

DRAFT: CDP 2018 Materials questionnaire

Introduction to this document

This document is a proposed draft of the CDP 2018 general climate change questionnaire, and the CDP 2018 supply chain climate change module. Questions are not final and are subject to change.

Question numbering

Question numbers in this document are subject to change. In some cases, question numbers from CDP's 2017 climate change questionnaire are provided for reference.

Tags

This document uses tags to characterize questions:

- **CE**: This question is applicable to organizations operating in the cement production sector
- **CH**: This question is applicable to organizations operating in the chemicals production sector
- **MM**: This question is applicable to organizations operating in the mining and metals production sector
- **ST**: This question is applicable to organizations operating in the steel production sector
- **New question**: This is a new question proposed by CDP
- **Modified questions**: This is a modification of an existing CDP question
- **New sector-specific question**: This is a new question added for a chemicals, cement, metals and mining or steel company
- **Adapted sector-specific question**: This is an existing CDP question, or a modified CDP question that is being asked again to focus specifically on chemicals, cement, metals and mining or steel operations.
- **No change**: This question has not changed (note the question number may have changed)
- **TCFD**: This question supports disclosure in line with the recommendations of the [Task force on Climate-related Financial Disclosures](#) (TCFD).
- **SME**: This question is applicable to responders answering the supply chain climate change information request for Small & Medium sized Enterprises (SMEs).

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CC0. Introduction

Tags: No change; SME

(CC0.1) Introduction

Please give a general description and introduction to your organization

(CC0.2) Reporting year

Please state the start and end date of the year for which you are reporting data

(CC0.3) Country list configuration

Please select the countries for which you will be supplying data

(CC0.4) Currency selection

Please select the currency in which you would like to submit your response

Organizational activity profile

SECTION RATIONALE: CDP has added this question to understand the activity profiles of materials companies answering the questionnaire. Materials companies have different degrees of diversification, and their activities, operations and products may differ greatly from company to company. Understanding what parts of the value chain the company is active in, and the consequent structural differences in emissions and energy use, is necessary to interpret data.

Tags: New sector-specific question; CE

RATIONALE: CDP has added this question on the specific activities that cement companies engage in. Without information on parts of the value chain in which the company operates, the data may miss structural differences in emissions and energy use.

(CC-CE0.5) What part of the cement value chain does your organization operate in? Please check all that apply.

- Limestone quarrying
- Ordinary Portland cement manufacturing
- Clinker production
- Concrete production
- Alternative 'low CO2' cementitious materials production
- Aggregates production
- Asphalt production

Tags: New sector-specific question; CH

RATIONALE: CDP has added this question on the specific products that chemicals companies are manufacturing. The chemicals industry is highly diversified and types of products may differ greatly from company to company. Without information on the specific product mix of a chemicals company, the data may miss structural differences in emissions and energy use.

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(CC-CH0.5) **What chemical products does your organization produce? Please check all that apply**

- Bulk organic chemicals
 - Lower Olefins (cracking)
 - Aromatics
 - Ethylene Oxide & Ethylene glycol
 - Ethanol
 - Methanol
 - Polymers
- Bulk inorganic chemicals
 - Ammonia
 - Fertilizers
 - Chlorine and Sodium hydroxide
 - Carbon black
 - Soda Ash
 - Titanium dioxide
 - Hydrogen
 - Oxygen
 - Other industrial gasses
- Specialty chemicals
 - Specialty organic chemicals
 - Specialty organic chemicals
- Other (please specify)

Tags: New sector-specific question; ST

RATIONALE: CDP has added this question on the specific activities that steel companies engage in. Steel companies have different levels of diversification and integration, and the type of production operations may differ greatly from steelmaker to steelmaker. Without information on parts of the value chain in which the company operates, the data may miss structural differences in emissions and energy use.

(CC-ST0.5) **Which of the following steel value chain activities does your organization operate in? Please check all that apply.**

- Mining and quarrying
 - Iron ore mining
 - Coal mining

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

Tags: New sector-specific question; MM

RATIONALE: CDP has added this question to understand the activity profiles of metals & mining companies answering the questionnaire. Metals and mining companies have different degrees of diversification and integration, and their activities, operations and products may differ greatly from company to company. Without information on parts of the value chain in which the company operates, the data may miss structural differences in emissions and energy use.

(CC-MM0.5) What activities in the mining and/or metal processing sector does your organization engage in? Please check all that apply.

Mining

- Bauxite
- Copper
- Gold
- Platinum group metals
- Silver
- Iron ore
- Nickel
- Zinc
- Lead
- Diamonds
- Other Non-ferrous metal mining

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Other mining (please specify)

Processing metals

Aluminum

Alumina

Copper

Gold

PGM metals

Silver

Other ferrous metals

Other non-ferrous materials processing

Nickel

Zinc

Lead

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CC1. Governance

Board and management responsibility

SECTION RATIONALE: CDP has added these questions to elicit the level at which climate-related issues are structurally handled at the board-level, as well as the frequency and nature of these discussions. These questions support TCFD Governance recommendations a): Describe the board's oversight of climate-related risks and opportunities; and b): Describe management's role in assessing and managing climate-related risks and opportunities.

Tags: Modified question; TCFD

RATIONALE: CDP has modified CC1.1 (Where is the highest level of direct responsibility for climate change within your organization?), to ask if there is board level oversight of climate change issues.

(CC1.1) **Is there board level oversight of climate change issues?** (Yes or No)

If Yes to CC1.1:

Tags: No change

(CC1.1a) **Please identify the position of the individual or name of the committee with this responsibility.**

Tags: New question; TCFD

(CC1.1b) **Please provide further details on the board's/committee's (appointed by the board) oversight of climate-related issues.**

Are climate-related issues a scheduled agenda item?	Into which governance mechanisms are climate-related issues integrated?	Please explain	Comment
Select from: Scheduled – all meetings; Scheduled – some meetings; Sporadic - as important matters arise; Other, please specify	Multi-select: Reviewing and guiding strategy and major plans of action; Risk management policies; Annual budgets; Business plans; Performance objectives; Monitoring implementation and performance; Overseeing major capital expenditures; Acquisitions and divestitures; Incentives; Monitoring and overseeing progress against goals and targets for addressing climate-related issues; Other, please explain		

Tags: New question; TCFD

(CC1.1c) **Below board-level, please identify the position of the individual or name of the committee in management with the highest responsibility for climate change.**

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Tags: New question; TCFD

(CC1.1d) Please identify and describe the climate-related responsibilities that have been assigned to management-level positions or committees.

Name of the committee/ Position of individual	Responsibility	Description of responsibility	Accountability	How regularly are climate-related issues featured on management committee's agenda	Comment
	Select all that apply: Assessing risks and opportunities; Managing risks and opportunities; Other, please specify.			Select from: Scheduled – all meetings; Scheduled – some meetings; Sporadic - as important matters arise; Other, please specify	

[Add row]

Individual performance

Tags: No Change

(CC1.2) Do you provide incentives for the management of climate change issues, including the attainment of targets? (Yes or No)

If Yes to CC1.2:

(CC1.2a) Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment

CC2. Risk & opportunity management

Time horizons

Tags: New question; TCFD

RATIONALE: CDP has added this question to understand the different timescales at which businesses, strategy and financial planning consider climate-related issues. Subsequent questions on risk and opportunity disclosure, as well as transition planning, relate to different time horizons, hence their definition is requested here. This question supports TCFD Strategy recommendation a): Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

(CC2.1) Please describe what your company considers to be short-, medium- and long-term horizons.

