or paralleled with the main grid. In March 2018, Eaton deployed a microgrid at our site in Wadeville, South Africa. This deployment was our first in Africa and reduced Wadeville's energy costs by 40 percent, thereby reducing GHG emissions. Our microgrid technology has the potential to bring power to millions of people in Africa who are currently living "off the grid." Our first deployment included our xStorage energy storage system, which uses second-life electric vehicle batteries. A regional microgrid, like the one launched at Wadeville, supports the stability of the electrical grid. With the help of a microgrid, companies can have the ability to self-generate power and become more resilient in case of outage or disaster. Microgrids can also accelerate the transition to renewable energy sources supports the stability of the electrical grid.

**Time horizon**

Current

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-low

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

280000000

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

<Not Applicable>

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

<Not Applicable>

**Explanation of financial impact figure**

Part of the impact results from our acquisition of Cooper Industries to acquire products and technologies needed in power transmission and other services that form the Micro-grid. Eaton achieved more than \$280 million year-over-year synergy profits since our Cooper Industries acquisition in 2012. This multi-year profit growth represents a powerful accelerator to the organic growth that emanates from our expanded set of global power management capabilities. We estimate that research and development investments could help raise segment Eaton segment margins from 16.8% in 2018 to 17.1-17.5% in 2019. In 2018, a 1% increase in segment margins would have represented an increase in segment operating profit of about \$215 million, a large impact for the company. Cost to realize opportunity includes \$13.79 billion acquisition of Cooper Industries, plus \$584 million in research and development investments in 2018 provided the products and processes to realize this and other opportunities.

**Strategy to realize opportunity**

Acquisition of Cooper Industries, along with new products and processes from our research and development efforts, and organic growth will combine to provide the power management products and solutions required to address this opportunity. For example, our electrical distribution equipment and engineering services helped power more than 1,600 homes with five community solar installations in Colorado. And California's Redwood Solar Farm relies on our solar inverters, distribution equipment and services to power 9,200 homes, helping local utilities meet the California Renewables Portfolio standard of generating 33 percent of energy from renewable sources by 2020. By acquiring Cooper, we added to our capabilities of smooth conversion of renewable energy into clean electric power through inverters, power distribution transformers and other innovative products that enable the transformation of renewable energy into clean, reliable electric power.

**Cost to realize opportunity**

1437400000

**Comment**

Cost to realize opportunity includes \$13.79 billion acquisition of Cooper Industries, plus \$584 million in research and development investments in 2018 provided the products and processes to realize this and other opportunities.

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**Identifier**

Opp2

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

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Type of financial impact**

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

**Company-specific description**

EPA's proposed 2017-2025 LD CAFÉ/GHG standards represent an aggressive target of 4-5% improvement per year from a baseline of about 35 mpg (2016) for the national automotive fleet. This will challenge the OEM's in terms of commercializing the necessary technologies while balancing against consumer preferences in size, weight, safety, and performance features. Likely scenarios are a combination of solutions involving vehicle mix, powertrain alternatives, optimizing electronic controls and

intelligence, innovative weight reduction, fuel source options, and major infrastructure investments. Eaton provides products to address our customer needs, including superchargers and other fuel-saving products for vehicles. Therefore, this regulation could increase demand for these relevant Eaton products. The Eaton Supercharger has been improving engine performance since 1985. Five generations later, the TVS® (Twin Vortices Series®) was a revolutionary design that provides a 12% efficiency improvement, which saves fuel and reduces GHG emissions.

**Time horizon**

Medium-term

**Likelihood**

More likely than not

**Magnitude of impact**

High

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

250000000

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

<Not Applicable>

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

<Not Applicable>

**Explanation of financial impact figure**

We estimate that research and development investments could help raise segment margins from 16.8% in 2018 to 17.1-17.5% in 2019. In 2018, a 1% increase in segment margins would have represented an increase in segment operating profit of about \$215 million, a large impact for the company. Eaton expects an additional \$250 million in annual revenue by 2020 from new products in our Vehicles Business that help customers lower fuel consumption, improve efficiency and solve customers' need to meet regulations. The name eMobility symbolizes our initial focus on the electrification of vehicles and our desire to go beyond the vehicle segment.

**Strategy to realize opportunity**

Technology will be a major global factor in reducing emissions. Eaton spent \$584 million in 2018, and a total of \$3.7 billion in Research and Development over the past six years, the majority of which was devoted to products and services that improve efficiency and reduce emissions. Our network of global innovation centers gives all businesses access to cutting-edge technology to develop the sustainable technologies needed for a healthier planet. For example, Eaton has created a new business segment called eMobility to address opportunities created by the need for technologies that help mitigate climate change. Eaton expects cost of management to be \$500 million over 5 years to design, manufacture, market and supply electrical and hybrid solutions for on- and off-road vehicles. The name eMobility symbolizes our initial focus on the electrification of vehicles and our desire to go beyond the vehicle segment. This move signals our commitment to being a leader in the emerging electrified vehicle market. By 2030, we expect to be a leading global player in the electrified vehicle market with annual revenues between \$2 billion to \$4 billion – that's roughly the same level of annual revenue our Vehicle Group generates today - \$3.5 billion in 2018.

**Cost to realize opportunity**

500000000

**Comment**

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**Identifier**

Opp3

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

Customer

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Type of financial impact**

Increased revenue through demand for lower emissions products and services

**Company-specific description**

Changes in temperature extremes can lead to serious weather events such as tornadoes and hurricanes, or melting sea ice

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causing flooding in coastal areas. Eaton can offer customers comprehensive solutions for minimizing their own physical risks. For example, high atop a 6,288-foot mountain—home to some of the most dangerous and unpredictable weather in the world—the Mount Washington Observatory in New Hampshire conducts research and collects real-time data for the U.S. National Weather Service. Demanding uninterrupted power for critical 24/7 observations, this nonprofit educational institution installed our rugged, energy efficient 9355 Uninterruptible Power System (UPS) to support its entire IT infrastructure more efficiently reliably. Eaton's R-D efforts provides continuous upgrades to existing products, while working with customers to develop innovative sustainable solutions in power management, energy efficiency and emissions reduction.

**Time horizon**

Medium-term

**Likelihood**

Very likely

**Magnitude of impact**

High

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

215000000

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

<Not Applicable>

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

<Not Applicable>

**Explanation of financial impact figure**

As weather events worsen during climate change, the world will need products that stabilize the power grid and provide factories with products that protect power quality at their own sites. For example, Eaton's rugged, energy efficient 9355 Uninterruptible Power System (UPS) can support its entire IT infrastructure more efficiently and reliably. Eaton's R-D efforts provides continuous upgrades to existing energy saving products, while working with customers to develop innovative sustainable solutions in power management, energy efficiency and emissions reduction. We estimate that research and development investments could help raise segment margins from 16.8% in 2018 to 17.1-17.5% in 2019. In 2018, a 1% increase in segment margins would have represented an increase in segment operating profit of about \$215 million, a high impact for the company.

**Strategy to realize opportunity**

To realize this opportunity, Eaton uses research and development to create comprehensive solutions to customers to address the risks of climate change. Our Electrical group is a leading provider of distribution and control solutions that increase energy efficiency and improve power quality, safety and reliability. Our PowerChain™ Management solutions offer a growing portfolio of "green" products and services, such as energy audits and real-time energy consumption monitoring. Eaton's Uninterruptible Power System (UPS) products, variable speed drives and lighting controls provide greater reliability, improved operational efficiencies and enhanced safety, making power outages from the physical risk of unstable weather patterns less of a threat. , we estimate that 70% of R-D budget is used to produce low carbon and low emissions products which represents about \$408 million in 2018 revenue from these sustainable products and processes.

**Cost to realize opportunity**

408000000

**Comment**

Based on product manager and engineering services team knowledge, we estimate a range of 60-80% of Eaton's 2018 sales (\$21.6 billion) are from sales of low carbon and low emissions products. In the box above, we used the figure of 70% as an average, which represents about \$15.7 billion in 2018 revenue from these sustainable products and .

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C2.5

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**(C2.5) Describe where and how the identified risks and opportunities have impacted your business.**

	Impact	Description
Products and services	Impacted	Eaton is addressing increasing demand for high-voltage electrified vehicle technologies with the creation of its new eMobility business. With a focus on intelligent power electronics, power systems, and advanced power distribution and circuit protection, eMobility is poised to capitalize on a global vehicle electrification market projected to grow to 15 million pure battery-electric vehicles and another 30 million hybrids, from mild to plug-in, by 2030. eMobility was formed by combining products, expertise and global manufacturing capabilities from Eaton's Electrical and Vehicle businesses. Eaton plans to invest more than \$500 million over the next five years to develop new products and technologies, including smart diagnostic technologies, intelligent power electronics and predictive health monitoring, to further strengthen its global capabilities and deliver intelligent electrification products and solutions to passenger car, commercial vehicle and off-highway customers. Eaton, a leader in vehicle electrification, has over 15 years of expertise in developing hybrid systems with more than 15,000 HEV and PHEV systems on the road in the U.S., Europe, China and other Asia-Pacific markets. Eaton also has high-voltage, fast-acting fuses in nearly 50 percent of global electrified cars, and power electronics on a leading European battery-electric vehicle platform. Because of this solid foothold, our pedigree in serving the vehicle markets and our proven electrical technologies, we are uniquely positioned to win in this space. In fact, we believe this combination is so powerful that by 2030, we expect to be a leading global player in the electrified vehicle market with annual revenues between \$2 billion to \$4 billion – that's roughly the same level of annual revenue our Vehicle Group generates today (about \$3.5 billion in sales) which represents a major impact on company revenue.
Supply chain and/or value chain	Impacted	The physical risks of increased storm and hurricane/typhoon activity, as well as flooding and droughts, may place a temporary financial burden on Eaton facilities and supply chain to sustain operations and protect our employees and communities. For example, a series of blizzards in the southeast US shutdown transportation lines at Eaton's Roanoke VA warehouse facility. Shipping and receiving was delayed or shutdown for three days putting about \$1 million per day at risk in contracts, a medium impact for the business. Climate change could increase these risks for Eaton and the company's 200+ facilities around the globe resulting in higher costs and increased threats to employee safety. If five facilities had similar issues, Eaton would face \$5 million/day in costs, a large impact for facilities but a low-medium impact for Eaton.
Adaptation and mitigation activities	Impacted	To address adaptation and mitigation of climate change, Eaton has focused on projects for its facilities that save energy and reduce emissions. Throughout the world our facilities completed 89 energy reduction projects in 2018 that have resulted in reducing a cumulative 8,228 metric tons of GHGs at a cost of \$1.37 million. In the past six years, Eaton has completed 404 energy-saving at a cost of about \$22.5 million. These projects included lighting and machine efficiency upgrades, manufacturing process optimization, heat recovery, building shell insulation, equipment upgrades, compressed air installation, ventilator control and energy management. These projects have also reduced GHG emissions by 45,604 metric tons, and generate savings of about \$8.4 million per year. Year-over-year, these projects add up to a medium impact.
Investment in R&D	Impacted	Eaton conducts research and development to continue to launch innovative products and solutions that help our customers meet their most demanding energy and emissions challenges. In 2018, Eaton spent \$584 million on research and development, most of which is spent on new and innovative products and services that help our customers and consumers reduce their environmental footprints. For example, Eaton is addressing increasing demand for high-voltage electrified vehicle technologies with the creation of its new eMobility business. With a focus on intelligent power electronics, power systems, and advanced power distribution and circuit protection, eMobility is poised to capitalize on a global vehicle electrification market projected to grow to 15 million pure battery-electric vehicles and another 30 million hybrids, from mild to plug-in, by 2030. eMobility was formed by combining products, expertise and global manufacturing capabilities from Eaton's Electrical and Vehicle businesses. Eaton plans to invest more than \$500 million over the next five years to develop new products and technologies, including smart diagnostic technologies, intelligent power electronics and predictive health monitoring, to further strengthen its global capabilities and deliver intelligent electrification products and solutions to passenger car, commercial vehicle and off-highway customers. Eaton, a leader in vehicle electrification, has over 15 years of expertise in developing hybrid systems with more than 15,000 HEV and PHEV systems on the road in the U.S., Europe, China and other Asia-Pacific markets. Eaton also has high-voltage, fast-acting fuses in nearly 50 percent of global electrified cars, and power electronics on a leading European battery-electric vehicle platform. Because of this solid foothold, our pedigree in serving the vehicle markets and our proven electrical technologies, we are uniquely positioned to win in this space. In fact, we believe this combination is so powerful that by 2030, we expect to be a leading global player in the electrified vehicle market with annual revenues between \$2 billion to \$4 billion – that's roughly the same level of annual revenue our Vehicle Group generates today and represents a large impact for the Vehicle Business, a large impact for Eaton.
Operations	Impacted for some suppliers, facilities, or product lines	Our Enterprise Risk Management and business continuity planning have assisted in creating response plans for our operations in the event of intense storms, hurricanes/typhoons, flooding, etc. due to climate change. In addition, Eaton is looking prospectively at changing global conditions using publicly available data sets to assess the longer-term impacts of climate change and how these may affect our operations world-wide. The physical risks of increased storm and hurricane/typhoon activity, as well as flooding and droughts, may place a temporary financial burden on Eaton facilities and supply chain to sustain operations and protect our employees and communities. For example, a series of blizzards in the southeast US shutdown transportation lines at Eaton's Roanoke VA warehouse facility. Shipping and receiving was delayed or shutdown for three days putting about \$1 million per day at risk in product orders, a medium impact for the business. Climate change could increase these risks for Eaton and the company's 200+ facilities around the globe resulting in higher costs and increased threats to employee safety. If five facilities had similar issues, Eaton would face \$5 million/day in costs, a medium impact for Eaton.
Other, please specify	Please select	

