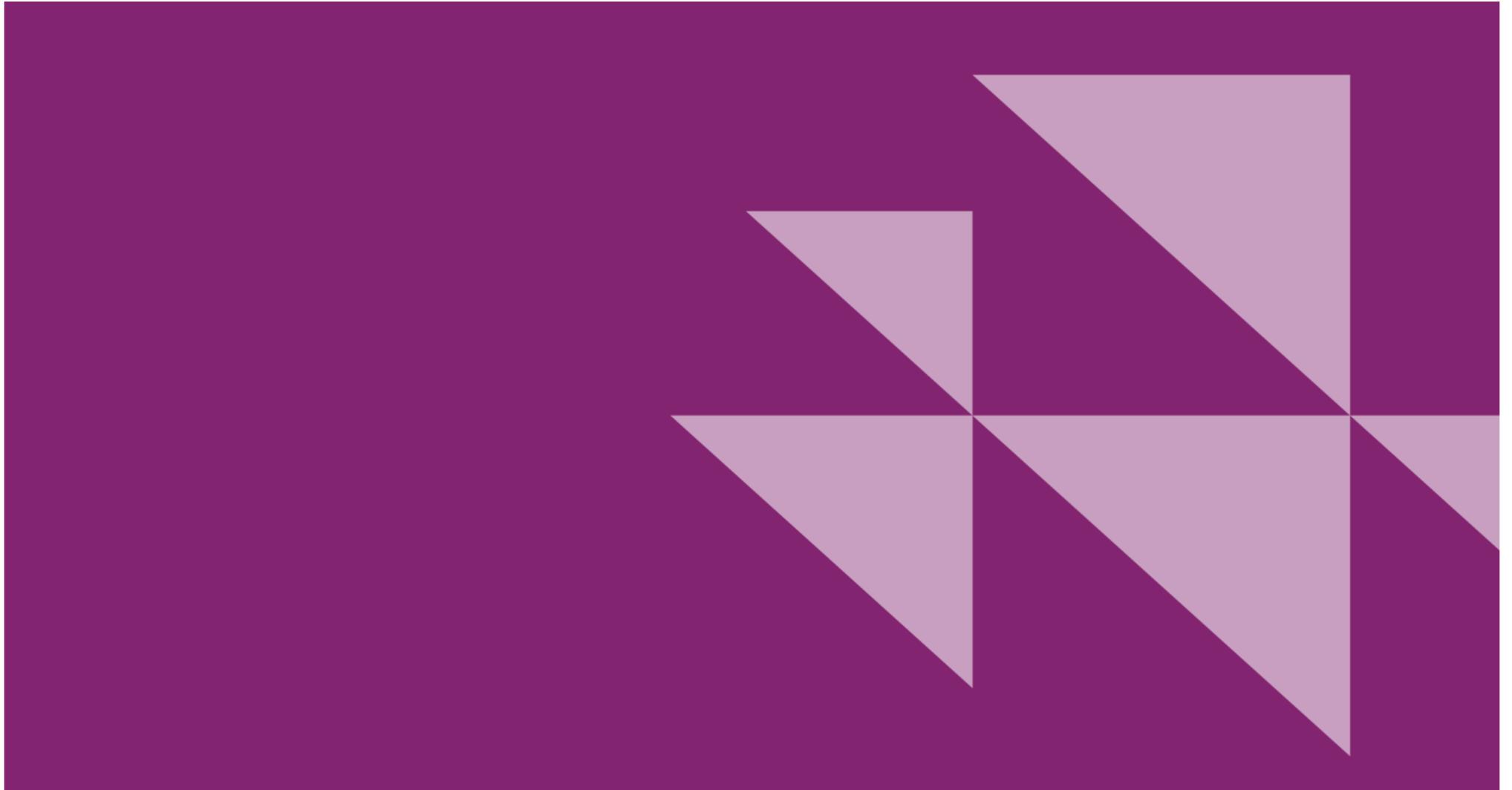

CDP Climate Change Questionnaire 2018



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CDP Climate Change Questionnaire Preview and Reporting Guidance 2018 - Version Control

Version control table will be updated weekly, so on Monday you can view all updates relevant to the previous week.

Version number	Release/Revision date	Revision summary
0.1	Released: Dec 13, 2017	Questionnaire preview This version was released to allow CDP stakeholders to see the 2018 climate change questionnaire, including sector-specific requests for CDP's high-impact sectors, ahead of the information request sent in February 2018.
0.2	Revised: Feb 7, 2018	Questionnaire preview The following sections were updated for 2018: <ul style="list-style-type: none">● Important Information● Terms for responding to Investors (2018 Climate Change)● Terms for responding to Supply Chain Members (2018 Climate Change)

Questionnaire preview

The following revisions were made to the climate change questions:

General questions

- Emissions data: C6.10. Drop-down options added for 'Metric denominator' column.
- Energy: C8.2a & C8.2c. Column 2 - 'Heating value' added to provide companies the option of reporting lower heating value (LHV) or higher heating value (HHV) energy values.
- Additional metrics: C9.1. Column 6 - 'Direction of change' added for companies to disclose the performance of their additional climate-related metrics.
- Verification: C10.2a. Drop-down options for column 1 - 'Disclosure module verification relates to' and column 2 - 'Data verified' added.
- Product (goods and services) level data - SC4.2: Question deleted; no longer required due to export question functionality in the online response system.

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

- C-AC4.4a/C-FB4.4a/C-PF4.4a. Column 5 - 'Emissions (metric tons CO2e)' modified to 'Estimated CO2e savings (metric tons CO2e)'.
- C-AC6.8a/C-FB6.8a/C-PF6.8a. Row added to Column 1 – 'Type of Change'.

Cement

- C-CE8.2c. Column 2 - 'Heating value' added to provide companies the option of reporting lower heating value (LHV) or higher heating value (HHV) energy values.