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Time horizon	Definition	Comment
Short-term		
Medium-term		
Long-term		

Substantive change

Tags: New question; TCFD

RATIONALE: CDP has added this question to elicit how organizations identify which risks and opportunities could have a substantive impact on their operations. This question supports TCFD Governance recommendation a): Describe the board's oversight of climate-related risks and opportunities; and Strategy recommendation b): Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

(CC2.2) Please describe the processes used to determine which climate-related risks and opportunities could have a substantive financial impact on your business, operations, revenue and expenditure, assets and liabilities, and capital allocation.

Risk & opportunity identification approach

SECTION RATIONALE: CDP has added these questions to further elicit the process through which climate-related risks and opportunities are determined, handled and integrated at an organization. These questions support TCFD Governance recommendation b): Describe management's role in assessing and managing climate-related risks and opportunities; and Risk Management recommendations a): Describe the organization's processes for identifying and assessing climate-related risks; b): Describe the organization's processes for managing climate-related risks; and c): Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

Tags: New question; TCFD; SME

(CC2.3) Please select the option that best describes your risk identification and assessment procedures with regard to climate change risks and opportunities.

Select from:

- Integrated into multi-disciplinary company-wide risk identification and assessment processes
- A specific climate change risk identification and assessment process
- There are no documented processes for identifying and assessing risks and opportunities from climate change

If, in response to CC2.3, 'Integrated into multi-disciplinary company-wide risk identification and assessment process; or a specific climate change risk identification and assessment process:

Tags: Modified question; TCFD

RATIONALE: This question has been modified from table CC2.1a (2017) and the question text has been reworded.

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(CC2.3a) Please provide further details on your risk identification and assessment procedures with regard to climate change risks and opportunities.

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Select from: Six-monthly or more frequently; Annually; Every two years; Sporadically, not defined; Never	Select from: Board or individual/ sub-set of the board or committee appointed by the board; Other committee; Senior manager; Other manager; Nobody		Select from: Up to 1 year; 1 to 3 years; 3 to 6 years; > 6 years; Unknown	

Tags: New question; TCFD

(CC2.3b) Please describe your risk management procedures for identifying and assessing climate-related risks and opportunities.

Tags: New question; TCFD

(CC2.3c) Please identify which of the following criteria are factored into your organization's climate risk assessments.

Criteria	Relevance	Please explain
Current regulation	Select from: Relevant, included; Relevant, included for some suppliers, facilities, or product lines; Relevant not yet included; Not relevant, included; Not relevant; Not evaluated.	
Emerging regulation		
Upstream value chain issues		
Downstream value chain issues		
Other, please explain		

If, in response to CC2.3, there are no documented processes for identifying and assessing risks and opportunities from climate change:

Tags: Modified question

RATIONALE: This question has been modified from CC2.1d (2017). The question text and table columns have been reworded and modified.

(CC2.4d) Please explain why you do not have a process in place for identifying and assessing risks and opportunities from climate change, and whether you plan to introduce such a process in the future.

Primary reason	Please explain
Select from: Climate change risk assessment in progress; We are planning to introduce one in the next two years; Important but not an immediate business priority; Judged to be unimportant;	

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No instruction from management; Lack of internal resources; Other, please specify	
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Risk disclosure

SECTION RATIONALE: CDP has modified CC5.1 (2017) to align more closely with TCFD recommended disclosures. It now additionally asks about assets, liabilities, and capital allocation. The table has also been modified with some columns being re-worded, some being removed (Potential impact, Direct/Indirect, Estimated financial implications of the risk before taking action, Methods you are using to manage this), some being added (Financial Impact Driver, Financial Impact). These questions support TCFD Strategy recommendations a): Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term; and b): Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.

Tags: Modified question; TCFD; SME

(CC2.5) Have you identified any inherent climate change risks that have the potential to have a substantive financial impact on your business, operations, revenue or expenditure, assets and liabilities, and capital allocation? (Yes or No)

If Yes to CC2.5:

Tags: Modified question; TCFD; SME

(CC2.5a) Please provide details of your identified risks that have the potential to have a substantive financial impact on your business, operations, revenue or expenditure, assets and liabilities, and capital allocation.

Identifier	Climate-related risk driver	Company specific description	Time horizon	Financial impact driver	Estimated financial impact	Financial impact	Likelihood	Magnitude

Opportunity disclosure

SECTION RATIONALE: CDP has modified CC6.1 (2017) to align more closely with TCFD recommended disclosures. It now additionally asks about assets, liabilities, and capital allocation. The table has also been modified with some columns being re-worded, some being removed (Potential impact, Direct/Indirect, Estimated financial implications of the opportunity before taking action, Methods you are using to manage this), some being added (Financial Impact Driver, Financial Impact). These questions support TCFD Strategy recommendations a): Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term; and b): Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.

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Tags: Modified question; TCFD; SME

(CC2.6) **Have you identified any inherent climate change opportunities that have the potential to have a substantive financial impact on your business, operations, revenue or expenditure, assets and liabilities, and capital allocation?** (Yes or No)

If Yes to CC2.6:

Tags: Modified question; TCFD; SME

(CC2.6a) **Please provide details of your identified opportunities that have the potential to have a substantive financial impact on your business, operations, revenue or expenditure, assets and liabilities, and capital allocation.**

Identifier	Climate-related opportunity driver	Company specific description	Time horizon	Financial impact driver	Estimated financial impact	Financial impact	Likelihood	Magnitude

Risk management

Tags: No change

(CC2.7) **Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities. (CC2.1, 2017)**

Select from:

- Integrated into multi-disciplinary company-wide risk management processes
- A specific climate change risk management process
- There are no documented processes for managing risks and opportunities from climate change

If, in response to CC2.7, 'Integrated into multi-disciplinary company-wide risk management process; or a specific climate change risk management process:

Tags: Modified question; TCFD

RATIONALE: CDP has modified this question from CC2.1a (2017). Rather than a table asking about frequency of monitoring, geographical areas considered, and how far into the future risks are considered, the question now focuses on general management of climate-related risks and opportunities. This question supports TCFD's Risk Management recommendation b): Describe the organization's process for managing climate-related risks.

(CC2.7a) **Please describe your process(es) for managing climate-related risks and opportunities.**

Tags: Modified question; TCFD

RATIONALE: CDP has modified this question from CC2.1b (2017). Rather than asking about how risk and opportunity identification processes are applied at both the company and asset level, the question now asks how risks and opportunities are integrated into your business. This question supports TCFD's

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

(CC2.7b) **Please describe where and how your identified risks and opportunities have been integrated into your business.**

Area	Relevance	Risk/Opportunity	Description
Products and services	Select from: Relevant, included; Relevant, included for some suppliers, facilities, or product lines; Relevant not yet included; Not relevant, included; Not relevant; Not evaluated.	Multi-select which risks/opportunities have impacted this aspect of business strategy	Open text
Supply chain and/or value chain			
Adaptation and mitigation activities			
Investment in R&D			
Operations			
Other, please specify			

Tags: New question; TCFD

RATIONALE: CDP has added this question to understand how climate-related issues may affect an organization's financial planning process. It supports TCFD Strategy recommendation b): Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.