**C2.6**

**(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.**

Relevance	Description
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	Relevance	Description
Revenues	Impacted	Climate change is shifting customer and consumer preferences toward lower emissions products and services, thereby presenting an opportunity new business and higher revenues. Through the Eaton Business System's ProLaunch process -- a set of integrated processes designed to guide our program and project management processes, including product development from concept through production launch -- we developed Eaton's eMobility business segment brings together our Electrical Transportation and Martek Power EMEA businesses with parts of our Vehicle business to design, manufacture, market and supply electrical and hybrid solutions for on- and off-road vehicles. The name eMobility symbolizes our initial focus on the electrification of vehicles and our desire to go beyond the vehicle segment. We have a great head start in this space already -- selling approximately \$320 million into this market in 2018. Because of this solid foothold, our pedigree in serving the vehicle markets and our proven electrical technologies, we are uniquely positioned to win in this space. In fact, we believe this combination is so powerful that by 2030, we expect to be a leading global player in the electrified vehicle market with annual revenues between \$2 billion to \$4 billion -- a large impact that's roughly the same level of annual revenue our Vehicle Group generates today (about \$3.5 billion in sales). Also, Eaton expects an additional \$250 million in annual revenue by 2020 from new products in our Vehicles Business that help customers lower fuel consumption, improve efficiency and solve customers' need to meet regulations. This income is a high impact for our company.
Operating costs	Impacted	Eaton is addressing some operating costs through improvements in energy efficiencies. Throughout our facilities we completed 89 energy reduction projects in 2018 that have resulted in reducing a cumulative 8,228 metric tons of GHGs at a cost of \$1.37 million. In the past five years, Eaton has completed 404 energy-saving at a cost of about \$22.5 million. Eaton's projects including lighting optimization, building shell insulation, equipment upgrades, heat recovery, compressed air installation, ventilator control and energy management. These projects will eliminate about 45,604 metric tons of GHG emissions per year, and save more than \$1,537,000 in operating costs per year. The average cost payback of about 3 years. Year-over-year, these projects add up to a medium impact. They were identified as part of Eaton's strategic planning and risk analysis at all of our facilities and associated businesses.
Capital expenditures / capital allocation	Impacted	Capital is being allocated throughout our facilities to help mitigate the impact of climate change. Throughout our facilities we completed 89 energy reduction projects in 2018 that have resulted in reducing a cumulative 8,228 metric tons of GHGs at a cost of \$1.37 million. In the past five years, Eaton has completed 404 energy-saving at a cost of about \$22.5 million. In 2018 Eaton completed 89 projects including lighting optimization, building shell insulation, equipment upgrades, heat recovery, compressed air installation, ventilator control and energy management. These projects will eliminate about 45,604 metric tons of GHG emissions per year, and save more than \$1,537,000 in operating costs per year. The average cost payback of about 3 years. Year-over-year, these projects add up to a medium impact. They were identified as part of Eaton's strategic planning and risk analysis at all of our facilities and associated businesses.
Acquisitions and divestments	Impacted	Climate change is creating demand for low emissions products and services, in part, through government regulation. In response, Eaton purchased Cooper Industries to complement our existing electrical products and services with new innovation such as LED lighting. Eaton has achieved more than \$280 million year-over-year synergy profits from our Cooper acquisition in 2012. This multi-year profit growth represents a high impact to the organic growth that emanates from our expanded set of global power management capabilities. Our decision was influenced by Eaton Business System processes, in which climate-related issues are integrated into our business objectives and strategy, including acquisitions. EBS provides a disciplined set of internal processes and tools that ensure enterprise-wide alignment and compliance, collection and reporting information to influence various business strategies, and rapid recognition and transfer of best practices. EBS encompasses Eaton's core values, policies and processes used to conduct business and measure, assess and improve performance, including factors influenced by climate change.
Access to capital	Not impacted	Eaton's objective is to finance its business through operating cash flow and an appropriate mix of equity and long-term and short-term debt. By diversifying its debt maturity structure, Eaton reduces liquidity risk. The Company maintains access to the commercial paper markets through a \$2 billion commercial paper program. The Company maintains long-term revolving credit facilities totaling \$2 billion, consisting of a \$500 million three-year revolving credit facility that will expire November 17, 2020, a \$750 million five-year revolving credit facility that will expire October 14, 2021, and a \$750 million five-year revolving credit facility that will expire November 17, 2022. The revolving credit facilities are used to support commercial paper borrowings and are fully and unconditionally guaranteed by Eaton and certain of its direct and indirect subsidiaries on an unsecured, unsecured basis. There were no borrowings outstanding under Eaton's revolving credit facilities at December 31, 2018 or 2017. The Company had available lines of credit of \$1.08 billion from various banks primarily for the issuance of letters of credit, of which there was \$265 million outstanding at December 31, 2018. Over the course of a year, cash, short-term investments and short-term debt may fluctuate in order to manage global liquidity. Eaton believes it has the operating flexibility, cash flow, cash and short-term investment balances, and access to capital markets in excess of the liquidity necessary to meet future operating needs of the business as well as scheduled payments of long-term debt. Do to these financial arrangements, we believe Eaton will have substantial access to capital regardless of climate risks/opportunities.
Assets	Impacted	Adding Cooper Industries to our asset base provided more than \$280 million year-over-year synergy profits since 2013, a high impact for Eaton. The acquisition was part of our strategy to procure energy-saving, sustainable lighting products and expertise that dovetailed with Eaton's own lighting portfolio. Our decision was influenced by Eaton Business System processes, in which climate-related issues are integrated into our business objectives and strategy, including acquisition of assets. EBS provides a disciplined set of internal processes and tools that ensure enterprise-wide alignment and compliance, collection and reporting information to influence various business strategies, and rapid recognition and transfer of best practices. EBS encompasses Eaton's core values, policies and processes used to conduct business and measure, assess and improve performance, including factors influenced by climate change. EBS provides a disciplined set of internal processes and tools that ensure enterprise-wide alignment and compliance, collection and reporting information to influence various business strategies, and rapid recognition and transfer of best practices. EBS encompasses Eaton's core values, policies and processes used to conduct business and measure, assess and improve performance, including factors influenced by climate change.
Liabilities	Not impacted	Eaton's liabilities are primarily legacy (remediation) sites that are closely managed under regulatory schemes. In our planning horizon we do not foresee significant impacts from climate-related events to these sites. Eaton is involved in remedial response and voluntary environmental remediation at a number of sites, including certain of its currently-owned or formerly-owned plants. The Company has also been named a potentially responsible party under the United States federal Superfund law, or the state equivalents thereof, at a number of disposal sites. A number of factors affect the cost of environmental remediation, including the number of parties involved at a particular site, the determination of the extent of contamination, the length of time the remediation may require, the complexity of environmental regulations, and the continuing advancement of remediation technology. Taking these factors into account, Eaton has estimated the costs of remediation, which will be paid over a period of years. The Company accrues an amount on an undiscounted basis, consistent with the estimates of these costs, when it is probable that a liability has been incurred. At December 31, 2018 and 2017, \$116 million and \$12 0 million, respectively, was accrued for these costs. Based upon Eaton's analysis and subject to the difficulty in estimating these future costs, the Company expects that any sum it may be required to pay in connection with environmental matters, including climate is not reasonably possible to exceed the recorded liability by an amount that would have a material effect on its financial position, results of operations or cash flows.

	Relevance	Description
Other	Please select	

### C3. Business Strategy

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#### C3.1

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**(C3.1) Are climate-related issues integrated into your business strategy?**

Yes

#### C3.1a

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**(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?**

Yes, quantitative

#### C3.1c

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### C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

Climate-related issues are integrated into our business objectives and strategy through the Eaton Business System (EBS), which provides a disciplined set of internal processes and tools that ensure enterprise-wide alignment and compliance, collection and reporting information to influence various business strategies, and rapid recognition and transfer of best practices. EBS encompasses Eaton's core values, policies and processes used to conduct business and measure, assess and improve performance, including factors influenced by climate change. For example, EBS provides these processes: • Eaton Lean Six Sigma – ELSS eliminates waste, simplifies processes, reduces cycle times and enables us to more effectively deploy resources within quality intensive systems. • PROLaunch – a set of integrated processes designed to guide our program and project management processes, including development of sustainable products from concept through production launch. Climate change has influenced our strategy and business objectives by reaffirming our belief in the necessity to balance the needs of our planet with our corporate goals. As a result, we now identify climate change as a major trend that will affect the way we do business for the foreseeable future. Influenced by climate change, our customers need new technologies to reduce their use of energy and improve their own carbon footprints. Our strategy is to invest heavily in leading-edge technologies that improve the energy efficiency of buildings, vehicles and machinery, help to conserve natural resources, shrink the carbon footprints of our customers, and reduce the environmental impact of everyday life.