Chemicals

- C-CH8.2c. As the data pertaining to this question can be acquired from already disclosed information this question has been deleted in order to reduce reporting effort.

Metals & mining

- C-MM8.2c. As the data pertaining to this question can be acquired from already disclosed information this question has been deleted in order to reduce reporting effort.

Oil & gas

- C-OG6.13. Question added to enable companies to report methane emissions as percentages of natural gas and hydrocarbon production or throughput. This ensures continuity with 2017 oil & gas module and captures methane emissions data that investors are interested in understanding.
- C-OG7.1b. Column 1 - 'Emissions category' modified to more closely align with the source categories and sub-source categories defined by the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

Transport OEMs

- C-TO7.8a. Question deleted with applicable data points merged into C-TO7.8 in order to reduce reporting effort. This was possible as these questions requested similar data points.

Transport services

- C-TS6.15. Questions C-TS6.14 and C-TS6.14a merged into one question, C-TS6.15, in order to reduce reporting effort. This was possible as these questions requested similar data points.

Steel

- C-ST6.14. Question number modified from C-ST6.13 to C-ST6.14 to allow for the inclusion of C-OG6.13. Note question text and requested data points for C-ST6.14 have remained the same.
- C-ST8.2a. Column 2 - 'Heating value' added to provide companies the option of reporting lower heating value (LHV) or higher heating value (HHV) energy values.
- C-ST8.3. Column 7 - 'Heating value' added to provide companies the option of reporting lower heating value (LHV) or higher heating value (HHV) energy values.
- C-ST8.2c. As the data pertaining to this question can be acquired from already disclosed information this question has been deleted in order to reduce reporting effort.

0.4	Released: Mar 28, 2018	<p>Questionnaire preview, Reporting guidance</p> <p>The following details were released, to assist companies in preparing their disclosures:</p> <ul style="list-style-type: none"> • Question 'Rationales' and 'Requested content' for all <u>general</u> climate change questions • 'Preparing and submitting your CDP response' section
0.5	Revised: Apr 5, 2018	<p>Questionnaire preview, Reporting guidance</p> <p>The following sections were added:</p> <ul style="list-style-type: none"> • 'Version control – climate change' • 'Appendix A: Agricultural/Forestry management practices' <p>Reporting guidance</p> <p>The following details were added, to assist companies in preparing their disclosures:</p> <ul style="list-style-type: none"> • Question 'Rationales' and 'Requested content' for all <u>sector-specific</u> climate change questions • 'Pathway diagrams' for all general climate change questions
0.6	Revised: Apr 20, 2018	<p>Questionnaire preview, Reporting guidance</p> <p>The following details were released, to assist companies in mapping their CDP responses to other frameworks:</p> <ul style="list-style-type: none"> • Connections to other frameworks, including the Sustainable Development Goals (SDGs) and 2018 RobecoSAM Corporate Sustainability Assessment (DJSI) <p>The following revisions were made to the climate change questions:</p> <ul style="list-style-type: none"> • The columns, '% achieved in reporting year' and 'Target status', were added to C4.2 Other climate-related targets to assist companies in reporting their progress of other climate-related targets. • Companies responding to sector questionnaires can now provide Scope 1 and 2 breakdowns by business division and by activity in questions C7.3a, C7.3c, C7.6a and C7.6c. • Question C-TO9.6a/C-TS9.6a was deleted to reduce reporting effort with companies now able to provide further details on why they don't report investment in C-TO9.6a/C-TS9.6a. • Additional rows can now be added to question C11.3a so that companies can report other internal prices on carbon that they use.
0.7	Revised: May 4, 2018	<p>Reporting guidance</p> <p>The following was released, to provide an overview of each module, as well as key changes, questions with "copy from last year" functionality in the ORS, sector modifications, and important disclosure notes.</p> <ul style="list-style-type: none"> • Module-level guidance
0.9	Revised: May 18, 2018	<p>Questionnaire preview, Reporting guidance</p> <p>Disclosure deadlines were updated in the 'CDP disclosure cycle 2018' section.</p> <p>Questionnaire preview</p> <p>The following revisions were made to the climate change questions:</p> <p><i>General questions</i></p> <ul style="list-style-type: none"> • Energy: C8.2f. Column 1 – The options regarding the basis for applying a low-carbon emission factor were revised to increase transparency regarding organizations' accounting of renewable or low-carbon electricity practices. <p>Reporting guidance</p> <p>The following details were released, to assist companies in preparing their disclosures:</p> <ul style="list-style-type: none"> • 'Explanation of terms', or detailed definitions for specific terminology, for select questions. • A 'Glossary', consisting of a subset of 'Explanation of terms'.