(CC2.7c) **Please describe where and how your identified risks and opportunities have served as an input to your financial planning process.**

	Area	Relevance	Risk/Opportunity	Description
Income statement	Revenues	Select from: Relevant, included; Relevant, included for some suppliers, facilities, or product lines; Relevant not yet included; Not relevant, included; Not relevant; Not evaluated.	Multi-select the risks or opportunities that have impacted this aspect of business strategy	
	Operating costs			
	Capital expenditures / capital allocation			
Balance sheet	Acquisitions and divestments			
	Access to capital			
	Assets			
	Liabilities			
	Other, please specify			

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Tags: Modified question; TCFD

RATIONALE: The table for this question has been modified from the one presented in CC2.1d (2017).

If, in response to CC2.7, there are no documented processes for managing risks and opportunities from climate change:

(CC2.7d) Please explain why you do not have a process in place for managing risks and opportunities from climate change, and whether you plan to introduce such a process in the future.

Primary reason	Please explain
Select from: Climate change risk assessment in progress; We are planning to introduce one in the next two years; Important but not an immediate business priority; Judged to be unimportant; No instruction from management; Lack of internal resources; Other, please specify	

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CC3. Strategy and scenario analysis

Strategy

SECTION RATIONALE: The low-carbon transition has strategic implications for businesses in the short, medium and long-term, therefore CDP has added questions to elicit how companies are evaluating their climate risks. To quantify these potential risks, companies can use scenario analysis to understand how various potential climate pathways affect their business model. Transition planning is also an important evolution of strategic environmental planning, and includes all the relevant changes that need to be made to the company's business model before the company can adjust to a low-carbon future. This is especially relevant for companies operating in high impact sectors. The following questions support the TCFD's Strategy recommendation c): Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. Climate-related scenario analysis and transition planning disclosure was piloted by CDP in the [Assessing Low-Carbon Transition](#) (ACT) initiative in 2016.

Tags: No change; TCFD; SME

(CC3.1) Is climate change integrated into your business strategy? (CC2.2, 2017)

If Yes to CC3.1:

Tags: New question; TCFD

(CC3.1a) Please indicate whether your company uses climate-related scenario analysis to inform your business strategy?

Select from:

- No, and we do not anticipate doing so in the next 2 years
- No, but we anticipate doing so in the next 2 years
- Yes, qualitative
- Yes, quantitative
- Yes, qualitative and quantitative

If Yes to CC3.1:

Tags: New question; TCFD

(CC3.1b) Please indicate whether your company has developed a low-carbon transition plan to support the long-term business strategy?

Select from:

- Yes
- No
- In development

If Yes to CC3.1:

Tags: No change; TCFD; SME

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(CC3.1c) **Please describe how climate change is integrated into your business strategy.**
(CC2.2a, 2017)

If Yes to CC3.1a:

Tags: New question; TCFD

RATIONALE: CDP has asked this question to elicit details about the scenarios being analyzed and about how their outcomes are used within the organization. CDP proposes an open-ended question to allow for a variety of scenarios and levels of detail.

(CC3.1d) **Please disclose details of your company's use of climate-related scenario analysis.**

Identifier	Details
2DS, IEA 450, Greenpeace, DDPP, or TRS 1, 2, 3 or PRS 1, 2, 3	Companies should disclose their inputs, assumptions and analytical methods used for this scenario For existing scenarios (e.g. IEA 450 etc.) companies should disclose how they have altered/changed the inputs, assumptions or analytical methods to cater to their needs

[Add row]

If Yes to CC3.1b:

Tags: New question; TCFD

RATIONALE: CDP proposes an open-ended text field since low-carbon transition planning is a relatively new concept with few standardized frameworks. This allows for companies to answer with varying degrees of detail.

(CC3.1e) **Please disclose details of your company's low-carbon transition plan.**

If, in response to CC3.1, climate change is not integrated into your business strategy:

(CC3.1f) **Please explain why climate change is not integrated into your business strategy.**
(CC2.1d, 2017)

If No in response to CC3.1a:

Tags: New question

(CC3.1g) **Please describe why your company does not use climate-related scenario analysis to inform your business strategy.**

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CC4. Targets and performance

Targets

Tags: Modified questions; TCFD; SME

RATIONALE: An effort was made to merge the multitude of targets questions and some of the performance questions. Furthermore, the information on the completion rate of the targets (CC3.1c, 2017) has also been included. This was done to center the relevant information in one place and make it easier for data users to compare targets.

(CC4.1) Did you have an emission reduction target that was active in the reporting year? (CC3.1, 2017) (Absolute and/or intensity target)

If, in response to CC4.1, 'Absolute target', go to CC4.1a; and if 'Intensity target', go to CC4.1b:

(CC4.1a) Please provide details of your absolute target.

ID	Scope	% emissions in Scope	% reduction from base year	Base Year	Start year	Base year emissions covered by target (metric tons CO2e)	Target year	Is this a science-based target?	% complete (emissions)	Target Status	Please explain

(CC4.1b) Please provide details of your intensity target.

This question uses a modified table based on the table above (CC4.1a):

- The 'Base year emissions covered by target' column is replaced with a 'Normalized base year emissions column';
- A column for 'Metric' selection is included;
- A column for the '% change anticipated in absolute Scope 1+2 emissions' is included; and
- A column for the '% change anticipated in absolute Scope 3 emissions' is included

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Tags: New question; TCFD; SME

RATIONALE: Emissions reduction targets are not the only type of relevant targets that organizations use to drive change. CDP previously asked for renewable energy targets (CC3.1d, 2017). This question has now been removed and replaced with a more open table where disclosers can report on any other climate-related targets. This includes renewable energy, but also includes for example waste and consumption reduction targets.

(CC4.2) Please provide details of other key climate-related targets not already reported in question CC4.1/a/b.

Target	Base year	Start year	Target year	KPI – Metric numerator	KPI – Metric denominator (intensity targets only)	KPI in base year	KPI in target year	Please explain	Part of emissions target
Select from: Renewable energy consumption; Renewable energy production; Waste; Energy usage; Land use; Engagement with suppliers; Other, please specify									

Emissions performance

Tags: No change; SME

(CC4.3) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous year? (CC12.1, 2017)

If emissions have increased, decreased or remained the same overall:

Tags: Modified question

RATIONALE: We proposed to remove the 'Direction of change' column and enable negative as well as positive numbers in the 'Emissions value' column, which would indicate the direction of change.