Our strategy takes into account the need to reduce carbon or other greenhouse gas emissions and the commitment to help our customers and consumers do the same. For our own footprint in 2018, we set a 1-year absolute GHG reduction target of 2 percent. Our absolute reduction target was 2 percent, and we exceeded this goal; we achieved an absolute reduction of 5.6 percent. For 2018, our indexed to sales reduction target was to stay flat, and we exceeded this goal; we achieved an indexed reduction of 11 percent. For 2019, our leadership set a long-term goal of 20 percent absolute Scope 1 and Scope 2 GHG emissions reduction (2015-2025). Eaton business divisions are expected to calculate and reduce their emissions based on this threshold. Also, Eaton is compliant in Europe, Middle East and Asia (EMEA) for 36 sites with the LEED Energy Efficiency Directive. We also have 20 sites in 10 countries that are ISO50001 Energy Management certified. One of our most substantial decisions influenced by the need to address climate change is the continued investment in projects that make our buildings and manufacturing processes more efficient. Throughout our facilities we completed 89 energy reduction projects in 2018 that have resulted in reducing a cumulative 8,228 metric tons of GHGs at a cost of \$1.37 million. These projects included lighting and machine efficiency upgrades, manufacturing process optimization, heat recovery and other efforts. The projects will save \$1.36 million per year with an average payback of 2.7 years. We have also committed to setting a science-based target for our direct and indirect emissions for the period of 2015-2030. We're also heeding the global call for nations and businesses to work together to address climate change. To accelerate our progress, we have determined that we need a long-term goal for our Scope 1 and 2 emissions informed by science, and we developed an energy and carbon roadmap to analyze the strategies that would help us to achieve an absolute GHG reduction goal of 20% (2015-2025). Another substantial business decision that has been influenced by the climate change driven aspects of our strategy is based on helping customers and consumers offset the effects of climate change. In 2018, Eaton continues to develop its new initiative to be a leading global player in vehicle electrification; electric power capabilities; and managing electrical power, in response to the climate change aspect of global demand for innovative products and processes that reduce emissions, conserve energy and help fight climate change. Eaton's deep expertise makes us a trusted partner to customers. In launching a new eMobility segment, we are targeting additional revenue of \$2 - \$4 billion by 2030. We believe that the climate change aspect of increasing pressure on global energy costs and availability will lead to increasing costs of extraction, processing, distribution and utilization. Technology will play a major role in addressing this aspect. Eaton spent \$584 million in 2018, and a total of \$3.7 billion in Research and Development over the past six years, the majority of which was devoted to products and services that improve efficiency and reduce emissions. Our network of global innovation centers gives all businesses access to cutting-edge technology to develop the green technologies needed for a healthier planet. We estimate that research and development investments could help raise segment margins from 16.8% in 2018 to 17.1-17.5% in 2019. In 2018, a 1% increase in segment margins would have represented an increase in segment operating profit of about \$215 million, a large impact for the company. Acquisition, Joint Ventures, Partnerships are critical to Eaton's efforts to develop the innovative products and services the help to mitigate climate change. Eaton recently sold a 50% interest in its heavy-duty and medium-duty commercial vehicle automated transmission business for \$600 million in cash to Cummins, Inc. to form a new joint venture, Eaton Cummins Automated Transmission Technologies (ECATT). In 2017-18, the partnership launched the new Endurant™ 12-speed automated transmission – the lightest, most efficient 1,850 lb.-ft. capable heavy-duty transmission. Designed for line-haul applications where weight savings and efficiency can add to a fleet's bottom line and reduce GHG emissions. The need to communicate, learn and share more about climate change is integrated into the company's overall business strategy, in large part through community and government partnerships. Eaton is helping advance energy resiliency for the national power grid through a U.S. Department of Energy (DOE) funded initiative to deploy new hydropower generation at existing non-powered dams and waterways. In 2018, under the second stage of the contract awarded in 2017, Eaton is manufacturing and testing new, low-cost integrated hydropower turbine and generator sets to help enhance the cost-effectiveness of new hydropower generation facilities. According to DOE assessments, more than 50 gigawatts of potential capacity remains untapped at existing small-scale hydropower sites, which is a significant potential resource for Eaton's renewable energy expertise.

### C3.1d

**(C3.1d) Provide details of your organization's use of climate-related scenario analysis.**

Climate-related scenarios	Details
2DS	Eaton's strategy has long been influenced by climate change related scenarios including: 1) An evolving regulatory regime focusing on carbon reduction; 2) customers demanding new carbon reduction technologies to respond to the potential impact of climate change; 3) the continuing efforts of governments to jump start robust green energy industries through credits, grants, and other incentives; opportunities are increasing for companies to grow by providing innovative products and services that help mitigate the impact of climate change. As part of our efforts to avoid the most significant impacts of climate change, in 2017 we analyzed our Scope 1 and 2 emissions (using the Sectoral Decarbonization Approach against a 2 degrees Celsius by end of century scenario) and evaluated options to address those emissions. We learned a great deal about what it would take to align our emissions reductions with science-based levels. We assessed the magnitude of reductions that can be achieved through a number of actions including but not limited to the purchase of green tariffs, onsite renewables, offsite renewables, energy efficiency projects and behavioral change. This analysis was fed into the multiple processes that are used to set business objectives and strategy across the enterprise. To accelerate our progress, we have determined that we need a long-term goal for our Scope 1 and 2 emissions informed by science and we developed an energy and carbon roadmap to analyze the strategies that would help us to achieve an absolute GHG reduction goal of 20% (2015-2025). Climate-related issues are integrated into our business objectives and strategy through the Eaton Business System (EBS), which provides a disciplined set of internal processes and tools that ensure enterprise-wide alignment and compliance, collection and reporting information to influence various business strategies, and rapid recognition and transfer of best practices. EBS encompasses Eaton's core values, policies and processes used to conduct business and measure, assess and improve performance, including factors influenced by climate change.

**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?**

Both absolute and intensity targets

**C4.1a**

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

**Target reference number**

Abs 1

**Scope**

Scope 1 +2 (market-based)

**% emissions in Scope**

100

**Targeted % reduction from base year**

2

**Base year**

2017

**Start year**

2017

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

1165271.35

**Target year**

2018

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

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

**% of target achieved**

100

**Target status**

Achieved

**Please explain**

For 2018 our absolute reduction target was 2 percent, and we exceeded this goal. We achieved an absolute reduction of 5.68 percent. To accelerate our progress, we have determined that we need a long-term goal for our Scope 1 and 2 emissions informed by science. Our leadership set a long-term goal of 20 percent absolute Scope 1 and Scope 2 GHG emissions reduction (2015-2025).

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**Target reference number**

Abs 2

**Scope**

Scope 1 +2 (market-based)

**% emissions in Scope**

100

**Targeted % reduction from base year**

20

**Base year**

2015

**Start year**

2015

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

1272709.1

**Target year**

2025

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

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

**% of target achieved**

68

**Target status**

Underway

**Please explain**

Our leadership set a long-term goal of 20 percent absolute Scope 1 and Scope 2 GHG emissions reduction (2015-2025). In 2018, we were 68% of the way to our target and achieved 13.65% reduction from our 2015 baseline. We expect to continue making progress toward this goal through energy efficiency, distributed renewable energy and renewable energy procurement.

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**C4.1b**

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

**Target reference number**

Int 1

**Scope**

Scope 1 +2 (market-based)

**% emissions in Scope**

100

**Targeted % reduction from base year**

0

**Metric**

Metric tons CO2e per unit revenue

**Base year**

2017

**Start year**

2017

**Normalized base year emissions covered by target (metric tons CO2e)**

57.11

**Target year**

2018

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

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

**% of target achieved**

100

**Target status**

Achieved

**Please explain**

Our 2018 GHG reduction goal was to keep GHG emissions flat indexed to sales from 2017. We exceeded that goal and achieved an 11% reduction. Our 2017 baseline is 57.11 MT Co2e per \$Million sales. In 2018, our greenhouse gas emissions were 50.86 MT Co2e per \$Million sales, far exceeding our goal to keep emissions flat relative to sales.

**% change anticipated in absolute Scope 1+2 emissions**

5.68

**% change anticipated in absolute Scope 3 emissions**

0

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**C4.2**

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**(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.**

**Target**

Waste

**KPI – Metric numerator**

Metric Tons of Waste

**KPI – Metric denominator (intensity targets only)**

Sales

**Base year**

2017

**Start year**

2017

**Target year**

2030

**KPI in baseline year**

26402

**KPI in target year**

25498

**% achieved in reporting year**

8.8

**Target Status**

Underway

**Please explain**

In 2018 we set a target for 100 percent of our manufacturing sites to send zero waste to landfill by 2030. To achieve this goal, we also committed to reducing our waste to landfill by 3 percent annually, indexed to sales. In 2018, indexed to sales, our waste to landfill, which includes waste incinerated without heat recovery, decreased by 8.8 percent. On an absolute basis, we decreased our waste generation by 3.4 percent. Since 2015, we have reduced waste to landfill by our operations by 24 percent.

**Part of emissions target**

Our emissions target is scope 1 and scope 2 emissions. As such, our waste reduction initiative is not part of our current emissions target. We are considering a future scope 3 reduction target and these efforts would help us to achieve that should we move in that direction.

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

No, it's not part of an overarching initiative

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**C4.3**

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**(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**

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	56	
To be implemented*	38	4660
Implementation commenced*	98	4196
Implemented*	89	8228
Not to be implemented	19	

## C4.3b

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

**Initiative type**

Energy efficiency: Building services

**Description of initiative**

Lighting

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

1615

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

157000

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

263000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

In 2018, Eaton facilities completed 17 lighting optimization programs that replaced inefficient lights with cutting edge LED lighting manufactured at Eaton facilities. The projects eliminated GHG emissions by 1,615 metric tons per year, will save \$157,000 per year on the investment of \$263,000 and a payback of 1-3 years.

**Initiative type**

Energy efficiency: Processes

**Description of initiative**

Process optimization

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

1180

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

239000

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

880000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

In 2018, Eaton completed 10 process optimization projects that reduced GHG emissions by 1,180 tons. Eaton invested \$880,000 and will save \$239,000 per year over the life of the projects (10-15 years). For example, one of our sites is transitioning from an ABB robot to a Panasonic robot for process improvements which subsequently will result in 1,024 KWH in annual energy improvements.

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**Initiative type**

Energy efficiency: Processes

**Description of initiative**

Compressed air

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

1236

**Scope**

Scope 1

**Voluntary/Mandatory**

Voluntary

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

451000

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

266900

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

6-10 years

**Comment**

Eaton facilities in U.S., Europe and Asia completed 16 compressed air projects including testing and eliminating leaks and purchase of new compressors. These projects are reducing 1,236 metric tons of GHG per year at a cost of \$266,000. The projects will reduce energy consumption by 2,600,262 KWH and save our facilities \$451,000 per year. The individual project lifetimes range from 1-30 years. Therefore, the median was used to calculate these projects.

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**Initiative type**

Energy efficiency: Building services

**Description of initiative**

HVAC

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

4197

**Scope**

Scope 1

**Voluntary/Mandatory**

Voluntary

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

522000

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

2260000

**Payback period**

4 - 10 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

In 2018, Eaton completed 46 HVAC projects that reduced our GHG emissions by 4,197 metric tons at an initial cost of \$2.3 million and an annual operational savings of \$522,000. Average life of these projects is 4.3 years.

