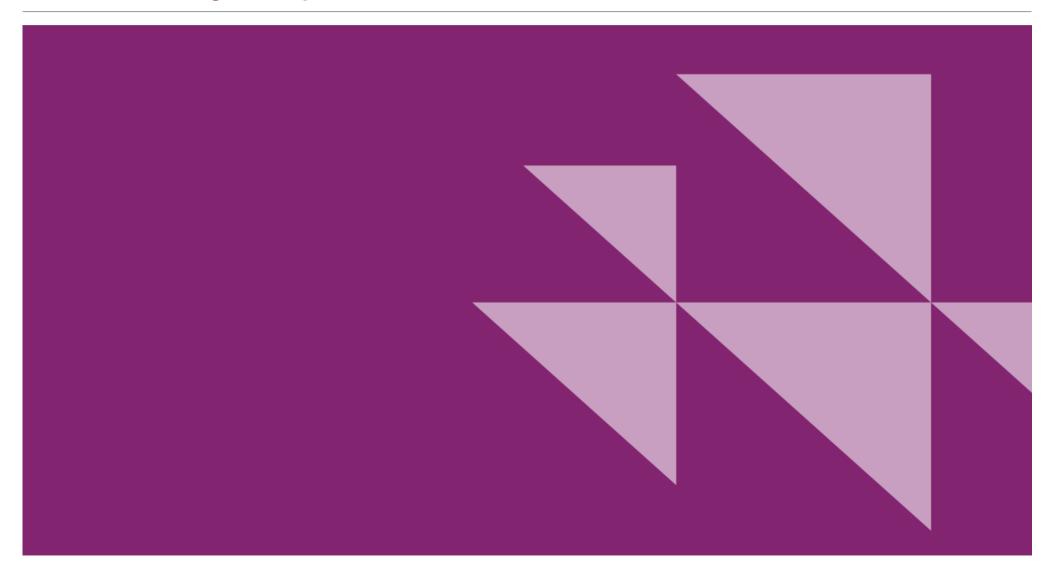


CDP Climate Change 2019 Questionnaire



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CDP Climate Change Questionnaire Preview and Reporting Guidance 2019 - Version Control

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Version number	Release/Revision date	Revision summary
0.1	Released: Dec 17, 2018	The 2019 climate change questionnaire preview and the general preliminary version of the reporting guidance was released.
0.2	Revised: March 14, 2019	The terms for submitting your response to CDP have been updated for 2019
		General questions Question linkages to the TCFD were revised in 'Connection to other frameworks' for C2.2b, C2.2c, C2.3a, C2.4a, C3.1d, C3.1f, C3.1g, C4.1c, C4.2, C6.2, and C9.1 C1.1a: Modifications to 'Requested content': the requirement to "Provide a rationale" removed and replaced with "Explain how the responsibilities" C2.2c: Clarifications to 'Requested content' for "Please explain" column C2.2d: Modifications to 'Requested content' for "Please explain" column C2.3a: Modifications to 'Requested content' for "Management method" column C2.4a: Modifications to 'Requested content' for "Strategy to realize opportunity" column C2.5: Modifications to 'Requested content' for "Strategy to realize opportunity" column C2.5: Modifications to 'Rationale' and 'Requested content' C2.6: Modifications to 'Rationale' and 'Requested content' C3.6: Modifications to column headers (columns 4 and 10) C4.1a: Modifications to column headers (columns 4, 8 and 11) C4.1b: Modifications to to the "Note on biogas" C7.3b: Modifications to the "Note on biogas" C7.3b: Modifications to 'Requested content' Agricultural commodities, Food, beverage & tobacco and Paper & forestry sectors C-AC6.6a/C-FB6.6a/CPF6.6a: Clarifications to text in column 1 Cement, Chemicals, Coal, Electric Utilities, Metals & Mining, Oil & Gas, Steel, Transport OEMs and Transport Services sectors C-CCE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4: Clarifications to 'Additional Information' regarding biogas. General questions and all sectors Numeric limits and/or decimal places modified in C2.3a, C2.4a, C4.1b, C4.2, C4.3b, C6.3, C6.10, C-TS6.15, C-OG7.1b, C-TO7.8, C-TO8.4, C-OG9.3b, C-CE9.6, C-CH9.6, C-CO9.6/C-EU9.6/C-OG9.6, C-MM9.6, C-TO9.6/C-TS9.6, C-ST9.6, SCO.1
0.3	Revised: June 5, 2019	General questions C2.1: Modifications to 'Requested content' for long-term time horizon C4.3b: Modifications to 'Requested content' for columns 'Description of initiative', 'Estimated annual CO2e savings (metric tons CO2e)' and 'Scope'
0.4	Revised: July 10, 2019	General question ■ C4.3b: Modification to 'Requested content' for 'Payback period' column.

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CDP disclosure cycle 2019

Accessing questionnaire previews, reporting guidance, and scoring methodologies

CDP's corporate questionnaire previews, reporting guidance, and scoring methodologies can be accessed by program (climate change, forests, and water security) from the guidance for companies page of CDP's website. You will be presented with three prompt screens that allow you to select the sectors and other details relevant to your organization. Questionnaires are valid for information requests from investors, as well as from customers that are members of CDP's supply chain program. As there are sector-specific questions throughout the questionnaires, you might find that question numbers skip since not all questions will be applicable to your organization.

Responses to questionnaires are submitted via CDP's online response system (ORS), which is part of CDP's online disclosure platform. Please refer to the contract of the contr

Full and Minimum versions of the questionnaire

For all CDP questionnaires, there are two versions: minimum and full. The minimum version contains identical but fewer questions, and no sector-specific questions or data points.

- The minimum version of a questionnaire can by completed by:
 - Organizations disclosing to that questionnaire for the first time; OR
 - Organizations not disclosing to that questionnaire for the first time, but with an annual revenue of less than EUR/US\$250 million

Although any organizations meeting the above criteria may opt to complete a minimum version, they may not be eligible for scoring.

For more information on scoring eligibility and implications, please seeScoring Introduction.

For previous responders with an annual revenue of less than EUR/US\$250 million, CDP reserves the right to remove the option of a minimum version questionnaire due to the organization's potential or existing environmental impact.

Note that companies eligible to complete the minimum version of a questionnaire can choose to answer the full version if they consider this to provide greater benefit to their organization or stakeholders.

Timeline:

December 2018	Preview of questionnaires and preliminary version of reporting guidance released on CDP website.
March 2019	Final version of reporting guidance and scoring methodologies released on CDP website.
April 2019	• Access will be provided to CDP's online response system (ORS).
July 2019	Responses to investor and supply chain requests must be submitted by 31st July 2019 to be automatically eligible for scoring and inclusion in CDP reports (where applicable).

For any disclosure-related enquiries, please contact respond@cdp.net.

CDP climate change questionnaire

Introduction to CDP's climate change program and questionnaire

CDP works to reduce companies' greenhouse gas emissions and mitigate climate change risk.

The 2015 Paris Agreement was a tipping point in the global approach to climate change. By agreeing to limit global temperature rises to well below 2°C, governments have committed to transforming to a low-carbon economy. This transition will create winners and losers within and across business sectors, as the manifestation of climate-related opportunities and risks accelerates in both size and scope. Business as usual will not be a good indicator of how companies will perform.

We believe that improving corporate awareness through measurement and disclosure is essential to the effective management of carbon and climate change risk. We request information on climate risks and low-carbon opportunities from the world's largest companies on behalf of over 525 institutional investor signatories with a combined US\$96 trillion in assets.

Regulators have begun to respond to the risks, notably with the Task Force on Climate-related Financial Disclosures (TCFD). Established by the Financial Stability Board, the TCFD has moved the climate disclosure agenda forward by emphasizing the link between climate-related risk and financial stability. The Task Force has recommended that both companies and investors disclose climate change information. This includes whether they are conducting scenario analysis in line with a 2-degree pathway and then setting out how climate-related issues impact their strategy and financial planning. This amplifies the longstanding call from CDP's investor signatories for companies to disclose comprehensive, comparable environmental data in their mainstream reports, driving climate-related risk management further into the boardroom.

Commit to Action

CDP and its partners in the We Mean Business coalition have created a central platform for companies to take action on key climate issues, with hundreds of companies from every economic sector and geography taking action to date. The We Mean Business "Take Action" platform gives companies a clear pathway for building the Paris Agreement into their business strategies and to future-proof growth, giving policy makers the confidence in raising their ambitions as governments prepare to ratchet up their national pledges in 2020.

Companies who have made commitments through We Mean Business can track progress against them via CDP's annual disclosure requests.

For example - Report on your commitment to adopt a science-based emissions reduction target by answering to C4.1 and C4.2 sub-questions in detail.

For more specific information on each commitment and how companies can report on their progress in the relevant sections of the CDP's questionnaires, please refer to the commitment and how companies can report on their progress in the relevant sections of the CDP's questionnaires, please refer to the commitment and how companies can report on their progress in the relevant sections of the CDP's questionnaires, please refer to the commitment and how companies can report on their progress in the relevant sections of the CDP's questionnaires, please refer to the commitment and how companies can report on their progress in the relevant sections of the CDP's questionnaires, please refer to the commitment and how companies can report on their progress in the relevant sections of the CDP's questionnaires, please refer to the commitment and how companies can report on their progress in the relevant sections of the CDP's questionnaires, please refer to the commitment and the c

Climate change questionnaire developments

The CDP climate change questionnaire was redesigned in 2018 in response to market needs and the following developments were included:

- Integration of sector-specific questions
- Inclusion of the TCFD recommendations
- Increased emphasis on forward-looking metrics and improved alignment with other reporting frameworks

Sector approach

For climate change, CDP has incorporated sector-specific questions for 12 high-impact sectors. The rationale for developing a refined questionnaire for each of these sectors is outlined in the relevant sector introduction. Companies with business activities outside of these sectors will receive a general questionnaire, as in previous years.

Each question number in the climate change questionnaire begins with the letter C. Questions that are unique to companies in a particular sector are labelled using a two-letter abbreviation within the question number. These abbreviations are noted below.

2019 climate change sectors:

- Agriculture: Agriculture commodities (AC); Food, beverage & tobacco (FB); Paper & forestry (PF)
- Energy: Coal (CO); Electric utilities (EU); Oil & gas (OG)
- Materials: Cement (CE); Chemicals (CH); Metals & mining (MM); Steel (ST)
- Transport: Transport services (TS); Transport OEMs (TO)

Note for financial services sector companies:

Financial institutions can play a pivotal role in accelerating the transition to a low-carbon future. The TCFD recommendations highlight the importance of climate-related financial disclosures by this sector to enable stakeholders to better understand the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks. The supplemental guidance provided by the Task Force focuses on the importance of considering the impacts of climate-related issues in the context of their financial activities such as lending, financial intermediary, investment and/or insurance underwriting activities.

Financial services sector companies should respond to the CDP climate change questionnaire in the context of these activities, in addition to operational activities. Where necessary, specific guidance has been included to clarify the type of information banks, insurance companies and asset managers should consider in their response. For further information, a Technical Note on Financial Services will be made available.

Questionnaire changes in 2019

The questionnaire is stabilized for 2019 so there are no major changes. There are some minor revisions to reflect feedback and a correction of errors. There are no new sectors questions. Revisions and changes are indicated within the questionnaire as: "no change", "minor change" or "modified question". "Minor change" indicates wording edits and revisions to drop-down options or a simple clarification, while a "modified question" indicates that a data request has been revised.

A detailed document on climate change question changes from 2018 to 2019 is available on the CDP website.

Sector introduction: Agricultural commodities (Climate)

The agricultural commodities sector is part of CDP's agricultural cluster. For climate change, this cluster includes companies in the agricultural commodities (AC), food, beverage, & tobacco (FBT) and paper & forestry sectors.

Activities in the AC sector include producing and processing raw materials (crops and/or livestock) that will be used as raw ingredients in the manufacturing, packaging, and marketing of food, drinks, and tobacco consumer goods in the FBT sector. Note that the small-scale production of non-timber forest products (e.g., rubber, nuts, seeds, etc.) is also included in this sector. Given the prevalence of direct land activities, the AC sector is fundamentally dependent on natural resources, and thus, directly affected by climate change.

Risks associated with the AC sector are deforestation and forest degradation risks and farm management practices (related to land use; the use of fertilizers, pesticides and manure; irrigation, harvesting and soil management practices; as well as livestock management and animal waste).

This sector questionnaire is based on the questions from CDP's previous climate change FBT module. The value chain approach has been maintained, given the large emissions risks associated with the entire value chain for this cluster. All questions are shared across agricultural sectors as business activity areas overlap, and organizations may specify their relevant business activity area.

CDP's agricultural commodities questionnaire has sector-specific questions on the following topics:

- Scope 1 emissions breakdown by commodities those which are associated with large GHG emissions or with high risks to the business;
- Emissions intensity data associated with commodities; and
- Scope 1 and 3 emissions can be disclosed by the business activities[1] relevant to each organization, to provide a better understanding of the activity areas with the highest risks for the business.

^[1] The value chain here was divided as follows: agriculture, processing/manufacturing (including packaging of food, beverage and tobacco products), distribution, consumption.

Sector introduction: Cement (Climate)

The cement sector is part of CDP's materials cluster. For the climate change program, this cluster includes companies operating in the cement, chemicals, metals and mining, and steel industries.

Producing cement is an energy intensive process. Most of the GHG emissions for cement production originate in the combustion of fossil fuels for the required heating of key ingredients to about 1450°C in massive cement kilns. In addition, significant CO2 emissions are released as process emissions during production. Increasing energy efficiency, fuel switching, reducing clinker content, and moving to more efficient dry process kilns with pre-calciner and pre-heating technologies are key ways the cement industry can reduce its emissions.

The climate change cement sector questionnaire is based on questions from other frameworks and research relevant to this sector, including CDP's investor reports. Many questions across the materials sector overlap, and where possible, align with external frameworks.

CDP's cement questionnaire has sector-specific questions on the following topics:

- Low-carbon transition plan;
- Scope 1 and Scope 2 emissions breakdowns by sector production activities;
- Energy consumption and generation breakdowns;
- Low-carbon investments;
- Emissions intensities of key industry products.

Sector introduction: Chemicals (Climate)

The chemicals sector is part of CDP's materials cluster. For the climate change program, this cluster includes companies operating in the cement, chemicals, metals and mining, and steel industries.

The chemicals sector is diverse, creating an immense variety of products which can be categorized into the following groups: commodity chemicals, specialty chemicals, life science products, and consumer care products. Most emissions originate from either fossil fuel combustion in production processes or as process chemical emissions. Process redesign, increased heat production efficiency through cogeneration, and fuel-switching are key ways to cut emissions in this sector. Depending on feedstocks used, this sector may have significant upstream emissions, thus feedstock switching from fossil to bio-based fuels may greatly reduce emissions as well.

The climate change chemicals sector questionnaire is based on questions from other frameworks and research relevant to this sector, including CDP's investor reports. Many questions across the materials sector overlap, and where possible, align with external frameworks.

CDP's chemicals questionnaire has sector-specific questions on the following topics:

- Low-carbon transition plan;
- Scope 1 and Scope 2 emissions breakdowns by sector production activities;
- Energy consumption and generation breakdowns;
- Low-carbon investments;
- Emissions intensities of key industry products;
- Production and capacity of key industry products;
- Scope 3 emissions; and
- Feedstock consumption.

Sector introduction: Coal (Climate)

The coal sector is part of CDP's energy cluster. For the climate change program, this cluster includes companies operating in the coal, electric utilities, and oil & gas industries.

Coal combustion contributes the largest share of the anthropogenic greenhouse gas increase in the atmosphere and dominates power generation globally[1]. Yet coal faces increasing regulatory and market pressures in its downstream use, including competition from natural gas and renewables. As such, direct and use-phase emissions are strategic risks for coal companies.

The climate change coal sector questionnaire is based on questions from other frameworks and research relevant to this sector, including CDP's investor reports. Many questions across the materials sector overlap, and

where possible, align with external frameworks.

CDP's coal guestionnaire has sector-specific questions on the following topics:

- Low-carbon transition plan;
- Scope 1 and Scope 3 emissions data, including methodology and breakdowns;
- Specific targets and performance indicators for the sector.
- Specific methane targets and flaring and methane leak detection and reduction; and
- Additional metrics for the coal industry, including questions on coal reserves and production, as well as investment in low-carbon research and development.

[1] IEA (2017) Tracking Clean Energy Progress 2017

Sector introduction: Electric utilities (Climate)

The electric utilities sector is part of CDP's energy cluster. For the climate change program, this cluster includes companies operating in the coal, electric utilities, and oil & gas industries.

Climate change is a strategic issue for the electric utilities sector, as power generation is the single largest emitter of CQ, accounting for around 25% of global emissions[1]. With the increasing commercialization of renewable energy sources and the advent of decentralized power production, the electric utilities sector has the key potential to undergo a transition to low-carbon energy sources.[2]

The climate change electric utilities sector questionnaire is based on questions from CDP's previous climate change electric utilities module. Questions are also based on other frameworks and research relevant to this sector, including CDP's ACT pilot project which focused on this industry. Many questions across the energy sector overlap, and where possible, align with external frameworks.

CDP's electric utilities questionnaire has sector-specific questions on the following topics:

- Low carbon transition plan:
- Power generation capacity;
- Global transmission and distribution business:
- CAPEX plans for power generation and products and services; and
- Investments in low carbon research and development, equipment, products and services.

[1] IPCC, 2014; Climate Change 2014; Synthesis Report, Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change

[2] IIGCC (2016) Investor Expectations of Electric Utility Companies: Looking down the line at carbon asset risk

Sector introduction: Food, beverage & tobacco (Climate)

This sector is part of CDP's agricultural cluster. For climate change, this cluster includes agricultural commodities (AC), food, beverage & tobacco (FBT) and paper & forestry sectors.

Activities in the FBT sector include processing (including packaging), manufacture, and trade of food, drinks and tobacco consumer goods. Organizations in the FBT sector usually source their raw materials from those in the AC sector. For vertically integrated organizations in the FBT sector, CDP has also included the production of agricultural raw materials that are further processed to be used as ingredients for the manufacture of food, beverage or tobacco consumer goods. Note that organizations that use agricultural commodities for the manufacture of personal care and household goods are excluded from the FBT sector.

The FBT sector inherits risks from agricultural activities, such as deforestation and forest degradation risks and those risks associated with farm management practices (related to land use; the use of fertilizers, pesticides

and manure; irrigation, harvesting and soil management practices; livestock management and animal waste); as well as other risks associated with the processing, manufacture, and packaging of food, drinks, and tobacco products, such as CO2 emissions from machinery, storage facilities and transportation. Focusing on the whole value chain to address these risks is highly important for organizations in this sector.

This sector questionnaire is based on the questions from CDP's previous climate change FBT module. The value chain approach has been maintained, given the large emissions risks associated with the entire value chain for this cluster. All questions are shared across agricultural sectors as business activity areas overlap, and organizations may specify their relevant business activity area.

CDP's food, beverage, and tobacco questionnaire has sector-specific questions on the following topics:

- Scope 1 emissions breakdown by commodities those which are associated with large GHGs emissions or with high risks to the business;
- Emissions intensity data associated with commodities; and
- Scope 1 and 3 emissions can be disclosed by the business activities that are relevant to each organization, to provide a better understanding of the activity areas with the highest risks for the business.

Sector introduction: Metals & mining (Climate)

The metals and mining sector is part of CDP's materials cluster. For the climate change program, this cluster includes companies operating in the cement, chemicals, metals and mining, and steel industries.

This sector represents the first stage of the life cycle of a huge range of manufactured products, from nuclear reactors to hand cream. Emissions from this sector occur at mining sites during the combustion of fossil fuels and the processing of materials necessary to transform the Earth's elements into useable industry materials. Metals and mining companies can reduce emissions through increased recycling, increased purchases of renewable and low-carbon electricity, and through generation at production sites, which may be particularly significant in remote mines not connected to a power grid. Fuel switching, and energy efficiency improvements are needed at metal processing facilities.

The climate change metals & mining sector questionnaire is based on questions from other frameworks and research relevant to this sector, including CDP's investor reports. Many questions across the materials sector overlap, and where possible, align with external frameworks.

CDP's metals & mining questionnaire has sector-specific questions on the following topics:

- Low-carbon transition plan;
- Scope 1 and Scope 2 emissions breakdowns by sector production activities;
- Energy consumption and generation breakdowns;
- Low-carbon investments:
- Production and capacity of key commodities; and
- Emission breakdowns of key commodities.

Sector introduction: Oil & gas (Climate)

The oil & gas sector is part of CDP's energy cluster. For the climate change program, this cluster includes companies operating in the coal, electric utilities, and oil & gas industries.

Climate change is a strategic risk for the oil & gas sector[1], whose operational and use phase emissions collectively account for half of global CQ emissions.

The climate change oil & gas sector questionnaire is based on questions from CDP's previous climate change oil and gas module. Questions are also based on other frameworks and research relevant to this sector, including CDP's investor reports. Many questions across the energy sector overlap, and where possible, align with external frameworks.

CDP's oil & gas questionnaire has sector-specific questions on the following topics:

- Low-carbon transition plan;
- Specific targets and performance indicators for the sector, Included in these questions are specific methane targets and several questions on flaring and methane leak detection and reduction:
- Emissions breakdowns by oil and gas business divisions, associated activities, emissions categories, and methane emissions;
- Hydrocarbon reserves, production, refining, and transportation figures;
- Low-carbon investments and capital flexibility; and

• Transfers & sequestration of CO2 emissions.

[1] IIGCC (2016) Investor Expectations of Oil and Gas Companies: Transition to a lower carbon future

Sector introduction: Paper & forestry (Climate)

This sector is part of CDP's agricultural cluster. For climate change, this cluster includes agricultural commodities (AC), food, beverage, & tobacco (FBT) and paper & forestry (PF) sectors.

Activities in the PF sector include the production and/or sourcing of timber and timber-based products. Note that non-timber forest products (NTFPs; e.g., rubber, nuts, seeds, etc.) are excluded, as the production and/or sourcing of these products are generally done at a smaller scale and consumed in local markets. Organizations that produce/source NTFPs are included in our AC sector.

Risks associated with the PF sector extend across the whole value chain and arise from a variety of sources. For example, unsustainable forest management activities, such as illegal logging, burning or other practices can cause deforestation/forest degradation. Another issue includes the sourcing of timber-based products for the manufacture of wooden goods, paper, and packaging. The use of wood as biofuel for facility energy use, downstream and upstream transportation and distribution, and the waste management from plantation/machinery residues are all risk factors.

This sector questionnaire is based on the questions from CDP's previous climate change FBT module. The value chain approach has been maintained, given the large emissions risks associated with the entire value chain for this cluster. All questions are shared across agricultural sectors as business activity areas overlap, and organizations may specify their relevant business activity area.

CDP's paper & forestry questionnaire has sector-specific questions on the following topics:

- Scope 1 emissions breakdown by commodities those which are associated with large GHGs emissions or with high risks to the business;
- Emissions intensity data associated with commodities: and
- Scope 1 and 3 emissions can be disclosed by the business activities that are relevant each organization, to provide a better understanding of the activity areas with the highest risks for the business.

Sector introduction: Steel (Climate)

The steel sector is part of CDP's materials cluster. For the climate change program, this cluster includes companies operating in the cement, chemicals, metals and mining, and steel industries

Steel production is a highly energy-intensive process as it transforms iron ore to steel. This transformation requires significant amounts of heat and coking coal, an emissions-intensive product. Production efficiency is closely tied to furnace type, so replacing less efficient furnaces with electric arc furnaces can greatly reduce emissions. However, electric arc furnaces rely on recycled steel for production, and therefore cannot be utilized without the more emissions-intensive production routes such as the blast furnace to transform the iron ore. Attention to feedstocks, implementing various techniques throughout the production process, installing technologies at plants, and switching to less emissions-intensive fuels will lower production emissions in the steel industry. Recycling steel has been and will continue to significantly reduce emissions.

The climate change steel sector questionnaire is based on questions from other frameworks and research relevant to this sector, including CDP's investor reports. Many questions across the materials sector overlap, and where possible, align with external frameworks.

CDP's steel questionnaire has sector-specific questions on the following topics:

- Low-carbon transition plan;
- Scope 1 and Scope 2 emissions breakdowns by sector production activities;
- Energy consumption and generation breakdowns;
- Low-carbon investments;
- Best available technique implementation;
- Emissions intensities of steel plants;
- Feedstock consumption;

- Consumption, production, and capacity figures by steel plant; and
- Production and capacity of key industry products.

Sector introduction: Transport OEMs (Climate)

The transport original equipment manufacturers (OEMs) sector is part of CDP's transport cluster. For the climate change program, this cluster includes industrial producers of transportation vehicles across the 5 transport modes covered by CDP.

The transport sector is responsible for almost a quarter of global energy-related emissions, with total energy use for transport having doubled in the last 35 years. The transport OEMs questionnaire was designed by identifying the different sub-sectors based on transport mode and transport subject. Five distinct transport modes were identified for study: Aviation, Light Duty Vehicles (LDV), Heavy Duty Vehicles (HDV), Shipping, and Rail. The two transport subjects identified were freight and passengers.

The climate change transport OEMs sector questionnaire is based on questions from CDP's previous climate change auto module. Questions are also based on other frameworks and research relevant to this sector, including investor reports and CDP's ACT pilot project which focused on this industry. Many questions across the transport sector overlap, and where possible, align with external frameworks.

CDP's transport OEMs questionnaire has sector-specific questions on the following topics:

- Low-carbon transition plan;
- Activity-based accounting of downstream Scope 3 emissions in category 11: use of sold products;
- Data assumptions and calculation methods used for Scope 3 figures; and
- Efficiency metrics with a carbon mitigation impact; and Implementation metrics for the production of, and investment in, low-carbon transportation technologies.