(CC4.3a) Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year (CC12.1a, 2017)

Reason	Emissions value (percentage)	Please explain and include calculation
Change in renewable energy consumption		
Other emissions reduction activities		
Divestment		
Acquisitions		

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Mergers		
Change in output		
Change in methodology		
Change in boundary		
Change in physical operating conditions		
Unidentified		
Other		

Tags: No change

(CC4.3b) **Are your emissions performance calculations in CC4.3 and CC4.3a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure? (CC12.1b, 2017)**

Tags: No change

(CC4.4) **Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources? (CC14.3, 2017) (Yes or No)**

If Yes to CC4.4:

Tags: Modified question

RATIONALE: We proposed to remove the 'Direction of change' column and enable negative as well as positive numbers in the 'Emissions value' column, which would indicate the direction of change.

(CC4.4a) **Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year (CC14.3a, 2017)**

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Comment

Emissions reduction initiatives

Tags: No change; SME

(CC4.5) **Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases) (CC3.3, 2017)**

If Yes to CC4.5, complete questions CC4.5a, CC4.5b and CC4.5c:

Tags: No change

(CC4.5a) **Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO₂e savings (CC3.3a, 2017)**

Stage of development	Number of projects	Total estimated annual CO ₂ e savings in metric tons CO ₂ e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*		
Implemented*		
Not to be implemented		

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Tags: No change; SME

(CC4.5b) For those initiatives implemented in the reporting year, please provide details in the table below (CC3.3b, 2017)

Activity type	Description of activity	Estimated annual CO ₂ e savings (metric tons CO ₂ e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency – as specified in CC0.4)	Investment required (unit currency – as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment

Tags: No change

(CC4.5c) What methods do you use to drive investment in emissions reduction activities? (CC3.3c, 2017)

Method	Comment

If no to CC4.5:

Tags: No change; SME

(CC4.5d) If you do not have any emissions reduction initiatives, please explain why not. (CC3.3d, 2017)

Tags: No change

(CC4.6) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions? (CC3.2, 2017) (Yes or No)

If Yes to CC4.6:

Tags: No change

(CC4.6a) Please provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions (CC3.2a, 2017)

Level of aggregation	Description of product/ Group of products	Are you reporting low-carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low-carbon or to calculate avoided emissions	% revenue from low-carbon product/s in the reporting year	Comment

Best Available Technologies (BAT) implementation

SECTION RATIONALE: Emissions reduction performance for companies in the materials sector is largely determined by deployment of recognized best available technologies (BAT) that can minimize process emissions. Sector-specific questions ask for disclosure on current deployment of these technologies.

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Tags: New sector-specific question; CE

RATIONALE: Preheating and pre-calciner technologies can reduce the energy requirements of cement production. CDP has added this question to understand the emission-reducing technology choices of cement companies.

(CC-CE4.7) Please state the percentage of your organization's OPC clinker production capacity with the following technologies installed

Technology	Total OPC production capacity coverage (%)
4+ cyclone preheating	
Pre-calciner	

Tags: New sector-specific question; ST

RATIONALE: Best available technologies (BAT) in the steel sector are established and well-known. A company's overall uptake of BAT can therefore indicate company performance in lowering emissions. Emissions and emissions intensity values for steelmakers may be influenced by outsourcing or insourcing of activities by individual operators, but BAT deployments indicate steps to reduce emissions, independent of operational structure.

(CC-ST4.7) Please state the percentage of plant capacity to which the listed best available technologies are installed

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Plant	Technology/Process	% of total plant capacity	Comment
Coke making	Select from: Coal moisture control Programmed heating Variable speed drive COG compressor Coke dry quenching		
Sintering	Select from: Sinter plant heat recovery Reduction of air leakage Increasing bed depth Improved process control Use of waste fuels (e.g., lubricants) in sintering		
Ironmaking - Blast furnace	Select from: Pulverized coal injection Injection of natural gas Top pressure recovery turbines Recovery of BFG Hot-blast stove automation Recuperator hot-blast stove		
Steelmaking - Basic oxygen furnace	Select from: BOF gas plus sensible heat recovery Variable speed drive on ventilation fans		
Steelmaking - Electric arc furnace	Select from: Improved process control (neural network) Adjustable speed drives Transformer efficiency—ultra-high power transformers Bottom stirring/stirring gas injection Foamy slag practice Oxy-fuel burners Post-combustion of the flue gases DC arc furnace Scrap preheating Engineered refractories Airtight operation Contiarc furnace Flue gas monitoring and control Eccentric bottom tapping on existing furnace DC twin-shell with scrap preheating		
Casting	Select from: Efficient caster ladle/tundish heating Near net shape casting - thin slab Near net shape casting – strip		

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Hot rolling	Select from: Hot charging Energy efficient drives in the rolling mill Process control in hot strip mill Recuperative and regenerative burners Flameless burners Insulation of furnaces Walking beam furnace Controlling oxygen levels and/or variable speed drives on combustion air fans Heat recovery to the product Waste heat recovery (cooling water)		
Cold rolling and finishing	Select from: Heat recovery on the annealing line Reduced steam use (pickling line) Automated monitoring and targeting system Inter-electrode insulation in electrolytic pickling line Continuous annealing		
General	Select from: Preventive maintenance Energy monitoring and management system Combined heat and power/cogeneration High-efficiency motors Variable speed drives: flue gas control, pumps, and fans		

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CC5. Metrics

Emissions methodology

Tags: No change

(CC5.1) Please provide your base year and base year emissions (Scopes 1 and 2) (CC7.1, 2017)

Tags: No change; SME

(CC5.2) Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions (CC7.2, 2017)

If you have selected "Other" in CC5.2:

Tags: No change; SME

(CC5.2a) If you have selected "Other" in CC5.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions (CC7.2a, 2017)

Energy

Tags: No change

(CC5.3) What percentage of your total operational spend in the reporting year was on energy? (CC11.1, 2017)

Tags: Modified question

RATIONALE: CDP proposes this consolidated table question, based on existing 2017 question CC11.2 (heat, steam and cooling purchased and consumed, in MWh), adding electricity to the question for a more complete energy consumption profile.

(CC5.4) Please state how much electricity, heat, steam, and cooling in MWh your organization has purchased or acquired, and consumed during the reporting year.

Energy type	MWh
Electricity	
Heat	
Steam	
Cooling	

Tags: Adapted sector-specific question; CH; MM; ST

RATIONALE: Scope 2 emissions may be a significant proportion of emissions from the steel, chemicals, metals and mining sectors. CDP has included this question from the core climate change questionnaire (CC5.4) to disaggregate Scope 2 data related to specific materials sector production activities. A company operating within one or more of the materials sectors must answer this question for each sector within which it operates.

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(CC-CH5.4/ CC-MM5.4/ CC-ST5.4) **Please state how much electricity, heat, steam, and cooling in MWh your organization has purchased or acquired, and consumed for use in (chemical/steel/mining and metal production activities) during the reporting year.**

Energy type	MWh
Electricity	
Heat	
Steam	
Cooling	

Fuels and feedstocks

Tags: New question;

RATIONALE: CDP proposes a new leading question on organizations' use of purchased and/or self-produced fuels. Organizations answering 'yes' will be presented with a follow up question.