1.0	Revised: May 25, 2018	<p>Questionnaire preview, Reporting guidance</p> <p>The following sections were updated:</p> <ul style="list-style-type: none"> • 'Terms for responding to Investors (2018 Climate Change)' • 'Terms for responding to Supply Chain Members (2018 Climate Change)' • 'CDP disclosure cycle 2018': details on the full and minimum versions of the questionnaire were added <p>Reporting guidance</p> <p>The following sections were updated:</p> <ul style="list-style-type: none"> • 'Preparing and submitting your CDP response': details were added under Reporting guidance, Notes for completing your disclosure, and Submitting your response through CDP's online response system (ORS) • References to 'Copy from last year' were removed throughout the reporting guidance as this feature will not be available until 2019 <p>Revisions were made to the 'Requested content' section for the following questions:</p> <ul style="list-style-type: none"> • C2.3a and C2.4a: to clarify that the potential financial impact figure could also be a range. • 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: to clarify how companies can identify and remove specific activities from their sector boundary. • C8.2: to notify RE100 members they now have the option of uploading their completed RE100 Reporting Spreadsheet in the 'Further Information' section of the questionnaire, presented prior to signing off in Module 14. • C8.2f: to align with the changes made to the options regarding the basis for applying a low-carbon emission factor in column 1. • C-TS8.2h: to support companies that do not have any transport movements that directly source energy from the grid to respond to this question. <p>Revisions were made to the explanation of the term 'Gross generation' for questions C8.2e, C-CE8.2e, C-CH8.2e, C-MM8.2e and C-ST8.2e.</p>
1.1	Revised: June 1, 2018	<p>Reporting guidance</p> <p>The following details were released, to assist companies in preparing their disclosures:</p> <ul style="list-style-type: none"> • 'Example responses' for questions C4.1a, C4.3b, C4.5, C6.4a, C6.10, C7.9a, C8.2f, C12.3a, C-AC0.7/C-FB0.7/C-PF0.7, C-AC4.4a/C-FB4.4a/C-PF4.4a, C-AC6.9a/C-FB6.9a/C-PF6.9a, C-AC7.4b/C-FB7.4b/C-PF7.4b, C-AC13.1a/C-FB13.1a/C-PF13.1a, C-TO7.8, C-CH8.3a • 'Additional information' for select general and sector questions. <p>Revisions were made to the 'Requested content' section for the following question.</p> <ul style="list-style-type: none"> • C4.3b: Payback period (column 8) was updated to provide guidance for implemented initiatives where the payback period is not applicable.
1.2	Revised: June 8, 2018	<p>Reporting guidance</p> <p>The following details were released, to assist companies in preparing their disclosures:</p> <ul style="list-style-type: none"> • C-CO4.2a and C-OG4.2a: Additional guidance and updated question dependency outlining that these questions only require a response if no methane emissions reduction targets are reported in C4.2.
1.3	Revised: June 22, 2018	<p>Reporting guidance</p> <p>The following details were released, to assist companies in preparing their disclosures:</p> <ul style="list-style-type: none"> • C-TS6.15 and C-TO7.8: The CDP Technical Note, 'Measuring emissions intensity of transport movements' has been published to support companies in understanding intensity metrics specific to the transport sector and in reporting to the transport OEM and transport services sector questionnaires.

1.4	Revised: July 13, 2018	<p>Reporting guidance</p> <p>The following details were updated in the reporting guidance:</p> <ul style="list-style-type: none"> ● C10.1a and C10.1b: Due to the online reporting system functionality zip files cannot be uploaded, therefore the guidance for questions C10.1a and C10.1b has been updated. Please note that where companies need to upload multiple files they can do so individually. ● C-CO9.6/C-EU9.6/C-OG9.6: Companies are requested to provide a percentage figure from 0-100 using no decimals for column 7 'Low-carbon investment percentage' in line with the formula outlined in this questions guidance.
1.5	Revised: July 27, 2018	<p>Reporting guidance</p> <p>The following change was made to the introduction to the reporting guidance:</p> <ul style="list-style-type: none"> ● Preparing and submitting your response: Updates regarding the Export/Import functionality in the ORS were added.

CDP disclosure cycle 2018

New for 2018: In response to market needs, CDP has developed questions specific to high-impact sector activities across its climate change, forests and water security programs. The 2018 questionnaires also include more forward-looking metrics, are further harmonized with other reporting frameworks, and include TCFD recommendations for climate-related disclosure.

Accessing questionnaire previews, reporting guidance, and scoring methodologies

CDP's 2018 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 [Using CDP's Online Disclosure Platform](#) for more detail. Note that while the questions themselves are the same in the questionnaire preview as they are in the ORS, the format may differ, particularly for drop-down options and tables.

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 be completed by:
 - Organizations disclosing to that questionnaire for the first time; OR
 - Organizations who are not disclosing to that questionnaire for the first time, but who have an annual revenue of less than EUR/US\$250 million
- 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.
- Companies with an annual revenue of over EUR/US\$250 million that are disclosing for the first time and responding to the minimum version will not be eligible for scoring.
- Companies responding to the minimum version that have an annual revenue of less than EUR/US\$250 million will be eligible for scoring and will be scored using the minimum version of the methodology. They will not be eligible for the A list as the scores are not comparable to scores resulting from the full version of the scoring methodology.

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. For more information on scoring eligibility and implications, please see [Scoring Introduction 2018](#).

Timeline:

January	<ul style="list-style-type: none">• Options to export content from this online preview into Word or PDF made available.
February	<ul style="list-style-type: none">• Organizations notified of the specific sector and program questionnaire(s) they need to complete for requesting investors.• Comprehensive details of changes to the CDP questionnaires from 2017 to 2018 shared.
March	<ul style="list-style-type: none">• Guidance and information on scoring methodologies made available.
April	<ul style="list-style-type: none">• Some organizations will be asked to provide additional information to their customers that are members of CDP's supply chain program.
May	<ul style="list-style-type: none">• Access will be provided to CDP's new disclosure platform.
August	<ul style="list-style-type: none">• Responses to investor requests must be submitted by August 15, 2018 to be automatically eligible for scoring and inclusion in CDP reports (where applicable).• Responses to supply chain requests must be submitted by August 29, 2018.

For any disclosure-related questions, 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 658 institutional investor signatories with a combined US\$87 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. Hundreds of companies representing every economic sector and geography have taken action to date.

The leadership these companies demonstrated formed a critical part of the package of solutions reached in Paris at COP21 in 2015 and has continued to grow, now playing a critical role as the Paris Agreement moves from agreement to implementation. 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, sending a strong signal that companies are making the transition to a low-carbon world and 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 one of more of the initiatives included on the [We Mean Business](#) platform can track progress against them via CDP's annual disclosure requests.