**C4.3c**

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

Method	Comment
Dedicated budget for energy efficiency	Energy/GHG reduction projects budgeted: We're using new technologies and processes to make our manufacturing plants around the world more energy efficient. In 2018, many of our aerospace, hydraulics, electrical and vehicle plants upgraded their facilities with energy-saving projects. One of our most substantial decisions influenced by the need to address climate change is the continued investment in projects that make our buildings and manufacturing processes more efficient. Throughout our facilities we completed 89 energy reduction projects in 2018 that have resulted in reducing a cumulative 8,228 metric tons of GHGs at a cost of \$1.37 million. These projects included lighting and machine efficiency upgrades, manufacturing process optimization, heat recovery and other efforts. The projects will save \$1.36 million per year with an average payback of 2.7 years. Potential financial implications: annual energy savings projected at \$1.37 million.
Employee engagement	Eaton employees determine where we donate a large share of our contributions, based on the needs in their local communities. This includes a number of sustainability projects. We also engage our employees in the aspects of our approach, from design and manufacturing, customer support, internal footprint reduction through Green Teams and other programs. From 2014-18, more than 30,000 employees worldwide participated in our World Environment Month program, which extends the annual Worldwide Environment Day into a month of sustainability activities in the workplace, home and communities.
Dedicated budget for low-carbon product R&D	Eaton spent \$584 million for research and development in 2018, the majority of which went to develop innovative products and processes that improve energy efficiency and reduce emissions.

**C4.5**

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

Yes

**C4.5a**

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

**Level of aggregation**

Group of products

**Description of product/Group of products**

As a power management company, Eaton has long focused on developing innovative technologies, products and solutions that help our customers meet challenging sustainability regulations and guidelines. During 2018, we invested \$584 million in research and development, helping answer the needs of our global customers now and in the future. Our cylinder deactivation system is the most direct way to reduce emissions and improve fuel economy through the driving cycle. Eaton was an early leader in the research and development of onboard refueling vapor recovery (ORVR) systems, which reduce hydrocarbon emissions by about 95 percent during refueling. China—the world's largest market for passenger and commercial vehicles—implemented ORVR in 2017-18. Eaton's electrical power control systems reduce power use and carbon emissions in buildings and homes. Our acquisition of Cooper Industries expanded our portfolio of electrical solutions with products such as LED lighting and critical smart-grid technologies for modern, sustainable electricity delivery systems. Our product portfolio also includes hybrid powertrains that boost fuel economy and reduce emissions in commercial vehicles; hydraulic aircraft systems that reduce weight and save fuel; automotive superchargers for enhanced fuel economy; electrical and hydraulic products for solar power and wind turbine systems'

and thousands more. For example, Protection Station 650 and 800 are combined Uninterruptible Power System (UPS), surge suppressor, and multiple socket devices with improved energy efficiency provided by an EcoControl function that automatically disables peripherals when the master drive is turned off. Laboratory testing of a typical home computer system demonstrated annual power consumption of 165 kWh for the Protection Station compared to 231 kWh for similar products without the EcoControl function. For 100,000 computers, the annual savings of 6,600,000 kWh reduces carbon emissions by 4,551 metric tons .

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

Avoided emissions

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

Other, please specify (IPCC GWP100a; ISO 14040 and 14044 )

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

70

**Comment**

With millions of SKUs and tens of thousands of products, Eaton is still in the process of classifying them into sustainability-related categories including low-carbon / energy efficiency. We have not calculated an exact number for percent of revenue. However, based on product manager and engineering services team knowledge, we estimate a range of 60-80% of Eaton's 2018 sales (\$21.6 billion) are from sales of low carbon and low emissions products. In the box above, we used the figure of 70% as an average, which represents about \$15.7 billion in 2018 revenue from these sustainable products and .

**Level of aggregation**

Group of products

**Description of product/Group of products**

In 2017-18, Eaton created a new business segment called eMobility to address opportunities created by the need for technologies that help mitigate climate change. Eaton expects cost of management to be \$500 million over 5 years to design, manufacture, market and supply electrical and hybrid solutions for on- and off-road vehicles. The name eMobility symbolizes our initial focus on the electrification of vehicles and our desire to go beyond the vehicle segment. This move signals our commitment to being a leader in the emerging electrified vehicle market. eMobility focuses on three primary areas for both automotive and commercial vehicle customers: intelligent power electronics, power systems, and advanced power distribution and circuit protection. The power distribution and protection category includes fuses, super-capacitors and power distribution units (PDUs), while converters and on-board chargers fall under the power electronics umbrella. Power systems include electric vehicle (EV) transmissions for a variety of medium- and heavy-duty applications, as well as a 48-volt regenerative accessory drive system for heavy-duty trucks. By 2030, we expect to be a leading global player in the electrified vehicle market with annual revenues between \$2 billion to \$4 billion, nearly all of which represents revenue from low carbon and/or low emissions products and services. In 2018, this segment reported \$320 million in revenues from these products and services.

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

Low-carbon product and avoided emissions

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

Other, please specify (IPCC GWP100a; ISO 14040 and 14044 )

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

90

**Comment**

By 2030, we expect to be a leading global player in the electrified vehicle market with annual revenues between \$2 billion to \$4 billion, nearly all of which represents revenue from low carbon and/or low emissions products and services. In 2018, this segment reported \$320 million in revenues from these products and services.

**Level of aggregation**

Group of products

**Description of product/Group of products**

Our portfolio of lighting products helps keep power flowing safely and reliably, from the utility to the light fixture. Our circuit protection helps keep homes safe from fires and surges. Our LED lighting helps drive energy efficiency to shrink electric bills and carbon footprints. And our connected lighting and wiring devices make smart homes possible. Eaton's Lighting Division delivers a range of innovative and reliable indoor and outdoor lighting and controls solutions, specifically designed to maximize performance, energy efficiency, emissions reduction and cost savings. The Lighting business serves customers in the commercial, industrial, retail, institutional, residential. Eaton's DLC® Qualified Product List has over 12,000 qualified models of Eaton's LED products representing the broadest portfolio available, with greater than 3.5 times more models listed than any other manufacturer. With Eaton's ENERGY STAR® Qualified Product List of more than 4,000 configurable models, Eaton has dominated the downlight recessed category since introducing the very first ENERGY STAR® qualified downlight.

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

Avoided emissions

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

Other, please specify (IPCC GWP100a; ISO 14040 and 14044 )

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

70

### Comment

Based on product manager and engineering services team knowledge, we estimate a range of 60-80% of Eaton's 2018 revenue of \$21.6 billion is from sales of low carbon and low emissions products and services. Using 70% as an average, about \$15.7 billion of our revenue stems from these sustainable products. Our Lighting Products Business represents roughly 31% (\$7.1 billion) of Eaton's total revenue, of which about \$4.9 billion represents sales from low carbon and low emissions products (70% of revenue).

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### Level of aggregation

Group of products

### Description of product/Group of products

Eaton Electrical Solutions combine several energy saving products into the most energy efficient package to address specific customer needs. Michigan's Detroit Metropolitan Airport recently selected Eaton's Cooper Lighting business to replace 6,050 existing parking garage fixtures with Eaton's energy-saving lighting products (from 210 watts to 60 watts). The conversion – using Eaton's McGraw-Edison Valet and Ventus light-emitting diode luminaires – will result in a 66 percent reduction in power consumption. The LED products also incorporate Eaton's Cooper Lighting LumaWatt Outdoor Wireless Control and Monitoring System to make it easier for the airport to effectively manage its lighting levels. The system reduces power usage by approx. 5 million kWh, resulting in a reduction of 35,000 metric tons of carbon dioxide (Scope 2) in a five-year period.

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

Avoided emissions

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

Other, please specify (IPCC GWP100a; ISO 14040 and 14044 )

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

70

### Comment

Based on product manager and engineering services team knowledge, we estimate a range of 60-80% of Eaton's 2018 revenue of \$21.6 billion is from sales of low carbon and low emissions products and services. Using 70% as an average, about \$15.7 billion of our revenue stems from these sustainable products. Our Electric Systems & Services Business represents roughly 28% (\$6 billion) of Eaton's total revenue, of which about \$4.2 billion represent sales from low carbon and low emissions products, or about 70% of revenue.

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### Level of aggregation

Group of products

### Description of product/Group of products

The Eaton Vehicle business is a leader in the design, manufacture, marketing, and supply of: drivetrain, powertrain systems and critical components that reduce emissions and improve fuel economy, stability, performance, and safety of cars, light trucks and commercial vehicles. Products include transmissions, clutches, hybrid power systems, superchargers, engine valves and valve actuation systems, cylinder heads, locking and limited slip differentials, transmission controls, fuel vapor components, fluid connectors and conveyance products for the global vehicle industry. The principal markets for the Vehicle segment are original equipment manufacturers and aftermarket customers of heavy-, medium-, and light-duty trucks, SUVs, CUVs, passenger cars and agricultural equipment. For example, The Eaton Twin Vortices Series® (TVS®) supercharger will help the automotive industry provide improved fuel economy while at the same time lowering carbon GHG emissions up to 20 percent. The supercharger pumps air into an engine boosting its overall performance which allows vehicle manufacturers to replace larger engines with smaller, more fuel efficient engines. The Eaton TVS allowed Audi to downsize its powertrain offerings. Rather than offering a normally aspirated 4.2L V-8 in the previous-generation S4, Audi now offers the more compact supercharged V-6, while achieving 27% better fuel economy (a 6 mpg improvement) and a reduction of about 12 metric tons of CO2 over five years of operation (based on fuel use for 15,000 miles per year).

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

Low-carbon product and avoided emissions

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

Other, please specify (IPCC GWP100a; ISO 14040 and 14044 )

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

70

**Comment**

Based on product manager and engineering services team knowledge, we estimate a range of 60-80% of Eaton's 2018 revenue of \$21.6 billion is from sales of low carbon and low emissions products and services. Using 70% as an average, about \$15.7 billion of our revenue stems from these sustainable products. Our Vehicle Business represents roughly 16.2% (\$3.5 billion) of Eaton's total revenue, of which about \$2.4 billion represents sales from low carbon and low emissions products.

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**C5. Emissions methodology**

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**C5.1**

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

### **Scope 1**

#### **Base year start**

January 1 2015

#### **Base year end**

December 31 2015

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

310661.29

#### **Comment**

In 2018, Eaton expanded the scope of our GHG inventory to capture smaller sources of emissions, shifted to calendar-year accounting and updated our methodology. Those changes triggered a recalculation of our 2015 baseline. For consistency, we also recalculated the intervening years. The inventory period corresponds to the calendar year (i.e. January 1 through December 31).

### **Scope 2 (location-based)**

#### **Base year start**

January 1 2015

#### **Base year end**

December 31 2015

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

962047.81

#### **Comment**

In 2018, Eaton expanded the scope of our GHG inventory to capture smaller sources of emissions, shifted to calendar-year accounting and updated our methodology. Those changes triggered a recalculation of our 2015 baseline. For consistency, we also recalculated the intervening years. The inventory period corresponds to the calendar year (i.e. January 1 through December 31).