(CC5.5) **Please indicate whether your organization has consumed any fuel for energy purposes during the reporting year. (Yes or No)**

Tags: Adapted sector-specific question; CE; CH; MM; ST

(CC-CE5.5/ CC-CH5.5/ CC-MM5.5/ CC-ST5.5) **Please indicate whether your organization has consumed any fuel for energy purposes related to chemical/steel/metal and mining/cement production activities during the reporting year. (Yes or No)**

If Yes to CC5.5:

Tags: Modified question

RATIONALE: CDP proposes this follow-up question which consolidates existing 2017 questions CC11.3 (fuel consumption in MWh) and CC11.3a (Fuel type breakdown), with the addition of fuel emissions factors and sources.

(CC5.5a) **Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year by fuel type.**

Fuels	MWh	Emission factor	Emissions factor source

[Add row]

If Yes to CC-CE5.5, CC-CH5.5, CC-MM5.5

Tags: Adapted sector-specific question; CE; CH; MM

RATIONALE: Materials companies may use fossil fuels as feedstocks or to generate their own energy to meet demand for use in production processes. CDP has included this question from the core climate change questionnaire (CC5.5a) to disaggregate fuel consumption and disclose the relevant fuel emission factors relating to production activities. A company operating within one or more of the materials sectors must answer this question for each sector within which it operates.

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(CC-CE5.5a/ CC-CH5.5a/ CC-MM5.5a) **Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year by fuel type.**

Fuels	MWh	Emission factor	Emission factor source

[Add row]

If Yes to CC-ST5.5

Tags: Adapted sector-specific question; ST

RATIONALE: Steel companies may use fossil fuels as feedstocks or to generate their own energy to meet demand for use in chemical production processes. CDP has included this question from the core climate change questionnaire (CC5.5a) to disaggregate fuel consumption and disclose the relevant fuel emission factors relating to steel production activities.

(CC-ST5.5a) **Please state how much fuel in MWh your organization has consumed (for feedstock and energy purposes) for use in steel production during the reporting year by fuel type.**

Fuels	MWh (LHV)	Emission factor	Emission factor source
Select from: Coking coal (feedstock); Blast furnace coal (feedstock); Fuel oil (feedstock) Natural gas (feedstock); Coke; Coke breeze; Thermal coal; Natural gas; Fuel oil; Gas oil; Other petroleum fuel; Diesel; Gasoline; Biomass; Biogas; Biofuel; Hydrogen; Other fuel (please specify); Other feedstock (please specify)			

[add row]

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Tags: New sector-specific question; ST

RATIONALE: CDP has added this question to understand company structure, process plant dependencies and sources of emissions. This will allow a complete, granular understanding of the company's activity structure and emissions sources.

(CC-ST5.5b) Please report production of solid and liquid feedstocks

Production	Production, metric tons	Capacity, metric tons	Comment
Select from: Hot-rolled steel; Blast furnace iron; Direct reduced iron; Coke (including coke breeze); Coke oven gas (for sale) Sinter; Iron ore pellets; Lime; Metal scrap; Oxygen (Nm3); Tar and benzole Iron ore mining; Coal mining; Limestone & Dolomite quarrying			

[Add row]

Low carbon emission factor

Tags: No change

(CC5.6) Please provide details of the electricity, heat, steam or cooling amounts that were accounted for at a low carbon emissions factor in the market based Scope 2 figure reported in CC5.11. (CC11.4, 2017)

Basis for applying a low-carbon emissions factor	MWh consumed associate with low-carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tons CO2e per MWh)	Comment

Produced electricity, heat, steam and cooling

Tags: New question

RATIONALE: Distributed/on-site power generation, where an organization owns, operates or hosts power generation sources on or within their business facilities, is becoming more common among companies not active in the energy sector.

(CC5.7) Has your organization produced any electricity, heat, steam, or cooling in the reporting year? (Yes or No)

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Tags: Adapted sector-specific question, CE; CH; MM; ST

(CC-CE5.7/ CC-CH5.7/ CC-MM5.7/ CC-ST5.7) **Has your organization produced any electricity, heat, steam, or cooling for use in cement/ metals and mining/ chemical/ steel production in the current reporting year?** (Yes or No)

If Yes to CC5.7:

Tags: New question

RATIONALE: CDP proposes this follow-up question, based on existing 2017 question CC11.5, for organizations to report power production. This question will give insight into energy production and consumption, as well as the primary power generation source used (e.g. fossil fuel and/or renewable).

(CC5.7a) **Please provide details on the produced electricity, heat, steam, or cooling your organization has produced in the reporting year.**

Source	Energy type	Gross MWh generated	Emission factor	Net MWh generated	Comment
	Select from: Electricity; Heat; Steam; Cooling				

[Add row]

If Yes to CC-CE5.7; CC-CH5.7; CC-MM5.7; CC-ST5.7:

Tags: Adapted sector-specific question, CE; CH; MM; ST

RATIONALE: Materials companies may generate a significant portion of their own energy to meet demand for use in production processes. CDP has included this question from the core climate change questionnaire (CC5.7a) to disaggregate electricity, heat, steam and cooling production, and disclose the relevant emission factors relating to materials production activities. A company operating within one or more of the materials sectors must answer this question for each sector within which it operates.

(CC-CE5.7a/ CC-CH5.7a/ CC-MM5.7a/ CC-ST5.7a) **Please provide details on the produced electricity, heat, steam, or cooling your organization has produced for cement/chemical/metal and mining/steel production in the current reporting year.**

Source	Energy type	Gross MWh generated	Emission factor	Net MWh generated	Comment
	Select from: Electricity; Heat; Steam; Cooling				

[Add row]

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Tags: New sector-specific question; CH; ST

RATIONALE: CDP has added this question to understand a company's fossil fuel dependence and fuel switching performance. A company operating within both chemical and steel sectors must answer this question for each sector separately.

(CC-CH5.7b/ CC-ST5.7b) **Please report the split of fuel consumed in the electricity, steam, heat, and cooling generation plant that are applicable to chemical/steel production activities.**

Fuel consumed	Total consumed, MWh (LHV)	Comment
Select from: Coal Natural Gas Petroleum Biomass Other (please specify) HSC from another organization?		
+ add row		
Total		

Tags: New sector-specific question, CH; ST

RATIONALE: CDP has added this question to understand a company's own generation of electricity, heat, steam and cooling as it relates to the previous question, since the generation plant is a major source of emissions across the chemicals and steel sectors. A company operating within both chemical and steel sectors must answer this question for each sector separately.

(CC-CH5.7c/ CC-ST5.7c) **Please report the generation and demand from the electricity, steam, heat, and cooling generation plant that are applicable to chemical/steel production activities**

Energy carrier	Generated (MWh)	Amount of generation used (MWh)	Comment
Electricity			
Steam/heat/cooling			

Cogeneration

Tags: New sector-specific question; CH

RATIONALE: Cogeneration is the recovery of heat from electricity generation and is a key opportunity to reduce emissions in the chemicals sector.

(CC-CH5.7d) **Please report the percentage of electricity generated which is from combined heat and power (cogeneration) plant.**

Energy generation	% from cogeneration
Electricity	

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Cement Production

Tags: New sector-specific question; CE

RATIONALE: White cement is roughly 20% more emissions intensive than grey cement. CDP has added this question to disaggregate production across these products.