Businesses classified as Transport-OEMs Engine Part Manufacturers will only be asked to provide efficiency metrics.

Sector introduction: Transport services (Climate)

The transport services sector is part of CDP's transport cluster. For the climate change program, this cluster includes operators of transport vehicles who transport goods and/or passengers using vehicles across the 5 modes covered by CDP.

The transport sector is responsible for almost a quarter of global energy-related emissions, with total energy use for transport having doubled in the last 35 years. The transport services questionnaire was designed by identifying the different sub-sectors based on transport mode and transport subject. Five distinct transport modes were identified for study: Aviation, Light Duty Vehicles (LDV), Heavy Duty Vehicles (HDV), Shipping, and Rail. The two transport subjects identified were freight and passengers. Between passenger and freight transport, the key difference with relevance to the CDP questionnaire is the specific metrics that measure efficiency either by passenger or by metric ton of goods transported.

The climate change transport services sector questionnaire is based on questions from other frameworks and research relevant to this sector, including investor reports and CDP's ACT pilot project which focused on this industry. Many questions across the transport sector overlap, and where possible, align with external frameworks.

CDP's transport services questionnaire has sector-specific questions on the following topics:

- Low-carbon transition plan;
- Activity-based accounting of emissions in Scope 1, 2 and 3 category 4: Upstream emissions from transportation;
- Data coverage and input factors to calculate emissions intensity of transport movements per technology;
- Efficiency metrics with a carbon mitigation impact; and
- Implementation metrics for the adoption of low-carbon technologies across the fleet.

C0 Introduction

Introduction

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

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

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

Change from 2018

No change

Response options

Please complete the following table.

Start date	End date		Select the number of past reporting years you will be providing emissions data for
From: [DD/MM/YYYY]	To: [DD/MM/YYYY]	Select from: • Yes • No	Select from: • 1 year • 2 years • 3 years

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

Change from 2018

Minor change

Response options

Please complete the following table:

Country/Region

Select all that apply:

[Country/region drop-down list]

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

Change from 2018

No change

Response options

Please complete the following table:

Currency

Select from:

[Currency drop-down list]

(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.

Change from 2018

No change

Response options

Select one of the following options:

- Financial control
- Operational control
- Equity share
- Other, please specify

Business activities emissions relevancy

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

Question dependencies

Your response to this question determines which questions will be shown throughout this information request and which response options will be listed within these questions.

Change from 2018

No change

Response options

Please complete the following table:

Business activity	Relevance
Agriculture/Forestry	Select from: Own land only Elsewhere in the value chain only Both own land and elsewhere in the value chain No
Processing/Manufacturing	Select from: Direct operations only Elsewhere in the value chain only Both direct operations and elsewhere in the value chain No
Distribution	Select from: Direct operations only Elsewhere in the value chain only Both direct operations and elsewhere in the value chain No
Consumption	Select from: • Yes • No

(C-AC0.6a/C-FB0.6a/C-PF0.6a) Why are agricultural/forestry activities not relevant to your current CDP climate change disclosure?

Question dependencies

This question only appears if you select "No" in response to the 'Agriculture/Forestry' row in C-AC0.6/C-FB0.6/C-PF0.6.

Change from 2018

No change

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 4,000 characters]
Outside the scope of my organization	
Analysis in progress	
Evaluated but judged to be unimportant	
Not evaluated due to insufficient data on operations	
Not evaluated due to lack of internal resources	
No instruction from management	
Other, please specify	

(C-AC0.6b/C-FB0.6b/C-PF0.6b) Why are emissions from agricultural/forestry activities undertaken on your own land not relevant to your current CDP climate change disclosure?

Question dependencies

This question only appears if you select "Elsewhere in the value chain only" in response to the 'Agriculture/Forestry' row in C-AC0.6/C-FB0.6/C-PF0.6.

Change from 2018

No change

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 4,000 characters]
Do not own/manage land	
Analysis in progress	
Evaluated but judged to be unimportant	
Not evaluated due to insufficient data on operations	
Not evaluated due to lack of internal resources	
No instruction from management	
• Other, please specify	

(C-AC0.6c/C-FB0.6c/C-PF0.6c) Why are processing/manufacturing activities not relevant to your current CDP climate change disclosure?

Question dependencies

The question only appears if you select "No" in response to the 'Processing/Manufacturing' row in C-AC0.6/C-FB0.6/C-PF0.6.

Change from 2018

No change

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 4,000 characters]
Outside the scope of my organization	
Analysis in progress	
Evaluated but judged to be unimportant	
Not evaluated due to insufficient data on operations	
Not evaluated due to lack of internal resources	
No instruction from management	
• Other, please specify	

(C-AC0.6d/C-FB0.6d/C-PF0.6d) Why are emissions from processing/manufacturing activities within your direct operations not relevant to your current CDP climate change disclosure?

Question dependencies

This question only appears if you select "Elsewhere in the value chain only" in response to the 'Processing/Manufacturing' row in C-AC0.6/C-FB0.6/C-PF0.6.

Change from 2018

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 4,000 characters]
Outside the scope of my organization	
Analysis in progress	
Evaluated but judged to be unimportant	
Not evaluated due to insufficient data on operations	
Not evaluated due to lack of internal resources	
No instruction from management	
• Other, please specify	

(C-AC0.6e/C-FB0.6e/C-PF0.6e) Why are distribution activities not relevant to your current CDP climate change disclosure?

Question dependencies

This question only appears if you select "No" in response to the 'Distribution' row in C-AC0.6/C-FB0.6/C-PF0.6.

Change from 2018

No change

Response options

Please complete the following table:

Please explain
Text field [maximum 4,000 characters]

(C-AC0.6f/C-FB0.6f/C-PF0.6f) Why are emissions from distribution activities within your direct operations not relevant to your current CDP climate change disclosure?

Question dependencies

This question will only appear if you select "Elsewhere in the value chain only" in response to the 'Distribution' row in C-AC0.6/C-FB0.6/C-PF0.6.

Change from 2018

No change

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 4,000 characters]
Outside the scope of my organization	
Analysis in progress	
Evaluated but judged to be unimportant	
Not evaluated due to insufficient data on operations	
Not evaluated due to lack of internal resources	
No instruction from management	
Other, please specify	

(C-AC0.6g/C-FB0.6g/C-PF0.6g) Why are emissions from the consumption of your products not relevant to your current CDP climate change disclosure?

Question dependencies

This question only appears if you select "No" in response to the 'Consumption' row in C-AC0.6/C-FB0.6/C-PF0.6.

Change from 2018

No change

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 4,000 characters]
Analysis in progress	
Evaluated but judged to be unimportant	
Not evaluated due to insufficient data on operations	
Not evaluated due to lack of internal resources	
No instruction from management	
• Other, please specify	

Agricultural commodity dependency

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows using the "Add Row" button at the bottom of the table.

Agricultural commodity	% of revenue dependent on this agricultural commodity	Produced or sourced	Please explain
Select from:	Select from:	Select from:	Text field [maximum 4,000 characters]
Cattle products	• Less than 10%	Produced	
Cotton	• 10-20%	Sourced	
Fish and seafood from aquaculture	• 20-40%	Both	
Palm Oil	• 40-60%		
• Rice	• 60-80%		
• Soy	More than 80%		
• Sugar	Don't know		
• Timber			
Tobacco			
Wheat			
Rubber			
Other, please specify			

[Add Row]

Organizational activities: Cement

(C-CE0.7) Which part of the concrete value chain does your organization operate in?

Change from 2018

No change

Response options

Select all that apply from the following options:

- Limestone quarrying
- Clinker production
- Portland cement manufacturing
- Blended cement
- Belite cements
- Alternative 'low CO2' cementitious materials production
- Aggregates production
- Concrete production
- Concrete pavement / asphalt / tarmac
- Lime production

Organizational activities: Chemicals

(C-CH0.7) Which part of the chemicals value chain does your organization operate in?

Change from 2018

No change

Response options

Select all that apply from the following options:

Bulk organic chemicals

- Lower Olefins (cracking)
- Aromatics
- Ethylene Oxide & Ethylene glycol
- Ethanol
- Methanol
- Polymers
- Adipic acid

Bulk inorganic chemicals

- Ammonia
- Fertilizers
- Nitric acid
- Chlorine and Sodium hydroxide
- Carbon black
- Soda Ash
- Titanium dioxide
- Hydrogen
- Oxygen
- Other industrial gasses

Other chemicals

- Specialty chemicals
- Specialty organic chemicals
- Other (please specify)

Organizational activities: Coal

(C-CO0.7) Which part of the coal value chain and other areas does your organization operate in?

Change from 2018

No change

Response options

Select all that apply from the following options:

Coal value chain

Underground coal mining

- Surface coal mining
- Coal derived fuels and chemical feedstocks
- Grid electricity generation from coal

Other divisions

- Other minerals mining
- Metal ore mining

Organizational activities: Electric utilities

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Change from 2018

No change

Response options

Select all that apply from the following options:

Electric utilities value chain

- Electricity generation
- Transmission
- Distribution

Other divisions

- Gas storage, transmission and distribution
- Smart grids / demand response
- Battery storage
- Microgrids
- Coal mining
- Gas extraction and production

Organizational activities: Metals & Mining

(C-MM0.7) Which part of the metals and mining value chain does your organization operate in?

Change from 2018

No change

Response options

Please select all that apply from the following options:

Mining

- Bauxite
- Copper
- Gold
- Platinum group metals
- Silver
- Iron ore
- Nickel
- Zinc
- Lead
- Diamonds
- Other non-ferrous metal mining (please specify)
- Other mining (please specify)

Processing metals

- Aluminum
- Alumina
- Copper
- Gold
- Platinum group metals
- Silver
- Nickel
- Zinc
- Lead
- Other ferrous metals (please specify)
- Other non-ferrous metals (please specify)

Organizational activities: Oil and Gas

(C-OG0.7) Which part of the oil and gas value chain and other areas does your organization operate in?

Change from 2018

Minor change

Response Options

Select all that apply from the following options:

Oil and gas value chain

- Upstream
- Midstream
- Downstream
- Chemicals

Other divisions

- Biofuels
- Grid electricity supply from gas
- Grid electricity supply from coal
- Grid electricity supply from renewables
- Carbon capture and storage/utilization
- Coal mining

Organizational activities: Steel

(C-ST0.7) Which parts of the steel value chain does your organization operate in?

Change from 2018

No change

Response options

Please select all that apply from the following options:

- Iron ore mining
- Coal mining
- Limestone and dolomite quarrying
- Other mining or quarrying (please specify)
- Iron ore sintering and agglomeration
- Coke oven operation
- Blast furnace and basic oxygen furnace operations
- Electric arc furnace operations
- Direct reduced iron operations
- Open hearth furnace operations
- Hot-rolling
- Cold rolling and finishing
- Scrap steel recycling
- Oxygen production
- Lime production
- Other steelmaking operations (please specify)

Organizational activities: Transport modes

(C-TO0.7/C-TS0.7) For which transport modes will you be providing data?

Change from 2018

No change

Response options

Select all that apply from the following options:

- Light Duty Vehicles (LDV)
- Heavy Duty Vehicles (HDV)
- Rail
- Marine
- Aviation

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C1 Governance

Board oversight

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

Change from 2018

No change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

Select one of the following options:

- Yes
- No

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

Question dependencies

This question only appears if you select "Yes" in response to C1.1.

Change from 2018

Minor change, Modified guidance

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Position of individual(s)	Please explain
Select from:	Text field [maximum 1,000 characters]
Board Chair	
Director on board	
Chief Executive Officer (CEO)	
Chief Financial Officer (CFO)	
Chief Operating Officer (COO)	
Chief Procurement Officer (CPO)	
Chief Risk Officer (CRO)	
Chief Sustainability Officer (CSO)	
Other C-Suite Officer	
President	
Board-level committee	
• Other, please specify	

[Add Row]

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

Question dependencies

This question only appears if you select "Yes" in response to C1.1.

Change from 2018

No change

Connection to other frameworks

TCFD

Governance recommended disclosure a) Describe the board's oversight of climate related risks and opportunities.

SDG

Goal 12: Responsible consumption and production

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Select from: Scheduled - all meetings Scheduled - some meetings Sporadic - as important matters arise Other, please specify	Select all that apply: 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 Other, please specify	Text field [maximum 3,000 characters]

[Add Row]

(C1.1c) Why is there no board-level oversight of climate-related issues and what are your plans to change this in the future?

Question dependencies

This question only appears if you select "No" in response to C1.1.

Change from 2018

No change

Response options

Please complete the following table:

Primary reason	Board-level oversight of climate-related issues will be introduced in the next two years.	
Text field [maximum 1,000 characters]	[maximum 1,000 characters] Select from:	
	Yes, we plan to do so within the next two years	
	No, we do not currently plan to do so	

Management responsibility

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

Change from 2018

Minor change

Connections to other frameworks

TCFD

Governance recommended disclosure b) Describe management's role in assessing and managing climate related risks and opportunities.

Goal 12: Responsible consumption and production

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Select from:	Select from:	Select from:
Chief Executive Officer (CEO)	Assessing climate-related risks and opportunities	More frequently than quarterly
Chief Financial Officer (CFO)	Managing climate-related risks and opportunities	Quarterly
Chief Operating Officer (COO)	Both assessing and managing climate-related risks and opportunities	Half-yearly
Chief Procurement Officer (CPO)	Other, please specify	Annually
Chief Risks Officer (CRO)		Less frequently than annually
Chief Sustainability Officer (CSO)		As important matters arise
Other C-Suite Officer, please specify		Not reported to the board
President		
Risk committee		
Sustainability committee		
Safety, Health, Environment and Quality committee		
Corporate responsibility committee		
Other committee, please specify		
Business unit manager		
Energy manager		
Environmental, Health, and Safety manager		
Environment/Sustainability manager		
Facility manager		
Process operation manager		
Procurement manager		
Public affairs manager		
Risk manager		
There is no management level responsibility for climate-related issues		
Other, please specify		

[Add Row]

(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).

Change from 2018

Minor change

Connection to other frameworks

TCFD

Governance recommended disclosure b) Describe management's role in assessing and managing climate related risks and opportunities.

Goal 12: Responsible consumption and production

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Employee incentives

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

Change from 2018

Minor change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

Select one of the following options:

- Yes
- No

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

Question dependencies

This question only appears if you select "Yes" in response to C1.3.

Change from 2018

Minor change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

2018 RobecoSAM Corporate Sustainability Assessment (DJSI)

Strategy

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Who is entitled to benefit from these incentives?	Types of incentives	Activity incentivized	Comment
Select from:	Select from:	Select from:	Text field[maximum 2,400 characters]
Board Chair	Monetary reward	Emissions reduction project	
Board/Executive board	Recognition (non-monetary)	Emissions reduction target	
Director on board	Other non-monetary reward	Energy reduction project	
Corporate executive team		Energy reduction target	
Chief Executive Officer (CEO)		Efficiency project	
Chief Financial Officer (CFO)		Efficiency target	
Chief Operating Officer (COO)		Behavior change related indicator	
Chief Procurement Officer (CPO)		Environmental criteria included in purchases	
Chief Risk Officer (CRO)		Supply chain engagement	
Chief Sustainability Officer (CSO)		Other, please specify	
Other C-Suite Officer			
President			
Executive officer			
Management group			
Business unit manager			
Energy manager			
Environmental, health, and safety manager			
Environment/Sustainability manager			
Facilities manager			
Process operation manager			
Procurement manager			
Public affairs manager			
Risk manager			
Buyers/purchasers			
All employees			
Other, please specify			

[Add Row]

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C2 Risks and opportunities

Time horizons

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

Change from 2018

No change

Connection to other frameworks

TCFD

Strategy recommended disclosure a) Describe the climate related risks and opportunities the organization has identified over the short, medium, and long term.

Response options

Please complete the following table:

Time horizon	From (years)	To (years)	Comment
Short-term	Numerical field [enter a number from 0-100 using no decimals or commas]	Numerical field [enter a number from 0-100 using no decimals or commas]	Text field [maximum 2,400 characters]
Medium-term			
Long-term			

Management processes

(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.

Change from 2018

No change

Connection to other frameworks

TCFD

Risk Management recommended disclosure c) Describe how processes for identifying, assessing, and managing climate related risks are integrated into the organization's overall risk management.

2018 RobecoSAM Corporate Sustainability Assessment (DJSI)

Governance and management incentives

Response options

Select one of the following options:

- Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes
- A specific climate change risk identification, assessment, and management process
- There are no documented processes for identifying, assessing, and managing climate-related issues

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

Question dependencies

This question only appears if you select "Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes" or "A specific climate change risk identification, assessment, and management processes" in response to C2.2.

Change from 2018

No change

Response options

Please complete the following table:

Frequency of monitoring	How far into the future are risks considered?	Comment
Select from:	Select from:	Text field [maximum 1,000 characters]
Six-monthly or more frequently	• Up to 1 year	
Annually	• 1 to 3 years	
Every two years	• 3 to 6 years	
Not defined	• > 6 years	
• Never	• Unknown	

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

Ouestion dependencies

This question only appears if you select "Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes" or "A specific climate change risk identification, assessment, and management processes" in response to C2.2.

Change from 2018

No change

Connection to other frameworks

TCFD

Risk Management recommended disclosure a) Describe the organization's processes for identifying and assessing climate-related risks.

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

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

Question dependencies

This question only appears if you select "Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes" or "A specific climate change risk identification, assessment, and management processes" in response to C2.2.

Change from 2018

Modified guidance

Connection to other frameworks

TCFD

Risk Management recommended disclosure a) Describe the organization's processes for identifying and assessing climate-related risks.

Response options

Please complete the following table:

Risk type	Relevance & inclusion	Please explain
Current regulation	Select from: Relevant, always included Relevant, sometimes included Relevant, not included Not relevant, included Not relevant, explanation provided Not evaluated	Text field [maximum 2,400 characters]
Emerging regulation		
Technology		
Legal		
Market		
Reputation		
Acute physical		
Chronic physical		
Upstream		
Downstream		

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

Question dependencies

This question only appears if you select "Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes" or "A specific climate change risk identification, assessment, and management processes" in response to C2.2.

Change from 2018

Modified guidance

Connection to other frameworks

TCFD

Risk Management recommended disclosure b) Describe the organization's processes for managing climate related risks.

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C2.2e) Why does your organization not have a process in place for identifying, assessing, and managing climate-related risks and opportunities, and do you plan to introduce such a process in the future?

Question dependencies

This question only appears if you select "There are no documented processes for identifying, assessing, and managing climate-related issues" in response to C2.2.

Change from 2018

No change

Response options

Please complete the following table:

Select from:	Text field Text field [maximum 1,500 characters]
We are planning to introduce a risk identification, assessment, and management process in the next two years	
Important but not an immediate business priority	
Judged to be unimportant, explanation provided	
Lack of internal resources	
Insufficient data on operations	
No instruction from management	
Other, please specify	

Risk disclosure

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

Change from 2018

No change

Connection to other frameworks

TCFD

Strategy recommended disclosure a) Describe the climate related risks and opportunities the organization has identified over the short, medium, and long term.

SDG

Goal 13: Climate action

Response options

Select one of the following options:

- Yes
- No

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

Question dependencies

This question only appears if you select "Yes" in response to C2.3.

Change from 2018

Modified question

Connection to other frameworks

TCFD

Strategy recommended disclosure a) Describe the climate related risks and opportunities the organization has identified over the short, medium, and long term.

Strategy recommended disclosure b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.

Please note: columns 1-7 align with the TCFD recommendations.

SDG

Goal 12: Responsible consumption and production

Goal 13: Climate action

Response options

Please complete the following table. For clarity, the table is displayed over several rows. You are able to add rows by using the "Add Row" function at the bottom of the table.

Identifier	Where in the value chain does the risk driver occur?	Risk type	Primary climate-related risk driver	Type of financial impact	Company- specific description	Time horizon
Select from: • Risk1 - Risk100	Select from: Direct operations Supply chain Customer Investment chain	Select from: Transition risk Physical risk	See drop-down options below	See drop-down options below	Text field [maximum 2,400 characters]	Select from: Current Short-term Medium-term Long-term Unknown

Likelihood	Magnitude of impact	Are you able to provide a potential financial impact figure?	Potential financial impact figure (currency)	Potential financial impact figure - minimum (currency)	Potential financial impact figure - maximum (currency)
Select from: Virtually certain Very likely Likely More likely than not About as likely as not Unlikely Very unlikely Exceptionally unlikely Unknown	Select from: High Medium-high Medium Medium Low Unknown	Select from: • Yes, a single figure estimate • Yes, an estimated range • No, we do not have this figure	Numerical field [enter a number from 0 to 999,999,999,999,999 using up to 2 decimal places]	Numerical field [enter a number from 0 to 999,999,999,999,999 using up to 2 decimal places]	Numerical field [enter a number from 0 to 999,999,999,999,999 using up to 2 decimal places]

Explanation of financial impact figure	Management method	Cost of management	Comment
Text field [maximum 1,000 characters]	Text field [maximum 1,500 characters]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 1,000 characters]

[Add Row]

Primary climate-related risk driver drop-down options (column 4)

Select one of the following options:

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nsition	

- Policy and legal: Increased pricing of GHG emissions
- Policy and legal: Enhanced emissions-reporting obligations
- Policy and legal: Mandates on and regulation of existing products and services
- Policy and legal: Exposure to litigation
- Policy and legal: Other
- Technology: Substitution of existing products and services with lower emissions options
- Technology: Unsuccessful investment in new technologies
- Technology: Costs to transition to lower emissions technology
- Technology: Other
- Market: Changing customer behavior
- Market: Uncertainty in market signals
- Market: Increased cost of raw materials
- Market: Other
- Reputation: Shifts in consumer preferences
- Reputation: Stigmatization of sector
- Reputation: Increased stakeholder concern or negative stakeholder feedback
- Reputation: Other

Physical risks

- Acute: Increased severity of extreme weather events such as cyclones and floods
- Acute: Other
- Chronic: Changes in precipitation patterns and extreme variability in weather patterns
- Chronic: Rising mean temperatures
- Chronic: Rising sea levels
- Chronic: Other

Type of financial impact drop-down options (column 5)

Select one of the following options:

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Transition risks

If primary climate-related risk driver is *Policy* and *legal*:

- Increased operating costs (e.g., higher compliance costs, increased insurance premiums)
- Write-offs, asset impairment, and early retirement of existing assets due to policy changes
- Increased costs and/or reduced demand for products and services resulting from fines and judgements
- Increased credit risk (e.g., increased probability of default and/or loss given default)
- Increased insurance claims liability arising from climate-related impacts
- Other, please specify

If primary climate-related risk driver is *Technology*:

- Write-offs and early retirement of existing assets due to technology changes
- Reduced demand for products and services
- Research and development (R&D) expenditures in new and alternative technologies
- Capital investments in technology development
- Costs to adopt/deploy new practices and processes
- Increased credit risk (e.g., increased probability of default and/or loss given default)
- Increased insurance claims liability arising from climate-related impacts
- Other, please specify

If primary climate-related risk driver is Market:

- Reduced demand for goods and/or services due to shift in consumer preferences
- Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatment)
- Abrupt and unexpected shifts in energy costs
- Change in revenue mix and sources resulting in decreased revenues
- Re-pricing of assets (e.g., fossil fuel reserves, land valuations, securities valuations)
- Increased credit risk (e.g., increased probability of default and/or loss given default)
- Increased insurance claims liability arising from climate-related impacts
- Other, please specify

If primary climate-related risk driver is Reputation:

- Reduced revenue from decreased demand for goods/services
- Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions)
- Reduced revenue from negative impacts on workforce management and planning (e.g., employee attraction and retention)
- Reduction in capital availability
- Increased credit risk (e.g., increased probability of default and/or loss given default)
- Increased insurance claims liability arising from climate-related impacts
- Other, please specify

Physical risks

- Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)
- Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism)
- Write-offs and early retirement of existing assets (e.g., damage to property and assets in "high-risk" locations)
- Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)
- Increased capital costs (e.g., damage to facilities)
- Reduced revenues from lower sales/output
- Increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations
- Increased credit risk (e.g., increased probability of default and/or loss given default)
- Increased insurance claims liability arising from climate-related impacts
- Other please specify

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

Question dependencies

This question only appears if you select "No" in response to C2.3.

Change from 2018

No change

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 2,400 characters]
Risks exist, but none with potential to have a substantive financial or strategic impact on business	
Evaluation in process	
Not yet evaluated	
• Other, please specify	

Opportunity disclosure

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

Change from 2018

No change

Connection to other frameworks

TCFD

Strategy recommended disclosure a) Describe the climate related risks and opportunities the organization has identified over the short, medium, and long term.

SDG

Goal 13: Climate action

Response options

Select one of the following options:

- Yes
- Yes, we have identified opportunities but are unable to realize them
- No

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

Question dependencies

This question only appears if you select "Yes" in response to C2.4.

Change from 2018

Modified question

Connection to other frameworks

TCFD

Strategy recommended disclosure a) Describe the climate related risks and opportunities the organization has identified over the short, medium, and long term.

Strategy recommended disclosure b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

Please note: columns 1-7 align with the TCFD recommendations.

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Goal 13: Climate action

Response options

Please complete the following table. For clarity, the table is displayed over several rows. You are able to add rows by using the "Add Row" button at the bottom of the table.