Climate change questionnaire developments

The CDP climate change questionnaire has been redesigned in response to these market needs, highlighting a shift to more sectoral information, mainstream-ready reporting and disclosures that highlight a company's own approach to the low-carbon economy. For 2018, this includes:

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

Key changes include:

Governance	<ul style="list-style-type: none"> Both board- level and management responsibility for climate-related issues
Risks and opportunities	<ul style="list-style-type: none"> How risks and opportunities are identified, assessed and managed Consolidation of risk disclosures into one question (from three) Consolidation of opportunity disclosure into one question (from three)
Strategy	<ul style="list-style-type: none"> Impacts of climate-related issues on strategy, financial planning, and businesses If scenario analysis is used to inform business strategy and details of the models, assumptions and types of scenario analysis performed Transition plans (high-impact sectors only)
Targets	<ul style="list-style-type: none"> Aggregation of non-GHG emissions climate-related targets into a single question
Energy	<ul style="list-style-type: none"> Revised energy question flow to focus breakdowns on only relevant energy use
Other climate-related metrics	<ul style="list-style-type: none"> Ability to provide other metrics such as from waste, energy, land-use
Carbon pricing	<ul style="list-style-type: none"> New question flow for carbon tax, emissions trading and/or internal carbon price use

A detailed document on [climate change question changes from 2017 to 2018](#) is now available. Revisions and changes to questions are also indicated by the “Change from 2017” row below each question, either as no change, a minor change, a modification, or a new question. Minor changes indicate wording edits and revisions to drop-down options, while a modification indicates where a new or revised data point has been added or removed from an existing question.

Sector approach

For climate change, CDP has incorporated sector-specific questions for 12 sectors grouped within the following four clusters. 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. Further sectors will be introduced in 2019.

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

2018 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)

C0 Introduction

Introduction

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

Change from 2017

No change (2017 CC0.1)

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 2017

No change (2017 CC0.2)

Response options

Please complete the following table.

Start date	End date	Indicate if you are providing emissions data for past reporting years
From: [DD/MM/YYYY]	To: [DD/MM/YYYY]	Select from: <ul style="list-style-type: none">• Yes• No

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

Change from 2017

No change (2017 CC0.3)

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 2017

Minor change (2017 CC0.4)

Response options

Please complete the following table:

Currency
Select from: [Currency drop-down list]

C1 Governance

Board oversight

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

Change from 2017

Modified question (2017 CC1.1)

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

Select one of the following options:

- Yes
- No

(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 2017

New question

Response options

Please complete the following table:

Primary reason	Board-level oversight of climate-related issues will be introduced in the next two years.	Please explain
Text field [maximum 1,000 characters]	Select from: <ul style="list-style-type: none">● Yes, we plan to do so within the next two years● No, we do not currently plan to do so	Text field [maximum 2,400 characters]

Employee incentives

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

Change from 2017

No change (2017 CC1.2)

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

Select one of the following options:

- Yes
- No

C2 Risks and opportunities

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 2017

Modified question (2017 CC2.1)

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

(C2.2e) 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 2017

Modified question (2017 CC2.1d)

Response options

Please complete the following table:

Primary reason	Please explain
Select from: <ul style="list-style-type: none"> ● 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 	Text field Text field [maximum 1,500 characters]

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 2017

Modified question (2017 CC5.1)

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 2017

Modified question (2017 CC5.1a, CC5.1b, CC5.1c)

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.

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. 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.

Identifier	Where in the value chain does the risk driver occur?	Risk type	Primary climate-related risk driver	Type of financial impact driver	Company- specific description	Time horizon
Select from: <ul style="list-style-type: none"> ● Risk1 - Risk100 	Select from: <ul style="list-style-type: none"> ● Direct operations ● Supply chain ● Customer 	Select from: <ul style="list-style-type: none"> ● Transition risk ● Physical risk 	See drop-down options below	See drop-down options below	Text field [maximum 2,400 characters]	Select from: <ul style="list-style-type: none"> ● Current ● Short-term ● Medium-term ● Long-term ● Unknown

Likelihood	Magnitude of impact	Potential financial impact	Explanation of financial impact	Management method	Cost of management	Comment
Select from: <ul style="list-style-type: none"> ● Virtually certain ● Very likely ● Likely ● More likely than not ● About as likely as not ● Unlikely ● Very unlikely ● Exceptionally unlikely ● Unknown 	Select from: <ul style="list-style-type: none"> ● High ● Medium-high ● Medium ● Medium-low ● Low ● Unknown 	Numerical field [enter a number from 0 to 999,999,999,999 using up to 2 decimal places and no commas]	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 and no commas]	Text field [maximum 1,000 characters]

[Add Row]

Primary climate-related risk driver (column 4)

Select one of the following options:

<p>Transition risks</p> <ul style="list-style-type: none"> ● 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 	<p>Physical risks</p> <ul style="list-style-type: none"> ● 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
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Type of financial impact driver drop-down options (column 5)

Select one of the following options:

<p>Transition risks</p> <ul style="list-style-type: none"> ● Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums) ● Policy and legal: Write-offs, asset impairment, and early retirement of existing assets due to policy changes ● Policy and legal: Increased costs and/or reduced demand for products and services resulting from fines and judgments ● Technology: Write-offs and early retirement of existing assets due to technology changes ● Technology: Reduced demand for products and services ● Technology: Research and development (R&D) expenditures in new and alternative technologies ● Technology: Capital investments in technology development ● Technology: Costs to adopt/deploy new practices and processes ● Market: Reduced demand for goods and/or services due to shift in consumer preferences ● Market: Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatment) ● Market: Abrupt and unexpected shifts in energy costs ● Market: Change in revenue mix and sources resulting in decreased revenues ● Market: Re-pricing of assets (e.g., fossil fuel reserves, land valuations, securities valuations) ● Reputation: Reduced revenue from decreased demand for goods/services ● Reputation: Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions) ● Reputation: Reduced revenue from negative impacts on workforce management and planning (e.g., employee attraction and retention) ● Reputation: Reduction in capital availability ● Other, please specify 	<p>Physical risks</p> <ul style="list-style-type: none"> ● 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 ● Other please specify
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(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 2017

Modified question (2017 CC5.1d, CC5.1e, CC5.1f)

Response options

Please complete the following table:

Primary reason	Please explain
Select from: <ul style="list-style-type: none">● 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	Text field [maximum 2,400 characters]

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 2017

Modified question (2017 CC6.1)

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 2017

Modified question (2017 CC6.1a, CC6.1b, CC6.1c)

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.