(CC-CE5.7e) **Please state your company's split between white and grey cement.**

Cement type	Percentage of total production (%)
White cement	
Grey cement	

Tags: New sector-specific question; CE

RATIONALE: Dry kiln and semi-dry kilns are more energy efficient than other kilns. CDP has added this question to better understand the technological status of the company's assets.

(CC-CE5.7f) **Please state the production and capacity of your organization's clinker capacity split**

Clinker capacity split	Production in metric tons	Capacity in metric tons
Wet kiln / process		
Semi-wet kiln / process		
Semi-dry kiln / process		
Dry kiln / process		

Steel production and consumption

Tags: New sector-specific question; ST

RATIONALE: CDP has added this question to understand the process structure of steel making companies as well as metallic inputs and outputs. This question also provides context and greater understanding of metrics reported in previous questions.

(CC-ST5.7g) **Please report your organization's production and consumption figures in metric tons by steel plant**

Steel plant	Metal Scrap consumption	Blast furnace iron consumption	Direct reduced iron consumption	Crude steel production	Crude steel capacity
Basic oxygen furnace					
Electric arc furnace					
Other					
Total					

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Emissions boundary

Tags: No change

(CC5.8) Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory (CC8.1, 2017)

Scope 1 and 2 emissions data

Tags: No change; TCFD; SME

(CC5.9) Please provide your gross global Scope 1 emissions figures in metric tons CO₂e. (CC8.2, 2017)

Tags: Adapted sector-specific question; CE; CH; MM; ST

RATIONALE: Scope 1 emissions from materials production activities are a significant proportion of emissions for this sector. CDP has included this question from the core climate change questionnaire (CC5.9) to disaggregate Scope 1 emissions data related specifically to cement/chemicals/metals and mining/steel production activities. A company operating within one or more of the materials sectors must answer this question for each sector within which it operates.

(CC-CE5.9/ CC-CH5.9/ CC-MM5.9/ CC-ST5.9): Please provide your gross (and net) global Scope 1 emissions relating to your organization's cement/chemicals/metals and mining/steel production activities in metric tons CO₂e

Tags: No change; SME

(CC5.10) Please describe your approach to reporting Scope 2 emissions. (CC8.3, 2017)

Scope 2, location-based	Scope 2, market-based	Comment

Tags: No change; TCFD; SME

(CC5.11) Please provide your gross global Scope 2 emissions figures in metric tons CO₂e. (CC8.3a, 2017)

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment

Tags: Adapted sector-specific question; CE; CH; MM; ST

RATIONALE: Scope 2 emissions from materials production activities are a large proportion of emissions. CDP has included this question from the core climate change questionnaire (CC5.11) to disaggregate Scope 2 emissions data related specifically to cement/chemicals/metals and mining/steel production activities. A company operating within one or more of the materials sectors must answer this question for each sector within which it operates.

(CC-CE5.11/ CC-CH5.11/ CC-MM5.11/ CC-ST5.11) Please provide your gross global Scope 2 emissions relating to your organization's cement/chemicals/metals and mining/steel production activities in metric tons CO₂e

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Scope 2, location-based	Scope 2, market-based (if applicable)	Comment

Tags: No change

(CC5.12) **Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure? (CC8.4, 2017)**

If Yes to CC5.12:

Tags: No change

(CC5.12a) **Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure (CC8.4a, 2017)**

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded

Scope 3 emissions

Tags: No change; TCFD; SME

(CC5.13) **Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions. (CC14.1, 2017)**

Sources of Scope 3 emissions	Evaluation status	Metric tons CO ₂ e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services					
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					

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Downstream leased assets				
Franchises				
Investments				
Other (upstream)				
Other (downstream)				

Tags: New sector-specific question; CH

RATIONALE: Scope 3 emissions from chemical production activities for feedstocks may be a significant proportion of emissions from this sector. The products/processes listed in the table are the most emissions intensive in the sector, but other products can be added if they are included in the calculation. CDP has added this question to understand the organization's Scope 3 Category: Purchased goods and services in more detail.

(CC-CH5.13a) Please disclose your company's purchases of feedstock chemicals and related Scope 3 emissions calculation methodology

Output product	Purchases, metric tons Co2e	Emissions calculation methodology	Explanation
Select from: High Value Chemicals (Steam cracking) Ammonia Aromatics extraction Methanol Butylene Propylene (FCC) Ethanol Butadiene (C4 sep.) Soda ash Carbon black Other (please specify)			
+ add row			

Tags: New sector-specific question; CH

RATIONALE: Some companies in the chemicals sector produce significant amounts of greenhouse gases as their products. CDP has added this question because these greenhouse gases may be subject to increasing regulation. Note that these emissions are additional to CC9 (GHG gas split) in that they are ultimately released downstream. This question gives more detail to the estimation of Scope 3 Category 11: Use of sold products.

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(CC-CH5.13b) Please disclose the sales of products that are greenhouse gases in metric tons.

Output product	Sales, metric tons	Comment
Carbon dioxide (CO ₂)		
Methane (CH ₄)		
Nitrous oxide (N ₂ O)		
Hydrofluorocarbons (HFC)		
Perfluorocarbons (PFC)		
Sulphur hexafluoride (SF ₆)		
Nitrogen trifluoride (NF ₃)		

Tags: New sector-specific question; CH

RATIONALE: CDP has added this question to understand the fossil fuel dependency of chemicals companies, which may indicate carbon risk. It also identifies chemicals companies using bio-based feedstocks. It is distinct from CH5.13a which asks for feedstock where it is a direct consumption. This question attempts to define the resource origin of any chemical feedstock.

(CC-CH5.13c) Please state the percentage (by mass) of primary resource from which your chemical feedstocks derive

Feedstock source	Percentage of total chemical feedstock (%)
Select from: Petroleum Natural Gas Coal Biomass Other (please specify)	

[Add row]

Verification

Tags: Modified question

RATIONALE: To reduce reporting burden and improve data usability by grouping related questions, CDP proposes this modified question, which is a merger of existing 2017 questions CC8.6, CC8.7 and CC14.2 (Scope 1, 2 and 3 verification/assurance status, respectively).

(CC5.14) Please indicate the verification/assurance status that applies to your reported emissions.

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

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If, in CC5.14, Scope 1, Scope 2 and/or Scope 3 emissions have been subject to third-party verification or assurance (complete or underway):

Tags: Modified question

RATIONALE: To reduce reporting burden and improve data usability by grouping related questions, CDP proposes this modified question, which is a merger of existing 2017 questions CC8.6a, CC8.7a and CC14.2a (Scope 1, 2 and 3 verification details, respectively).