### **Scope 2 (market-based)**

#### **Base year start**

January 1 2017

#### **Base year end**

December 31 2017

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

870897.11

#### **Comment**

2017 is the first year we have reported market-based Scope 2 emissions. In 2018, Eaton expanded the scope of our GHG inventory to capture smaller sources of emissions, shifted to calendar-year accounting and updated our methodology. Those changes triggered a recalculation of our 2015 baseline. For consistency, we also recalculated the intervening years. The inventory period corresponds to the calendar year (i.e. January 1 through December 31). We use location based only for scope 2 emissions in 2015 and 2016. Starting in 2017, we have both market-based and location-based scope 2 emissions in our GHG inventory.

## **C5.2**

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### **(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.**

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

## **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)**

293491.69

**Start date**

January 1 2018

**End date**

December 31 2018

**Comment**

Eaton's scope 1 emissions include stationary combustion, mobile combustion, refrigerants, fugitive emissions, fleet and wastewater treatment. In 2018, we expanded the scope of our GHG inventory in 2018 to capture smaller sources of scope 1 emissions, shifted to calendar-year accounting and updated our methodology.

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

294374.24

**Start date**

January 1 2017

**End date**

December 31 2017

**Comment**

Eaton's scope 1 emissions include stationary combustion, mobile combustion, refrigerants, fugitive emissions, fleet and wastewater treatment. In 2018, we expanded the scope of our GHG inventory in 2018 to capture smaller sources of scope 1 emissions, shifted to calendar-year accounting and updated our methodology. Those changes triggered a recalculation of our 2015 baseline. For consistency, we also recalculated the intervening years.

**Past year 2****Gross global Scope 1 emissions (metric tons CO2e)**

290148.78

**Start date**

January 1 2016

**End date**

December 31 2016

**Comment**

Eaton's scope 1 emissions include stationary combustion, mobile combustion, refrigerants, fugitive emissions, fleet and wastewater treatment. In 2018, we expanded the scope of our GHG inventory in 2018 to capture smaller sources of scope 1 emissions, shifted to calendar-year accounting and updated our methodology. Those changes triggered a recalculation of our 2015 baseline. For consistency, we also recalculated the intervening years.

**Past year 3****Gross global Scope 1 emissions (metric tons CO2e)**

310661.29

**Start date**

January 1 2015

**End date**

December 31 2015

**Comment**

Eaton's scope 1 emissions include stationary combustion, mobile combustion, refrigerants, fugitive emissions, fleet and wastewater treatment. In 2018, we expanded the scope of our GHG inventory in 2018 to capture smaller sources of scope 1 emissions, shifted to calendar-year accounting and updated our methodology. Those changes triggered a recalculation of our 2015 baseline. For consistency, we also recalculated the intervening years.

## 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

Eaton's scope 2 emissions include purchased electricity: The consumption of electricity acquired from generation facilities or sources that are not owned or controlled by Eaton, such as utilities, cooperatives, power authorities as well as direct access from independent power plants and other generation facilities. Consistent with GHG Protocol Scope 2 Guidance, Eaton calculates indirect emissions from purchased electricity twice using two different accounting methods: -The location-based method using average energy generation emission factors for defined geographic locations. -The market-based method from electricity based on the GHG emissions of the generators from which electricity was contractually purchased, specific electricity product purchased, or a contractual instrument. In 2018, we expanded the scope of our GHG inventory in 2018 to capture smaller sources of scope 1 emissions, shifted to calendar-year accounting and updated our methodology. Those changes triggered a recalculation of our 2015 baseline. For consistency, we also recalculated the intervening years.

## 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

885396.03

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

805552.48

##### Start date

January 1 2018

##### End date

December 31 2018

##### Comment

Eaton's scope 2 emissions include purchased electricity: The consumption of electricity acquired from generation facilities or sources that are not owned or controlled by Eaton, such as utilities, cooperatives, power authorities as well as direct access from independent power plants and other generation facilities. Consistent with GHG Protocol Scope 2 Guidance, Eaton calculates indirect emissions from purchased electricity twice using two different accounting methods: -The location-based method using average energy generation emission factors for defined geographic locations. -The market-based method from electricity based on the GHG emissions of the generators from which electricity was contractually purchased, specific electricity product purchased, or a contractual instrument. In 2018, we expanded the scope of our GHG inventory in 2018 to capture smaller sources of scope 1 emissions, shifted to calendar-year accounting and updated our methodology. Those changes triggered a recalculation of our 2015 baseline. For consistency, we also recalculated the intervening years.

## Past year 1

### Scope 2, location-based

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

870897.11

### Start date

January 1 2017

### End date

December 31 2017

### Comment

Eaton's scope 2 emissions include purchased electricity: The consumption of electricity acquired from generation facilities or sources that are not owned or controlled by Eaton, such as utilities, cooperatives, power authorities as well as direct access from independent power plants and other generation facilities. Consistent with GHG Protocol Scope 2 Guidance, Eaton calculates indirect emissions from purchased electricity twice using two different accounting methods: -The location-based method using average energy generation emission factors for defined geographic locations. -The market-based method from electricity based on the GHG emissions of the generators from which electricity was contractually purchased, specific electricity product purchased, or a contractual instrument. In recalculating our 2015 baseline and intervening years, we did not recalculate our location-based emissions for 2017, only our market-based emissions. For 2015 and 2016, we have location-based emissions. Moving forward, we will have both location and market-based emissions in future years.

## Past year 2

### Scope 2, location-based

872935.83

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

### Start date

January 1 2016

### End date

December 31 2016

### Comment

In recalculating our 2015 baseline and intervening years, we did not recalculate our location-based emissions for 2017, only our market-based emissions. For 2015 and 2016, we have location-based emissions. Moving forward, we will have both location and market-based emissions in future years.

## Past year 3

### Scope 2, location-based

962047.81

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

### Start date

January 1 2015

### End date

December 31 2015

### Comment

In recalculating our 2015 baseline and intervening years, we did not recalculate our location-based emissions for 2017, only our market-based emissions. For 2015 and 2016, we have location-based emissions. Moving forward, we will have both location and market-based emissions in future years.

## C6.4

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

No

**(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.****Purchased goods and services****Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

11852471.47

**Emissions calculation methodology**

Eaton's Scope3 emissions include other indirect emissions that occur in Eaton's value chain. Eaton's CDP Supply Chain Report is used to determine emissions from Purchased Goods and Services. This data is from suppliers who reported revenues, scope 1 and scope 2, and upstream scope 3 emissions. This data is used to calculate an emissions per unit revenue factor for each of these suppliers. These emissions factors are multiplied by Eaton's annual spend on each supplier to determine purchased goods emissions from this subset of suppliers, and then extrapolated using total annual purchased goods spend (excluding intercompany sales) to estimate the entire purchased goods for the corporation. Eaton's Scope 3 GHG emissions from Purchased Goods and Services nearly doubled in 2018 compared to 2016 emissions. Since spending on purchased goods only increased by 8% over this time period, the increase in GHG is likely caused by an increase in the supplier emission factors in 2018.

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

4

**Explanation**

Eaton's spend with the suppliers in the CDP Supply Chain Report for the Purchased Goods category represented 4 percent of Eaton's total spend on purchased goods.

**Capital goods****Evaluation status**

Not relevant, calculated

**Metric tonnes CO2e**

125513.19

**Emissions calculation methodology**

Eaton's Scope3 emissions include other indirect emissions that occur in Eaton's value chain. Eaton's CDP Supply Chain Report is used to determine emissions from Capital Goods. This data is from suppliers who reported revenues, scope 1 and scope 2, and upstream scope 3 emissions. This data is used to calculate an emissions per unit revenue factor for each of these suppliers. These emissions factors are multiplied by Eaton's annual spend on each supplier to determine capital goods emissions from this subset of suppliers, and then extrapolated using total annual purchased goods spend (excluding intercompany sales) to estimate the entire purchased goods and capital goods emissions for the corporation. Eaton's Scope 3 GHG emissions from Capital Goods and Services increased by 52% in 2018 compared to 2016 emissions. Since spending on purchased goods only increased by 12% over this time period, the increase in GHG is likely caused by an increase in the supplier emission factors in 2018.

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

57

**Explanation**

Eaton's spend with the suppliers in the CDP Supply Chain Report for the Capital Goods category represented 57 percent of Eaton's total spend on Capital Goods.

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

### Evaluation status

Not relevant, calculated

### Metric tonnes CO2e

110883.31

### Emissions calculation methodology

Publicly available databases were used to identify the percent of emissions from fossil fuels' and electricity's life cycle phases including use, upstream and transportation and distribution losses. The ratios are applied to calculated Scope 1 and Scope 2 emissions (i.e. the use phase) for Eaton's energy consumption to extrapolate the upstream emissions from these activities.

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

0

### Explanation

Calculated upstream fuel emissions represent less than 1 percent of our total emissions impact and are not relevant.

## Upstream transportation and distribution

### Evaluation status

Not relevant, calculated

### Metric tonnes CO2e

159665.67

### Emissions calculation methodology

The company that manages Eaton's logistics, provides an annual emission report for in-bound truck, air, and small package shipments in North America. The ration between Eaton's North American sales and total sales is applied to extrapolate additional emissions associated with global shipments. An additional correction factor is then applied to the total to account for shipments otherwise not included in the data set.

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

35

### Explanation

North American shipments via FedEx represent 50 percent of shipments. Eaton also adds a 15% correction factor for missing data leaving 35 percent of the data coming from our supplier. Calculated upstream transportation and distribution emissions represent less than 1 percent of our total emissions and are not relevant.

## Waste generated in operations

### Evaluation status

Not relevant, calculated

### Metric tonnes CO2e

8975.83

### Emissions calculation methodology

Eaton uses MESH database data on total annual waste disposal at Eaton facilities. The data is apportioned to landfilled and incineration waste categories based on waste stream characterization study ratios These waste category quantities are multiplied by emission factors sourced form the US EPA WARM model.

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

0

### Explanation

Calculated waste emissions represent less than 1 percent of our total emissions impact and are not relevant.

## Business travel

### Evaluation status

Not relevant, calculated

### Metric tonnes CO2e

46416.35

### Emissions calculation methodology

Eaton's travel coordinators, BCD Travel and Egencia, provide reports identifying annual emissions from Eaton employee air travel which are summed together. A de minimis estimate of non-air travel emissions, calculated from spend obtained from the Concur database, is added to the air travel emissions to quantify total emissions from business travel.

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

69

### Explanation

We calculated our air travel emissions from 2 suppliers, which accounts for 69 percent of the data used to calculate business travel. Ground travel is calculated using internal data and represents 31 percent of data used to calculate business travel emissions. Calculated business travel represents less than 1 percent of our total emissions impact and are not relevant.

## Employee commuting

### Evaluation status

Not relevant, calculated

### Metric tonnes CO2e

167773.51

### Emissions calculation methodology

Data on regional commuting distances, modes and emission rates are applied relative to Eaton employee totals in those regions to calculate average commuting emissions per employee. This emission factor is multiplied by Eaton's worldwide employee total to estimate total commuting emissions for the entire corporation.

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

0

### Explanation

Calculated employee commute emissions represent less than 1 percent of our total emissions impact and are not relevant.

## Upstream leased assets

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Explanation

All leased assets are accounted for in reported Scope 1 and /or Scope 2 emissions.