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. 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.

Identifier	Where in the value chain does the opportunity occur?	Opportunity type	Primary climate-related opportunity driver	Type of financial impact driver	Company-specific description	Time horizon
Select from: <ul style="list-style-type: none"> ● Opp1 - Opp100 	Select from: <ul style="list-style-type: none"> ● Direct operations ● Supply Chain ● Customer 	Select from: <ul style="list-style-type: none"> ● 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: <ul style="list-style-type: none"> ● Current ● Short-term ● Medium-term ● Long-term

Likelihood	Magnitude of impact	Potential financial impact	Explanation of financial impact	Strategy to realize opportunity	Cost to realize opportunity	Comment
Select from: <ul style="list-style-type: none"> ● Virtually certain ● Very likely ● Likely ● More likely than not ● About as likely as not ● Unlikely ● Very unlikely ● Exceptionally unlikely ● Unknown 	Select from: <ul style="list-style-type: none"> ● High ● Medium-high ● Medium ● Medium-low ● Low ● Unknown 	Numerical field [enter a number from 0 to 999,999,999,999 using up to 2 decimal places and no commas]	Text field [maximum 1,000 characters]	Text field [maximum 1,500 characters]	Numerical field [enter a number from 0 to 999,999,999,999 using up to 2 decimal places and no commas]	Text field [maximum 1,000 characters]

[Add Row]

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

Select one of the following options:

<p>Resource efficiency</p> <ul style="list-style-type: none"> ● 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 <p>Energy source</p> <ul style="list-style-type: none"> ● 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 	<p>Products and services</p> <ul style="list-style-type: none"> ● 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 <p>Markets</p> <ul style="list-style-type: none"> ● Access to new markets ● Use of public-sector incentives ● Access to new assets and locations needing insurance coverage ● Other <p>Resilience</p> <ul style="list-style-type: none"> ● Participation in renewable energy programs and adoption of energy-efficiency measures ● Resource substitutes/diversification ● Other
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Type of financial impact driver drop-down options (column 5)

Select one of the following options:

<p>Resource efficiency</p> <ul style="list-style-type: none"> ● 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 <p>Energy source</p> <ul style="list-style-type: none"> ● 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 	<p>Products and services</p> <ul style="list-style-type: none"> ● 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 <p>Markets</p> <ul style="list-style-type: none"> ● 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 <p>Resilience</p> <ul style="list-style-type: none"> ● 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
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(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 2017

Modified question (2017 CC6.1d, CC6.1e, CC6.1f)

Response options

Please complete the following table:

Primary reason	Please explain
<p>Select from:</p> <ul style="list-style-type: none">● 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	<p>Text field [maximum 2,400 characters]</p>

C3 Business strategy

Business strategy

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

Change from 2017

Minor Change (2017 CC2.2)

Response options

Select one of the following options:

- Yes
- No

(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 2017

Minor Change (2017 CC2.2b)

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 2017

Modified question (2017 CC3.1)

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 2017

Modified question (2017 CC3.1a, CC3.1e)

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	% reduction from base year	Base year	Start 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- 2018]	Numerical field [enter a number between 1900- 2018]	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?	% achieved (emissions)	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: <ul style="list-style-type: none"> ● Underway ● Retired ● Expired ● New ● Replaced 	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 2017

Modified question (2017 CC3.1b, CC3.1c, CC3.1e)

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	% reduction from baseline year	Metric	Base year	Start year	
Select from: Int1-Int100	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]	Select from drop-down options below	Numerical field [enter a whole number between 1900- 2018]	Numerical field [enter a whole number between 1900- 2018]	
Normalized baseline year emissions covered by target (metric tons CO2e)	Target year	Is this a science-based target?	% achieved (emissions)	Target status	Please explain	% change anticipated in absolute Scope 1+2 emissions	% change anticipated in absolute Scope 3 emissions
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 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: <ul style="list-style-type: none"> ● Underway ● Retired ● Expired ● New ● Replaced 	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:

<ul style="list-style-type: none"> ● 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) 	<ul style="list-style-type: none"> ● 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
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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 (see Technical Note on Science-Based Targets):

<ul style="list-style-type: none"> ● Grams CO2e per revenue passenger kilometer* ● Metric tons CO2e per USD(\$) value-added* ● Metric tons CO2e per square meter* ● Metric tons CO2e per metric ton of aluminum* ● Metric tons CO2e per metric ton of steel* ● Metric tons CO2e per metric ton of cement* ● Metric tons CO2e per metric ton of cardboard* ● Grams CO2e per kilometer* ● Metric tons CO2e per unit revenue ● Metric tons CO2e per unit FTE employee ● Metric tons CO2e per unit hour worked ● Metric tons CO2e per metric ton of product ● Metric tons of CO2e per liter of product ● Metric tons CO2e per unit of production 	<ul style="list-style-type: none"> ● Metric tons CO2e per unit of service provided ● Metric tons CO2e per square foot* ● Metric tons CO2e per kilometer ● Metric tons CO2e per passenger kilometer* ● Metric tons CO2e per megawatt hour (MWh)* ● Metric tons CO2e per barrel of oil equivalent (BOE) ● Metric tons CO2e per vehicle produced ● Metric tons CO2e per metric ton of ore processed ● Metric tons CO2e per ounce of gold ● Metric tons CO2e per ounce of platinum ● Metric tons of CO2e per metric ton of aggregate ● Metric tons of CO2e per billion (currency) funds under management ● Other, please specify
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Is this a science-based target? drop-down options (column 10)

Select one of the following options:

<ul style="list-style-type: none"> ● 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 	<ul style="list-style-type: none"> ● 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
---	--

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

Question dependencies

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

Change from 2017

Modified question (2017 CC3.1f)

Response options

Please complete the following table:

Primary reason	Five-year forecast	Please explain
Select from: <ul style="list-style-type: none">● 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	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]

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 2017

Modified question (2017 CC3.1d)

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.