(CC5.14a) **Please provide further details of the verification/assurance undertaken for your emissions, and attach the relevant statements**

Scope	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported emissions verified (%)

[Add row]

Tags: No change

(CC5.15) **Please identify if any data points have been verified as part of the third-party verification work undertaken, other than the verification of emissions figures reported in [CC5.9, CC5.11 and CC5.13] (CC8.8, 2017)**

Additional data points verified	Comment

Carbon dioxide emissions from biologically sequestered carbon

Tags: No change

(CC5.16) **Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization? (CC8.9, 2017)**

If Yes to CC5.16:

Tags: No change

(CC5.16a) **Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO₂. (CC8.9a, 2017)**

Emissions intensity

Tags: Modified question; SME

RATIONALE: To reduce reporting burden and improve data usability by grouping related questions, CDP proposes this modified question, which is a merger of existing 2017 questions CC12.2 (revenue intensity) and CC12.3 (business-relevant intensity).

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(CC5.17) Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Reason for change
	metric tons CO ₂ e					

[Add row]

Tags: New sector-specific question; CE

RATIONALE: CDP has added this question to better understand emissions performance. It also aims to capture information on cement product intensities.

(CC-CE5.17a): Please state company volume-based output in the cement activities of the business

Output product	Production, metric tons	Capacity, metric tons	Emissions intensity per unit of product (gross)	Emissions intensity per unit of product (net)
Select from: Limestone production Clinker production OPC cement-eq. production OPC cementitious production Low-CO ₂ materials production Gypsum production Other (please specify)				

[Add row]

Tags: New sector-specific question; CH

RATIONALE: CDP has added this question to identify which companies are active in the most emissions intensive processes in the sector. This question also aims to identify emissions intensities relating to specific products and processes. This question can link to science based target setting.

(CC-CH5.17b) Please state company volume-based output and process performance in the chemicals sector

Output product	Production, metric tons	Capacity, metric tons	Direct emissions intensity	Indirect emissions intensity

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Select from: High Value Chemicals (Steam cracking) Ammonia Aromatics extraction Methanol Butylene Propylene (FCC) Ethanol Butadiene (C4 sep.) Soda ash Carbon black Other (please specify)				
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[Add row]

Tags: New sector-specific question; MM

RATIONALE: CDP has added this question to better understand emissions performance. It also aims to capture information on metal and mining product intensities.

(CC-MM5.17c): Please state company volume-based output in the mining and/or metal production sector

Output product	Production, metric tons	Capacity, metric tons	Scope 1 emissions intensity	Scope 2 emissions intensity	Annual production in copper-equivalent units (thousand tones)	Pricing methodology
Select from: Mining - Bauxite - Copper - Gold - PGM metals - Silver - Iron ore - Non-ferrous metal mining - Nickel - Zinc - Lead						Fixed prices (year) Moving average Yearly

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<ul style="list-style-type: none"> - Diamonds - Other mining (Please specify) <p>Processing metals</p> <ul style="list-style-type: none"> - Aluminum - Alumina - Copper - Gold - PGM metals - Silver - Other non-ferrous metals - Nickel - Lead - Zinc - Other ferrous metals 						
--	--	--	--	--	--	--

[Add row]

Tags: New sector-specific question; ST

RATIONALE: CDP has added this question to better understand energy performance, an important indicator in the steel sector because of the high-energy throughput and high costs associated with energy. It also aims to collect intensity figures through a process route breakdown.

(CC-ST5.17d) Please provide your organization's process route emissions intensity per metric ton of crude steel produced in the reporting year

Process route	Intensity figure (tCO2e per metric ton of crude steel production)	Intensity figure (GJ (LHV) per metric ton of crude steel production) =	Methodology applied	Comments
Select from: BF-BOF Scrap-EAF DRI-EAF Other (please specify)			Select from: GHG Protocol World Steel Association Other (please specify)	

[Add row]

Scope 1 emissions breakdown

Tags: New question

RATIONALE: For many sectors and business activities, GHG emissions other than carbon dioxide are significant and relevant. Their contribution to overall emissions is sometimes masked by reporting in

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CO2-equivalents. CDP therefore proposes this new leading question for companies to report their gross Scope 1 emissions by GHG type.

(CC5.18) **Does your organization have greenhouse gas emissions other than carbon dioxide?**

If Yes to CC5.18:

Tags: New question

RATIONALE: CDP proposes this new question based on existing 2017 questions CC7.3 (global warming potentials) and CC9.2c (gross Scope 1 emissions breakdown by GHG type). This provides more granularity on an organization's emissions by GHG type as well as the global warming potentials used by the reporting organization to convert into CO2-equivalents.

(CC5.18a) **Please break down your total gross global Scope 1 emissions by greenhouse gas type, provide the used global warming potential and the source of these.**

Greenhouse gas type	Scope 1 emissions in metric tons of selected greenhouse gas	GWP Reference
Select from: CO2; CH4; N2O; HFCs; PFCs; SF6; NF3; Other, please specify		

[Add row]

Tags: No change

(CC5.19) **Please break down your total gross global Scope 1 emissions by country/region. (CC9.1a, 2017)**

Tags: Modified question

RATIONALE: This question has been modified in that the Scope 1 breakdown by GHG type selection has been moved into a separate question, above.

(CC5.20) **Please indicate which gross global Scope 1 emissions breakdowns you are able to provide. (CC9.2, 2017)**

- By business division
- By facility
- By activity

Tags: No Change

(CC5.20a/b/c) **Please break down your total gross global Scope 1 emissions by business division/facility/activity. (CC9.2a/b/d, 2017)**

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Scope 2 emissions breakdown

Tags: No change

(CC5.21) Please break down your total gross global Scope 2 emissions by country/region. (CC10.1a, 2017)

Tags: No change

(CC5.22) Please indicate which gross global Scope 2 emissions breakdowns you are able to provide. (CC10.2, 2017)

- By business division
- By facility
- By activity

Tags: No change

(CC5.22a/b/c) Please break down your total gross global Scope 2 emissions by business division/facility/activity. (CC10.2a/b/c, 2017)

Additional climate-related metrics

Tags: New question

RATIONALE: CDP proposes this new question to enable reporting organizations to present relevant climate-related metrics that may indirectly or directly impact emissions or energy use.

(CC5.23) Please provide any additional climate-related metrics relevant for your business.

Description	Metric value	Metric numerator	Metric denominator (intensity metric only)	% change from previous year	Please explain
Select from: Waste; Energy usage; Land use; Other, please specify					

Low-carbon investments

Tags: New question; CE; CH; MI; ST

RATIONALE: CDP has added this question to elicit details on the low-carbon investments of responding materials companies.

(CC-CE5.24/ CC-CH5.24/ CC-MM5.24/ CC-ST5.24) Please disclose your investments in low-carbon research and development (R&D), equipment, products and services.

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Reporting period	Investment area	Technology area	Investment maturity	Low-carbon investment (in local currency)	Percentage of total investment	Description
Enter a 1-year period (can be a past year; the current reporting year; or a future year)	Select from: - R&D - Equipment - Products - Services	Select from: Chemicals: - Waste heat recovery - Process step integration - Radical process redesign - Product redesign - CCUS - Bio technology Steel: - Efficiency/recovery equipment on existing process plant - New process plant with improved efficiency - Alternative steelmaking processes Cement: - Low carbon cement - CCUS - Dry kiln - Preheating Metals/mining: - Green metals - Metal recycling - Waste reprocessing	Select from: - Basic academic/theoretical research - Applied research and development - Pilot demonstration - Full/commercial-scale demonstration - Small scale commercial deployment - Large scale commercial deployment	[Numerical field]	[Percentage field]	[Text field]

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CC6. Carbon pricing & trading

Carbon price

Tags: No change

(CC6.1) **Does your company use an internal price on carbon? (CC2.2c, 2017)**

- Yes
- No, but we anticipate doing so in the next 2 years
- No, and we don't anticipate doing so in the next 2 years

If Yes to CC6.1:

Tags: Modified question

RATIONALE: CDP proposes to change CC2.2d (2017) from an open-ended text box question to a table question, with columns eliciting details of how the reporting organization uses an internal carbon price.