Identifier	Where in the value chain does the opportunity occur?	Opportunity type	Primary climate-related opportunity driver	Type of financial impact	Company-specific description	Time horizon
Select from: Opp1 - Opp100	Select from: Direct operations Supply Chain Customer Investment chain	Select from: Resource efficiency Energy source Products and services Markets Resilience	See drop-down options below	See drop-down options below	Text field [maximum 2,400 characters]	Select from: Current Short-term Medium-term Long-term

Likelihood	Magnitude of impact	Are you able to provide a potential financial impact figure?	' ' ''	Potential financial impact figure - minimum (currency)	Potential financial impact figure - maximum (currency)
Select from: Virtually certain Very likely Likely More likely than not About as likely as not Unlikely Very unlikely Exceptionally unlikely Unknown	Select from: High Medium-high Medium Medium-low Low Unknown	Select from: • Yes, a single figure estimate • Yes, an estimated range • No, we do not have this figure	Numerical field [enter a number from 0 to 999,999,999,999,999 using up to 2 decimal places]	Numerical field [enter a number from 0 to 999,999,999,999,999 using up to 2 decimal places]	Numerical field [enter a number from 0 to 999,999,999,999,999 using up to 2 decimal places]

Explanation of financial impact figure	Strategy to realize opportunity	Cost to realize opportunity	Comment
Text field [maximum 1,000 characters]	Text field [maximum 1,500 characters]	Numerical field [enter a number from 0 to 999,999,999,999,999 using up to 2 decimal places]	Text field [maximum 1,000 characters]

Primary climate-related opportunity driver drop-down options (column 4)

Select one of the following options:

Resource efficiency

- Use of more efficient modes of transport
- Use of more efficient production and distribution processes
- Use of recycling
- Move to more efficient buildings
- Reduced water usage and consumption
- Other

Energy source

- Use of lower-emission sources of energy
- Use of supportive policy incentives
- Use of new technologies
- Participation in carbon market
- Shift toward decentralized energy generation
- Other

Products and services

- Development and/or expansion of low emission goods and services
- Development of climate adaptation and insurance risk solutions
- Development of new products or services through R&D and innovation
- Ability to diversify business activities
- Shift in consumer preferences
- Other

Markets

- Access to new markets
- Use of public-sector incentives
- Access to new assets and locations needing insurance coverage
- Other

Resilienc

- Participation in renewable energy programs and adoption of energy-efficiency measures
- Resource substitutes/diversification
- Other

Type of financial impact drop-down options (column 5)

Select one of the following options:

Resource efficiency

- Reduced operating costs (e.g., through efficiency gains and cost reductions)
- Increased production capacity, resulting in increased revenues
- Increased value of fixed assets (e.g., highly rated energy-efficient buildings)
- Benefits to workforce management and planning (e.g., improved health and safety, employee satisfaction resulting in lower costs)
- Other, please specify

Energy source

- Reduced operational costs (e.g., through use of lowest cost abatement)
- Reduced exposure to future fossil fuel price increases
- Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon
- Returns on investment in low-emission technology
- Increased capital availability (e.g., as more investors favor lower-emissions producers)
- Reputational benefits resulting in increased demand for goods/services
- Other, please specify

Products and services

- Increased revenue through demand for lower emissions products and services
- Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)
- Better competitive position to reflect shifting consumer preferences, resulting in increased revenues
- Other, please specify

Markets

- Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks)
- Increased diversification of financial assets (e.g., green bonds and infrastructure)
- Other, please specify

Resilience

- Increased market valuation through resilience planning (e.g., infrastructure, land, buildings)
- Increased reliability of supply chain and ability to operate under various conditions
- Increased revenue through new products and services related to ensuring resiliency
- Other, please specify

(C2.4b) Why do you not consider your organization to have climate-related opportunities?

Question dependencies

This question only appears if you select "No" or "Yes, we have identified opportunities but are unable to realize them" in response to C2.4.

Change from 2018

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 2,400 characters]
Opportunities exist, we are unable to realize them	
Opportunities exist, but none with potential to have a substantive financial or strategic impact on business	
Evaluation in progress	
Judged to be unimportant	
No instruction from management to seek out opportunities	
Not yet evaluated	
Other, please specify	

Business impact assessment

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

Question dependencies

This question only appears if you select "Yes" in response to C2.3 and/or C2.4.

Change from 2018

Modified guidance

Connection to other frameworks

TCFD

Strategy recommended disclosure b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

SDG

Goal 12: Responsible consumption and production

Response options

Please complete the following table:

Area	Impact	Description
Products and services	Select from: Impacted Impacted for some suppliers, facilities, or product lines Not yet impacted Not impacted Not evaluated We have not identified any risks or opportunities	Text field [maximum 2,400 characters]
Supply chain and/or value chain		
Adaptation and mitigation activities		
Investment in R&D		
Operations		
Other, please specify		

Financial planning assessment

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

Question dependencies

This question only appears if you select "Yes" in response to C2.3 and/or C2.4.

Change from 2018

Modified guidance

Connection to other frameworks

TCFD

Strategy recommended disclosure b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

Response options

Please complete the following table:

Area	Relevance	Description
Revenues	Select from: Impacted Impacted for some suppliers, facilities, or product lines Not impacted Not yet impacted Not evaluated We have not identified any risks or opportunities	Text field [maximum 2,400 characters]
Operating costs		
Capital expenditures/capital allocation		
Acquisitions and divestments		
Access to capital		
Assets		
Liabilities		
Other		

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C3 Business strategy

Business strategy

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

Change from 2018

No change

Connection to other frameworks

TCFD

Strategy recommended disclosure b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

SDG

Goal 13: Climate action

Response options

Select one of the following options:

- Yes
- No

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

Question dependencies

This question only appears if you select "Yes" in response to C3.1.

Change from 2018

No change

Connection to other networks

TCFD

Strategy recommended disclosure c) Describe the resilience of the organization's strategy, taking into consideration different climate related scenarios, including a 2°C or lower scenario.

SDG

Goal 13: Climate action

2018 RobecoSAM Corporate Sustainability Assessment (DJSI)

Scenario Analysis

Response options

Select one of the following options:

- Yes, qualitative
- Yes, quantitative
- Yes, qualitative and quantitative
- No, but we anticipate doing so in the next two years
- No, and we do not anticipate doing so in the next two years

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

Question dependencies

This question only appears if you select "Yes" in response to C3.1.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No, we do not have a low-carbon transition plan
- In development, we plan to complete it within the next two years

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

Question dependencies

This question only appears if you select "Yes" in response to C3.1.

Change from 2018

No change

Connection to other frameworks

TCFD

Strategy recommended disclosure b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

SDG

Goal 13: Climate action

Response options

This is an open text question with a limit of 7,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

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

Question dependencies

This question only appears if you select "Yes, qualitative", "Yes, quantitative" or "Yes, qualitative and quantitative" in response to C3.1a.

Change from 2018

Minor change

Connection to other frameworks

TCFD

Strategy recommended disclosure b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

Strategy recommended disclosure c) Describe the resilience of the organization's strategy, taking into consideration different climate related scenarios, including a 2°C or lower scenario.

SDG

Goal 13: Climate action

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Climate-related scenarios	Details
Select all that apply:	Organizations should disclose their inputs, assumptions and analytical methods used for this scenario.
• 2DS	
● IEA 450	For existing scenarios (e.g. IEA 450 etc.), organizations should disclose how they have altered/changed the inputs, assumptions or analytical methods to cater to their needs.
Greenpeace	
• DDPP	Text field [maximum 4,000 characters]
• IRENA	
• RCP 2.6	
• RCP 4.5	
• RCP 6	
• RCP 8.5	
• IEA B2DS	
IEA Sustainable development scenario	
• IEA NPS	
• IEA CPS	
BNEF NEO	
• REMIND	
MESSAGE-GLOBIOM	
 Nationally determined contributions (NDCs) 	
Other, please specify	

[Add Row]

(C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e) Disclose details of your organization's low-carbon transition plan.

Question dependencies

This question only appears if you select "Yes" in response to C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-TO

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C3.1f) Why are climate-related issues not integrated into your business objectives and strategy?

Question dependencies

This question only appears if you select "No" in response to C3.1.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

Question dependencies

This question only appears if you select "No, but we anticipate doing so in the next two years" or "No, and we do not anticipate doing so in the next two years" in response to C3.1a.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

C4 Targets and performance

Targets

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

Change from 2018

No change

Connection to other frameworks

TCFD

Metrics & Targets recommended disclosure c) Describe the targets used by the organization to manage climate related risks and opportunities and performance against targets.

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Response options

Select one of the following options:

- Absolute target
- Intensity target
- Both absolute and intensity targets
- No target

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

Question dependencies

This question only appears if you select "Absolute target" or "Both absolute and intensity targets" in response to C4.1.

Change from 2018

Minor change

Connection to other frameworks

TCFD

Metrics & Targets recommended disclosure c) Describe the targets used by the organization to manage climate related risks and opportunities and performance against targets.

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Goal 13: Climate action

2018 RobecoSAM Corporate Sustainability Assessment (DJSI)

Climate-related targets

Response options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Target reference number	Scope	% emissions in Scope	Targeted % reduction from base year	Base year		Base year emissions covered by target (metric tons CO2e)
Select from: Abs1-Abs100	Select from drop-down options below	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Numerical field [enter a number between 1900- 2019]	Numerical field [enter a number between 1900- 2019]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]

Target year	Is this a science-based target?	% of target achieved	Target status	Please explain
Numerical field [enter a whole number between 2000- 2100]	Select from drop-down options below	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: New Underway Achieved Expired Revised Replaced Retired	Text field [maximum 2,400 characters]

[Add Row]

Scope drop-down options:

Select one of the following options:

- Scope 1
- Scope 2 (location-based)
- Scope 2 (market-based)
- Scope 1+2 (location-based)
- Scope 1+2 (market-based)
- Scope 1+2 (location-based) +3 (upstream)
- Scope 1+2 (location-based) +3 (downstream)
- Scope 1+2 (location-based) +3 (upstream & downstream)
- Scope 1+2 (market-based) +3 (upstream)
- Scope 1+2 (market-based) +3 (downstream)

- Scope 1+2 (market-based) +3 (upstream & downstream)
- Scope 3 (upstream)
- Scope 3 (downstream)
- Scope 3 (upstream & downstream)
- Scope 3: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting
- Scope 3: Upstream leased assets
- Scope 3: Investments
- Scope 3: Downstream transportation and distribution
- Scope 3: Processing of sold products
- Scope 3: Use of sold products
- Scope 3: End-of-life treatment of sold products
- Scope 3: Downstream leased assets
- Scope 3: Franchises
- Other, please specify

Is this a science-based target? drop-down options:

Select one of the following options:

- Yes, this target has been approved as science-based by the Science-Based Targets initiative
- Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative
- No, but we are reporting another target that is science-based
- No, but we anticipate setting one in the next 2 years
- No, and we do not anticipate setting one in the next 2 years

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

Question dependencies

This question only appears if you select "Intensity target" or "Both absolute and intensity target" in response to C4.1.

Change from 2018

Minor change

Connection to other frameworks

TCFD

Metrics & Targets recommended disclosure c) Describe the targets used by the organization to manage climate related risks and opportunities and performance against targets.

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Goal 13: Climate action

2018 RobecoSAM Corporate Sustainability Assessment (DJSI)

Climate-related targets

Response options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Target reference number	Scope	% emissions in Scope	Targeted % reduction from base year	Metric	Base year	Start year
Select from:	Select from drop-down options below	Percentage field [enter a percentage from 0-100 using a	Percentage field [enter a percentage from 0-100 using a	Select from drop-down options below	Numerical field [enter a whole number between 1900- 2019]	Numerical field [enter a whole number between 1900- 2019]
Int1-Int100		maximum of 2 decimal places]	maximum of 2 decimal places]			

Normalized base year emissions covered by target (metric tons CO2e)	Target year	Is this a science-based target?	% of target achieved	Target status	Please explain	% change anticipated in absolute Scope 1+2 emissions	% change anticipated in absolute Scope 3 emission
Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 10 decimal places and no commas]	Numerical field [enter a whole number between 2000- 2100]	Select from drop-down options below	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: New Underway Achieved Expired Revised Replaced Retired	Text field [maximum 2,400 characters]	Percentage field [enter a percentage from -999 - 999 using a maximum of 2 decimal places]	Percentage field [enter a percentage from -999 - 999 using a maximum of 2 decimal places]

[Add Row]

Scope drop-down (column 2)

Select one of the following options:

• Scope 1	 Scope 3: Upstream transportation and distribution
• Scope 2 (location-based)	Scope 3: Waste generated in operations
Scope 2 (market-based)	Scope 3: Business travel
• Scope 1+2 (location-based)	Scope 3: Employee commuting
• Scope 1+2 (market-based)	Scope 3: Upstream leased assets
• Scope 1+2 (location-based) +3 (upstream)	Scope 3: Investments
• Scope 1+2 (location-based) +3 (downstream)	 Scope 3: Downstream transportation and distribution
 Scope 1+2 (location-based) +3 (upstream & downstream) 	Scope 3: Processing of sold products
• Scope 1+2 (market-based) +3 (upstream)	Scope 3: Use of sold products
• Scope 1+2 (market-based) +3 (downstream)	Scope 3: End-of-life treatment of sold products
 Scope 1+2 (market-based) +3 (upstream & downstream) 	Scope 3: Downstream leased assets
• Scope 3 (upstream)	Scope 3: Franchises
• Scope 3 (downstream)	Other, please specify
• Scope 3 (upstream & downstream)	
Scope 3: Purchased goods and services	
Scope 3: Capital goods	
 Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) 	

Metric drop-down options (column 5)

Select one of the following options from the drop-down menu below. Those with an asterisk (*) are the metrics that can be evaluated against science-based target setting methods (se<u>Fechnical Note on Science-Based Targets</u>):

 Grams CO2e per revenue passenger kilometer* 	 Metric tons CO2e per unit of service provided
 Metric tons CO2e per USD(\$) value-added* 	 Metric tons CO2e per square foot*
 Metric tons CO2e per square meter* 	Metric tons CO2e per kilometer
 Metric tons CO2e per metric ton of aluminum* 	 Metric tons CO2e per passenger kilometer*
 Metric tons CO2e per metric ton of steel* 	 Metric tons CO2e per megawatt hour (MWh)*
 Metric tons CO2e per metric ton of cement* 	 Metric tons CO2e per barrel of oil equivalent (BOE)
 Metric tons CO2e per metric ton of cardboard* 	 Metric tons CO2e per vehicle produced
Grams CO2e per kilometer*	 Metric tons CO2e per metric ton of ore processed
Metric tons CO2e per unit revenue	 Metric tons CO2e per ounce of gold
Metric tons CO2e per unit FTE employee	 Metric tons CO2e per ounce of platinum
Metric tons CO2e per unit hour worked	 Metric tons of CO2e per metric ton of aggregate
Metric tons CO2e per metric ton of product	 Metric tons of CO2e per billion (currency) funds under management
Metric tons of CO2e per liter of product	 Other, please specify
Metric tons CO2e per unit of production	

Is this a science-based target? drop-down options (column 10)

Select one of the following options:

Yes, this target has been approved as science-based by the Science Based Targets initiative	No, but we are reporting another target that is science-based
• Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science	No, but we anticipate setting one in the next 2 years
Based Targets initiative	No, and we do not anticipate setting one in the next 2 years

(C4.1c) Explain why you do not have an emissions target, and forecast how your emissions will change over the next five years.

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Question dependencies

This question only appears if you select "No target" in response to C4.1.

Change from 2018

Modified guidance

Response options

Please complete the following table:

Primary reason	Five-year forecast	Please explain
Select from:	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]
We are planning to introduce a target in the next two years		
 Important but not an immediate business priority 		
Judged to be unimportant, explanation provided		
Lack of internal resources		
Insufficient data on operations		
No instruction from management		
Other, please specify		
No instruction from management		

Other climate-related targets

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

Change from 2018

Minor change

Connection to frameworks

TCFD

Metrics & Targets recommended disclosure a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

Metrics & Targets recommended disclosure c) Describe the targets used by the organization to manage climate related risks and opportunities and performance against targets.

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Goal 13: Climate action

2018 RobecoSAM Corporate Sustainability Assessment (DJSI)

Climate-related targets

Response options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Target	KPI – Metric numerator	KPI – Metric denominator (intensity targets only)	Base year	Start year	Target year
Select from: Energy productivity Renewable electricity consumption Renewable electricity production Renewable energy target including electricity, heat, steam and cooling Renewable fuel Waste Zero/low-carbon vehicle Energy usage Land use Methane reduction target Engagement with suppliers R&D investments Other, please specify	Text field [maximum 200 characters]	Text field [maximum 200 characters]	Numerical field [enter a number between 1900- 2019]	Numerical field [enter a number between 1900- 2019]	Numerical field [enter a whole number between 2000- 2100]

KPI in baseline year	KPI in target year	% achieved in reporting year	Target Status	Please explain	Part of emissions target	Is this target part of an overarching initiative?
Numerical field [enter a number from 0 to 999,999,999,999 using up to 10 decimal places and no commas	Numerical field [enter a number from 0 to 999,999,999,999 using up to 10 decimal places and no commas	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: New Underway Achieved Expired Revised Replaced Retired	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters] [emissions reduction target ID]	Select from: RE100 EP100 EV100 Below50 – sustainable fuels Science-based targets initiative Reduce short-lived climate pollutants Remove deforestation Low-Carbon Technology Partnerships initiative No, it's not part of an overarching initiative Other, please specify

[Add Row]

(C-CO4.2a) If you do not have a methane-specific emissions reduction target for your coal mining activities or do not incorporate methane into your target(s) reported in C4.2 please explain why not and forecast how your methane emissions will change over the next five years.

Question dependencies

This question only requires a response if no methane emissions reduction targets are reported in C4.2.

Change from 2018

Minor change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C-OG4.2a) If you do not have a methane-specific emissions reduction target for your oil and gas activities or do not incorporate methane into your target(s) reported in C4.2 please explain why not and forecast how your methane emissions will change over the next five years.

Question dependencies

This question only requires a response if no methane emissions reduction targets are reported in C4.2

Change from 2018

Minor change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Emissions reduction initiatives

(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.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 13: Climate action

Response options

Select one of the following options:

- Yes
- No

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

O	all a second	
Question	aepen	dencies

This question only appears if you select "Yes" in response to C4.3.

Change from 2018

Minor change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 13: Climate action

Response options

Please complete the following table:

Stage of development	Number of initiatives	Total estimated annual CO2e savings in metric tons CO2e (only for rows marked *)
Under investigation	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-999,999,999 using a maximum of 2 decimal places and no commas]
To be implemented*		
Implementation commenced*		
Implemented*		
Not to be implemented		

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

Question dependencies

This question only appears if you select "Yes" in response to C4.3.

Change from 2018

Minor change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 13: Climate action

Response options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Initiative type	Description of initiative	Estimated annual CO2e savings (metric tons CO2e)	Scope	Voluntary/ Mandatory
Select from: Energy efficiency: Building fabric Energy efficiency: Building services Energy efficiency: Processes Fugitive emissions reductions Low-carbon energy purchase Low-carbon energy installation Process emissions reductions Other, please specify	Select from drop-down options below	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: Scope 1 Scope 2 (location-based) Scope 2 (market-based) Scope 3	Select from: • Voluntary • Mandatory

Annual monetary savings (unit currency, as specified in C0.4)	Investment required (unit currency, as specified in C0.4)	Payback period	Estimated lifetime of the initiative	Comment
Numerical field [enter a number from 0-999,999,999,999 using no decimal places, and no commas]	Numerical field [enter a number from 0-999,999,999,999 using no decimal places, and no commas]	Select from: <1 year 1-3 years 4-10 years 11-15 years 16-20 years 21-25 years >25 years No payback 	Select from: <1 year 1-2 years 3-5 years 6-10 years 11-15 years 16-20 years 21-30 years >30 years Ongoing 	Text field [maximum 1,500 characters]

[Add Row]

Description of initiative drop-down options (column 2)

Select one of the following options:

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Energy efficiency:Building fabric

- Insulation
- Maintenance program
- Other, please specify

Energy efficiency:Building services

- Building controls
- HVAC
- Lighting
- Motors and drives
- Combined heat and power
- Other, please specify

Energy efficiency:Processes

- Heat recovery
- Cooling technology
- Refrigeration
- Process optimization
- Fuel switch
- Compressed air
- Combined heat and power
- Waste water treatment
- Water reuse
- Reuse of steam
- Machine replacement
- Waste recovery
- Other, please specify

Fugitive emissions reductions

- Agriculture methane capture
- Agriculture N2O reductions,
- Landfill methane capture,
- Oil/natural gas methane leak capture/prevention
- Refrigerant leakage reduction
- Other, please specify

Low-carbon energy purchase

- Biomass
- Biogas
- Fuel Cells
- Geothermal
- Hydro
- Solar Hot Water
- Solar PV
- Solar CPV
- Nuclear
- Wind
- Other, please specify

Low-carbon energy installation

- Biomass
- Biogas
- Carbon Capture & Storage
- Fuel Cells
- Geothermal
- Hydro
- Solar Hot Water
- Solar PV
- Solar CPV
- Natural Gas
- Wind
- Other, please specify

Process emissions reductions

- New equipment
- Product design
- Changes in operations
- Behavioral change
- Process materials selectionProcess water
- Other, please specify

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

Question dependencies

This question only appears if you select "Yes" in response to C4.3.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 13: Climate action

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Method	Comment
Select from:	Text field [maximum 2,400 characters]
Compliance with regulatory requirements/standards	
Dedicated budget for energy efficiency	
Dedicated budget for low-carbon product R&D	
Dedicated budget for other emissions reduction activities	
Employee engagement	
Financial optimization calculations	
Internal price on carbon	
Internal incentives/recognition programs	
Internal finance mechanisms	
Lower return on investment (ROI) specification	
Marginal abatement cost curve	
Partnering with governments on technology development	
• Other	

[Add Row]

(C4.3d) Why did you not have any emissions reduction initiatives active during the reporting year?

Question dependencies

This question only appears if you select "No" in response to C4.3.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Land management practices

Question C4.4 only applies to organizations with activities in the following sectors:

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry

(C-AC4.4/C-FB4.4/C-PF4.4) Do you implement any agricultural or forest management practices on your own land with climate change mitigation and/or adaptation benefits?

Question dependencies

This question only appears if you select "Own land only" or "Both own land and elsewhere in value chain only" in response to the "Agriculture/Forestry" row in C-AC0.6/C-FB0.6/C-PF0.6.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No
- Don't know

(C-AC4.4a/C-FB4.4a) Specify the agricultural or forest management practice(s) implemented on your own land with climate change mitigation and/or adaptation benefits and provide a corresponding emissions figure, if known.

Question dependencies

This question only appears if you select "Yes" in response to C-AC4.4/C-FB4.4/C-PF4.4.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Management practice reference number	Management practice	Description of management practice	Primary climate change-related benefit	Estimated CO2e savings (metric tons CO2e)	Please explain
Select from: MP1 MP2 MP3 MP4 MP5 MP6 MP7 MP8 MP9 MP10 MP11 MP12 MP13 MP14	Select from: Afforestation Agroforestry Biodiversity considerations Change in the topography or landscapes Composting Crop diversity Contour farming Crop rotation Diversifying farmer income Efficient equipment use Equipment maintenance and calibration Enhanced forest regeneration	Text field [maximum 2,400 characters]	Select from: Emission reductions (mitigation) Increasing resilience to climate change (adaptation) Increase carbon sink (mitigation) Reduced demand for fossil fuel (adaptation) Reduced demand for fertilizers (adaptation) Reduced demand for pesticides (adaptation) Other, please specify	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]
 MP15 MP16 MP17 MP18 MP19 MP20 	practices Fertilizer management Fire control Governmental or institutional policies and programs Green harvesting Integrated pest management Knowledge sharing Land use change Low carbon energy use				

	1	I	
Low tillage and residue management			
Livestock management			
Manure management			
Nitrogen-fixing plants as cover crop			
Organic farming			
Practices to increase wood production			
and forest productivity			
Permanent soil cover (including cover)			
crops)			
Pest, disease and weed management			
practices			
Reducing energy use			
Reforestation			
Restoration			
Replacing fossil fuels by renewable			
energy sources			
Restoration of degraded lands and			
cultivated organic soils			
Rice management			
Seed variety selection			
Selective logging			
Selecting species to maximize carbon			
capture			
Species introduction			
Timing of farm operations			
Waste management			
• Other, please specify			

[Add Row]

Low-carbon products

(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?

Change from 2018

No change

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

Select one of the following options:

Yes

No

(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.

Question dependencies

This question only appears if you select "Yes" in response to C4.5.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Goal 13: Climate action

2018 RobecoSAM Corporate Sustainability Assessment (DJSI)

Products

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Level of aggregation	Description of product/ Group of products	Are these low-carbon product(s) or do they enable avoided emissions?	Taxonomy, project, or methodology used to classify product(s) as low-carbon or to calculate avoided emissions	% revenue from low-carbon product(s) in the reporting year	Comment
Select from: Product Group of products Company-wide	Text field [maximum 2,400 characters]	Select from: Low-carbon product Avoided emissions Low-carbon product and avoided emissions	Select from: Low-Carbon Investment (LCI) Registry Taxonomy Climate Bonds Taxonomy Addressing the Avoided Emissions Challenge- Chemicals sector Evaluating the carbon reducing impacts of ICT Other, please specify	Numerical field [enter a number from 0-100 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]

[Add Row]

Methane reduction efforts

(C-CO4.6) Describe your organization's efforts to reduce methane emissions from your activities.

Change from 2018

Minor change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.

Question dependencies

This question only appears if you select "Electricity generation", "Gas storage transmission and distribution", "Coal mining" and/or "Gas extraction and production" in response to C-EU0.7.