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: <ul style="list-style-type: none"> ● Energy productivity ● Renewable energy consumption ● Renewable energy production ● 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- 2018]	Numerical field [enter a number between 1900- 2018]	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 5 decimal places and no commas]	Numerical field [enter a number from 0 to 999,999,999,999 using up to 5 decimal places and no commas]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: <ul style="list-style-type: none"> ● Underway ● Retired ● Expired ● New ● Replaced 	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters] [emissions reduction target ID]	Select from: <ul style="list-style-type: none"> ● 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]

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 2017

No change (2017 CC3.3)

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

(C4.3b) 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 2017

Minor change (2017 CC3.3b)

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.

Activity type	Description of activity	Estimated annual CO2e savings (metric tons CO2e)	Scope	Voluntary/ Mandatory
Select from: <ul style="list-style-type: none">● 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 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: <ul style="list-style-type: none">● Scope 1● Scope 2 (location-based)● Scope 2 (market-based)● Scope 3	Select from: <ul style="list-style-type: none">● 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 0-999,999,999,999,999 using no decimal places, and no commas]	Numerical field [enter a number from 0-999,999,999,999,999 using no decimal places, and no commas]	Select from: <ul style="list-style-type: none"> ● <1 year ● 1-3 years ● 4-10 years ● 11-15 years ● 16-20 years ● 21-25 years ● >25 years 	Select from: <ul style="list-style-type: none"> ● <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 activity drop-down options (column 2)

Select one of the following options:

<p>Energy efficiency:Building fabric</p> <ul style="list-style-type: none"> ● Insulation ● Maintenance program ● Other, please specify <p>Energy efficiency:Building services</p> <ul style="list-style-type: none"> ● Building controls ● HVAC ● Lighting ● Motors and drives ● Combined heat and power ● Other, please specify <p>Energy efficiency:Processes</p> <ul style="list-style-type: none"> ● 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 ● Other, please specify <p>Fugitive emissions reductions</p> <ul style="list-style-type: none"> ● Agriculture methane capture ● Agriculture N2O reductions, ● Landfill methane capture, ● Oil/natural gas methane leak capture/prevention ● Refrigerant leakage reduction ● Other, please specify 	<p>Low-carbon energy purchase</p> <ul style="list-style-type: none"> ● Biomass ● Biogas ● Fuel Cells ● Geothermal ● Hydro ● Solar Hot Water ● Solar PV ● Solar CPV ● Natural Gas ● Nuclear ● Carbon Capture & Storage ● Other, please specify <p>Low-carbon energy installation</p> <ul style="list-style-type: none"> ● Biomass ● Biogas ● Fuel Cells ● Geothermal ● Hydro ● Solar Hot Water ● Solar PV ● Solar CPV ● Natural Gas ● Carbon Capture & Storage ● Other, please specify <p>Process emissions reductions</p> <ul style="list-style-type: none"> ● New equipment ● Changes in operations ● Process materials selection ● Process water ● Other, please specify
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(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 2017

Minor change (2017 CC3.3d)

Response options

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

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C5 Emissions methodology

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 2017

No change (2017 CC7.2)

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, Superseded 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 2017

No change (2017 CC7.2a)

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 2017

No change (2017 CC8.2)

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 2017

No change (2017 CC8.3)

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: <ul style="list-style-type: none"> ● We are reporting a Scope 2, location-based figure ● We are not reporting a Scope 2, location-based figure 	Select from: <ul style="list-style-type: none"> ● 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 2017

No change (2017 CC8.3a)

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 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	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 3 emissions data

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

Change from 2017

No change (2017 CC14.1)

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: <ul style="list-style-type: none"> ● 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)					

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 2017

Modified question (2017 CC12.2, CC12.3)

Connection to other frameworks

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.

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 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: <ul style="list-style-type: none"> ● 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) ● megawatt hour transmitted (MWh) ● metric ton of product ● ounce of gold ● ounce of platinum ● passenger kilometer ● room night produced ● square foot ● square meter ● metric ton of aggregate ● metric ton of aluminum ● metric ton of coal ● metric ton of ore processed ● metric ton of steel ● unit hour worked ● unit of production ● unit of service provided ● vehicle produced ● Other, please specify 	Numerical field [enter a number from 0-10,000,000,000,000,000 using a maximum of 2 decimal places and no commas]	Select from: <ul style="list-style-type: none"> ● Location-based ● Market-based 	Numerical field [enter a number from 0-999 using a maximum of 2 decimal places]	Select from: <ul style="list-style-type: none"> ● Increased ● Decreased ● No change 	Text field [maximum 2,400 characters]

[Add Row]

C7 Emissions breakdown

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 2017

Minor change (2017 CC12.1)

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

C8 Energy

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 2017

New question

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 2017

Modified question (2017 CC11.2, CC11.5)

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: <ul style="list-style-type: none">● LHV (lower heating value)● HHV (higher 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			

Value chain engagement

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

Change from 2017

Minor change (2017 CC14.4)

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

C14 Signoff

Signoff

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

Change from 2017

Minor change (2017 CC15.1)

Response options

Please complete the following table:

Job title	Corresponding job category
Text field [maximum 200 characters]	Select from: <ul style="list-style-type: none">● 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

SC Supply chain

Supply chain introduction

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

Change from 2017

No change (2017 SM0.0)

Response options

This is an open text question.