(CC6.1a) **Please provide details of how your company uses an internal price on carbon.**

Objective for implementing an internal carbon price	Type of internal carbon price	GHG Scope	Application	Actual price(s) used	Explain variance of price(s) used	Impact	Comment
Select from: Navigate GHG regulations; Stakeholder expectations; Change internal behavior; Drive energy efficiency; Drive low-carbon investment; Stress test investments	Select from: Shadow price; Internal fee; Internal trading; Implicit price.		Corporate structure that price is applied to (i.e. business units, corporate divisions, facilities)	Currency /metric ton	Text box. (i.e. by time or region, or by the way it is used across the business or in specific business units or corporate divisions)	Example of how carbon pricing has affected your business i.e. business strategy, risk assessment or evaluation, emissions reduction, investment decisions.	

Carbon pricing system

Tags: New question

RATIONALE: Evolving section CC13 'Emissions Trading' (2017), CDP proposes to change the title of this section to "Carbon Pricing System" and ask about compliance to carbon pricing regulation more generally; therefore, encompassing carbon tax schemes in addition to carbon markets and asking for mandatory compliance as opposed to just voluntary participation. Therefore, CDP proposes this new leading question to ask about compliance to general carbon pricing regulations.

(CC6.2) **Are any of your operations or activities regulated by a carbon pricing scheme (i.e. ETS, Cap & Trade or Carbon Tax)?**

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Select from:

- Yes
- No, but we anticipate being regulated in the next 5 years
- No, and we do not anticipate being regulated in the next 5 years

If Yes to CC6.2:

Tags: New question

RATIONALE: CDP proposes this follow-up question for respondents to select carbon pricing regulations in which they are compliant.

(CC6.2a) **Please select the legislation(s) in which you are compliant.**

Multi-select from a list of carbon pricing regulations taken from the [World Bank's State and Trends of Carbon Pricing](#) report

If a company selects an emissions trading scheme in the question above, they will be presented with existing questions taken from section CC13 (2017):

Tags: No Change

(CC6.2b) **Please complete the following table for each of the emissions trading schemes in which you participate (CC13.1a, 2017)**

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tons CO _{2e}	Details of ownership

Tags: No change

(CC6.2c) **What is your strategy for complying with the schemes in which you participate or anticipate participating? (CC13.1b, 2017)**

Tags: No change

(CC6.2d) **Has your organization originated any project-based carbon credits or purchased any within the reporting period? (CC13.2, 2017)**

If Yes to CC6.2d:

Tags: No change

(CC6.2e) **Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period. (CC13.2a, 2017)**

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tons CO _{2e})	Number of credits (metric tons CO _{2e}): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance

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CC7. Engagement

Value chain engagement

Tags: No change

(CC7.1) **Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (CC14.4, 2017)**

Tick all that apply

- Yes, our suppliers
- Yes, our customers
- Yes, other partners in the value chain
- No, we do not engage

If, in response to CC7.1, ‘Yes, our suppliers’:

Tags: Modified question

RATIONALE: CDP has modified CC14.4b (2017) to gather more specific information on the methods that organizations use to engage their supply chain. The table now includes a hierarchy of engagement types and some additional columns (% Scope 3 emissions as reported in CC5.13, rationale for the target audience selection and scope of engagement), which provide more information about the implementation and success of the engagement activities.

(CC7.1a) **Please give details of methods of engagement and measures of success in engaging with your suppliers.**

Type of engagement	Details of engagement	Number of suppliers	% total spend (direct and indirect)	% Scope 3 emissions as reported in CC5.13	Please explain the rationale for the target audience selection and scope of engagement.	Impact of engagement, including measures of success
Select from: Compliance & onboarding; Information collection; Engagement & incentivization; Innovation & collaboration; Other, please explain						

[Add row]

If, in response to CC7.1, ‘Yes, our customers’:

Tags: New question

RATIONALE: CDP has added this question to align the question on customer engagement with that of supply chain engagement. It features a similar table, though it is based on its own hierarchy of

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engagement categories, and the level of detail is more heterogeneous, allowing disclosers to report their own metrics for the size and impact of their customer engagement.

(CC7.1b) Please give details of methods of engagement and measures of success in engaging with your customers.

Engagement Category	Engagement type	Size of engagement	% Scope 3 emissions as reported in CC5.13	Please explain the rationale for the target audience selection and scope of engagement.	Impact of engagement, including measures of success
Select from: Education; Collaboration; Motivation; Compensation; Regulation; Other, please explain					

[Add row]

If, in response to CC7.1, ‘Yes, other partners in the value chain’:

Tags: No change

(CC7.1c) Please give details of methods of engagement and measures of success in engaging with other partners in the value chain. (CC14.4a, 2017)

If, in response to CC7.1, ‘No, we do not engage’:

Tags: No change

(CC7.1d) Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future (CC14.4c, 2017)

Policy engagement & lobbying

Tags: No change

(CC7.2) Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (CC2.3, 2017)

Tick all that apply:

- Direct engagement with policy makers
- Trade associations
- Funding research organizations
- Other
- No

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Tags: No change

(CC7.2a) **On what issues have you been engaging directly with policy makers? (CC2.3a, 2017)**

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution

Tags: No change

(CC7.2b) **Are you on the board of any trade associations or do you provide funding beyond membership? (CC2.3b, 2017) (Yes or No)**

Tags: No change

(CC7.2c) **Please enter the details of those trade associations that are likely to take a position on climate change legislation. (CC2.3c, 2017)**

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?

Tags: No change

(CC7.2d) **Do you publicly disclose a list of all research organizations that you fund? (CC2.3d, 2017) (Yes or No)**

Tags: No change

(CC7.2e) **Please provide details of the other engagement activities that you undertake. (CC2.3e, 2017)**

Tags: No change

(CC7.2f) **What processes do you have in place to ensure that all your direct and indirect activities that influence policy are consistent with your overall climate change strategy? (CC2.3f, 2017)**

Tags: No change

(CC7.2g) **Please explain why you do not engage with policy makers. (CC2.3g, 2017)**

Communications

Tags: No change

(CC7.3) **Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s). (CC4.1, 2017)**

Publication	Status	Attach the document	Content elements	In accordance with TCFD recommendations	In line with CDSB framework

[Add row]

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CC8. Sign off

Sign off

Tags: No change; SME

(CC8.1) Please provide the following information for the person that has signed off (approved) your CDP climate change response. (CC15.1, 2017)

Name	Job title	Corresponding job category