Change from 2018

Minor change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C-OG4.6) Describe your organization's efforts to reduce methane emissions from your activities.

Change from 2018

Minor change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Leak detection and repair

(C-CO4.7) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from coal mining activities?

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No, we do not have a program in place
- No, this is not relevant to our operations

(C-CO4.7a) Describe the protocol through which methane leak detection and repair or other methane leak detection methods are conducted for your coal mining activities, including predominant frequency of inspections, estimates of assets covered, and methodologies employed.

Question dependencies

This question only appears if you select "Yes" in response to C-CO4.7.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C-CO4.7b) Explain why not and whether you plan to conduct methane leak detection and repair or adopt other methods to find and fix fugitive methane emissions from your coal mining activities.

Question dependencies

This question only appears if you select "No, we do not have a program in place" or "No, this is not relevant to our operations" in response to C-CO4.7.

Change from 2018

No change

Response Options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C-OG4.7) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from oil and gas production activities?

Change from 2018

No change

Response option

Select one of the following options:

- Yes
- No, we do not have a program in place
- No, this is not relevant to our operations

(C-OG4.7a) Describe the protocol through which methane leak detection and repair or other leak detection methods, are conducted for oil and gas production activities, including predominant frequency of inspections, estimates of assets covered, and methodologies employed.

Question dependencies

This question only appears if you select "Yes" in response to C-OG4.7.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C-OG4.7b) Explain why you do not conduct LDAR or use other methods to find and fix fugitive methane emissions, and whether you have a plan to do so from your oil and gas production activities.

Question dependencies

This question only appears if you select "No, we do not have a program in place" or "No, this is not relevant to our operations" in response to C-OG4.7.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Flaring reduction efforts

(C-CO4.8) If flaring is relevant to your coal mining operations, describe your organization's efforts to reduce flaring, including any flaring reduction targets.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C-OG4.8) If flaring is relevant to your oil and gas production activities, describe your organization's efforts to reduce flaring, including any flaring reduction targets.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Best available techniques: Cement

(C-CE4.9) Disclose your organization's best available techniques as a percentage of Portland cement clinker production capacity.

Question dependencies

This question only appears if you select 'Clinker Production' in C-CE0.7

Change from 2018

No change

Response options

Please complete the following table:

Technique	Total production capacity coverage (%)
4+ cyclone preheating	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]
Pre-calciner	

Best available techniques: Steel

(C-ST4.9) Disclose your organization's best available techniques as a percentage of total plant capacity.

Change from 2018

No change

Response options

Please complete the following table:

Technique/Process*	% of total plant capacity	Primary reason for not having technique	Comment
Coke oven: Coke dry quenching	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: Other priorities are being met first Payback period considered too long Improvement potential considered insignificant Considered infeasible due to site-specific conditions Other, please specify	Text field [maximum 2,400 characters]
Coke oven: Coal moisture control process			
Coke oven: Programmed heating			
Sinter plant: Sinter cooler exhaust gas waste heat recovery			
Sinter plant Sinter strand waste-gas recycling			
Sinter plant: Use of waste fuels in sinter mixture			
Blast furnace: Injection of pulverized coal, biomass or wastes			
Blast furnace: Top recovery turbine			
Blast furnace: Recuperator (air preheating) hot-blast stoves			
Blast furnace: Computer aided control system for hot-blast stoves			
Blast furnace: Slag granulation for cement industry			
Basic oxygen furnace: BOF gas and sensible heat recovery			
Basic oxygen furnace: Vessel bottom stirring			
Basic oxygen furnace: Programmed and preheated ladles			

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Electric arc furnace: Scrap preheating		
Electric arc furnace: Oxy-fuel burners		
Electric arc furnace: Oxygen blowing for liquid steel oxidation or post combustion		
Electric arc furnace: Integrated, real-time process control and monitoring systems		
Casting: Absence of soaking pits and primary rolling of ingots		
Casting: Near net shape casting, e.g. thin slab, thin strip, etc.		
Hot rolling mill: Hot charging		
Hot rolling mill: Recuperative/regenerative burners		
Hot rolling mill: Walking beam furnace		
Hot rolling mill: Variable speed drives on combustion air fans of reheat furnace		
Integrated steel mill: Combined heat and power/cogeneration plant		
Integrated steel mill: Energy monitoring and management system		
Other		

^{*}Techniques/processes appear based on the corresponding selections made in C-ST0.7

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C5 Emissions methodology

Base year emissions

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

Change from 2018

No change

Response options

Please complete the following table:

Scope	Base year start	Base year end	Base year emissions (metric tons CO2e)	Comment
Scope 1	Use the calendar button or enter dates manually in the format DD/MM/YYYY	Use the calendar button or enter dates manually in the format DD/MM/YYYY	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]
Scope 2 (location-based)				
Scope 2 (market-based)				

Emissions methodology

(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.

Change from 2018

No change

Response options

Select all that apply from the following options:

- ABI Energia Linee Guida
- Act on the Rational Use of Energy
- American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009
- Australia National Greenhouse and Energy Reporting Act
- Bilan Carbone
- Brazil GHG Protocol Programme
- Canadian Association of Petroleum Producers, Calculating Greenhouse Gas Emissions, 2003
- China Corporate Energy Conservation and GHG Management Programme
- Defra Voluntary 2017 Reporting Guidelines
- ENCORD: Construction CO2e Measurement Protocol
- Energy Information Administration 1605B

- Environment Canada, Sulphur hexafluoride (SF6) Emission Estimation and Reporting Protocol for Electric Utilities
- Environment Canada, Aluminum Production, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Base Metals Smelting/Refining, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Cement Production, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Primary Iron and Steel Production, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Lime Production, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Primary Magnesium Production and Casting, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Metal Mining, Guidance Manual for Estimating Greenhouse Gas Emissions
- EPRA (European Public Real Estate Association) guidelines, 2011
- European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) General guidance for installations
- European Union Emissions Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) General guidance for aircraft operators
- Hong Kong Environmental Protection Department, Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings, 2010
- ICLEI Local Government GHG Protocol
- India GHG Inventory Programme
- International Wine Industry Greenhouse Gas Protocol and Accounting Tool
- IPCC Guidelines for National Greenhouse Gas Inventories, 2006
- IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2003
- IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011
- ISO 14064-1
- Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)
- Korea GHG and Energy Target Management System Operating Guidelines
- New Zealand Guidance for Voluntary, Corporate Greenhouse Gas Reporting
- Philippine Greenhouse Gas Accounting and Reporting Programme (PhilGARP)
- Programa GEI Mexico
- Regional Greenhouse Gas Initiative (RGGI) Model Rule
- Smart Freight Centre: GLEC Framework for Logistics Emissions Methodologies
- Taiwan GHG Reduction Act
- Thailand Greenhouse Gas Management Organization: The National Guideline Carbon Footprint for organization
- The Climate Registry: Electric Power Sector (EPS) Protocol
- The Climate Registry: General Reporting Protocol
- The Climate Registry: Local Government Operations (LGO) Protocol
- The Climate Registry: Oil & Gas Protocol
- The Cool Farm Tool
- The GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organizations
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- The Greenhouse Gas Protocol Agricultural Guidance: Interpreting the Corporate Accounting and Reporting Standard for the Agricultural Sector
- The Greenhouse Gas Protocol: Public Sector Standard
- The Tokyo Cap-and Trade Program
- US EPA Climate Leaders: Direct Emissions from Iron and Steel Production
- US EPA Climate Leaders: Direct Emissions from Municipal Solid Waste Landfilling
- US EPA Climate Leaders: Direct HFC and PFC Emissions from Manufacturing Refrigeration and Air Conditioning Equipment
- US EPA Climate Leaders: Direct HFC and PFC Emissions from Use of Refrigeration and Air Conditioning Equipment

- US EPA Climate Leaders: Indirect Emissions from Purchases/ Sales of Electricity and Steam
- US EPA Climate Leaders: Direct Emissions from Stationary Combustion
- US EPA Climate Leaders: Direct Emissions from Mobile Combustion Sources
- US EPA Mandatory Greenhouse Gas Reporting Rule
- WBCSD: The Cement CO2 and Energy Protocol
- World Steel Association CO2 emissions data collection guidelines
- Other, please specify

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

Question dependencies

This question only appears if you select "Other, please specify" in response to C5.2.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

C6 Emissions data

Scope 1 emissions data

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

Change from 2018

No change

Connection to other frameworks

TCFD

Metrics & Targets recommended disclosure b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

SDG

Goal 13: Climate action

Response options

Complete the following table:

Gross global Scope 1 emissions (metric tons CO2e)	Comment
Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]

Scope 2 emissions reporting

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

Change from 2018

No change

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

Please complete the following table:

Scope 2, location-based	Scope 2, market-based	Comment
Select from: • We are reporting a Scope 2, location-based figure • We are not reporting a Scope 2, location-based figure	Select from: We are reporting a Scope 2, market-based figure We have no operations where we are able to access electricity supplier emission factors or residual emission factors, and are unable to report a Scope 2, market-based figure We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure	Text field [maximum 2,400 characters]

Scope 2 emissions data

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

Change from 2018

No change

Connection to other frameworks

TCFD

Metrics & Targets recommended disclosure b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

Response options

Please complete the following table:

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
Numerical field [enter a range of 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a range of 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]

Exclusions

(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?

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No

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

Question dependencies

This question only appears if you select "Yes" in response to C6.4.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why this source is excluded
Text field [maximum 2,400 characters]	Select from:	Select from:	Select from:	Text field [maximum 2,400 characters]
	No emissions excluded	No emissions excluded	No emissions excluded	
	 No emissions from this source 	No emissions from this source	No emissions from this source	
	Emissions are not relevant	Emissions are not relevant	Emissions are not relevant	
	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated	
	 Emissions are relevant and calculated, but not 	Emissions are relevant and calculated, but not	Emissions are relevant and calculated, but not	
	disclosed	disclosed	disclosed	
	Emissions excluded due to recent acquisition	Emissions excluded due to a recent acquisition	Emissions excluded due to a recent acquisition	
	Emissions are not evaluated	Emissions are not evaluated	Emissions are not evaluated	

[Add Row]

Scope 3 emissions data

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

Change from 2018

No change

Connection to other frameworks

TCFD

Metrics & Targets recommended disclosure b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

SDG

Goal 12: Responsible consumption and production

Goal 13: Climate action

2018 RobecoSAM Corporate Sustainability Assessment (DJSI)

Scope 3

Response options

Please complete the following table:

Sources of Scope 3 emissions	Evaluation status	Metric tons CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Select from: Relevant, calculated Relevant, not yet calculated Not relevant, calculated Not relevant, explanation provided Not evaluated	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]	Numerical field [enter a number from 0-100 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]
Capital goods					
Fuel-and-energy-related activities (not included in Scope 1 or 2)					
Upstream transportation and distribution					
Waste generated in operations					
Business travel					
Employee commuting					
Upstream leased assets					
Downstream transportation and distribution					
Processing of sold products					
Use of sold products					
End of life treatment of sold products					
Downstream leased assets					
Franchises					
Investments					
Other (upstream)					
Other (downstream)					

Scope 3 emissions data: agricultural value chain

(C-AC6.6/C-FB6.6/C-PF6.6) Can you break down your Scope 3 emissions by relevant business activity area?

Question dependencies

This question only appears if you select "Elsewhere in value chain only" or "Both own land and elsewhere in value chain" in response to the 'Agriculture/Forestry' row; and/or if you select "Elsewhere in the value chain" only" or "Both direct operations and elsewhere in the value chain" in response to the 'Processing/Manufacturing' and/or 'Distribution' rows; and/or if you select "Yes" in response to the 'Consumption' row in C-AC0.6/C-FB0.6/C-PF0.6.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- Partially
- No

(C-AC6.6a/C-FB6.6a/C-PF6.6a) Disclose your Scope 3 emissions for each of your relevant business activity areas.

Question dependencies

This question only appears if you select "Yes" or "Partially" in response to C-AC6.6/C-FB6.6/C-PF6.6.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" function at the bottom of the table.

Activity	Scope 3 category	Emissions (metric tons CO2e)	Please explain
Select from: List created using the business activity area for which you selected: "Elsewhere in value chain only" or "Both own land and elsewhere in value chain" in response to the 'Agriculture/Forestry' row; and/or "Elsewhere in the value chain only" or "Both direct operations and elsewhere in the value chain" in response to the 'Processing/Manufacturing' and/or 'Distribution' rows; and/or "Yes" in response to the 'Consumption' row in C-ACO.6/C-FBO.6/C-PFO.6.	Scope 3 category Select from: Purchased goods and services (Agriculture/Forestry or Processing/Manufacturing) Processing of sold products (Processing/Manufacturing only) Upstream transportation and distribution (Distribution only) Downstream transportation and distribution (Distribution only) Use of sold products (Consumption only)	Emissions (metric tons CO2e) Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 4,000 characters]
	End of life treatment of sold products (Consumption only)		

[Add Row]

(C-AC6.6b/C-FB6.6b/C-PF6.6b) Why can you not report your Scope 3 emissions by business activity area?

Question dependencies

This question only appears if you select "No" in response to C-AC6.6/C-FB6.6/C-PF6.6.

Change from 2018

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 4,000 characters]
Analysis in progress	
We are planning to include in the next two years	
Judged to be unimportant	
Not an immediate business priority	
Insufficient data on operations	
Lack of internal resources	
No instruction from management	
• Other, please specify	

Emissions from biologically sequestered carbon

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

Change from 2018

No change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Response options

Select one of the following options:

- Yes
- No

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

Question Dependencies

This question only appears if you select "Yes" in response to C6.7.

Change from 2018

Minor change

Connection to other frameworks

SDG

Response options

Please complete the following table:

Emissions from biologically sequestered carbon (metric tons CO2)	Comment
Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]

Biogenic carbon data: agriculture

Questions C6.8 and C6.9 only apply to organizations with activities in the following sectors:

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No
- Don't know

(C-AC6.8a/C-FB6.8a/C-PF6.8a) Account for biogenic carbon data pertaining to your direct operations and identify any exclusions.

Question dependencies

This question only appears if you select "Yes" in response to C-AC6.8/C-FB6.8/C-PF6.8.

Change from 2018

No change

Response options

Please complete the following table:

Type of change	Emissions (metric tons CO2e)	Methodology	Please explain
CO2 emissions from land use management	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places]	Select all that apply: Default emissions factors Region-specific emissions factors Empirical models Process-based models Field measurements Other, please specify	Text field [maximum 2,400 characters]
CO2 removals from land use management			
Sequestration during land use change			
CO2 emissions from biofuel combustion (land machinery)			
CO2 emissions from biofuel combustion (processing/manufacturing machinery)			
CO2 emissions from biofuel combustion (other)			

Other emissions data: agricultural commodities

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/C-FB0.7/C-PF0.7?

Question dependencies

This question only appears if you responded to C-AC0.7/FB0.7/PF0.7.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Agricultural commodities	Do you collect or calculate GHG emissions for this commodity?	Please explain
Select from: List created with commodities selected in C-AC0.7/C-FB0.7/C-PF0.7.	Select from: • Yes • No, not currently but intend to collect or calculate this data within the next two years • No	Text field [maximum 2,000 characters]

[Add Row]

(C-AC6.9a/C-FB6.9a/C-PF6.9a) Report your greenhouse gas emissions figure(s) for your disclosing commodity(ies), explain your methodology, and include any exclusions.

Question dependencies

This question only appears if you select "Yes" in response to C-AC6.9/C-FB6.9/C-PF6.9

Change from 2018

No change

Response options

Please complete the following table:

Agricultural commodity	Reporting emissions by	Emissions (metric tons CO2e)	Denominator: unit of production	Change from last reporting year	Please explain
Auto-populated with commodities for which 'Yes' was selected in C-AC6.9/C-FB6.9/C-PF6.9	Select from: Total Unit of production	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 10 decimal places]	Select from: Kilograms Liters Metric tons Unit of product Unit of revenue Other, please specify	Select from: This is our first year of measurement Much lower Lower About the same Higher	Text field [maximum 2,000 characters]
				Much higher	

Emissions intensities

(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.

Change from 2018

Modified guidance

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

Please complete the following table. It is requested that you first report your emissions intensity figure per unit of currency total revenue. You are able to add rows by using the "Add Row" button at the bottom of the table.

Intensity figure	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change	Reason for change
Numerical field [enter a number from 0-999,999,999,999 using a maximum of 10 decimal places and no commas]	Metric tons CO2e Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: unit total revenue barrel of oil equivalent (BOE) billion (currency) funds under management full time equivalent (FTE) employee kilometer liter of product megawatt hour generated (MWh) metric ton of product ounce of gold ounce of platinum passenger kilometer room night produced square foot square meter metric ton of aluminum metric ton of ore processed metric ton of steel unit hour worked unit of service provided vehicle produced Other, please specify	Numerical field [enter a number from 0-999,999,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: Location-based Market-based	Numerical field [enter a number from 0-999 using a maximum of 2 decimal places]	Select from: Increased Decreased No change	Text field [maximum 2,400 characters]

[Add Row]

Emissions intensities: Cement

(C-CE6.11) State your organization's Scope 1 and Scope 2 emissions intensities related to cement production activities.

Change from 2018

No change

Response options

Please complete the following table:

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Output product	Gross Scope 1 emissions intensity, metric tons CO2e per metric ton	Net Scope 1 emissions intensity, metric tons CO2e per metric ton	Scope 2, location-based emissions intensity, metric tons CO2e per metric ton
Clinker	Numerical field Numerical field [enter a number from 0-99 using a maximum of 4 decimal places]	Numerical field Numerical field [enter a number from 0-99 using a maximum of 4 decimal places]	Numerical field Numerical field [enter a number from 0-99 using a maximum of 4 decimal places]
Cement equivalent			
Cementitious products			
Low-CO2 materials			

Emissions intensities: Oil and gas

(C-OG6.12) Provide the intensity figures for Scope 1 emissions (metric tons CO2e) per unit of hydrocarbon category.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Unit of hydrocarbon category (denominator)	Metric tons CO2e from hydrocarbon category per unit specified	% change from previous year	Direction of change	Reason for change	Comment
Select all that apply: Thousand barrels of crude oil / condensate Thousand barrels of natural gas liquids Thousand barrels of oil sands (includes bitumen and synthetic crude) Million cubic feet of natural gas Thousand barrels of refinery throughput Thousand barrels of refinery net production Thousand metric tons of 'high value chemicals' (lower olefins) Other, please specify	Numerical field [enter a number from 0-999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999 using a maximum of 2 decimal places]	Select from: Increased Decreased No change	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]

[Add Row]

(C-OG6.13) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.

Change from 2018

Minor change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Oil and gas business division	Estimated total methane emitted expressed as % of natural gas production or throughput at given division	Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division	Comment
Select all that apply: Upstream Midstream Downstream Chemicals Other, please specify	Numerical field [enter a number from 0-100 with a maximum of three decimal places]	Numerical field [enter a number from 0-100 with a maximum of three decimal places]	Text field [maximum 2,400 characters]

[Add Row]

Emissions intensities: Steel

(C-ST6.14) State your organization's emissions and energy intensities by steel production process route.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Process route	Emissions intensity figure, metric tons CO2e per metric ton of crude steel production	Energy intensity figure, GJ (LHV) per metric ton of crude steel production	Methodology applied	Comment
Select from: Blast furnace-basic oxygen furnace Scrap-electric arc furnace Direct reduced iron-electric arc furnace Other (please specify)	Numerical field [enter a number from 0-99 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-99 using a maximum of 2 decimal places]	Select from: GHG Protocol Worldsteel Association Other (please specify)	Text field [maximum 2,400 characters]

[Add Row]

Emissions intensities: Transport services

(C-TS6.15) What are your primary intensity (activity-based) metrics that are appropriate to your emissions from transport activities in Scope 1, 2, and 3?

Change from 2018

No change

Response options

Please complete the following table:

Activity	Scopes used for calculation of intensities	Intensity figure	Metric numerator: emissions in metric tons CO2e
LDV	Select from: Report just Scope 1 Report Scope 1 + 2 Report Scope 1 + 2 + 3 (category 4)	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 6 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]
HDV	Select from: Report just Scope 1 Report Scope 1 + 2 Report Scope 1 + 2 + 3 (category 4)		
Rail	Select from: Report just Scope 1 Report Scope 1 + 2 Report Scope 1 + 2 + 3 (category 4)		
Aviation	Select from: Report just Scope 1 Report Scope 1 + 2 Report Scope 1 + 2 + 3 (category 4)		
Marine	Select from: Report just Scope 1 Report Scope 1 + 2 Report Scope 1 + 2 + 3 (category 4)		
ALL	Select from: Report just Scope 1 Report Scope 1 + 2 Report Scope 1 + 2 + 3 (category 4)		

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Metric denominator: unit	Metric denominator: unit total		Please explain any exclusions in your coverage of transport emissions in selected category, and reasons for change in emissions intensity.
Select from: p.km p.mile t.km t.mile	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from -999 to 999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]

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C7 Emissions breakdown

Scope 1 breakdown: GHGs

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

Change from 2018

Minor change

Response options

Select one of the following options:

- Yes
- No
- Don't know

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

Question Dependencies

This question only appears if you select "Yes" in response to C7.1.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Greenhouse gas	Scope 1 emissions (metric tons in CO2e)	GWP Reference
Select from:	Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Select from:
• CO2		IPCC Fifth Assessment Report (AR5 – 100 year)
• CH4		IPCC Fourth Assessment Report (AR4 - 100 year)
• N2O		IPCC Third Assessment Report (TAR - 100 year)
• HFCs		IPCC Second Assessment Report (SAR - 100 year)
• PFCs		IPCC Fourth Assessment Report (AR4 - 50 year)
• SF6		IPCC Third Assessment Report (TAR - 50 year)
• NF3		IPCC Second Assessment Report (SAR - 50 year)
Other, please specify		IPCC Fifth Assessment Report (AR5 – 20 year)
		IPCC Fourth Assessment Report (AR4 - 20 year)
		IPCC Third Assessment Report (TAR - 20 year)
		IPCC Second Assessment Report (SAR - 20 year)
		Other, please specify

[Add Row]

(C-CO7.1b) Break down your total gross global Scope 1 emissions from coal mining activities in the reporting year by greenhouse gas type.

Question dependencies

This question only appears if you select "Yes" in response to C7.1

Change from 2018

No change

Response options

Please complete the following table:

Emissions sources	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Total gross Scope 1 GHG emissions (metric tons CO2e)	Comment
Fugitives (Underground coal mining)	Numerical field [enter up to 999,999,999,999 and up to 2 decimal places]	Numerical field [enter up to 999,999,999,999 and up to 2 decimal places	Numerical field [enter up to 999,999,999,999 and up to 2 decimal places	Text field [maximum 2,400 characters]
Fugitives (Surface coal mining)				
Fugitives (Post-mining and abandoned coal mines)				
Flaring				
Utilized methane				
Combustion (Underground coal mining, excluding flaring and utilization)				
Combustion (Surface coal mining, excluding flaring, excluding flaring and utilization)				
Combustion (Electricity generation)				
Combustion (Other)				
Emissions not elsewhere classified				

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

Question dependencies

This question only appears if you select "Yes" in response to C7.1

Change from 2018

No change

Response options

Please complete the following table:

Emissions sources	Gross Scope 1 carbon dioxide emissions (metric tons CO2)		Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 GHG emissions (metric tons CO2e)	Comment
Fugitives	Numerical field [enter a number from 0- 999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]
Combustion (Electric utilities)					
Combustion (Gas utilities)					
Combustion (Other)					
Emissions not elsewhere classified					

(C-OG7.1b) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type.

Question dependencies

This question only appears if you select "Yes" in response to C7.1.

Change from 2018

Modified question

Response options

Please complete the following table:

Emissions category	Value Chain	Product	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Total gross Scope 1 GHG emissions (metric tons CO2e)	Comment
Select all that apply: Combustion (excluding flaring) Flaring Venting Fugitives Process (feedstock) emissions Other (please specify)	Select all that apply: Upstream Midstream Downstream Other (please specify)	Select from: Oil Gas Unable to disaggregate	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]

[Add Row]

Scope 1 breakdown: country

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

Change from 2018

No change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Goal 13: Climate action

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Country/Region	Scope 1 emissions (metric tons CO2e)
Select from a drop-down list of countries and regions. Please see the Technical Note "Country Regions" for details around the available regions and their constituent countries.	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]

[Add Row]

Scope 1 breakdown: business breakdown

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

Change from 2018

No change

Response options

Select all that apply from the following options:

- By business division
- By facility
- By activity

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

Question dependencies

This question only appears if you select "By business division" in response to C7.3.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Business division	Scope 1 emissions (metric tons CO2e)
Text field [maximum 500 characters]	Numerical field [enter a range of 0- 999,999,999 using a maximum of 2 decimal places and no commas]

[Add Row]

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

Question Dependencies

This question only appears if you select "By facility" in response to C7.3.

Change from 2018

Modified guidance

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Text field [maximum 500 characters]	Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Enter the latitude of your facility here using numbers between 90.000000 and -90.000000, e.g. 51.524810	Enter the longitude of your facility using numbers between 180.000000 and -180.000000, e.g0.106958

[Add Row]

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

Question Dependencies

This question only appears if you select "By activity" in response to C7.3.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Activity	Scope 1 emissions (metric tons CO2e)
Text field [maximum 500 characters]	Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]

[Add Row]

Scope 1 breakdown: agriculture

Question C7.4 only applies to organizations with activities in the following sectors:

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry
- Coal
- Electric utilities
- Oil and gas
- Cement

- Chemical
- Metals and mining
- Steel
- Transport OEMs
- Transport services

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

Question dependencies

This question only appears if you select the following options in response to C-AC0.6/C-FB0.6/C-PF0.6:

- "Own land only" or "Both own land and elsewhere in value chain" for 'Agriculture/Forestry' business activity, AND/OR,
- "Direct operations only" or "Both direct operations and elsewhere in value chain" for 'Processing/Manufacturing' and/or 'Distribution' business activities.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- Partially
- No

(C-AC7.4a/C-FB7.4a/C-PF7.4a) Select the form(s) in which you are reporting your agricultural/forestry emissions.