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

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

Change from 2017

Minor change (2017 SM0.1)

Response options

Please complete the following table:

Annual revenue
Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]

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

Change from 2017

No change (2017 SM0.2)

Response options

Select one of the following options:

- Yes
- No

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

Question dependencies

This question only appears if you select "Yes" in response to SC0.2.

Change from 2017

No change (2017 SM0.2a)

Response options

Please complete the following table:

ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Text field [maximum 2 characters]	Text field [maximum 10 characters using no decimal places]

Allocating your emissions to your customers

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

Change from 2017

No change (2017 SM1.1)

Connection to other frameworks

SDG

Goal 12: Responsible consumption and production

Response options

Please note that this table (for SC1.1) is designed so that only the customer that you select in column 1 ("Requesting member") will be able to see the data relevant to them. If you enter an answer without selecting a requesting member, your answer will not be viewable at all.

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.

Requesting member	Scope of emissions	Emissions in metric tons of CO2e	Uncertainty (± %)
[Drop-down menu of requesting members]	Select from: <ul style="list-style-type: none"> ● Scope 1 ● Scope 2 ● Scope 3 	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 4 decimal places and no commas]	Percentage field [enter a percentage from 0-999,999 using a maximum of 4 decimal places and no commas]

Major sources of emissions	Verified*	Allocation method	Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Text field [maximum 2,500 characters]	Select from: <ul style="list-style-type: none"> ● Yes ● No 	Select from drop-down options below	Text field [maximum 5,000 characters]

[Add Row]

*Has the allocation of emissions to your customers been externally verified?

Description of allocation method drop-down options (column 7)

Select one of the following options:

- | | |
|--|---|
| <ul style="list-style-type: none">● Allocation not necessary due to type of primary data available● Allocation not necessary as secondary data used● Allocation based on mass of products purchased● Allocation based on the volume of products purchased● Allocation based on the energy content of products purchased● Allocation based on the chemical content of products purchased | <ul style="list-style-type: none">● Allocation based on the number of units purchased● Allocation based on area● Allocation based on another physical factor● Allocation based on the market value of products purchased● Other, please specify |
|--|---|

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

Change from 2017

No change (2017 SM1.2)

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.

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

Change from 2017

No change (2017 SM1.3)

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.

Allocation challenges	Please explain what would help you overcome these challenges
Select from: <ul style="list-style-type: none">● Diversity of product lines makes accurately accounting for each product/product line cost ineffective● Customer base is too large and diverse to accurately track emissions to the customer level● Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult● Doing so would require we disclose business sensitive/proprietary information● We face no challenges● Other, please specify	Text field [maximum 2,500 characters]

[Add Row]

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

Change from 2017

No change (2017 SM1.4)

Response options

Select one of the following options:

- Yes
- No

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

Question dependencies

This question only appears if you select "Yes" in response to SC1.4.

Change from 2017

No change (2017 SM1.4a)

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.

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

Question dependencies

This question only appears if you select "No" in response to SC1.4.

Change from 2017

No change (2017 SM1.4b)

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.

Collaborative opportunities

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

Change from 2017

Modified question (2017 SM2.1)

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Response options

Please note that this table (for SC2.1) is designed so that only the customer that you select in column 1 ("Requesting member") will be able to see the data relevant to them. If you enter an answer without selecting a requesting member, your answer will not be viewable at all.

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

Requesting member	Group type of project	Type of project	Emissions targeted	Estimated timeframe for carbon reductions to be realized	Estimated lifetime CO2e savings	Estimated payback	Details of proposal
Select from: [Drop-down menu of requesting members]	Select from: <ul style="list-style-type: none"> ● Reduce Logistics Emissions ● Change to provision of goods and services ● New product or service ● Relationship sustainability assessment ● Change to supplier operations ● Other, please specify 	Select from drop-down options below	Select from: <ul style="list-style-type: none"> ● Actions to reduce customers' operational emissions (customer scope 1 & 2) ● Actions that would reduce our own operational emissions (our scope 1 & 2) ● Actions that would reduce our own supply chain emissions (our own scope 3) ● Actions that would reduce both our own and our customers' emissions ● Other, please specify 	Select from: <ul style="list-style-type: none"> ● 0-1 year ● 1-3 years ● 3-5 years ● Other, please specify 	Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: <ul style="list-style-type: none"> ● Cost/saving neutral ● 0-1 year ● 1-3 years ● 3-5 years ● Other, please specify 	Text field [maximum 5,000 characters]

[Add Row]

Type of project drop-down options (column 3)

Select one of the following options:

<p>Reduce Logistics Emissions</p> <ul style="list-style-type: none"> ● Consolidated logistics ● Changing transportation mode (switch from aviation to rail) ● Route optimization ● Changed timing of logistics ● Other, please specify <p>Change to provision of goods and services</p> <ul style="list-style-type: none"> ● Reduced packaging weight ● More online/virtual provision of services ● Other, please specify <p>New product or service</p> <ul style="list-style-type: none"> ● New product or service that reduces customers operational emissions ● New product or service that reduces customers products/services operational emissions ● New product or service that has a lower upstream emissions footprint ● Other, please specify 	<p>Relationship sustainability assessment</p> <ul style="list-style-type: none"> ● Assessing products or services life-cycle footprint to identify efficiencies ● Sustainability audit of existing relationship ● Aligning goals to feed into customers targets and ambitions ● Other, please specify <p>Change to supplier operations</p> <ul style="list-style-type: none"> ● Implementation of energy reduction projects ● Increased levels of purchased renewable energy ● Undertaking life-cycle assessment ● Other, please specify <p>Other</p> <ul style="list-style-type: none"> ● Other, please specify
--	--

(SC2.2) Have requests or initiatives by CDP supply chain members prompted your organization to undertake organizational-level emissions reduction initiatives?