## Downstream transportation and distribution

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

263980.23

### Emissions calculation methodology

FedEx, who manages Eaton's logistics provides an annual emissions report for out-bound truck, air and small package shipments in the North American region. The ratio between Eaton's North American sales and total sales is applied to extrapolate additional emissions associated with global shipments. An additional correction factor is then applied to the total to account for shipments otherwise not included in the FedEx dataset.

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

35

### Explanation

North American shipments via FedEx represent 50 percent of shipments. Eaton also adds a 15% correction factor for missing data leaving 35 percent of the data coming from our supplier. Calculated downstream transportation and distribution emissions represent less than 1 percent of our total emissions and are not relevant. Calculated downstream transportation and distribution emissions represent less than 1 percent of our total emissions impact and are not relevant.

## Processing of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Explanation

Eaton does not manufacture products that act as raw materials that require further processing.

## Use of sold products

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

54692611

### Emissions calculation methodology

Eaton product life cycle assessment study data were used to identify the percent of emissions from product life cycle phases including production and use. These ratios are applied to the sum of Eaton's calculated Scope 1, Scope 2 and Scope 3 Category 1-3 upstream emissions (i.e. the production phase) to extrapolate the use emissions from Eaton's manufactured products. In addition, these product use emissions are adjusted by a direct energy use factor determined from the energy consumption characteristics of Eaton's top product lines.

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

0

### Explanation

Using the data from life cycle assessments Eaton has completed the average emissions contribution from use of Eaton products is about 87%, while manufacturing and material use account for 11.5%. Eaton's Scope 1 and 2 emissions, added to the calculated Scope 3 purchased goods, capital goods, and category 3 emissions, are extrapolated from 11.5% to 87% to estimate annual use impact.

## End of life treatment of sold products

### Evaluation status

Not relevant, calculated

### Metric tonnes CO2e

26858.88

### Emissions calculation methodology

Eaton product life cycle assessment study data were used to identify the percent of emissions from product life cycle phases including production and end-of-life. These ratios are applied to the sum of Eaton's calculated Scope1, Scope 2 and Scope 3 Category 1-3 emissions (i.e. the production phase) to extrapolate the end-of-life emissions from Eaton's manufactured products. In addition, these product end-of-life emissions are adjusted by an end-of-life-treatment factor determined from Eaton's top product lines.

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

0

### Explanation

Calculated end-of-life emissions represent less than 1 percent of our total emissions impact and are not relevant.

## Downstream leased assets

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Explanation

Eaton does not lease company-owned assets to customers.

## Franchises

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Explanation

Eaton sells products directly to customers without the use of a franchise network.

## Investments

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Explanation

Eaton is not a private or public financial institution with investments not accounted for in Scope 1 and/or Scope 2 emissions.

**Other (upstream)**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

**Explanation**

No additional upstream Scope 3 categories apply.

**Other (downstream)**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

**Explanation**

No additional downstream Scope 3 categories apply.

**C6.7**

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

No

**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**

0.00005086

**Metric numerator (Gross global combined Scope 1 and 2 emissions)**

1099044.17

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

21609000000

**Scope 2 figure used**

Market-based

**% change from previous year**

11

**Direction of change**

Decreased

**Reason for change**

Our overall emissions intensity is being reduced because we are actively pursuing energy efficiency and renewable energy projects to decrease greenhouse gas emissions. In 2018 our emissions reduction efforts included the following: 1) Improving the energy efficiency of our buildings and manufacturing processes and emphasizing energy conservation by employees. Improvements included compressed air system maintenance, boiler upgrades, lighting retrofits, HVAC replacements, installation of more efficient motors, drives and pumps and process improvements. 2) Using distributed energy generation at our sites: two of our manufacturing sites have solar arrays, which produced 9.2 million kWh of renewable energy in 2018; three of our sites have microgrids incorporating solar photovoltaics; and purchasing renewable energy from energy providers.

**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	247425	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	59	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	218	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	11549	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	33431	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify (R1348)	809.7	IPCC Fifth Assessment Report (AR5 – 100 year)

**C7.2**

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Asia Pacific (or JAPA)	22349.62
Europe, Middle East and Africa (EMEA)	69095.04
North America	192903.76
South America	9142.4

**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)
Aerospace	23527.88
Electrical Americas	122507.74
Electrical APAC	7445.45
Electrical EMEA	18867.35
Hydraulics	54730.67
Vehicle	64330.25
Corporate	2082.49

**C7.5**

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Asia Pacific (or JAPA)	160405.54	159640.96	257871.42	0
Europe, Middle East and Africa (EMEA)	183559.95	173557.95	339711.7	42962.8
North America	520901.53	458718.53	1066546.32	3083.23
South America	20553.77	13635.38	150556.09	3

**C7.6**

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

By business division

## C7.6a

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

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Aerospace	51583.21	39346.21
Electrical Americas	246486.36	224253.36
Electrical APAC	48889.66	48889.66
Electrical EMEA	41908.09	30844.09
Hydraulics	174623.75	151926.75
Vehicle	309996.53	303614.53
Corporate	11908.21	6677.21

## C7.9

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**(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

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	19156	Decreased	1.6	We increased our renewable energy consumption by 7,609 MWH to a total of 46,049 MW compared to 2017 usage. Our average emission factor for purchased electricity is .416 MT CO2e/MWH. Therefore we calculate avoided emissions to be 19,156.38 MTco2e which represents 1.6% of the 5.2% reduction over 2017 Market-Based Totals. Change in Scope 1 and 2 emissions attributed to renewable energy consumption account for 19,156 MT Co2e divided by 2017 GHG total of 11,65,271.345 MT CO2e = 1.6%.
Other emissions reduction activities	1579	Decreased	0.14	We implemented energy efficiency projects in 2018 that reduced 8,228 MT Co2e, a greater reduction than in 2017 by 1,579 MT Co2e. This reduction resulted in a .14% of the 5.2% reduction over 2017 Market-based totals. Change in Scope 1 and 2 emissions attributed to other emissions activity, primarily energy efficiency, account for 1,579 MT Co2e divided by 2017 GHG total of 11,65,271.345 MT CO2e = .14%.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other	11950	Decreased	3.46	The remainder 3.46% improvement (11,950 MT Co2e) can be attributed to several updates to our greenhouse gas inventory. In 2018 we expanded our reporting boundary, began tracking additional stationary and mobile scope 1 fuels. At the same time, we recalculated our baseline and moved to market-based emissions factors as the method by which we track our long-term progress toward our goals. As such, we have significantly improved our collection of market-based emissions factors specific to contracts, local utilities and renewable energy procurement. These changes along with energy efficiency, renewable energy, greening of the grid in general account for the remainder of our reduction. Change in Scope 1 and 2 emissions attributed to other reasons account for 11,950 MT Co2e divided by 2017 GHG total of 11,65,271.345 MT CO2e = 3.46%.

**C7.9b**

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

Market-based

**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 undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

## 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 MWh
Consumption of fuel (excluding feedstock)	Unable to confirm heating value	0	1087119.43	1087119.43
Consumption of purchased or acquired electricity	<Not Applicable>	46049.03	1814685.24	1860734.27
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	46049.03	2901804.68	2947853.71

## C8.2b

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

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

## C8.2c

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

#### Fuels (excluding feedstocks)

Diesel

#### Heating value

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

22346.41

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

&lt;Not Applicable&gt;

**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**

0

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

&lt;Not Applicable&gt;

**Comment**

Diesel MWh data represents stationary and mobile sources using heating value weighted averages for stationary and mobile respectively. We don't track diesel use for self-generation of heat, self-generation of steam or self-generation of cooling at the corporate level. Therefore it is unknown what portion is used for heating, cooling or steam generation respectively.

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**Fuels (excluding feedstocks)**

Motor Gasoline

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

2945.23

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

&lt;Not Applicable&gt;

**MWh fuel consumed for self-generation of heat****MWh fuel consumed for self-generation of steam****MWh fuel consumed for self-generation of cooling****MWh fuel consumed for self-cogeneration or self-trigeneration**

&lt;Not Applicable&gt;

**Comment**

Gasoline MWh represents stationary and mobile sources using heating value weighted averages for stationary and mobile respectively. We don't track gasoline use for self-generation of heat, self-generation of steam or self-generation of cooling at the corporate level. Therefore it is unknown what portion is used for heating, cooling or steam generation respectively.

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**Fuels (excluding feedstocks)**

Propane Liquid

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

58730.72

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

&lt;Not Applicable&gt;

**MWh fuel consumed for self-generation of heat****MWh fuel consumed for self-generation of steam****MWh fuel consumed for self-generation of cooling****MWh fuel consumed for self-cogeneration or self-trigeneration**

&lt;Not Applicable&gt;

**Comment**

Propane/LPG MWh data represents stationary and mobile sources using heating value weighted averages for stationary and mobile respectively. We don't track Propane/LPG use for self-generation of heat, self-generation of steam or self-generation of cooling at the corporate level. Therefore it is unknown what portion is used for heating, cooling or steam generation respectively.

---

**Fuels (excluding feedstocks)**

Butane

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

2.79

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

<Not Applicable>

**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**

0

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

<Not Applicable>

**Comment**

Butane MWh data represents stationary sources using heating value weighted averages. We don't track Butane use for self-generation of heat, self-generation of steam or self-generation of cooling at the corporate level. Therefore it is unknown what portion is used for heating, cooling or steam generation respectively.

---

**Fuels (excluding feedstocks)**

Other, please specify (Methanol)

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

2091.86

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

<Not Applicable>

**MWh fuel consumed for self-generation of heat****MWh fuel consumed for self-generation of steam****MWh fuel consumed for self-generation of cooling****MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

Methanol MWh data represents stationary sources using heating value weighted averages. We don't track Methanol use for self-generation of heat, self-generation of steam or self-generation of cooling at the corporate level. Therefore it is unknown what portion is used for heating, cooling or steam generation respectively.

---

**Fuels (excluding feedstocks)**

Kerosene

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

421.97

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

<Not Applicable>

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

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

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

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

<Not Applicable>

**Comment**

Kerosene MWh data represents stationary sources using heating value weighted averages. We don't track kerosene use for self-generation of heat, self-generation of steam or self-generation of cooling at the corporate level. Therefore it is unknown what portion is used for heating, cooling or steam generation respectively.

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**Fuels (excluding feedstocks)**

Natural Gas

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

1000580.43

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

<Not Applicable>

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

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

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

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

<Not Applicable>

**Comment**

We don't track natural gas use for self-generation of heat, self-generation of steam or self-generation of cooling at the corporate level. Therefore it is unknown what portion is used for heating, cooling or steam generation respectively.

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**C8.2d**

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**(C8.2d) List the average emission factors of the fuels reported in C8.2c.**

**Butane**

**Emission factor**

0.00177

**Unit**

metric tons CO2 per liter

**Emission factor source**

Butane Global Warming Potential (GWP) obtained from IPCC Fifth Assessment Report.

**Comment**

## Diesel

### Emission factor

0.00274

### Unit

metric tons CO<sub>2</sub>e per liter

### Emission factor source

Diesel Global Warming Potential (GWP) obtained from IPCC Fifth Assessment Report.

### Comment

## Kerosene

### Emission factor

0.00269

### Unit

metric tons CO<sub>2</sub> per liter

### Emission factor source

Kerosene Global Warming Potential (GWP) obtained from IPCC Fifth Assessment Report.