Question dependencies

This question only appears if you select "Yes" or "Partially" in response to C-AC7.4/C-FB7.4/C-PF7.4, AND select "Own land only" or "Both own land and elsewhere in value chain" in response to the 'Agriculture/Forestry' row in C-AC0.6/C-FB0.6/C-PF0.6

Change from 2018

No change

Response options

Select one of the following options:

- Total emissions
- Emissions disaggregated by category (advised by the GHG Protocol)

(C-AC7.4b/C-FB7.4b/C-PF7.4b) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

Question dependencies

This question only appears if you select "Yes" or "Partially" in response to C-AC7.4/C-FB7.4/C-PF7.4.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table:

Activity	Emissions category	Emissions (metric tons CO2e)	Methodology	Please explain
Select from: • [List created from your response to C-AC0.6/C-FB0.6/C-PF0.6]	Select from: Non-mechanical Land use change Mechanical Total	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Select all that apply: Default emissions factor Region-specific emissions factors Empirical models Process-based models Field measurements Other, please specify	Text field [maximum 2,400 characters]

[Add Row]

(C-AC7.4c/C-FB7.4c/C-PF7.4c) Why do you not include greenhouse gas emissions pertaining your business activity(ies) in your direct operations as part of your global gross Scope 1 figure? Describe any plans to do so in the future.

Question dependencies

This question only appears if you select "No" in response to C-AC7.4/C-FB7.4/C-PF7.4.

Change from 2018

No change

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 4,000 characters]
Analysis in progress	
We are planning to include in the next two years	
Judged to be unimportant	
Not an immediate business priority	
No instruction from management	
Lack of internal resources	
• Other, please specify	

Scope 1 breakdown: sector production activities

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

Change from 2018

No change

Response options

Please complete the following table:

Sector production activity	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions, metric tons CO2e*	Comment
Cement production activities**	Numerical field [enter a number from 0-999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]
Chemicals production activities**			
Coal production activities**			
Electric utility generation activities**			
Metals and mining production activities**			
Oil and gas production activities (upstream)**			
Oil and gas production activities (downstream)**			
Steel production activities**			
Transport OEM activities**			
Transport services activities**			

^{*}This column only appears for cement production activities

Scope 2 breakdown: country

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

Change from 2018

No change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Goal 13: Climate action

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

^{**}This row only appears for the relevant sector

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)
Select from a drop-down list of countries and regions. Please see the Technical Note "Country Regions", for details around the available regions and their constituent countries.	Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places and no commas]	-	Numerical field [enter a number of 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number of 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]

[Add Row]

Scope 2 breakdown: business breakdowns

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

Change from 2018

No change

Response options

Select all that apply from the following options:

- By business division
- By facility
- By activity

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

Question dependencies

This question only appears if you select "By business division" in response to C7.6.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Text field [500 maximum characters]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]

[Add Row]

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Question dependencies

This question only appears if you select "By facility" in response to C7.6.

Change from 2018

Modified guidance

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Text field [maximum 500 characters]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999 using a maximum of 2 decimal places and no commas]

[Add Row]

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Question dependencies

This question only appears if you select "By activity" in response to C7.6.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Text field [maximum 500 characters]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]

[Add Row]

Scope 2 breakdown: sector production activities

Question C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7 only applies to organizations with activities in the following sectors:

- Cement
- Chemicals
- Coal
- Metals & mining
- Oil & gas
- Steel
- Transport OEMS
- Transport services

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

Change from 2018

No change

Response options

Please complete the following table:

Sector production activity	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities*	Numerical field [enter a number from 0-99,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-99,999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]
Chemicals production activities*			
Coal production activities*			
Metals and mining production activities*			
Oil and gas production activities (upstream)*			
Oil and gas production activities (downstream)*			
Steel production activities*			
Transport OEM activities*			
Transport services activities*			

^{*}This row only appears for the relevant sector

Scope 3 breakdown

Question C7.8 only applies to organizations with activities in the following sectors:

- Chemicals
- Transport manufacturers

(C-CH7.8) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Purchased feedstock	Percentage of Scope 3, Category 1 tCO 2e from purchased feedstock	Explain calculation methodology
Select from:	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]
High Value Chemicals (Steam cracking)		
• Ammonia		
Aromatics extraction		
Methanol		
Butylene		
Propylene (FCC)		
• Ethanol		
Butadiene (C4 sep.)		
Nitric acid		
Adipic acid		
Caprolactam		
Soda ash		
Carbon black		
• Polymers		
Specialty chemicals		
Other base chemicals		
Anthracite		
• Coal		
• Lignite		
• Coke		
Patent fuel / BKB		
Petroleum coke		
Diesel oil		
• Gas oil		
Heavy fuel oil		
• Oil shale		
Gasoline		
White Spirit / SBP		
Lubricants		
Naphtha		
Special Naphtha		
Propane liquid		
Propane gas		
• Ethane		
Butane		
• LPG		
Refinery gas		
Natural gas		
Solid biomass		
Liquid biofuel		
Waste biofuel		
• Biogas		
Other (please specify)		

[Add Row]

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(C-CH7.8a) Disclose sales of products that are greenhouse gases.

Change from 2018

No change

Response options

Please complete the following table:

Output product	Sales, metric tons	Comment
Carbon dioxide (CO2)	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]
Methane (CH4)		
Nitrous oxide (N2O)		
Hydrofluorocarbons (HFC)		
Perfluorocarbons (PFC)		
Sulphur hexafluoride (SF6)		
Nitrogen trifluoride (NF3)		

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

Change from 2018

No change

Response Options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table. The table is displayed over several rows for readability.

Activity	Emissions intensity figure	Metric numerator (Scope 3 emissions: use of sold products) in Metric tons CO2e	Metric denominator	Metric denominator: Unit total
Select from: Drop down options determined by transport modes selected in C-TO0.7/C-TS0.7	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]		LDV p.km t.km p.mile t.mile HDV p.km t.km p.mile t.mile Rail p.km t.km p.mile t.mile Rail p.km t.km p.mile t.km p.mile t.mile Marine p.km t.km p.mile	Numerical field [enter a number from 0-999,999,999,999,999 using a maximum of 6 decimal places and no commas]
			t.mile n.autical mile t.nautical mile	

[Add Row]

% change from previous year	Vehicle unit sales in reporting year	· ·	Annual distance in km or miles (unit specified by column 4)		Please explain the changes, and relevant standards/methodologies used
Percentage field [enter a percentage from -999 - 999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]

[Add Row]

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Emissions performance

(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?

Change from 2018

No change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Goal 13: Climate action

Response options

Select one of the following options:

- Increased
- Decreased
- Remained the same overall
- This is our first year of reporting, so we cannot compare to last year
- We don't have any emissions data

(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.

Question dependencies

This question only appears if you select "Increased", "Decreased" or "Remained the same overall" in response to C7.9.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Response options

Please complete the following table:

Reason	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: Increased Decreased No change	Numerical field [enter a number from 0-999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]
Other emissions reduction activities				
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

(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?

Question dependencies

This question only appears if you select "Increased", "Decreased" or "Remained the same overall" in response to C7.9.

Change from 2018

No change

Response options

Select one of the following options:

- Location-based
- Market-based
- Don't know

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C8 Energy

Energy spend

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

Change from 2018

No change

Response options

Select one of the following options:

- 0%
- More than 0% but less than or equal to 5%
- More than 5% but less than or equal to 10%
- More than 10% but less than or equal to 15%
- More than 15% but less than or equal to 20%
- More than 20% but less than or equal to 25%
- More than 25% but less than or equal to 30%
- More than 30% but less than or equal to 35%
- More than 35% but less than or equal to 40%
- More than 40% but less than or equal to 45%
- More than 45% but less than or equal to 50%
- More than 50% but less than or equal to 55%
- More than 55% but less than or equal to 60%
- More than 60% but less than or equal to 65%
- More than 65% but less than or equal to 70%
- More than 70% but less than or equal to 75%
- More than 75% but less than or equal to 80%
- More than 80% but less than or equal to 85%
- More than 85% but less than or equal to 90%More than 90% but less than or equal to 95%
- More than 95% but less than or equal to 100%
- Don't know

Energy-related activities

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

Question Dependencies

The energy-related activities that you select in response to C8.2 determine which energy breakdowns you will be prompted to respond to in the proceeding questions. Please note, if your response to C8.2 is amended, data in dependent questions may be erased.

Change from 2018

No change

Response options

Please complete the following table:

Activity	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Select from:
	Yes No
Consumption of purchased or acquired electricity	
Consumption of purchased or acquired heat	
Consumption of purchased or acquired steam	
Consumption of purchased or acquired cooling	
Generation of electricity, heat, steam, or cooling	

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

Question dependencies

This question only appears if you select "Yes" to any of the activities listed in C8.2. A row will appear in this table for each energy-related activity selected in C8.2. The "Total energy consumption" row will always appear.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Goal 13: Climate action

Response options

Please complete the following table:

Activity	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	Select from: • LHV (lower heating value) • HHV (higher heating value) • Unable to confirm heating value	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]
Consumption of purchased or acquired electricity	N/A			
Consumption of purchased or acquired heat	N/A			
Consumption of purchased or acquired steam	N/A			
Consumption of purchased or acquired cooling	N/A			
Consumption of self-generated non-fuel renewable energy	N/A		N/A	
Total energy consumption	N/A			

(C-CE8.2a) Report your organization's energy consumption totals (excluding feedstocks) for cement production activities in MWh.

Question dependencies

This question only appears if you select "Yes" to any of the activities listed in C8.2. A row will appear in this table for each energy-related activity selected in C8.2. The "Total energy consumption" row will always appear.

Change from 2018

Minor change

Response options

Please complete the following table:

Activity	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	Select from: LHV (lower heating value) HHV (higher heating value) Unable to confirm heating value	Numerical field [enter a number from 0-9,999,999,999 using a maximum of 2 decimal places]
Consumption of purchased or acquired electricity	N/A	
Consumption of other purchased or acquired energy (heat, steam, and/or cooling)	N/A	
Total energy consumption	N/A	

(C-CH8.2a) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

Question dependencies

This question only appears if you select "Yes" in response to any of the activities listed in C8.2. A row will appear in this table for each energy-related activity selected in C8.2. The "Total energy consumption" row will

always appear.

Change from 2018

Minor change

Response options

Please complete the following table:

Activity	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	Select from: LHV (lower heating value) HHV (higher heating value) Unable to confirm heating value	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]
Consumption of purchased or acquired electricity	N/A	
Consumption of purchased or acquired heat	N/A	
Consumption of purchased or acquired steam	N/A	
Consumption of purchased or acquired cooling	N/A	
Consumption of self-generated non-fuel renewable energy	N/A	
Total energy consumption	N/A	

(C-MM8.2a) Report your organization's energy consumption totals (excluding feedstocks) for metals and mining production activities in MWh.

Question dependencies

This question only appears if you select "Yes" to any of the activities listed in C8.2. A row will appear in the response table for each energy-related activity selected in C8.2. The "Total energy consumption" row will always appear.

Change from 2018

Minor change

Response options

Please complete the following table:

Activity	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	Select from: LHV (lower heating value) HHV (higher heating value) Unable to confirm heating value	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]
Consumption of purchased or acquired electricity	N/A	
Consumption of purchased or acquired heat	N/A	
Consumption of purchased or acquired steam	N/A	
Consumption of purchased or acquired cooling	N/A	
Consumption of self-generated non-fuel renewable energy	N/A	
Total energy consumption	N/A	

(C-ST8.2a) Report your organization's energy consumption totals (excluding feedstocks) for steel production activities in MWh.

Question dependencies

This question only appears if you select "Yes" in response to any of the activities listed in C8.2. A row will appear in this table for each energy-related activity selected in C8.2.

Change from 2018

Minor change

Response options

Please complete the following table

Activity	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	Select from: LHV (lower heating value) HHV (higher heating value) Unable to confirm heating value	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]
Consumption of purchased or acquired electricity	N/A	
Consumption of purchased or acquired heat	N/A	
Consumption of purchased or acquired steam	N/A	
Consumption of purchased or acquired cooling	N/A	
Consumption of self-generated non-fuel renewable energy	N/A	
Total energy consumption	N/A	

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

Question Dependencies

This question only appears if you select "Yes" to "Consumption of fuel" in response to C8.2. Each option that you select in this table will appear as an additional column in C8.2c.

Change from 2018

Minor change

Response options

Please complete the following table:

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

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

Question dependencies

This question only appears if you select "Consumption of fuel" in C8.2. For each fuel application selected in C8.2b a column appears in the table in addition to the "MWh fuel consumed for self-generation of heat" and "Total MWh consumed by the organization" columns. If no fuel application is selected in C8.2b then only the "Total MWh consumed by the organization" column will appear.

Change from 2018

Minor change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 13: Climate action

Response options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Fuels	Heating value	Total MWh consumed by the organization	MWh consumed for self-generation of electricity
Select from: Acetylene; Agricultural Waste; Alternative Kiln Fuel (Wastes); Animal Fat; Animal/Bone Meal; Anthracite Coal; Asphalt; Aviation Gasoline; Bagasse; Bamboo; Basic Oxygen Furnace Gas (LD Gas); Biodiesel; Biodiesel Tallow; Biodiesel Waste Cooking Oil; Bioethanol; Biogas; Biogasoline; Biomass Municipal Waste; Biomethane; Bitumen; Bituminous Coal; Black Liquor; Blast Furnace Gas; Brown Coal Briquettes (BKB); Burning Oil; Butane; Butylene; Charcoal; Coal; Coal Tar; Coke; Coke Oven Gas; Coking Coal; Compressed Natural Gas (CNG); Condensate; Crude Oil; Crude Oil Extra Heavy; Crude Oil Heavy; Crude Oil Light; Diesel; Distillate Oil; Dried Sewage Sludge; Ethane; Ethylene; Fuel Gas; Fuel Oil Number 1; Fuel Oil Number 2; Fuel Oil Number 4; Fuel Oil Number 5; Fuel Oil Number 6; Gas Coke; Gas Oil; Gas Works Gas; GCl Coal; General Municipal Waste; Grass; Hardwood; Heavy Gas Oil; Hydrogen; Industrial Wastes; Isobutane; Isobutylene; Jet Gasoline; Jet Kerosene; Kerosene; Landfill Gas; Light Distillate; Lignite Coal; Liquefied Natural Gas (LNG); Liquefied Petroleum Gas (LPG); Liquid Biofuel; Lubricants; Marine Fuel Oil; Marine Gas Oil; Metallurgical Coal; Methane; Motor Gasoline; Naphtha; Natural Gas; Natural Gas Liquids (NGL); Natural Gasoline; Non-Biomass Municipal Waste; Non-Biomass Waste; Oil Sands; Oil Shale; Orimulsion; Other Petroleum Gas; Paraffin Waxes; Patent Fuel; PCI Coal; Peat; Pentanes Plus; Petrochemical Feedstocks; Petrol; Petroleum Coke; Petroleum Products; Pitch; Plastics; Primary Solid Biomass; Propane Gas; Propane Liquid; Propylene; Refinery Feedstocks; Refinery Gas; Refinery Oil; Residual Fuel Oil; Road Oil; SBP; Shale Oil; Sludge Gas; Softwood; Solid Biomass Waste; Special Naphtha; Still Gas; Straw; Subbituminous Coal; Sulphite Lyes; Tar; Tar Sands; Thermal Coal; Waste Paper and Card; Waste Plastics; Waste Tires; White Spirit; Wood; Wood Chips; Wood Logs; Wood Pellets; Wood Waste; Other, please specify	Select from: LHV HHV Unable to confirm heating value	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]

MWh consumed for self-generation of heat	MWh consumed for self-generation of steam	3	MWh consumed self-cogeneration or self-trigeneration	Comment
Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Text field [maximum 2,400 characters]

[Add Row]

(C-CE8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel for cement production activities.

Question dependencies

This question only appears if you select "Consumption of fuel" in C8.2 and a column appears in the table for each fuel application selected in C8.2b. The "Total MWh (LHV) consumed for cement production" and "MWh (LHV) consumed at the kiln" columns will always appear.

Change from 2018

Minor change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Fuels (excluding feedstocks) Heating value	Total MWh fuel consumed for cement production activities	kiln	MWh fuel consumed for the generation of heat that is not used in the kiln		MWh fuel consumed for self- cogeneration or self- trigeneration
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Acety	t from: lene; Agricultural Waste; Alternative Kiln	Select from: • LHV	Numerical field [enter a number from 0-9,999,999,999				
Fuel (Wastes); Animal Fat; Animal/Bone Meal;	• HHV	using a maximum of 2 decimal				
Anthr	acite Coal; Asphalt; Aviation Gasoline;	 Unable to confirm heating 	places]	places]	places]	places]	places]
Bagas	sse; Bamboo; Basic Oxygen Furnace Gas	value					
(LD G	as); Biodiesel; Biodiesel Tallow; Biodiesel						
Waste	e Cooking Oil; Bioethanol; Biogas;						
Bioga	soline; Biomass Municipal Waste;						
Biome	ethane; Bitumen; Bituminous Coal; Black						
Liquo	r; Blast Furnace Gas; Brown Coal						
Brique	ettes (BKB); Burning Oil; Butane; Butylene;						
Charc	coal; Coal; Coal Tar; Coke; Coke Oven						
Gas;	Coking Coal; Compressed Natural Gas						
(CNG); Condensate; Crude Oil; Crude Oil Extra						
Heav	y; Crude Oil Heavy; Crude Oil Light; Diesel;						
Distilla	ate Oil; Dried Sewage Sludge; Ethane;						
Ethyle	ene; Fuel Gas; Fuel Oil Number 1; Fuel Oil						
Numb	er 2; Fuel Oil Number 4; Fuel Oil Number						
5; Fue	el Oil Number 6; Gas Coke; Gas Oil; Gas						
Works	s Gas; GCI Coal; General Municipal Waste;						
Grass	; Hardwood; Heavy Gas Oil; Hydrogen;						
Indus	trial Wastes; Isobutane; Isobutylene; Jet						
Gasol	ine; Jet Kerosene; Kerosene; Landfill Gas;						
Light	Distillate; Lignite Coal; Liquefied Natural						
Gas (LNG); Liquefied Petroleum Gas (LPG);						
Liquid	Biofuel; Lubricants; Marine Fuel Oil;						
Marin	e Gas Oil; Metallurgical Coal; Methane;						
Motor	Gasoline; Naphtha; Natural Gas; Natural						
Gas L	iquids (NGL); Natural Gasoline; Non-						
Bioma	ass Municipal Waste; Non-Biomass Waste;						
Oil Sa	ands; Oil Shale; Orimulsion; Other						
Petro	eum Gas; Paraffin Waxes; Patent Fuel; PCI						
Coal;	Peat; Pentanes Plus; Petrochemical						
Feeds	stocks; Petrol; Petroleum Coke; Petroleum						
Produ	icts; Pitch; Plastics; Primary Solid Biomass;						
Propa	ne Gas; Propane Liquid; Propylene;						
Refine	ery Feedstocks; Refinery Gas; Refinery Oil;						
Resid	ual Fuel Oil; Road Oil; SBP; Shale Oil;						
Sludg	e Gas; Softwood; Solid Biomass Waste;						
Speci	al Naphtha; Still Gas; Straw;						
Subbi	tuminous Coal; Sulphite Lyes; Tar; Tar						
Sands	s; Thermal Coal; Thermal Coal						
Comn	nercial; Thermal Coal Domestic; Thermal						
Coal I	ndustrial; Tires; Town Gas; Unfinished Oils;						
Veget	able Oil; Waste Oils; Waste Paper and						
Card;	Waste Plastics; Waste Tires; White Spirit;						
Wood	; Wood Chips; Wood Logs; Wood Pellets;						
Wood	Waste; Other, please specify						

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

Question dependencies

This question only appears if you input data into C8.2c. A corresponding row will appear for each fuel that you reported in C8.2c.

Change from 2018

Minor change, Modified guidance

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Response options

Fuel	Emission factor	Unit	Emission factor source	Comment
Select from:	Numerical field [enter a number from 0 to 999,999 using up	Select from:	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]
(Options for this column driven by fuel's selected	to 5 decimal places and no commas]	metric tons CO2e per m3		
in C8.2c)		• metric tons CO2 per m3		
		metric tons CO2e per liter		
		metric tons CO2 per liter		
		metric tons CO2e per barrel		
		metric tons CO2 per barrel		
		metric tons CO2e per Mg		
		metric tons CO2 per Mg		
		metric tons CO2e per metric ton		
		metric tons CO2 per metric ton		
		 metric tons CO2e per short ton 		
		 metric tons CO2 per short ton 		
		 metric tons CO2e per kWh 		
		 metric tons CO2 per kWh 		
		 metric tons CO2e per MWh 		
		 metric tons CO2 per MWh 		
		metric tons CO2e per GJ		
		metric tons CO2 per GJ		
		 metric tons CO2e per million Btu 		
		 metric tons CO2 per million Btu 		
		metric tons CO2e per boe		
		metric tons CO2 per boe		
		metric tons CO2e per toe		
		metric tons CO2 per toe		
		metric tons CO2e per tce		
		metric tons CO2 per tce		
		metric tons CO2e per Gcal		
		metric tons CO2 per Gcal		
		• kg CO2e per m3		

● kg CO2 per m3	
• kg CO2e per liter	
• kg CO2 per liter	
• kg CO2e per barrel	
kg CO2 per barrel	
• kg CO2e per gallon	
• kg CO2 per gallon	
• kg CO2e per Mg	
• kg CO2 per Mg	
kg CO2e per metric ton	
kg CO2 per metric ton	
kg CO2e per short ton	
kg CO2 per short ton	
• kg CO2e per MWh	
• kg CO2 per MWh	
• kg CO2e per GJ	
• kg CO2 per GJ	
• kg CO2e per million Btu	
• kg CO2 per million Btu	
• kg CO2e per boe	
• kg CO2 per boe	
• kg CO2e per toe	
• kg CO2 per toe	
• kg CO2e per tce	
• kg CO2 per tce	
• kg CO2e per Gcal	
• kg CO2 per Gcal	
Ib CO2e per 1000 cubic ft3	
Ib CO2 per 1000 cubic ft3	
• Ib CO2e per gallon	
• lb CO2 per gallon	
Ib CO2e per barrel	
• Ib CO2 per barrel	
Ib CO2e per short ton	
Ib CO2 per short ton	
● lb CO2e per MWh	
● Ib CO2 per MWh	
• Ib CO2e per GJ	
● Ib CO2 per GJ	
● lb CO2e per million Btu	
Ib CO2 per million Btu	
• Ib CO2e per boe	
• Ib CO2 per boe	
• Ib CO2e per toe	
• Ib CO2 per toe	
• Ib CO2e per tce	
• Ib CO2 per tce	
● lb CO2e per Gcal	
• Ib CO2 per Gcal	
·	

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

Question Dependencies

This question only appears if you select "Generation of electricity, heat, steam, or cooling" in response to C8.2.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Goal 13: Climate action

Response options

Please complete the following table:

Energy Carrier	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	Numerical field [enter a number from 0 to 999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 999,999,999 using up to 2 decimal places and no commas]
Heat				
Steam				
Cooling				

(C-CE8.2e) Provide details on the electricity and heat your organization has generated and consumed for cement production activities.

Question dependencies

This question only appears if you select "Generation of electricity, heat, steam, or cooling" in response to C8.2.

Change from 2018

No change

Response options

Energy carrier	Total gross generation (MWh) inside the cement sector boundary	Generation that is consumed (MWh) inside the cement sector boundary
Electricity	Numerical field [enter a number from 0-999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999 using a maximum of 2 decimal places]
Heat		
Steam		

(C-CH8.2e) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

Question dependencies

This question only appears if you select "Generation of electricity, heat, steam, or cooling" in response to C8.2.

Change from 2018

No change

Response options

Please complete the following table:

Energy Carrier	Total gross generation (MWh) inside chemicals sector boundary	Generation that is consumed (MWh) inside chemicals sector boundary
Electricity	Numerical field [enter a number from 0-999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]
Heat		
Steam		
Cooling		

(C-EU8.2e) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

Question dependencies

This question only appears if you selected "Yes" to "Generation of electricity, heat, steam, or cooling" in C8.2.

Change from 2018

No change

Response options

Power generation source	Nameplate capacity (MW)	Gross electricity generation (GWh)	Net electricity generation (GWh)	Absolute Scope 1 emissions (metric tons CO2e)	Scope 1 emissions intensity (metric tons CO2e per GWh)	Comment
Coal – hard	Numerical field [enter a number from 0-999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-9,999 using a maximum of 2 decimal places and]	Text field [maximum 2,400 characters]
Lignite						
Oil						
Gas						
Biomass						
Waste (non-biomass)						
Nuclear						
Geothermal						
Hydroelectric						
Wind						
Solar						
Other renewable						
Other non-renewable						
Total						

(C-MM8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for metals and mining production activities.

Question dependencies

This question only appears if you select "Generation of electricity, heat, steam, or cooling" in response to C8.2.

Change from 2018

Minor change

Response options

Please complete the following table:

Energy Carrier	Total gross generation (MWh) inside metals and mining sector boundary	Generation that is consumed (MWh) inside metals and mining sector boundary
Electricity	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]
Heat		
Steam		
Cooling		

(C-ST8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for steel production activities.