Change from 2017

No change (2017 SM2.2)

Response options

Select one of the following options:

- Yes
- No

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

Question dependencies

This question only appears if you select "Yes" in response to SC2.2.

Change from 2017

Modified question (2017 SM2.2a)

Connection to other frameworks

SDG

Goal 7: Affordable and clean energy

Response options

Please note that this table (for SC2.2a) is designed so that only the customers that you select in column 1 ("Requesting member") will be able to see the data relevant to them. If you enter an answer without selecting a requesting member, your answer will not be viewable at all.

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.

Requesting member	Initiative ID	Group type of project	Type of project
Select from: [Drop-down menu of requesting members]	Select from: [Drop-down menu of ID's]	Select from: <ul style="list-style-type: none"> ● Reduce Logistics Emissions ● Change to provision of goods and services ● New product or service ● Relationship sustainability assessment ● Change to supplier operations ● Other, please specify 	Select from drop-down options below
Description of the reduction initiative	Emissions reduction for the reporting year in metric tons of CO2e	Did you identify this opportunity as part of the CDP supply chain Action Exchange?	Would you be happy for CDP supply chain members to highlight this work in their external communication?
Text field [maximum 2,500 characters]	Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: <ul style="list-style-type: none"> ● Yes ● No 	Select from: <ul style="list-style-type: none"> ● Yes ● No

[Add Row]

Type of project drop-down options (column 4)

Select one of the following options:

Reduce Logistics Emissions

- Consolidated logistics
- Changing transportation mode (switch from aviation to rail)
- Route optimization
- Changed timing of logistics
- Other, please specify

Change to provision of goods and services

- Reduced packaging weight
- More online/virtual provision of services
- Other, please specify

New product or service

- New product or service that reduces customers operational emissions
- New product or service that reduces customers products/services operational emissions
- New product or service that has a lower upstream emissions footprint
- Other, please specify

Relationship sustainability assessment

- Assessing products or services life-cycle footprint to identify efficiencies
- Sustainability audit of existing relationship
- Aligning goals to feed into customers targets and ambitions
- Other, please specify

Change to supplier operations

- Implementation of energy reduction projects
- Increased levels of purchased renewable energy
- Undertaking life-cycle assessment
- Other, please specify

Other

- Other, please specify

Action Exchange

(SC3.1) Do you want to enroll in the 2018-2019 CDP Action Exchange initiative?**Change from 2017**

No change (2017 SM4.1)

Response options

Select one of the following options:

- Yes
- No

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

This question only appears if you select "Yes" in response to SC3.1.

Change from 2017

No change (2017 SM4.1a)

Response options

Select from drop-down list of members.

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

This question only appears if you select "Yes" in response to SC3.1.

Change from 2017

No change (2017 SM4.1b)

Response options

Select all that apply from the following options:

- 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
- Transportation: fleet
- Transportation: use
- Product design
- Behavioral change
- Waste recovery
- Green project finance
- Other, please specify

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

Question dependencies

This question only appears if you select "Yes" in response to SC3.1.

Change from 2017

No change (2017 SM4.1c)

Response options

Select one of the following options:

- Yes
- No

(SC3.2) Is your company a participating supplier in CDP's 2017-2018 Action Exchange initiative?

Change from 2017

No change (2017 SM4.2)

Response options

Select one of the following options:

- Yes
- No

(SC3.2a) Describe how your organization actively considered emissions reduction projects as a result of Action Exchange. If you do not have any emissions reduction activities resulting from Action Exchange at any stage of implementation, please explain why not in the second column.

Question dependencies

This question only appears if you select "Yes" in response to SC3.2.

Change from 2017

No change (2017 SM4.2a)

Response options

Please complete the following table:

Type of project	Details of proposal
Select all that apply: <ul style="list-style-type: none">● 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● Transportation: fleet● Transportation: use● Product design● Behavioral change● Waste recovery● Green project finance● Other, please specify	Text field [maximum 2,500 characters]

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.

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Terms for responding to Investors (2018 Climate Change)

These terms apply if you are submitting a response to the CDP Climate Change Questionnaire 2018 to Investors. If you are also submitting a response to Supply Chain Members the Terms for responding to Supply Chain Members (2018 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 to **we**, **our** and **us** in these terms are references to CDP and the Billing Company.

Deadline: means 15 August 2018.

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 2018.

Responding Company: means the company responding to the Questionnaire. References to **you** 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, your response can only be amended by our staff and we may charge a fee. 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.

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 1 October 2018 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. If you are responding to a CDP Climate Change Questionnaire for the first time you may choose for your score to be "private" but in all other cases CDP may publish your score, 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 Member that has asked you to respond to the Questionnaire. For further details please see the **Terms for responding to Supply Chain Members (2018 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 2018. Please note that we may charge an additional fee if you want to change your response after you have submitted your response and you are seeking to make the

change 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, 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 (2018 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 **CDP Worldwide**.

Terms for responding to Supply Chain Members (2018 Climate Change)

These terms apply if you are submitting a response to the CDP Climate Change Questionnaire 2018 to Supply Chain Members. If you are also submitting a response to Investors the Terms for responding to Investors (2018 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 to **we**, **our** and **us** in these terms are references to CDP.

Deadline: means 29 August 2018.

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 2018.

Responding Company: means the company responding to the Questionnaire. References to **you** 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 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, 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 (2018 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 (2018 climate change). Information you submit in response to the Supply Chain module (2018 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 (2018 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 (2018 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, your response can only be amended by our staff and we may charge a fee. 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.

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 1 October 2018 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 (2018 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\$100 trillion, we leverage investor and buyer power to motivate companies to disclose and manage their environmental impacts.

Over 6,300 companies with some 55% of global market capitalization disclosed environmental data through CDP in 2017. This is in addition to the over 500 cities and 100 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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