### Comment

## Motor Gasoline

### Emission factor

0.00878

### Unit

metric tons CO<sub>2</sub>e per liter

### Emission factor source

Gasoline Global Warming Potential (GWP) obtained from IPCC Fifth Assessment Report.

### Comment

## Natural Gas

### Emission factor

0.18

### Unit

metric tons CO<sub>2</sub>e per MWh

### Emission factor source

For all locations we use natural gas emissions factors published by The Climate Registry.

### Comment

## Propane Liquid

### Emission factor

0.00151

### Unit

metric tons CO<sub>2</sub>e per liter

### Emission factor source

Propane Global Warming Potential (GWP) obtained from IPCC Fifth Assessment Report.

### Comment

## Other

### Emission factor

0.00084

### Unit

metric tons CO2 per liter

### Emission factor source

Methanol Global Warming Potential (GMP) obtained from IPCC Fourth Assessment Report.

### Comment

## C8.2f

---

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

### Basis for applying a low-carbon emission factor

Power Purchase Agreement (PPA) with energy attribute certificates

### Low-carbon technology type

Solar PV

### Region of consumption of low-carbon electricity, heat, steam or cooling

Africa

### MWh consumed associated with low-carbon electricity, heat, steam or cooling

280.47

### Emission factor (in units of metric tons CO2e per MWh)

0

### Comment

We have one site in South Africa with a PPA with EACs. We track renewable energy consumption and where Eaton has the rights to claim a lower emission factor. We consider low-carbon emissions factors to be energy with a zero emissions factor and where we have a green power purchase with EACs, RECs, Guarantee of Origin or other contractual rights to the renewable energy. We are not reporting instances as low-carbon where we have a zero market-based emissions factors resulting from grid mix renewables such as nuclear or hydropower sourced electricity with zero or low emissions factors.

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### Basis for applying a low-carbon emission factor

Contract with suppliers or utilities ( e.g. green tariff), supported by energy attribute certificates

### Low-carbon technology type

Solar PV

Wind

### Region of consumption of low-carbon electricity, heat, steam or cooling

Other, please specify (Europe, Middle East and Africa)

### MWh consumed associated with low-carbon electricity, heat, steam or cooling

42682.33

### Emission factor (in units of metric tons CO2e per MWh)

0

### Comment

We have 30 sites in EMEA with contracted wind and solar energy supplies supported by EACs. We track renewable energy consumption and where Eaton has the rights to claim a lower emission factor. We consider low-carbon emissions factors to be energy with a zero emissions factor and where we have a green power purchase with EACs, RECs, Guarantee of Origin or other contractual rights to the renewable energy. We are not reporting instances as low-carbon where we have a zero market-based emissions factors resulting from grid mix renewables such as nuclear or hydropower sourced electricity with zero or low emissions factors.

---

### Basis for applying a low-carbon emission factor

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Power Purchase Agreement (PPA) with energy attribute certificates

**Low-carbon technology type**

Solar PV  
Wind

**Region of consumption of low-carbon electricity, heat, steam or cooling**

North America

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**

3086.23

**Emission factor (in units of metric tons CO2e per MWh)**

0

**Comment**

We have five sites in North America with PPAs for wind and solar energy with EACs. We track renewable energy consumption and where Eaton has the rights to claim a lower emission factor. We consider low-carbon emissions factors to be energy with a zero emissions factor and where we have a green power purchase with EACs, RECs, Guarantee of Origin or other contractual rights to the renewable energy. We are not reporting instances as low-carbon where we have a zero market-based emissions factors resulting from grid mix renewables such as nuclear or hydropower sourced electricity with zero or low emissions factors.

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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**

25498

**Metric numerator**

Metric Tons

**Metric denominator (intensity metric only)**

Sales

**% change from previous year**

8.8

**Direction of change**

Decreased

**Please explain**

Indexed to sales, our waste to landfill, which includes waste incinerated without heat recovery, decreased by 8.8% in 2018 compared to 2017. On an absolute basis, we decreased our waste generation by 3.4 percent (from 26,402 metric tons in 2017 to 25,498 metric tons in 2018), a total decrease of 904 metric tons.

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C10. Verification

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C10.1

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**(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 and/or Scope 2 emissions and attach the relevant statements.**

**Scope**

Scope 1

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

Verification Statement\_Eaton RY2018 Scope 1\_2 GHG\_final.pdf

**Page/ section reference**

Pages 1-3.

**Relevant standard**

ISO14064-3

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

100

Verification Statement\_Eaton RY2018 Scope 1\_2 GHG\_final.pdf

**Scope**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

Verification Statement\_Eaton RY2018 Scope 1\_2 GHG\_final.pdf

**Page/ section reference**

Pages 1-3.

**Relevant standard**

ISO14064-3

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

100

Verification Statement\_Eaton RY2018 Scope 1\_2 GHG\_final.pdf

**Scope**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

Verification Statement\_Eaton RY2018 Scope 1\_2 GHG\_final.pdf

**Page/ section reference**

Pages 1-3.

**Relevant standard**

ISO14064-3

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

100

Verification Statement\_Eaton RY2018 Scope 1\_2 GHG\_final.pdf

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**C10.1b**

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

**Scope**

Scope 3- all relevant categories

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Attach the statement**

Eaton RY2018 Scope 3 Verification Statement\_final.pdf

**Page/section reference**

Pages 1-3.

**Relevant standard**

ISO14064-3

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**C10.2**

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**(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**

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**(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	Other, please specify (Zero Waste Certification Verification)	Eaton defines a Zero Waste to Landfill facility as: • Consistently achieving a landfill waste diversion rate of 98% for three consecutive months; • An Eaton plant that manages waste in a beneficial manner so that all wastes are recycled, reclaimed or reused; • An Eaton plant in which incinerated wastes yield positive energy; i.e. excess heat is recovered, and the heat balance is positive (note that incineration should only be considered after the previous methods of recycling, reclamation, and reuse have been implemented or are unavailable).	A 3rd party verifier uses a sample-based approach to ensure that sufficient and appropriate evidence is collected and reviewed by the verification team to assess the methodology and procedures that formed the Zero Waste to Landfill claim made by the facility and to disclose any material discrepancies that may exist. The verifier follows a three-phase approach for conducting environmental audits.

**C11. Carbon pricing**

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**C11.1**

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

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

**C11.2**

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

No

**C11.3**

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

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

**C12. Engagement**

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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

Yes, other partners in the value chain

**C12.1a**

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

**Type of engagement**

Information collection (understanding supplier behavior)

**Details of engagement**

Collect climate change and carbon information at least annually from suppliers

**% of suppliers by number**

0.01

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

21

**% Scope 3 emissions as reported in C6.5**

100

**Rationale for the coverage of your engagement**

As a component of our supplier engagement methods (including Eaton's Supplier Code of Conduct and Terms and Conditions requirements) across all 49,000+ of Eaton's Tier suppliers, Eaton directly engaged 153 strategic suppliers representing 21% of total spend via the CDP Supply Chain program. As part of Eaton's annual participation in CDP's Supply Chain Program, these suppliers are chosen based on a number of risk-based criteria including spend, GHG intensity of the supplied products, and preferred or long-term supplier partner designation. Certain of the suppliers' provided emission data is used as inputs in Eaton's calculation of relevant scope 3 emissions categories

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

Eaton directly engaged 153 strategic suppliers representing 21% of total spend via the CDP Supply Chain program. Certain of the suppliers provided emission data is used as inputs in Eaton's calculation of relevant scope 3 emissions categories. In addition to monitoring supplier response rates against internal targets (Eaton achieved prior year supplier response rate of 85%, well above the average CDP Climate Supply Chain disclosure rate of 47%). Eaton also undertakes analysis of supplier responses and tracks and proactively supports supplier improvements in both disclosure and corresponding greenhouse gas and climate change, management, risk and opportunity actions. For example, 68% of responding suppliers disclosed active emission reduction targets and 76% disclosed active emission reduction initiatives.

**Comment**

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**Type of engagement**

Compliance & onboarding

**Details of engagement**

Included climate change in supplier selection / management mechanism

Code of conduct featuring climate change KPIs

Climate change is integrated into supplier evaluation processes

**% of suppliers by number**

100

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

100

**% Scope 3 emissions as reported in C6.5**

100

**Rationale for the coverage of your engagement**

All 49,000+ Eaton suppliers are engaged and required, through Eaton's Supplier Code of Conduct and relevant Terms and Conditions, to minimize environmental pollution and make continuous improvements to reduce or eliminate solid waste, wastewater and air emissions, including greenhouse gases, by implementing appropriate conservation measures in their production, maintenance, and facility processes

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

In addition to holding all suppliers accountable to the requirements in Eaton's Code of Conduct and Terms and Conditions via both standard terms acceptance tracking as well as tracking of supplemental acceptance affirmations of Eaton's Code of Conduct, select strategic suppliers are also included in a performance scorecard and risk management program, through which key sustainability metrics (including CDP disclosure) are evaluated. CDP disclosure and performance criteria is also a critical metric for relevant suppliers to be considered for Eaton's supplier awards.

**Comment**

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## C12.1b

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

#### Type of engagement

Education/information sharing

#### Details of engagement

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

#### % of customers by number

#### % Scope 3 emissions as reported in C6.5

1

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

Eaton has identified climate change as a major trend that will affect the way we do business for the foreseeable future. Influenced by climate change, our customers need new technologies to reduce their use of energy and improve their own carbon footprints. For Eaton's Electrical business, our customers are selected based on their interest in innovative solutions to their power quality needs and their interest in improving energy efficiency while reducing their impact on the environment. Each year, we interact with approximately 15,000 customers, visitors, government officials, and other stakeholders at our Electrical business Experience Centers in Pittsburgh and Houston. Much of the focus is on energy efficient buildings, including the use of Eaton's products, such as variable frequency motor drives, efficient lighting, micro-grids, renewable energy sources, energy efficient transformers and other equipment. The Houston facility includes a functioning microgrid demonstration. There is a 24-kW solar canopy in the parking lot, 86 panels on the roof, 30 kWh in battery storage and a 100-kW generator, all of which are controlled by Eaton's Power Xpert Energy Optimizer controller. The intersection of all those assets and optimizing their usage is at the core of advancing energy resiliency, so that Eaton's Experience Center can operate even when the local utility grid may be impacted by an outage.

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

At our Houston Experience Center, we interacted with approx. 8,000 customers and 2,000 visitors including, government officials, universities and other stakeholders. We impact customers in the following ways:

- o Personal hands-on/eyes-on training of actual equipment/products in real world applications on energy related subjects at our world-class facilities
- o Educational training via recorded videos related to energy savings and energy saving devices that Eaton makes (drives, transformers, etc). This also includes significant training on false energy savings (what to watch out for from others selling false energy savings). We have about 100 educational videos on electrical systems and many of these focus on energy efficient solutions.
- o On-site training and support of training with our demonstrations at conferences including IEEE, AEE and others.
- o IBEW training – every year, we train more than 500 IBEW electricians and electrical contractors at our Experience Centers. This includes educational programs on the use of Eaton energy efficient products as well as energy efficient "system" designs. Our partnership with this national organization helps to amplify our presence in the marketplace and gives us a platform to help spread the word about energy efficient solutions and GHG reduction.
- o We follow-up with our visitors and others by communicating topics such as climate change, energy efficiency and renewables via our active use of social media channels including Linked-In and Twitter.