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Question dependencies

This question only appears if you select "Generation of electricity, heat, steam, or cooling" in response to C8.2.

Change from 2018

No change

Response options

Please complete the following table:

Energy Carrier	Total Gross generation (MWh) inside steel sector boundary	Generation that is consumed by the organization (MWh) inside steel sector boundary
Electricity	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]
Heat		
Steam		

(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.

Question Dependencies

This question only appears if you select "Consumption of purchased or acquired electricity", "Consumption of purchased or acquired heat", "Consumption of purchased or acquired steam" or "Consumption of purchased or acquired cooling" in response to C8.2.

Change from 2018

Modified question

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Goal 12: Responsible consumption and production

Goal 13: Climate action

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Basis for applying a low-carbon emission factor	Low-carbon technology type	Region of consumption of low- carbon electricity, heat, steam or cooling	MWh consumed associated with low- carbon electricity, heat, steam or cooling	Emission factor (in units of metric tons CO2e per MWh)	Comment
Select from: No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor Off-grid energy consumption from an on-site installation or through a direct line to an off-site generator owned by another company Power Purchase Agreement (PPA) with energy attribute certificates Power Purchase Agreement (PPA) without energy attribute certificates Contract with suppliers or utilities (e.g. green tariff), supported by energy attribute certificates Contract with suppliers or utilities (e.g. green tariff), not supported by electricity attribute certificates Energy attribute certificates, Guarantees of Origin Energy attribute certificates, Renewable Energy Certificates (RECs) Energy attribute certificates, I-RECs Grid mix of renewable electricity Other, please specify	Select all that apply: Solar PV Concentrated solar power (CSP) Wind Hydropower Nuclear Biomass (including biogas) Tidal Other low-carbon technology, please specify	Select from: Asia Pacific Africa Europe Latin America Middle East North America Other, please specify	Numerical field [enter a number from 0 to 999,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999 using up to 6 decimal places and no commas]	Text field [maximum 2,400 characters]

(C-TS8.2h) Provide details on the average emission factor used for all transport movements per mode that directly source energy from the grid.

Question dependencies

This question only appears if you select LDV or Rail in C-TS0.7.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Category	Emission factor unit	Average emission factor: unit value	Comment
Select from: LDV Rail	Select from: • gCO2/kWh • gCO2e/kWh	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]

[Add Row]

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(C-CH8.3) Disclose details on your organization's consumption of feedstocks for chemical production activities.

Change from 2018

Minor change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table. Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]

Feedstocks	Total consumption	Total consumption unit	Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit	Heating value of feedstock, MWh per consumption unit	Heating value	Comment
Select from: Anthracite Coal Lignite Coke Patent fuel / BKB Petroleum coke Diesel oil Gas oil Heavy fuel oil Oil shale Gasoline White Spirit / SBP Lubricants Naphtha Special Naphtha Propane gas Ethane Butane LPG Refinery gas Natural gas Solid biomass Liquid biofuel Waste biofuel Biogas Other, please specify No consumption of fossil fuel feedstocks for chemical production activities	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Select from: metric tons thousand metric tons thousand pounds barrels thousand barrels gallons thousand gallons million gallons liters thousand liters million liters cubic feet thousand cubic feet million cubic feet cubic metres thousand cubic metres	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Select from: • LHV • HHV • Unable to confirm heating value	Text field [maximum 2,400 characters]

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[Add row]

(C-CH8.3a) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.

Change from 2018

No change

Response options

Please complete the following table:

Feedstock source	Percentage of total chemical feedstock (%)
Oil	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]
Natural Gas	
Coal	
Biomass	
Waste	
Fossil fuel (where coal, gas, oil cannot be distinguished)	
Unknown source or unable to disaggregate	

Feedstock consumption: Steel

(C-ST8.3) Disclose details on your organization's consumption of feedstocks for steel production activities.

Change from 2018

Minor change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Feedstocks	Total consumption	Total consumption unit	Dry or wet basis?	Inherent carbon dioxide emission factor of feedstock, metric tons of CO2 per consumption unit	Heating value of feedstock, MWh per consumption unit	Heating value	Comment
Select from: Coal Coking coal Blast furnace coal Coke Fuel oil Natural gas Coke oven gas Blast furnace gas Hydrogen Charcoal Other biomass Liquid biofuel Biogas Biomass waste Non-biomass waste Other, please specify	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Select from: metric tons thousand metric tons thousand pounds barrels thousand barrels gallons thousand gallons million gallons liters thousand liters million liters cubic feet thousand cubic feet million cubic feet cubic metres thousand cubic metres	Select from: Dry basis Wet basis	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Select from: LHV HHV Unable to confirm heating value	Text field [maximum 2,400 characters]

Transmission and distribution

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?

Change from 2018

Minor change

Response options

Select one of the following options:

- Yes
- No

(C-EU8.4a) Disclose the following information about your transmission and distribution business.

Question dependencies

This question only appears if you select "Yes" in response to C-EU8.4.

Change from 2018

No change

Response options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

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Country/region	Voltage level	Annual load (GWh)	Scope 2 emissions (basis)	Scope 2 emissions (metric tons CO2e)
Select from: Country/region drop-down list	Select from: Transmission (high voltage) Distribution (low voltage)	Numerical field [enter a number from 0 - 999,999 using a maximum of 2 decimal places]	Select from: Location-based Market-based	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places]

Annual energy losses (% of annual load)	Length of network (km)	Number of connections	Area covered (km2)	Comment
-	Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]

[Add row]

Transport-related energy efficiency metrics

(C-TO8.4) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Activity	Metric figure	Metric numerator	Metric denominator	Metric numerator: Unit total	Metric denominator: Unit total	% change from previous year	Please explain
Select from:	Numerical field [enter a	Select from:	Select from:	Numerical field [enter a	Numerical field [enter a	Percentage field [enter a	Text field [maximum 2,400
	number from 0-			number from 0-	number from 0-	percentage from -999 - 999	characters]
Drop down options	999,999,999,999 using a	LDV	LDV	999,999,999,999 using a	999,999,999,999 using a	using a maximum of 2	
determined by transport	maximum of 2 decimal	• tCO2	 Production: Vehicle 	maximum of 2 decimal places	maximum of 2 decimal places	decimal places]	
modes selected in C-	places]	• tCO2e	Use phase: Vehicle.km	and no commas	and no commas		Note for Rail: Please speci
TO0.7/C-TS0.7		MWh	 Use phase: Vehicle.mile 				if reporting on production, t
		 Other, please specify 	 Life cycle (please explain 				nature of the standardized
			assumptions)				vehicle used for this
		HDV	 Other, please specify 				calculation.
		• tCO2					
		• tCO2e	HDV				
		• MWh	 Production: Vehicle 				
		 Other, please specify 	Use phase: Vehicle.km				
			 Use phase: Vehicle.mile 				
		Rail	 Life cycle (please explain 				
		• tCO2	assumptions)				
		• tCO2e	 Other, please specify 				
		MWh	Rail				
		 Other, please specify 	Production: Vehicle				
			(locomotive)				
		Marine	Production: Vehicle (train				

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	car)		
• tCO2	Production: Other, please		
• tCO2e	specify		
• MWh	Use phase: please specify		
Other, please specify			
	Life cycle, please specify		
Aviation	• Financial: Revenue-ton.km		
• tCO2	Financial: Revenue-ton		
• tCO2e	mile		
• MWh	Other, please specify		
Other, please specify			
Other, please specify	Marine		
	Production: Specific vessel		
	unit, please specify		
	Use phase, please specify		
	Life cycle, please specify		
	Financial: Revenue-ton.km		
	Financial: Revenue-		
	ton.mile		
	Financial: Revenue-		
	ton.nautical mile		
	Other, please specify		
	Aviation		
	Production: Aircraft		
	Production: Other, please		
	specify		
	Use phase, please specify		
	Life cycle, please specify		
	Financial: Revenue-ton.km		
	Financial: Revenue-		
	ton.mile		
	Financial: Revenue per		
	ASK (RASK)		
	Financial: Revenue per		
	ASM (RASM)		
	Other, please specify		
I	<u> </u>		

(C-TS8.4) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Activity	Metric figure	Metric numerator	Metric denominator	Metric numerator: Unit total	Metric denominator: Unit total	% change from previous year	Please explain

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Select	from:	Numerical field [enter a number from 0-	Select from:	Select from:	Numerical field [enter a number from 0-	Numerical field [enter a number from 0-	Percentage field [enter a percentage from -999 – 999	Text field [maximum 2,400 characters]
Drop de	own options	999,999,999,999 using a	LDV	LDV	999,999,999,999 using a	999,999,999,999 using a	using a maximum of 2	,
1 .	ined by transport	maximum of 2 decimal	Liters of fuel	• v.km	maximum of 2 decimal	maximum of 2 decimal	decimal places]	Note for Rail: Please specif
	selected in C-	places]	MWh	• v.mile	places]	places]		if reporting on production, tl
	C-TS0.7	piacesj	Other, please specify	• t.km	piaceol	piacool		nature of the standardized
100.77	C-130.7		Other, please specify	• t.mile				vehicle used for this
			HDV	• p.km				calculation.
			Liters of fuel	• p.mile				Saloulation.
			MWh	m2 vehicle footprint				
			Other, please specify	kg vehicle mass				
			• Other, please specify	Other, please specify				
			Rail	• Other, please specify				
			Liters of fuel					
				HDV				
			• MWh					
			Other, please specify	• v.km				
				• v.mile				
			Marine	• t.km				
			Liters of fuel	• t.mile				
			• MWh	• m3.km				
			Other, please specify	• m3.mile				
				• p.km				
			Aviation	• p.mile				
			Liters of fuel	m2 vehicle footprint				
			• MWh	kg vehicle mass				
			Other, please specify	Other, please specify				
				Rail				
				• v.km				
				• v.mile				
				• t.km				
				• t.mile				
				• m3.km				
				• m3.mile				
				• p.km				
				• p.mile				
				kg vehicle mass.km				
				kg vehicle mass.mile				
				Revenue-ton.km				
				Revenue-ton.mile				
				Other, please specify				
				Marine				
				• v.km				
				• v.mile				
				v.nautical mile				
				• t.km				
				• t.mile				
				t.nautical mile				
				• m3.km				
I		The state of the s	T.	I .	T. Control of the Con	1	1	1

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	1	1
• m3.mile		
m3.nautical mile		
• p.km		
• p.mile		
• p.nautical mile		
• 20ft.km		
• 20ft.mile		
20ft.nautical mile		
• 40ft.km		
• 40ft.mile		
40ft.nautical mile		
Revenue-ton.km		
Revenue-ton.mile		
Revenue-ton.nautical mile		
Other, please specify		
Aviation		
• v.km		
• v.mile		
• t.km		
• t.mile		
• p.km		
• p.mile		
Available seat.km		
Available seat.mile		
Revenue-ton.km		
Revenue-ton.mile		
Revenue per ASK (RASK)		
Revenue per ASM (RASM)		
Other, please specify		

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C9 Additional metrics

Other climate-related metrics

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

Change from 2018

No change

Connection to other frameworks

TCFD

Metrics & Targets recommended disclosure a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Description	Metric value	Metric numerator	Metric denominator (intensity metric only)	% change from previous year	Direction of change	Please explain
Select from: Waste; Energy usage; Land use; Other, please specify	Numerical field [enter a number from 0 to 99,999,999,999 using up to 2 decimal places]	Text field [maximum 50 characters]	Text field [maximum 50 characters]	Numerical field [enter a number from 0 to 999 using up to 2 decimal places]	Select from: Increased Decreased No change	Text field [maximum 2,400 characters]

Oil and gas production

(C-OG9.2a) Disclose your net liquid and gas hydrocarbon production (total of subsidiaries and equity-accounted entities).

Question dependencies

This question only appears if you select "Upstream" in response to C-OG0.7.

Change from 2018

No change

Response options

Hydrocarbon category	In-year net production	Comment
Crude oil and condensate, million barrels	Numerical field [enter a number from 0-999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 character limit]
Natural gas liquids, million barrels		
Oil sands, million barrels (includes bitumen and synthetic crude)		
Natural gas, billion cubic feet		

Coal reserves and production

(C-CO9.2a) Disclose coal reserves and production by coal type attributable to your organization in the reporting year.

Change from 2018

Minor change

Response options

Please complete the following table:

Coal type	Proven reserves (million metric tons)	Probable reserves (million metric tons)	Production (million metric tons)	Energy content of production (GJ per metric ton)	Heating value	Emission factor of production (metric tons CO2e per metric ton)	Comment
Thermal coal	Numerical field [enter a number from 0-999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 1-35 using a maximum of 2 decimal places]	Select from: LHV HHV Unable to confirm heating value	Numerical field [enter a number from 0-9,999 using a maximum of 4 decimal places]	Text field [maximum 2,400 characters]
Metallurgical coal							
Other coal							
Total coal							

Coal resources

(C-CO9.2b) Disclose coal resources by coal type attributable to your organization in the reporting year.

Change from 2018

No change

Response options

Coal type	Measured resources (million metric tons)	Indicated resources (million metric tons)	Inferred resources (million metric tons)	Total resources (million metric tons)	Comment
Thermal coal	Numerical field [enter a number from 0- 9,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 9,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 99,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 99,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]
Metallurgical coal					
Other coal					
Total coal					

Oil and gas reserves methodology

(C-OG9.2b) Explain which listing requirements or other methodologies you use to report reserves data. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries, please explain this.

Question dependencies

This question only appears if you select "Upstream" in response to C-OG0.7.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Oil and gas total reserves

(C-OG9.2c) Disclose your estimated total net reserves and resource base (million BOE), including the total associated with subsidiaries and equity-accounted entities.

Question dependencies

This question only appears if you select "Upstream" in response to C-OG0.7.

Change from 2018

Minor change

Response options

Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)	Comment
Numerical field		Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]

Oil and gas reserves split

(C-OG9.2d) Provide an indicative percentage split for 2P, 3P reserves, and total resource base by hydrocarbon categories.

Question dependencies

This question only appears if you select "Upstream" in response to C-OG0.7.

Change from 2018

Minor change

Response options

Please complete the following table:

Hydrocarbon category	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Crude oil / condensate / Natural gas liquids	Numerical field [enter a number from 0-100 using no decimals]	Numerical field [enter a number from 0-100 using no decimals]	Numerical field [enter a number from 0-100 using no decimals]	Text field [maximum 2,400 characters]
Natural gas				
Oil sands (includes bitumen and synthetic crude)				

Oil and gas split by development type

(C-OG9.2e) Provide an indicative percentage split for production, 1P, 2P, 3P reserves, and total resource base by development types.

Question dependencies

This question only appears if you select "Upstream" in response to C-OG0.7.

Change from 2018

Minor change

Response options

Development type	In-year net production (%)	Net proved reserves (1P) (%)	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Select from: Onshore Shallow-water Deepwater Ultra deepwater Arctic Oil sand/extra heavy oil Tight/shale LNG Other, please specify	Numerical field [enter a number from 0-100 using no decimals]	Numerical field [enter a number from 0-100 using no decimals]	Numerical field [enter a number from 0-100 using no decimals]	Numerical field [enter a number from 0-100 using no decimals]	Numerical field [enter a number from 0-100 using no decimals]	Text field [maximum 2,400 characters]

[Add row]

Low-carbon technology implementation

(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

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Activity	Metric	Technology	Metric figure	Metric unit	Explanation
Select from:	Select from:	Select from:	Numerical field [enter a number from 0-	Select from:	Text field [maximum 2,400
		LDV	999,999,999,999 using a maximum of 2	LDV	characters]
Drop down options determined by transport		Vehicle using LPG/CNG	decimal places]	Units	
modes selected in C-TO0.7/C-TS0.7	Production	Vehicle using bio-fuel		• % of fleet	
	• Sales	Conventional hybrid		% of total sales	
	Fleet adoption	Plug-in hybrid vehicle (PHEV)		% of estimated yearly VKT	
	Yearly purchase	Battery electric vehicle (BEV)		% of estimated yearly VMT	
	Other, please specify	Fuel cell electric vehicle (FCEV)		% of estimated lifetime VKT	
		Other, please specify		% of estimated lifetime VMT	
				Other, please specify	
		HDV			
		Vehicle using LPG/CNG		HDV	
		Vehicle using bio-fuel		Units	
		Conventional hybrid		• % of fleet	
		 Plug-in hybrid vehicle (PHEV) 		% of total sales	
		Battery electric vehicle (BEV)		% of estimated yearly VKT	
		Fuel cell electric vehicle (FCEV)		% of estimated yearly VMT	
		 Other, please specify 		% of estimated lifetime VKT	
				% of estimated lifetime VMT	
		Rail		 Other, please specify 	
		 Other, please specify 			
		Marine		Rail	
		Other, please specfiy		Other, please specify	
		Aviation		Marine	
		Other, please specify		Other, please specify	
				Aviation	
				Other, please specify	

Chemicals production metrics

(C-CH9.3a) Provide details on your organization's chemical products.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

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Output product	Production (metric tons)	Capacity (metric tons)	Direct emissions intensity (metric tons CO2e per metric ton of product)	Electricity intensity (MWh per metric ton of product)	Steam intensity (MWh per metric ton of product)	Steam/ heat recovered (MWh per metric ton of product)	Comment
Select from: High Value Chemicals (Steam cracking) Ammonia Aromatics extraction Methanol Butylene Propylene (FCC) Ethanol Butadiene (C4 sep.) Nitric acid Adipic acid Caprolactam Soda ash Carbon black Polymers Specialty chemicals Other (please specify)	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 4 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 4 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 4 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 4 decimal places]	Text field [maximum 2,400 characters]

Coal production breakdown

(C-CO9.3a) Break down the coal production attributed to your organization in the reporting year by grade.

Change from 2018

No change

Response options

Please complete the following table:

Coal grade	Production (%)	Comment
Lignite	Numerical field [enter a number from 0-100 using no decimals]	Text field [maximum 2,400 characters]
Subbituminous		
Bituminous		
Anthracite		
Other		

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Mining production metrics

(C-MM9.3a) Provide details on the commodities relevant to the mining production activities of your organization.

Question dependencies

This question only appears if you select one of the options under the "Mining" sub-heading in C-MM0.7.

Change from 2018

Modified question

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Output product	Capacity, metric tons	Production, metric tons	Production, copper- equivalent units (metric tons)	Scope 1 emissions	Scope 2 emissions	Scope 2 emissions approach	Pricing methodology for copper-equivalent figure
Select from: Bauxite Copper Gold Platinum group metals Silver Iron ore Nickel Zinc Lead Diamonds Other non-ferrous metal mining (Please specify) Other mining (Please specify)	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Select from: Location-based Market-based	Text field [maximum 2,400 characters]

[Add Row]

Steel production and capacity

(C-ST9.3a) Report your organization's steel-related consumption, production and capacity figures by steel plant.

Change from 2018

No change

Response options

Please complete the following table:

Steel plant	Metal scrap consumption (metric tons)	Blast furnace iron consumption (metric tons)	Direct reduced iron consumption (metric tons)	Crude steel production (metric tons)	Crude steel capacity (metric tons)
Basic oxygen furnace	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of two decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of two decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of two decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of two decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of two decimal places]
Electric arc furnace					
Other					
Total					

Total refinery throughput

(C-OG9.3a) Disclose your total refinery throughput capacity in the reporting year in thousand barrels per day.

Question dependencies

This question only appears if you select "Downstream" in response to C-OG0.7.

Change from 2018

No change

Response options

Please complete the following table:

Total refinery throughput capacity (Thousand barrels per day)

Numerical field up to 99,999 and up to 2 decimal places

Coal production by mine type

(C-CO9.3b) Break down the coal production attributed to your organization in the reporting year by mine type.

Change from 2018

No change

Response options

Coal mine type	Production (%)
Underground	Numerical field [enter a number from 0-100 using no decimals]
Surface	

Metals production metrics

(C-MM9.3b) Provide details on the commodities relevant to the metals production activities of your organization.

Question dependencies

This question only appears if you select one of the options under the "Processing metals" sub-heading in C-MM0.7.

Change from 2018

Modified question

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Output product	Capacity (metric tons)	Production (metric tons)	Annual production in copper- equivalent units (thousand tons)	Scope 1 emissions (metric tons CO2e)	Scope 2 emissions (metric tons CO2e)	Scope 2 emissions approach	Pricing methodology for copper-equivalent figure
Select from: Aluminum Alumina Copper Gold Platinum group metals Silver Nickel Lead Zinc Other non- ferrous metals (Please specify) Other ferrous metals (Please specify)	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Select from: Location-based Market-based	Text field [maximum 2,400 characters]

[Add Row]

Steel production breakdown

(C-ST9.3b) Report your organization's steel-related production outputs and capacities by product.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Product	Production (metric tons)	Capacity (metric tons)	Comment
Select from:	Numerical field [enter a number from 0-999,999,999,999 using a	Numerical field [enter a number from 0-999,999,999,999 using a	Text field [maximum 2,400 characters]
Hot-rolled steel	maximum of two decimal places]	maximum of two decimal places]	
•			
Direct reduced iron			
Coke (including coke breeze)			
Coke oven gas (for sale)			
Sinter			
Iron ore pellets			
• Lime			
Metal scrap			
Oxygen (disclose in millions Nm3)			
Tar and benzole			
Ammonia			
Benzene, toluene and xylene (BTX)			
Iron ore			
• Coal			
Limestone & Dolomite			

[Add row]

Feedstocks used in refinery

(C-OG9.3b) Disclose feedstocks processed in the reporting year in million barrels per year.

Question dependencies

This question only appears if you select "Downstream" in response to C-OG0.7.

Change from 2018

No change

Response options

Feedstock	Throughput (Millions barrels)	Comment
Oil	Numerical field [enter a number from 0-9,999 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]
Other feedstocks		
Total		

Refinery products and net production

(C-OG9.3c) Are you able to break down your refinery products and net production?

Question dependencies

This question only appears if you select "Downstream" in response to C-OG0.7.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No

(C-OG9.3d) Disclose your refinery products and net production in the reporting year in million barrels per year.

Question dependencies

This question only appears if you select "Yes" in response to C-OG9.3c.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Product produced	Refinery net production (Million barrels) *not including products used/consumed on site
Select from:	Numerical field [enter a number from 0-9,999 using a maximum of 2 decimal places]
Liquified petroleum gas	
• Gasolines	
Naphtha	
Kerosenes	
Diesel fuels	
• Fuel oils	
Lubricants	
• Waxes	
Asphalt and tar	
Petroleum coke	
• Still gas	
Other, please specify	

Chemicals production

(C-OG9.3e) Please disclose your chemicals production in the reporting year in thousand metric tons.

Question dependencies

This question only appears if you select "Chemicals" in response to C-OG0.7.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Product	Production, Thousand metric tons	Capacity, Thousand metric tons
Select from: High value chemicals (Steam cracking) Other, please specify	Numerical field [enter a number from 0-999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999 using a maximum of 2 decimal places]

[Add Row]

Coal reserves methodology

(C-CO9.4a) Explain which listing requirements or other methodologies you have used to provide reserves data in C-CO9.2a. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries, please explain this.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

CAPEX: power generation

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
Select from: Coal – hard Lignite Oil Gas Biomass Waste (non-biomass) Nuclear Geothermal Hydroelectric Wind	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-100 using a maximum of 2 decimal places]	Numerical field [enter a number from 2019- 2100]	Text field [maximum 2,400 characters]
Solar Other renewable				

[Add row]

CAPEX: products and service

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned for products and services	End year of CAPEX plan
Select from:	Text field [maximum 2,400 characters]	Numerical field [enter a number from 0-999,999,999,999	Numerical field [enter a number from 0-100 using a	Numerical field [enter a number from 2019-
Distributed generation		using a maximum of 2 decimal places]	maximum of 2 decimal places]	2100]
Home storage systems				
Smart appliances				
Home systems				
 Prosumer services 				
 Information campaigns 				
Audits;				
Tariff measures				
Energy audits				
 Energy management services 				
Electric vehicles				
Charging networks				
Heating systems				
HVAC				
• CHP				
Lighting				
Smart grid				
Micro-grid				
Large-scale storage				
Other, please specify				

[Add Row]

Low-carbon investments: Cement

(C-CE9.6) Disclose your organization's low-carbon investments for cement production activities.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Investment start date	Investment end date	Investment area	Technology area	Investment maturity	Investment figure	Low-carbon investment percentage	Please explain
Numerical field From: [DD/MM/YYYY]	Numerical field To: [DD/MM/YYYY]	Select from: R&D Property, plant and equipment Products Services	Select from: Dry kiln Waste heat recovery Fuel switching Low clinker cement Alternative low-CO2 cements/binders Carbon capture and storage (CCS) Carbon capture, utilization and storage (CCUS) Other, please specify	Select from: Basic academic/theoretical research Applied research and development Pilot demonstration Full/commercial-scale demonstration Small scale commercial deployment Large scale commercial deployment	Numerical field [enter a number from 0- 999,999,999,999,999 using a maximum of 2 decimal places]	Select from: • 0 - 20% • 21 - 40% • 41 - 60% • 61 - 80% • 81 - 100%	Text field [maximum 2,400 characters]

Low-carbon investments: Chemicals

(C-CH9.6) Disclose your organization's low-carbon investments for chemical production activities.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Investment start date	Investment end date	Investment area	Technology area	Investment maturity	Investment figure	Low-carbon investment percentage	Please explain
Numerical field From: [DD/MM/YYYY]	Numerical field To: [DD/MM/YYYY]	Select from: R&D Property, plant and equipment Products Services	Select from: Waste heat recovery Process step integration Radical process redesign Product redesign Carbon capture and storage (CCS) Carbon capture, utilization and storage (CCUS) Bio technology Other, please specify	Select from: Basic academic/theoretical research Applied research and development Pilot demonstration Full/commercial-scale demonstration Small scale commercial deployment Large scale commercial deployment	Numerical field [enter a number from 0- 999,999,999,999,999 using a maximum of 2 decimal places]	Select from: 0 - 20% 21 - 40% 41 - 60% 61 - 80% 81 - 100%	Text field [maximum 2,400 characters]

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Low-carbon investments: Metals & Mining

(C-MM9.6) Disclose your organization's low-carbon investments for metals and mining production activities.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Investment start date	Investment end date	Investment area	Technology area	Investment maturity	Investment figure	Low-carbon investment percentage	Please explain
Numerical field From: [DD/MM/YYYY]	Numerical field To: [DD/MM/YYYY]	Select from: R&D Property, plant and equipment Products Services	Select from: Green metals Metal recycling Waste reprocessing Other, please specify	Select from: Basic academic/theoretical research Applied research and development Pilot demonstration Full/commercial-scale demonstration Small scale commercial deployment Large scale commercial deployment	Numerical field [enter a number from 0- 999,999,999,999,999 using a maximum of 2 decimal places]	Select from: 0 - 20% 21 - 40% 41 - 60% 61 - 80% 81 - 100%	Text field [maximum 2,400 characters]

[Add Row]

Low-carbon investments: Steel

(C-ST9.6) Disclose your organization's low-carbon investments for steel production activities.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Investment start date	Investment end date	Investment area	Technology area	Investment maturity	Investment figure	Low-carbon investment percentage	Please explain
Numerical field From: [DD/MM/YYYY]	Numerical field To: [DD/MM/YYYY]	Select from: R&D Property, plant and equipment Products Services	Select from: • Efficiency/recovery equipment on existing process plant • New process plant with improved efficiency • Alternative steelmaking processes • Carbon capture and storage (CCS) • Carbon capture, utilization and storage (CCUS) • Other, please specify	Select from: Basic academic/theoretical research Applied research and development Pilot demonstration Full/commercial-scale demonstration Small scale commercial deployment Large scale commercial deployment	Numerical field [enter a number from 0- 999,999,999,999,999 using a maximum of 2 decimal places]	Select from: 0 - 20% 21 - 40% 41 - 60% 61 - 80% 81 - 100%	Text field [maximum 2,400 characters]

Low-carbon investments: Coal / Electric utilities / Oil & gas

(C-CO9.6/C-EU9.6/C-OG9.6) Disclose your investments in low-carbon research and development (R&D), equipment, products, and services.

Change from 2018

Minor change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Investment start date	Investment end date	Investment area	Technology area	Investment maturity	Investment figure	Low-carbon investment percentage	Please explain
Numerical field From: [DD/MM/YYYY]	Numerical field To: [DD/MM/YYYY]	Select from: R&D Property, plant and equipment Products Services	Select from: Coal Advanced control systems Carbon capture and storage/utilization Coal bed methane capture Combustion optimization and modification Monitoring systems to reduce emissions Process improvements Renewable energy Steam turbine and/or other component upgrades Other, please specify	Select from: Basic academic/theoretical research Applied research and development Pilot demonstration Full/commercial-scale demonstration Small scale commercial deployment Large scale commercial deployment	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places]	Select from:	Text field [maximum 2,400 characters]

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Electric Utilities		
Carbon capture and		
storage/utilization		
Demand side response		
programs		
Digital technology		
Distributed energy		
resources		
Energy storage		
Infrastructure		
Renewable energy		
Smart grids		
Smart meters		
Steam turbine and/or other		
component upgrades		
Other, please specify		
Oil and Gas		
Infrastructure		
Renewable energy		
Smart systems		
Advanced fluids		
Advanced materials		
Carbon capture and		
storage/utilization		
Enhanced Oil Recovery		
(EOR) techniques		
Hydrogen		
Methane detection and		
reduction		
Energy efficiency in		
transport		
Steam turbine and/or other		
component upgrades		
Other energy efficiency		
measures in the oil and gas		
value chain		
 Other, please specify 		

Low-carbon investments: Transport OEM / Transport services

(C-TO9.6/C-TS9.6) What is your investment in research and development (R&D), equipment, products and services and which part of it would you consider a direct investment in the low-carbon transition?

Change from 2018

Response options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Activity	Investment start date	Investment end date	Investment area	Technology area
Select from: Drop down options determined by transport modes selected in C-TO0.7/C-TS0.7	Numerical field From: [DD/MM/YYYY]	Numerical field To: [DD/MM/YYYY]	Select from: No investment R&D Property, plant and equipment Products Services	Light Duty Vehicles (LDV) Infrastructure Drivetrain Electrification Alternative fuels Materials Smart systems Business models Other, please specify Heavy Duty Vehicles (HDV) Infrastructure Drivetrain Electrification Alternative fuels Materials Smart systems Business models Operations Business models Operations Management Other, please specify Rail Electrification Infrastructure Drivetrain Electrification Management Other, please specify Rail Electrification Infrastructure Drivetrain Materials Smart systems Carriage Control systems Management Other, please specify Marine Drivetrain Advanced technologies Alternative fuels Materials Operations Fuels Hydrodynamics/fluid mechanics Other, please specify Aviation Airframe Aerodynamics Alternative fuels

		PropulsionElectronicsGround handling operations
		Management
		OperationsOther, please specify

Investment maturity	Investment figure	Low-carbon investment percentage	Please explain
Select from: Basic academic/theoretical research Applied research and development	Numerical field [enter a number from 0-999,999,999,999,999 using a maximum of 2 decimal places]	Select from: • 0-20% • 21-40%	Text field [maximum 2,400 characters]
 Pilot demonstration Full/commercial-scale demonstration Small scale commercial deployment Large scale commercial deployment 		41-60%61-80%81-100%	

Breakeven price (US\$/BOE)

(C-OG9.7) Disclose the breakeven price (US\$/BOE) required for cash neutrality during the reporting year, i.e. where cash flow from operations covers CAPEX and dividends paid/share buybacks.

Question dependencies

This question only appears if you select "Upstream" or "Downstream" in response to C-OG0.7.

Change from 2018

No change

Response options

Numerical field [enter a number from 0-999 using a maximum of 2 decimal places].

Transfers & sequestration of CO2 emissions

(C-OG9.8) Is your organization involved in the sequestration of CO2?

Question dependencies

This question only appears if you select "Carbon capture and storage/utilization" in response to C-OG0.7.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No

(C-OG9.8a) Provide, in metric tons CO2, gross masses of CO2 transferred in and out of the reporting organization (as defined by the consolidation basis).

Question dependencies

This question only appears if you select "Yes" in response to C-OG9.8.

Change from 2018

No change

Response options

Please complete the following table:

Transfer direction	CO2 transferred – reporting year (metric tons CO2)
CO2 transferred in	Numerical field [enter a number from 0-999,999 using a maximum of 2 decimal places]
CO2 transferred out	Numerical field [enter a number from 0-999,999 using a maximum of 2 decimal places]

(C-OG9.8b) Provide gross masses of CO2 injected and stored for the purposes of CCS during the reporting year according to the injection and storage pathway.

Question dependencies

This question only appears if you select "Yes" in response to C-OG9.8.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Injection and storage pathway	Injected CO2 (metric tons CO2)	Percentage of injected CO2 intended for long- term (>100 year) storage	Year in which injection began	Cumulative CO2 injected and stored (metric tons CO2)
Select from: Acid gas injection (CO2 and H2S co-injected into a production reservoir) CO2 used for enhanced oil recovery (EOR) or enhanced gas recovery (EGR) CO2 injected into a geological formation or saline formation for long-term storage CO2 used for enhanced coal bed methane (ECBM) operations Other – please specify	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-100 using a maximum of 2 decimal places]	Numerical field [enter a year e.g. 1999. The value must be in the range 1900-2019]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places]

[Add Row]

(C-OG9.8c) Provide clarification on any other relevant information pertaining to your activities related to transfer and sequestration of CO2.

Question dependencies

This question only appears if you select "Yes" in response to C-OG9.8.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

C10 Verification

Verification

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

Change from 2018

No change

Response options

Please complete the following table:

Scope	Verification/assurance status
Scope 1	Select from: No emissions data provided No third-party verification or assurance Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	
Scope 3	

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

Question dependencies

This question only appears if you select "Third-party verification or assurance process in place" for Scope 1 and/or Scope 2 emissions in response to C10.1.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Scope	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported emissions verified (%)
Select from: Scope 1 Scope 2 location-based Scope 2 market-based	Select from: • Annual process • Biennial process • Triennial process	Select from: No verification or assurance of current reporting year Underway but not complete for current reporting year – first year it has taken place Underway but not complete	High assurance Third party	Attach your document here.	Text field [maximum 500 characters]	Select from: • AA1000AS • Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET) • Airport Carbon Accreditation (ACA) des	Numerical field [enter a number from 0-100 using n decimals or commas]

for reporting year – previous	underway		Airports Council International
statement of process			Europe
attached			Alberta Specified Gas
Complete			Emitters Regulation (SGER)
			• ASAE3000
			 Attestation standards
			established by AICPA
			(AT105)
			 Australian National GHG
			emission regulation (NGER)
			California Mandatory GHG
			Reporting Regulations
			(CARB)
			 Canadian Institute of
			Chartered Accountants
			(CICA) Handbook: Assurance
			Section 5025
			 Certified emissions
			measurement and reduction
			scheme (CEMARS)
			• Chicago Climate Exchange
			(CCX) verification standard
			 Compagnie Nationale des
			Commissaires aux Comptes
			(CNCC)
			 Corporate GHG verification
			guidelines from ERT
			 DNV Verisustain Protocol/
			Verification Protocol for
			Sustainability Reporting
			 Earthcheck Certification
			ERM GHG Performance
			Data Assurance Methodology
			European Union Emissions (511.572)
			Trading System (EU ETS)
			IDW PS 821: IDW Drüftungsstandard
			Prüfungsstandard:
			Grundsätze
			ordnungsmäßiger Prüfung
			oder prüferischer Durchsicht von Berichtenim Bereich der
			Nachhaltigkeit IDW AsS 821: IDW
			Assurance Standard:
			Generally Accepted
			Assurance Principles for the
			Audit or Review of Reports
			on Sustainability Issues
			ISAE3000
			• ISAE 3410

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Environmental Protection, Verification of GHG and emissions reduction in Israel Guidance Document Swiss Climate CO2 Label for Businesses Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol						Registered Accountants
Verification of GHG and emissions reduction in Israel Guidance Document Swiss Climate CO2 Label for Businesses Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol						State of Israel Ministry of
emissions reduction in Israel Guidance Document Swiss Climate CO2 Label for Businesses Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol						Environmental Protection,
Guidance Document Swiss Climate CO2 Label for Businesses Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol						Verification of GHG and
 Swiss Climate CO2 Label for Businesses Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol 						emissions reduction in Israel
for Businesses Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol						Guidance Document
Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol						Swiss Climate CO2 Label
Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol						for Businesses
(TGO) Greenhouse Gas (GHG) Verification Protocol						Thai Greenhouse Gas
(TGO) Greenhouse Gas (GHG) Verification Protocol						Management Organisation
(GHG) Verification Protocol						
						The Climate Registry's
General Verification Protocol						
● Tokyo cap-and-trade						
guideline for verification						
Verification as part of						
Carbon Trust standard						
certification						
• Other, please specify						
Guilly picture opesiny						, , , , , , , , , , , , , , , , , , , ,

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

Question dependencies

This question only appears if you select "Third-party verification or assurance process in place" for Scope 3 emissions in response to C10.1.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Scope	Verification or assurance cycle in place	Status in the current reporting year	Attach the statement	Page/ section reference	Relevant standard
Select from: Scope 3- all relevant categories Scope 3- at least one applicable category	Select from: • Annual process • Biennial process • Triennial process	Select from: No verification or assurance of current reporting year Underway but not complete for current reporting year – first year it has taken place Underway but not complete for reporting year – previous statement of process attached Complete	Attach your document here.	Text field [maximum 500 characters]	Select from: AA1000AS Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET) Airport Carbon Accreditation (ACA) des Airports Council International Europe Alberta Specified Gas Emitters Regulation (SGER) ASAE3000 Attestation standards established by AICPA (AT105) Australian National GHG emission regulation (NGER) California Mandatory GHG Reporting Regulations (CARB) Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025 Certified emissions measurement and reduction scheme (CEMARS) Cincago Climate Exchange (CCX) verification standard Compagnie Nationale des Commissaires aux Comptes (CNCC) Corporate GHG verification guidelines from ERT DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting Earthcheck Certification ERM GHG Performance Data Assurance Methodology European Union Emissions Trading System (EU ETS) IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichtenim Bereich der Nachhaltigkeit IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues

1	
	• ISAE3000
	• ISAE 3410
	• ISO14064-3
	Japan voluntary emissions trading scheme
	(JVETS) guideline for verification
	Korean GHG and energy target management
	system
	NMX-SAA-14064-3-IMNC: Instituto Mexicano de
	Normalización y Certificación A.C
	 RevR6 procedure for assurance of sustainability
	report
	Saitama Prefecture Target-Setting Emissions
	Trading Program
	● SGS Sustainability Report Assurance
	Spanish Institute of Registered Auditors (ICJCE)
	Standard 3810N Assurance engagements
	relating to sustainability reports of the Royal
	Netherlands Institute of Registered Accountants
	State of Israel Ministry of Environmental
	Protection, Verification of GHG and emissions
	reduction in Israel Guidance Document
	Swiss Climate CO2 Label for Businesses
	Thai Greenhouse Gas Management Organisation
	(TGO) Greenhouse Gas (GHG) Verification Protocol
	The Climate Registry's General Verification
	Protocol
	Tokyo cap-and-trade guideline for verification
	Verification as part of Carbon Trust standard
	certification
	• Other, please specify

Other verified data

(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?

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- In progress
- No, but we are actively considering verifying within the next two years

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- No, we are waiting for more mature verification standards and/or processes
- No, we do not verify any other climate-related information reported in our CDP disclosure

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

Question dependencies

This question only appears if you select "Yes" in response to C10.2.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Disclosure module verification relates to	Data verified	Verification standard	Please explain
Select from:	Select from:	Text field [maximum 1,500 characters]	Text field [maximum 1,500 characters]
C0. Introduction	• Year on year change in emissions (Scope 1)		
C1. Governance	Year on year change in emissions (Scope 2)		
C2. Risks and opportunities	• Year on year change in emissions (Scope 1 and 2)		
C3. Business Strategy	Year on year change in emissions (Scope 3)		
C4. Targets and performance	Year on year emissions intensity figure		
C5. Emissions performance	• Financial or other base year data points used to set a science-based target		
C6. Emissions data	Progress against emissions reduction target		
C7. Emissions breakdown	Change in Scope 1 emissions against a base year (not target related)		
C8. Energy	Change in Scope 2 emissions against a base year (not target related)		
C9. Additional metrics	Change in Scope 3 emissions against a base year (not target related)		
C11. Carbon pricing	Product footprint verification		
C12. Engagement	Emissions reduction activities		
C13. Other land management	Renewable energy products		
C14. Sign off	Don't know		
• SC. Supply chain module	Other, please specify		

[Add Row]

C11 Carbon pricing

Carbon pricing systems

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

Change from 2018

No change

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

Select one of the following options:

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

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

Question dependencies

This question only appears if you select "Yes" in response to C11.1.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

Select all that apply from the following options:

- Alberta carbon tax
- Alberta SGER
- Australia ERF Safeguard Mechanism
- BC carbon tax
- BC GGIRCA
- Beijing pilot ETS
- California CaT

- Chile carbon tax
- China national ETS
- Chongqing pilot ETS
- Colombia carbon tax
- Denmark carbon tax
- Estonia carbon tax
- EU ETS
- Finland carbon tax
- France carbon tax
- Fujian pilot ETS
- Guangdong pilot ETS
- Hubei pilot ETS
- Iceland carbon tax
- Ireland carbon tax
- Japan carbon tax
- Kazakhstan ETS
- Korea ETS
- Latvia carbon tax
- Liechtenstein carbon tax
- Mexico carbon tax
- New Zealand ETS
- Norway carbon tax
- Ontario CaT
- Poland carbon tax
- Portugal carbon tax
- Québec CaT
- RGGI
- Saitama ETS
- Shanghai pilot ETS
- Shenzhen pilot ETS
- Slovenia carbon tax
- Sweden carbon tax
- Switzerland carbon tax
- Switzerland ETS
- Tianjin pilot ETS
- Tokyo CaT
- UK carbon price floor
- Ukraine carbon tax
- Washington CAR
- Other ETS, please specify
- Other carbon tax, please specify

(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.

Question dependencies

This question only appears if you select an emissions trading option in response to C11.1a.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

System name	% of Scope 1 emissions covered by the ETS	Period start date	Period end date
Fixed table rows are populated by selection in C11.1a	maximum of 2 decimal places and no commas]	button or enter dates manually in the format DD/MM/YYYY. Please note	Enter the finish date that applies to the data in the row. Use the calendar button or enter dates manually in the format DD/MM/YYYY. Please note that the period reported should overlap with the reporting year.

Allowances allocated	Allowances purchased	Verified emissions in metric tons CO2e	Details of ownership	Comment
Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: Facilities we own and operate Facilities we own but do not operate Facilities we operate but do not own Other, please specify	Text field [maximum 2,400 characters]

(C11.1c) Complete the following table for each of the tax systems in which you participate.

Question dependencies

This question only appears if you select a carbon tax system in response to C11.1a.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

Please complete the following table

Pricing system	Period start date	Period end date	% of emissions covered by tax	Total cost of tax paid	Comment
Fixed table rows are populated by selection in C11.1a	Enter the start date that applies to the data in the row. Use the calendar button or enter dates manually in the format DD/MM/YYYY. Please note that the period reported should overlap with the reporting year.	Enter the finish date that applies to the data in the row. Use the calendar button or enter dates manually in the format DD/MM/YYYY. Please note that the period reported should overlap with the reporting year.	Numerical field [enter a number from 0-100 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]

(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

Question dependencies

This question only appears if you select "Yes" or "No, but we anticipate being regulated in the next three years" in response to C11.1

Change from 2018

No change

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Project-based carbon credits

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

Change from 2018

No change

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

Select one of the following options:

- Yes
- No

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Question dependencies

This question only appears if you select "Yes" in response to C11.2.

Change from 201

Minor change

Connection to other frameworks

SDG

Goal 13: Climate action

Response options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Credit origination or credit purchase	Project type	Project identification	Verified to which standard
Select from: Credit origination Credit purchase	Select from: Agriculture Biomass energy Cement CO2 usage Coal mine/bed CH4 Energy distribution Energy efficiency: households Energy efficiency: industry Energy efficiency: own generation Energy efficiency: service Energy efficiency: supply side Forests Fossil fuel switch Fugitive Geothermal HFCs Hydro Landfill gas Methane avoidance N2O PFCs and SF6 Solar Tidal Transport Wind Other, please specify	Text field [maximum 2,400 characters]	Select from: CDM (Clean Development Mechanism) JI (Joint Implementation) Gold Standard VCS (Verified Carbon Standard) VER+ (TÜV SÜD standard) CAR (The Climate Action Reserve) ACR (American Carbon Registry) CCBS (developed by the Climate, Community and Biodiversity Alliance, CCBA) Plan Vivo Emissions Reduction Fund of the Australian Government Not yet verified Other, please specify

Number of credits (metric tons CO2e)	Number of credits (metric tons CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: • Yes • No • Not relevant	Select from: Compliance Voluntary Offsetting Not applicable Other, please specify

Internal price on carbon

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

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No, but we anticipate doing so in the next two years
- No, and we don't anticipate doing so in the next two years

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

Question dependencies

This question only appears if you select "Yes" in response to C11.3.

Change from 2018

No change

Connection to other frameworks

2018 RobecoSAM Corporate Sustainability Assessment (DJSI)

Internal carbon pricing

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Objective for implementing an internal carbon price	GHG Scope	Application	Actual price(s) used (Currency /metric ton)	Variance of price(s) used	Type of internal carbon price	Impact & implication
Select all that apply: Navigate GHG regulations Stakeholder expectations Change internal behavior Drive energy efficiency Drive low-carbon investment Stress test investments Identify and seize low-carbon opportunities Supplier engagement Other, please specify	Select all that apply: Scope 1 Scope 2 Scope 3	Corporate structure that price is applied to (i.e. business units, corporate divisions, facilities) Text field [maximum 1,000 characters]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]	Select all that apply: Shadow price Internal fee Internal trading Implicit price Offsets Other, please specify	Text field [maximum 2,400 characters]

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C12 Engagement

Value chain engagement

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

Change from 2018

No change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

Select all that apply from the following options:

- Yes, our suppliers
- Yes, our customers
- Yes, other partners in the value chain
- No, we do not engage

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

Question dependencies

This question only appears if you select "Yes, our suppliers" in response to C12.1.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table

Type of engagement	Details of engagement	% of suppliers by number	% total procurement spend (direct and indirect)	% Scope 3 emissions as reported in C6.5	, , ,	Impact of engagement, including measures of success	Comment
Select from: Compliance & onboarding	Select all that apply:	Percentage field [enter a percentage from 0-100 using	Percentage field [enter a percentage from 0-100 using	Percentage field [enter a percentage from 0-100 using	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]

 Information collection (understanding supplier behavior) Engagement & incentivization (changing supplier behavior) Innovation & collaboration (changing markets) Other, please specify 	Compliance & onboarding Included climate change in supplier selection / management mechanism Code of conduct featuring climate change KPIs Climate change is integrated into supplier evaluation processes Other, please specify	a maximum of 2 decimal places]	a maximum of 2 decimal places]	a maximum of 2 decimal places]		
	Information collection (understanding supplier behavior) Collect climate change and carbon information at least annually from suppliers					
	Other, please specify Engagement & incentivization (changing supplier behavior) Run an engagement campaign to educate					
	suppliers about climate change Climate change performance is featured in supplier awards scheme Offer financial incentives					
	for suppliers who reduce your operational emissions (Scopes 1 &2) • Offer financial incentives for suppliers who reduce your downstream emissions					
	(Scopes 3) Offer financial incentives for suppliers who reduce your upstream emissions (Scopes 3) Other, please specify					
	Innovation & collaboration (changing markets) Run a campaign to encourage innovation to reduce climate impacts on products and services Other, please specify					

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Other				
• Other, plea	ase specify			

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

Question dependencies

This question only appears if you select "Yes, our customers" in response to C12.1.

Change from 2018

Minor change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table

Type of engagement	Details of engagement	% of customers by number	% Scope 3 emissions as reported in C6.5	Please explain the rationale for selecting this group of customers and scope of engagement	Impact of engagement, including measures of success
Select from: Education/information sharing Collaboration & innovation Other, please specify	Education/ information sharing Run an engagement campaign to educate customers about your climate change performance and strategy Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services Share information about your products and relevant certification schemes (i.e. Energy STAR) Collaboration & Innovation Run a campaign to encourage innovation to reduce climate change impacts Other – please provide information in column 5	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]

[Add Row]

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

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Question dependencies

This question only appears if you select "Yes, other partners in the value chain" in response to C12.1.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

This is an open text guestion with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C12.1d) Why do you not engage with any elements of your value chain on climate-related issues, and what are your plans to do so in the future?

Question dependencies

This question only appears if you select "No, we do not engage" in response to C12.1.

Change from 2018

No change

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Agricultural supplier engagement

Question C12.2 only applies to organizations with activities in the following sectors:

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?

Question dependencies

This question only appears if you select "Yes, our suppliers" in response to C12.1 AND if you select "Elsewhere in value chain" or "Both own land and elsewhere in value chain" in response to the "Agriculture/Forestry" row in C-AC0.6/C-FB0.6/C-PF0.6

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No

(C-AC12.2a/C-FB12.2a/C-PF12.2a) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Question dependencies

This question only appears if you select "Yes" in response to C-AC12.2/C-FB12.2/C-PF12.2.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Management practice reference number	Management practice	Description of management practice	Your role in the implementation	Explanation of how you encourage implementation	Climate change related benefit	Comment
Select a reference number: MP1 MP2 MP3 MP4 MP5 MP6 MP7 MP8 MP9 MP10 MP11 MP12 MP13	Select from: Afforestation Agroforestry Biodiversity considerations Change in the topography or landscapes Composting Crop diversity Contour farming Crop rotation Diversifying farmer income Efficient equipment use Equipment maintenance and calibration	Text field [maximum 2,400 characters]	Select all that apply: Financial Knowledge sharing Operational Procurement None Other, please specify	Text field [maximum 2,400 characters]	Select all that apply: Emissions reductions (mitigation) Increasing resilience to climate change (adaptation) Increase carbon sink (mitigation) Reduced demand for fossil fuel (adaptation) Reduced demand for fertilizers (adaptation) Reduced demand for pesticides (adaptation) Other, please specify	Text field [maximum 1,000 characters]
 MP14 MP15 MP16 MP17 MP18 MP19 MP20 	 Enhanced forest regeneration practices Fertilizer management Fire control Governmental or institutional policies and programs Green harvesting Integrated pest management 					

Knowledge sharing	1		
Land use change	·		
Low carbon energy	/ use		
Low tillage and res			
management			
Livestock manager	ment		
Manure management			
Nitrogen-fixing plan			
crop			
Organic farming			
Practices to increa	se wood		
production and forest			
Permanent soil cov			
cover crops)			
Pest, disease and	weed		
management practice	es		
Reducing energy u	se;		
Reforestation			
Restoration			
Replacing fossil fue	els by		
renewable energy so	urces		
Restoration of degr	raded lands		
and cultivated organic	c soils		
Rice management			
Seed variety selection	tion		
Selective logging			
Selecting species to	o maximize		
carbon capture			
Species introduction	on		
Timing of farm ope	rations		
Waste management	nt		
Other, please speci	ify		

(C-AC12.2b/C-FB12.2b/C-PF12.2b) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?