Measures of success: Number of customers engaged. In 2018 we engaged about 8,000 customers and 2,000 visitors including government officials, universities, and others. This represents full capacity and a very successful year for Eaton's Houston Experience Center.

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## C12.1c

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

Across all of Eaton's businesses and geographic locations, the company strives to create a workplace in which sustainability is a mindset at every level of our operations. We include employees in our value chain. Eaton actively seeks to increase awareness and voluntary participation by its employees in green initiatives such as recycling, waste reduction, green technology adoption, and energy efficiency and climate change awareness and impact reduction. As an example, this focus is a major driver in the participation of many locations in activities such as Bike to Work initiatives, which aim to help Eaton employees make healthy transportation choices that also improve our environment and reduce our collective carbon footprints. Sustainability information is communicated to employees through Eaton's internal web site called "JOE"; blogs such as EHS News which reports sustainability information such as emissions targets and goals around the globe; Twitter, and other communications.

### C12.3

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

- Direct engagement with policy makers
- Trade associations

### C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (CAFE regulations)	Support	Eaton endorses the EPA's original Corporate Average Fuel Economy (CAFÉ) and GHG standards for automotive passenger vehicles which mandate that vehicle fleets achieve an average of 54.5 mpg by 2025, thereby reducing fuel use and carbon emissions. However, CAFÉ standards could be significantly relaxed or frozen under the Trump administration and would make it harder for the U.S. to avoid a two-degree-Celsius global warming scenario as per the Paris Agreement. We also believe the weaker standards could lower demand for Eaton's fuel-saving and emissions-reducing products. For example, the Eaton Supercharger has been improving engine performance since 1985. Five generations later, the TVS® (Twin Vortices Series®) was a revolutionary design that provides a 12% efficiency improvement, which saves fuel and reduces GHG emissions. Eaton also supports the current US EPA phase two of the CAFE and GHG rule for commercial trucks that will set standards for 2018 thru 2025. Our work relates to testing, compliance and incentives to drive adoption of fuel efficient technologies through aggressive GHG and CAFÉ standards. We worked with stakeholders and the agencies to identify technologies that will help OEM's meet the standards with improved performance in the next phase of rulemaking.	Preserve the CAFE standards for automotive passenger vehicles which mandate that vehicle fleets achieve an average of 54.5 mpg by 2025, thereby reducing fuel use and carbon emissions. Also, propose rules in the commercial vehicle segment that drive adoption of fuel efficient technologies, improve performance, and reduce costs for truck fleets. The EPA is reviewing the CAFE standards as part of its ongoing process of setting standards. Eaton submitted comments regarding technologies to meet the standards.

### C12.3b

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

Yes

### C12.3c

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

**Trade association**

National Electrical Manufacturers Association

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

Consistent

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

NEMA strongly supports a climate policy that achieves meaningful greenhouse gas reductions at the lowest practicable costs. NEMA members are leaders in providing demand management and energy-efficient products and technologies to the market. These technologies, if deployed and utilized, lead to far more efficient use of energy sources, be they fossil fuels or others, and, in turn, reduce the amount of greenhouse gases across all sectors of our economy. NEMA's member companies stand committed to incorporating the energy-efficient products and equipment that our members manufacture, all as part of our industry's efforts to reduce GHGs.

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

Eaton has worked with advocates at the State level to promote the adoption of legislation, regulations, codes and standards for energy efficient measures that reduce GHG emissions and facility operational costs. Topic: Eaton supports public policies that encourage schools and public buildings to follow Leadership in Energy and Environmental Design (LEED) practices. We believe that LEED serves as a vital blueprint for building design, construction, operation, and maintenance, providing cost-effective, best practice specifications that ensure that public buildings are using the energy efficient technologies that provide operational savings and reduce emissions. Method: we are working through trade organizations and the government (DOE). Actions advocating: develop rule-making and products/technologies strategies for reasonable LEED practices in public buildings that will help customers meet LEED requirements and evolving carbon emissions regulations. Nature of engagement: meet with legislators; provide information on Eaton's energy efficiency products.

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**C12.3f**

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

Eaton's Executive VP, Eaton Business System (EBS) & Sustainability has major responsibility to ensure that direct and indirect activities are consistent with our overall climate change strategy. As a member of Eaton's Senior Leadership Committee (SLC), the EVP, EBS and Sustainability reports (inter alia) climate related issues on a monthly, quarterly and annual basis. The SLC is the highest level non-Board committee and reports directly to the Board of Directors on major corporate and business issues. Other members of the SLC who are directly involved in policy, legal, strategy and other functions coordinate with the EVP, EBS and Sustainability to ensure a consistent approach on climate change issues both internal and external to our organization. For environmental and safety risks, issues planning, and climate change strategy, Eaton uses MESH (Management of Environment, Safety, Security and Health), a globally deployed, unified system that consolidates all EHS and compliance programs and voluntary action into one integrated management system that conforms to the well-known ISO14001 standard and OHSAS 18001. MESH has three components: Process & Compliance; Culture; and Results. Process & Compliance sets requirements in 34 elements grouped into 10 EHS categories and drives compliance with EHS legal requirements and Eaton's global EHS requirements and voluntary action at the facility. Culture relates to how well each facility drives ownership of EHS management through cross-functional leadership and engagement of all employees. Results component focuses on achieving performance metrics. Targets, objectives, priorities and performance goals are set for each component. Eaton facilities conduct self-assessments each year, and undergo a corporate MESH assessment and OpA assessment led by independent internal teams every three years. Results are reported each year to Business operations leadership; EVP, EBS and Sustainability; and, if necessary, the Board of Directors.

**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

**Status**

Complete

**Attach the document**

eaton-2018-sustainability-report\_FINAL.pdf  
Annual report Capture.PNG

**Page/Section reference**

Eaton GHG emissions listed in chart on pg. 20 in the sustainability section of Eaton's 2018 Annual Report/Sustainability Report .  
Attached: Screen capture of cover of online Eaton 2018 Annual Report/Sustainability Report to Shareholders Attached: The sustainability section of the Eaton 2018 Annual Report/Sustainability Report

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics  
Other, please specify (Other metrics: Water consumption, Zero Waste to Landfill sites, energy consumption, listed on pg. 20. )

**Comment**

Eaton's Annual/Sustainability report is sent to investors and other stakeholders worldwide. Eaton sustainability/GHG strategy is listed on pp. 6,8,12,13,17 Risks & Opportunities: pg. 9-13, 17 Emissions figures: pg. 20 Emissions targets: P. 17 Other metrics: Water consumption, Zero Waste to Landfill sites, energy consumption, listed on pg. 20.

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**C14. Signoff**

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**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.**

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**C14.1**

**(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Chairman and Chief Executive Officer	Chief Executive Officer (CEO)

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**SC. Supply chain module**

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**SC0.0**

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

## SC0.1

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

	Annual Revenue
Row 1	21600000000

## SC0.2

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

Yes

## SC0.2a

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

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	IE	00B8KQN827

## SC1.1

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

**Requesting member**

Alphabet, Inc.

**Scope of emissions**

Scope 1

**Allocation level**

Company wide

**Allocation level detail**

<Not Applicable>

**Emissions in metric tonnes of CO2e**

1657

**Uncertainty (±%)**

**Major sources of emissions**

**Verified**

Yes

**Allocation method**

Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**

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**Requesting member**

Alphabet, Inc.

**Scope of emissions**

Scope 2

**Allocation level**

Company wide

**Allocation level detail**

<Not Applicable>

**Emissions in metric tonnes of CO2e**

5000

**Uncertainty (±%)**

**Major sources of emissions**

Please see information included in earlier responses sections.

**Verified**

Yes

**Allocation method**

Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**

Please see information included in earlier responses sections.

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**SC1.2**

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

<https://www.eaton.com/us/en-us/company/sustainability/climate-action.html> (links to prior year - will be updated)

<https://www.eaton.com/content/dam/eaton/company/sustainability/files/direct-Indirect-emissions.pdf> (links to prior year - will be updated)

**SC1.3**

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

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	Challenge: Being unable to measure where and how energy is used. Generally we do not sub meter our factories. Therefore, it is generally difficult to determine a footprint of a single unit of production. Eaton produces close to eight million products at more than 200 manufacturing facilities worldwide. We have no method of allocating products to a specific facility, then connecting them to one of our thousands of customers. Potential solution: Submetering of plants would overcome this challenge.
Customer base is too large and diverse to accurately track emissions to the customer level	Challenge: Eaton sells over a eight million SKUs to a diversified set of components to our customer base, which are used in a variety of different situations, making it nearly impossible to estimate the impact of our products in use. Potential solution: implementing lifecycle assessment methodology into all new product development to keep a database of downstream emissions, including customer use phase.
Other, please specify (Monitoring for all product deliveries)	Potential solution: Developing a logistic process to measure energy would overcome this challenge.
Other, please specify (Product packaging disposal emissions)	Potential Solution: Developing a package disposal profile would overcome this challenge.

**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.**

In the future Eaton plans to enhance scope 3 emissions tracking. Additional enhancements would include:

- Continue to develop our Life Cycle Assessment (LCA) process to include more products and achieve a better understanding of a product’s GHG impact, including allocation to customers. Establish a process to monitor finished products including transport and packaging waste disposal.
- Eaton Corporation is committed to improving our environmental footprint – not only around our own emissions, energy and water consumption but also by helping our suppliers reduce theirs. We asked our most strategic suppliers to join us in our sustainability efforts by working with our partner CDP and completing the Supplier Questionnaire. Eaton engaged GZA GeoEnvironmental, Inc. as an additional resource to assist our suppliers in responding to the questionnaire offering training and one on one consultation. These suppliers are strategic to our operations representing approximately 20% of Eaton’s total upstream spend on goods and services. Success was measured by the number of respondents and the quality of information submitted. The CDP supply chain results showed Eaton as a leading company in both number of suppliers asked and number accepting our invitation.
- Increase employee awareness and understanding of emissions worldwide to provide support to our programs to reduce our carbon footprint and increase our environmental handprint in our efforts to achieve our aspirational goal of becoming Active Stewards of the Environment.

### SC2.1

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

### SC2.2

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

No

### SC3.1

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**(SC3.1) Do you want to enroll in the 2019-2020 CDP Action Exchange initiative?**

Yes

### SC3.1a

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**(SC3.1a) Identify which member(s), if any, have motivated you to take part in Action Exchange this year.**

Alphabet, Inc.

### SC3.1b

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**(SC3.1b) Select the types of emissions reduction activities that your company would like support in analyzing or in implementing in the next reporting year.**

Energy efficiency: Processes  
Low-carbon energy purchase  
Process emissions reductions

### SC3.1c

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**(SC3.1c) As part of Action Exchange, would you like facility level analysis?**

No

### SC3.2

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**(SC3.2) Is your company a participating supplier in CDP's 2018-2019 Action Exchange initiative?**

No

### SC4.1

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

No, I am not providing data

## Submit your response

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### In which language are you submitting your response?

English

### Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Public	Investors Customers	Yes, submit Supply Chain Questions now

### Please confirm below

I have read and accept the applicable Terms