Question dependencies

This question only appears if you select "Yes" in response to C-AC12.2/C-FB12.2/C-PF12.2.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No

(C-AC12.2c/C-FB12.2c/C-PF12.2c) Why do you not encourage your suppliers to undertake any agricultural/forest management practices with climate change mitigation and/or adaptation benefits?

Question dependencies

This question only appears if you select "No" in response to C-AC12.2/C-FB12.2/C-PF12.2.

Change from 2018

No change

Response options

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 4,000 characters]
Lack of internal resources	
We plan to introduce a process in the next two years	
Not an immediate business priority	
Judged to be unimportant	
No instruction from management	
Other, please specify	

Public policy engagement

(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?

Change from 2018

No change

Response options

Select all that apply from the following options:

- Direct engagement with policy makers
- Trade associations
- Funding research organizations
- Other
- No

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

Question dependencies

This question only appears if you select "Direct engagement with policy makers" in response to C12.3.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Select from: Mandatory carbon reporting Cap and trade Carbon tax Energy efficiency Clean energy generation Adaptation or resilience Climate finance Regulation of methane	Select from: Support Support with minor exceptions Support with major exceptions Neutral Oppose Undecided	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]
Emissions Other, please specify			

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

Question dependencies

This question only appears if you select "Trade associations" in response to C12.3.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No

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

Question dependencies

This question only appears if you select "Yes" in response to C12.3b.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table

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	Is your position on climate change consistent with theirs?		How have you influenced, or are you attempting to influence their position?
Text field [maximum 1,000 characters]	Select from: Consistent Inconsistent Mixed Unknown	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]

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

Question dependencies

This question only appears if you select "Funding research organizations" in response to C12.3.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No

(C12.3e) Provide details of the other engagement activities that you undertake.

Question dependencies

This question only appears if you select "Other" in response to C12.3.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(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?

Question dependencies

This question only appears if you select "Direct engagement with policy makers", "Trade associations", "Funding research organizations" and/or "Other" in response to C12.3.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

(C12.3g) Why do you not engage with policy makers on climate-related issues?

Question dependencies

This question only appears if you select "No" in response to C12.3.

Change from 2018

No change

Response options

This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure, formatting is not retained.

Communications

(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).

Change from 2018

Modified question

Connection to other frameworks

Goal 12: Responsible consumption and production

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table

Select from: In mainstream reports In mainstream reports, in line with the CDSB framework (as amended to incorporate the TCFD recommendations) In mainstream reports, in corporating the TCFD In mainstream reports, incorporating the TCFD In mainstream reports, in line with the CDSB of Complete In text field [maximum 500 characters] In text field [maximum 500 characters]	Publication	Status	Attach the document	Page/Section reference	Content elements	Comment
recommendations In other regulatory filings In voluntary communications In voluntary sustainability report No publications with information about our response to climate-related issues and GHG emissions performance	Select from: In mainstream reports In mainstream reports, in line with the CDSB framework (as amended to incorporate the TCFD recommendations) In mainstream reports, incorporating the TCFD recommendations In other regulatory filings In voluntary communications In voluntary sustainability report No publications with information about our response to climate-related issues and GHG	Select from: Complete Underway – previous year attached			Select all that apply: Governance Strategy Risks & Opportunities Emissions figures Emission targets Other metrics	Text field [maximum 2,400

[Add Row]

C13 Other land management impacts

(C-AC13.1/ C-FB13.1/C-PF13.1) Do you know if any of the management practices implemented on your own land disclosed in C-AC4.4a/C-FB4.4a/C-PF4.4a have other impacts besides climate change mitigation/adaptation?

Question dependencies

This question only appears if you select "Yes" in response to C-AC4.4/C-FB4.4/C-PF4.4.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No

(C-AC13.1a/ C-FB13.1a / C-PF13.1a) Provide details on those management practices that have other impacts besides climate change mitigation/adaptation and on your management response.

Question dependencies

This question only appears if you select "Yes" in response to C-AC13.1/ C-FB13.1/C-PF13.1.

Change from 2018

No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Management practice reference number	Overall effect	Which of the following has been impacted?	Description of impact	Have you implemented any response(s) to these impacts?	Description of the response(s)
number Select from: MP1 MP2 MP3 MP4 MP5 MP6 MP7 MP8 MP9 MP10 MP11 MP12 MP13 MP14 MP15 MP15 MP16	Select all that apply: Positive Negative Neutral Mixed	impacted? Select all that apply: Biodiversity Soil Water Yield Other, please specify	Text field [maximum 2,400 characters]	response(s) to these impacts? Select from: • Yes • No	Text field [maximum 2,400 characters]
MP16MP17MP18MP19MP20					

(C-AC13.2/ C-FB13.2 / C-PF13.2) Do you know if any of the management practices mentioned in C-AC12.2a/C-FB12.2a/C-PF12.2a that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation?

Question dependencies

This question only appears if you select "Yes" in response to C-AC12.2/C-FB12.2/C-PF12.2.

Change from 2018

No change

Response options

Select one of the following options:

- Yes
- No

(C-AC13.2a/ C-FB13.2a / C-PF13.2a) Provide details of those management practices implemented by your suppliers that have other impacts besides climate change mitigation/adaptation.

Question dependencies

This question only appears if you select "Yes" in response to C-AC13.2/ C-FB13.2 / C-PF13.2.

Change from 2018

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No change

Response options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Management practice reference number	Overall effect	Which of the following has been impacted?	Description of impacts	Have any response to these impacts been implemented?	Description of the response (s)
Select from:	Select all that apply:	Select all that apply:	Text field [maximum 2,400 characters]	Select from:	Text field [maximum 2,400 characters]
• MP1	Positive	Biodiversity		• Yes	
• MP2	Negative	• Soil		• No	
• MP3	Neutral	Water			
• MP4	Mixed	• Yield			
• MP5		Other, please specify			
• MP6					
• MP7					
• MP8					
• MP9					
• MP10					
• MP11					
• MP12					
• MP13					
• MP14					
• MP15					
• MP16					
• MP17					
• MP18					
• MP19					
• MP20					

[Add Row]

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C13 Other land management impacts

Module C13 only applies to organizations with activities in the following sectors:

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry

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C14 Signoff

Further information

(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.

Change from 2018

No change

Response options

This is an open text question with a limit of 9,999 characters.

When copying from another document into the disclosure platform, formatting is not retained.

Note

• Click "File upload" button (paperclip icon) to drag and drop a file if you want to attach one.

Signoff

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

Change from 2018

No change

Response options

Please complete the following table:

Job title	Corresponding job category
Text field [maximum 200 characters]	Select from:
	Board chair
	Board/Executive board
	Director on board
	Chief Executive Officer (CEO)
	Chief Financial Officer (CFO)
	Chief Operating Officer (COO)
	Chief Procurement Officer (CPO)
	Chief Risk Officer (CRO)
	Chief Sustainability Officer (CSO)
	Other C-Suite Officer
	President
	Business unit manager
	Energy manager
	Environmental, health and safety manager
	Environment/Sustainability manager
	Facilities manager
	Process operation manager
	Procurement manager
	Public affairs manager
	Risk manager
	• Other, please specify

Important Information

Companies should not consider their CDP response a means of complying with any regulatory requirement to share financially sensitive non-public information with the market. You may wish to consult with your financial, legal, and/or compliance departments for advice on your company's general approach to the provision of forward-looking statements and information concerning risks.

CDP questionnaire copyright and licensed use

The copyright to CDP's annual questionnaire/s is owned by CDP Worldwide, a registered charity number 1122330 and a company limited by guarantee, registered in England number 05013650. Any use of any part of the questionnaire, including the questions, must be licensed by CDP. Any unauthorized use is prohibited and CDP reserves the right to protect its copyright by all legal means necessary.

Terms for responding to Investors (2019 Climate Change)

These terms apply if you are submitting a response to the CDP Climate Change Questionnaire 2019 to Investors. If you are also submitting a response to Supply Chain Members the Terms for responding to Supply Chain Members (2019 Climate Change), below, will also apply.

1.DEFINITIONS

Billing Company: means the organization determined in accordance with the table at the end of these terms.

CDP: means CDP Worldwide, a charitable company registered with the Charity Commission of England and Wales (registered charity no. 1122330 and a company number 05013650). References towe", "our" and "us" in these terms are references to CDP and the Billing Company.

Deadline: means 31 July 2019.

Fee: means the fee set out in the table at the end of these terms, which is exclusive of any applicable taxes.

Full version: means the version of the Questionnaire which contains all questions that are applicable to you.

Minimum version: means the version of the Questionnaire which contains a subset of the questions included in the Full Version.

Personal Data: means data which relates to an individual who can be identified from the data, such as a person's name and job title.

Questionnaire: means the Full Version and the Minimum Version of the CDP Climate Change Questionnaire 2019.

Responding Company: means the company responding to the Questionnaire. References to 'your' and 'your' in these terms are references to the Responding Company.

2.PARTIES

The parties to these terms shall be CDP, the Billing Company (where the Billing Company is not CDP) and the Responding Company.

3.THESE TERMS

These are the terms that apply when you submit a response to our Questionnaire to Investors. If you do not agree to these terms, please contact us at respond@cdp.net to discuss them with us.

4.RESPONDING TO OUR QUESTIONNAIRE

General. When responding to our Questionnaire, you will be given a choice as to whether your response can be made public or whether your response is non-public. We strongly encourage you to make your response public.

Deadline for responding. You must submit your response to us using our online response system by the Deadline for your response to be eligible for scoring and inclusion in any reports.

Public responses. If you agree that your response can be made public, we may use and make it available for all purposes that we decide (whether for a fee or otherwise), including, for example, making your responses available on our website, to our investor signatories and other third parties and scoring your response.

Non-public responses. If your response is non-public, we may use it only as follows:

- (a) make it available as soon as it is received by CDP to our investor signatories (as listed on our website) either directly or through Bloomberg terminals, for any use within their organizations but not for publication unless any data from your response has been anonymized or aggregated in such manner that it has the effect of being anonymized;
- (b) make it available as soon as it is received by CDP to our group companies and affiliates (for example, CDP North America, Inc), our country partners, research partners, report writers and scoring partners:
 - (i) to score your response; and
 - (ii) for any other use within their organizations but not for publication unless any data from your response has been anonymized or aggregated in such manner that it has the effect of being anonymized.

Amending your response. You may amend a response that you have submitted at any time before the Deadline. After the Deadline has passed, certain amendments to your response can only be made by our staff and we may charge a fee for making them. Please note that any changes to your response after the Deadline may not be reflected in any score or in any report. Please email respond@cdp.net for more information about amending your response.

Scoring of responses to the Full Version (of the Questionnaire). If you submit your response to the Full Version in English using our online response system:

- (a) by the Deadline, your response will be scored;
- (b) after the Deadline but on or before 30 September 2019 you can request an 'On-Demand' score for a fee. Please email scorefeedback@cdp.net for more information on On-Demand scoring.

Please contact your local CDP office for information about scoring if you intend to submit your response in a language other than English.

Scoring of responses to the Minimum Version (of the Ouestionnaire), Responses to the Minimum Version will only be scored in certain circumstances. Please contact your local CDP office for further information.

Publication and use of scores. If you are responding to a CDP Climate Change Questionnaire for the first time or have received an On-Demand score, you may choose for your score to be "private" but in all other cases CDP may publish your score, and use and make it available for all purposes that we decide (whether for a fee or otherwise), regardless of whether your response is public or non-public. If you choose for your score to be "private", unless you achieve an A grade in which case we may make your score public, we may only make it available to our group companies and affiliates (for example, CDP North America, Inc), our country partners, research partners, report writers and scoring partners, in each case for any use within their organizations but not for publication. Note that if you also submit your response to Supply Chain Members it will also be available to any Supply Chain Members (2019 Climate Change).

5.FEE

Fee. We are a not-for-profit organization and charge certain companies an annual administrative fee to enable us to maintain the disclosure system. Unless you are exempt from paying the Fee, as set out below, if you are listed, incorporated or headquartered in a country/region that is listed in the next paragraph, you are required to pay the Fee plus any applicable taxes. The Fee is payable once regardless of how many responses (climate change, forests and water security) you submit in 2019. Please note that we may charge an additional fee if you want to amend your response after the Deadline or if you submit your response after the Deadline and you would like it to be scored.

Countries/regions where the Fee applies. A Responding Company will be required to pay the Fee if it is listed, incorporated or headquartered in any one of the following countries/regions:

Argentina, Australia, Australia, Austria, Bahamas, Belgium, Bermuda, Brazil, Canada, Cayman Islands, Channel Islands, Chile, Colombia, Denmark, Finland, France, Germany, Hong Kong, Iceland, India, Indonesia, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico, Netherlands, New Zealand, Norway, Peru, Philippines, Portugal, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, the UK or the USA.

Exemptions from the Fee. A Responding Company is exempt from paying the Fee if:

- (a) it falls within one of CDP's investor samples and it has not submitted a response to CDP in the last three years; or
- (b) it is responding only to CDP's supply chain request.

Please note we will decide in our absolute discretion as to whether the Fee is payable or not and we will notify you before you submit your response. A full list of companies in our investor samples is available on our website.

Payment of the Fee. You must pay the Fee by credit or debit card or request an invoice via CDP's online corporate dashboard, which must be paid within such time as set out in the invoice. Please note that you will not be able to submit your response unless you have paid the Fee, you have requested an invoice or you are exempt from paying the Fee.

6.RIGHTS IN THE RESPONSES

Ownership. All intellectual property rights in your response will be owned by you or your licensors.

License. You grant to us, or shall procure for us, a perpetual, irrevocable, non-exclusive, assignable, sub-licensable, royalty-free and global license to use your response and any copyright and data base rights in your response for the uses set out in these terms.

7.IMPORTANT REPRESENTATIONS

You confirm that:

- (a) the person submitting the response to us is authorized by you to submit the response;
- (b) you have obtained all necessary consents and permissions to submit the response to us; and
- (c) the response that you submit:
 - (i) does not infringe the rights of any third party (including privacy, publicity or intellectual property rights);

- (ii) does not defame any third party; and
- (iii) does not include any Personal Data.

8.LIABILITY

We do not exclude or limit in any way our liability to you where it would be unlawful to do so. This includes liability for death or personal injury caused by our negligence or the negligence of our employees, agents or subcontractors; for fraud or fraudulent misrepresentation.

We are not liable for business losses. Subject to these terms, CDP and the Billing Company have no liability to you in any circumstances for any loss of revenue, loss of profit, loss of business, business interruption, loss of business opportunity, loss of goodwill, loss of reputation, loss of, damage to or corruption of data or software or any indirect or consequential loss or damage.

Exclusion of liability. Subject to these terms, CDP and the Billing Company have no liability to you in any circumstances arising from the content or submission of your response to us, our use of your response and/or the use of your response by any third parties.

Limitation of liability. Subject to these terms, CDP and the Billing Company's total liability to you in all circumstances shall be limited to an amount equivalent to the Fee or to £625 if you are not required to pay the Fee.

9.GENERAL

We may transfer our rights to someone else. We may transfer our rights and obligations under these terms to another organization.

Nobody else has any rights under these terms. These terms are between you and us. No other person shall have any rights to enforce any of its terms.

Entire agreement. These terms constitute the entire agreement between you and us unless you also choose to share your response with supply chain members, in which case you will also be subject to our Terms for responding to Supply Chain Members (2019 Climate Change).

Variation. CDP (acting on its own behalf and the Billing Company's behalf, if applicable) reserves the right to change these terms at any time. Such changes shall be effective immediately or such other time as CDP elects. In the event of any materially adverse changes, you may request to withdraw your response within 30 days of us notifying you of the change.

If a court finds part of these terms illegal, the rest will continue in force. Each of the paragraphs of these terms operates separately. If any court or relevant authority decides that any of them are unlawful, the remaining paragraphs will remain in full force and effect.

Governing law and jurisdiction. These terms are governed by English law and you and us both agree to the exclusive jurisdiction of the English courts to resolve any dispute or claim arising out of or in connection with these terms or their subject matter or formation.

Language. If these terms are translated into any language other than English, the English language version will prevail.

10.AMOUNT OF FEE

Location of Responding Company	Fee (exclusive of any applicable taxes)
Brazil	BRL 3,560
India	INR 67,000
Japan	JPY 97,500
UK	GBP 625
Europe (excluding UK)	EUR 925
Rest of the world	USD 975

11.BILLING COMPANY

Billing Company	Location of Responding Company
CDP Worldwide	Australia, Bahamas, Bermuda, Cayman Islands, Channel Islands, Hong Kong, Indonesia, Ireland, Malaysia, New Zealand, Philippines, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, United Kingdom
CDP Worldwide (Europe) gGmbH	Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland
CDP North America, Inc	Canada, USA
Carbon Disclosure Project (Latin America)	Argentina, Brazil, Chile, Colombia, Mexico, Peru
Carbon Disclosure Project India	India
一般社団法人 CDP Worldwide-Japan	Japan

If the Responding Company is located in a territory that is not listed in the table above, the Billing Company shall be DP Worldwide.

Terms for responding to Supply Chain Members (2019 Climate Change)

These terms apply if you are submitting a response to the CDP Climate Change Questionnaire 2019 to Supply Chain Members. If you are also submitting a response to Investors the Terms for responding to Investors (2019 Climate Change), above, will also apply.

1.DEFINITIONS

CDP: means CDP Worldwide, a charitable company registered with the Charity Commission of England and Wales (registered charity no. 1122330 and a company number 05013650). References towe", "our" and "us" in these terms are references to CDP.

Deadline: means 28 August 2019.

Full version: means the version of the Questionnaire which contains all questions that are applicable to you.

Minimum version: means the version of the Questionnaire which contains a subset of the questions included in the Full Version.

Personal Data: means data which relates to an individual who can be identified from the data, such as a person's name and job title.

Questionnaire: means the Full Version and the Minimum Version of the CDP Climate Change Questionnaire 2019.

Responding Company: means the company responding to the Questionnaire. References to 'your' and 'your' in these terms are references to the Responding Company.

Supply Chain Member: means an organization that is requesting data from its suppliers.

2.PARTIES

The parties to these terms shall be CDP and the Responding Company.

3.THESE TERMS

These are the terms that apply when you submit a response to our Questionnaire to Supply Chain Members. If you do not agree to these terms, please contact us at respond@cdp.net to discuss them with us.

4.RESPONDING TO OUR OUESTIONNAIRE

General. When responding to our Questionnaire, you will be given a choice as to whether your response can be made public or whether your response is non-public. We strongly encourage you to make your response public, but in either case, we will not divulge the relationship between you and any Supply Chain Member that has asked you to respond other than to our group companies and affiliates (for example, CDP North America, Inc.), our country partners, research partners, report writers and scoring partners, all of which are obliged to keep such relationship confidential.

Deadline for responding. You must submit your response to us using our online response system by the Deadline for your response to be eligible for scoring and inclusion in any reports.

Public responses. If you agree that your response can be made public, we may use and make it available for all purposes that we decide (whether for a fee or otherwise), including, for example, making your responses available on our website, to our investor signatories and other third parties and scoring your response. Note that information you submit within the Supply Chain module (2019 Climate Change) will be treated as non-public (see below for details).

Non-public responses. If your response is non-public, we may use it only as follows:

- (a) make it available as soon as it is received by CDP to any Supply Chain Member that has asked you to respond to the Questionnaire for any use within their organization but not for publication unless any data from your response has been anonymized or aggregated in such manner that it has the effect of being anonymized;
- (b) make it available as soon as it is received by CDP to our group companies and affiliates, our country partners, research partners, report writers and scoring partners:
 - (i) to score your response; and
 - (ii) for any other use within their organizations but not for publication unless any data from your response has been anonymized or aggregated in such manner that it has the effect of being anonymized.

Supply Chain module (2019 Climate Change). Information you submit in response to the Supply Chain module (2019 Climate Change) (questions SC0, SC1, SC2, SC3 and SC4 of the Questionnaire) will be treated as non-public even if you choose to make your response public. Questions SC1.1, SC2.1, SC2.2a, SC3.1a and SC4.2e ask you to select a Supply Chain Member using a drop-down menu in our online response system, and only the Supply Chain Member you select for each row will have access to the information in it. For all other questions in the Supply Chain module (2019 Climate Change) the information you submit will be accessible to any Supply Chain Member that has asked you to respond to the Questionnaire. All information you submit in the Supply Chain module (2019 Climate Change) will be accessible to CDP and to our group companies and affiliates, our country partners, research partners, report writers and scoring partners, all of which are obliged to keep such information confidential.

Amending your response. You may amend a response that you have submitted at any time before the Deadline. After the Deadline has passed, certain amendments to your response can only be made by our staff and we may charge a fee for making them. Please note that any changes that you make to your response after the Deadline may not be reflected in any score or in any report. Please email respond@cdp.net for more information about amending your response.

Scoring of responses to the Full Version (of the Ouestionnaire). If you submit your response to the Full Version in English using our online response system:

- (a) by the Deadline, your response will be scored;
- (b) after the Deadline but on or before 30 September 2019 you can request an 'On-Demand' score for a fee. Please email scorefeedback@cdp.net for more information on On-Demand scoring.

Please contact your local CDP office for information about scoring if you intend to submit your response in a language other than English.

Scoring of responses to the Minimum Version (of the Questionnaire). Responses to the Minimum Version will only be scored in certain circumstances. Please contact your local CDP office for further information.

Publication of scores. Unless you achieve an A grade, in which case we may make your score public, we may only make your score available to any Supply Chain Member that has asked you to respond to the Questionnaire, our group companies and affiliates (for example, CDP North America, Inc), our country partners, research partners, report writers and scoring partners, in each case for any use within their organizations but not for publication.

5.RIGHTS IN THE RESPONSES

Ownership. All intellectual property rights in your response will be owned by you or your licensors.

License. You grant to us, or shall procure for us, a perpetual, irrevocable, non-exclusive, assignable, sub-licensable, royalty-free and global license to use your response and any copyright and data base rights in your response for the uses set out in these terms.

6.IMPORTANT REPRESENTATIONS

You confirm that:

- (a) the person submitting the response to us is authorized by you to submit the response;
- (b) you have obtained all necessary consents and permissions to submit the response to us; and
- (c) the response that you submit:
 - (i) does not infringe the rights of any third party (including privacy, publicity or intellectual property rights);
 - (ii) does not defame any third party; and
 - (iii) does not include any Personal Data.

7.LIABILITY

We do not exclude or limit in any way our liability to you where it would be unlawful to do so. This includes liability for death or personal injury caused by our negligence or the negligence of our employees, agents or subcontractors; for fraud or fraudulent misrepresentation.

We are not liable for business losses. Subject to these terms, CDP has no liability to you in any circumstances for any loss of revenue, loss of profit, loss of business, business interruption, loss of business opportunity, loss of goodwill, loss of reputation, loss of, damage to or corruption of data or software or any indirect or consequential loss or damage.

Exclusion of liability. Subject to these terms, CDP has no liability to you in any circumstances arising from the content or submission of your response to us, our use of your response and/or the use of your response by any third parties.

Limitation of liability. Subject to these terms, CDP's total liability to you in all circumstances shall be limited to £625.

8.GENERAL

We may transfer our rights to someone else. We may transfer our rights and obligations under these terms to another organization.

Nobody else has any rights under these terms. These terms are between you and us. No other person shall have any rights to enforce any of its terms.

Entire agreement. These terms constitute the entire agreement between you and us, unless you also choose to share your response with investors in which case you will also be subject to our Terms for responding to Investors (2019 Climate Change).

Variation. CDP reserves the right to change these terms at any time. Such changes shall be effective immediately or such other time as CDP elects. In the event of any materially adverse changes, you may request to withdraw your response within 30 days of us notifying you of the change.

If a court finds part of these terms illegal, the rest will continue in force. Each of the paragraphs of these terms operates separately. If any court or relevant authority decides that any of them are unlawful, the remaining paragraphs will remain in full force and effect.

Governing law and jurisdiction. These terms are governed by English law and you and us both agree to the exclusive jurisdiction of the English courts to resolve any dispute or claim arising out of or in connection with these terms or their subject matter or formation.

Language. If these terms are translated into any language other than English, the English language version will prevail.

About CDP

CDP is an international non-profit that drives companies and governments to reduce their greenhouse gas emissions, safeguard water resources and protect forests.

Voted number one climate research provider by investors and working with institutional investors with assets of US\$96 trillion, we leverage investor and buyer power to motivate companies to disclose and manage their environmental impacts.

Over 7,000 companies with some 50% of global market capitalization disclosed environmental data through CDP in 2018. This is in addition to the over 750 cities, states and regions who disclosed, making CDP's platform one of the richest sources of information globally on how companies and governments are driving environmental change. CDP, formerly Carbon Disclosure Project, is a founding member of the We Mean Business Coalition. Please visit www.cdp.net or follow us @CDP to find out more.

What is the legal status of CDP?

CDP Worldwide (CDP) is a UK Registered Charity no. 1122330 and a company limited by guarantee registered in England no. 05013650. The charity has wholly owned subsidiaries in Germany and China and companies in Australia, Brazil and India over which it exercises control through majority Board representation. In the US, CDP North America, Inc. is an independently incorporated affiliate which has United States IRS 501(c)(3) charitable status.

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