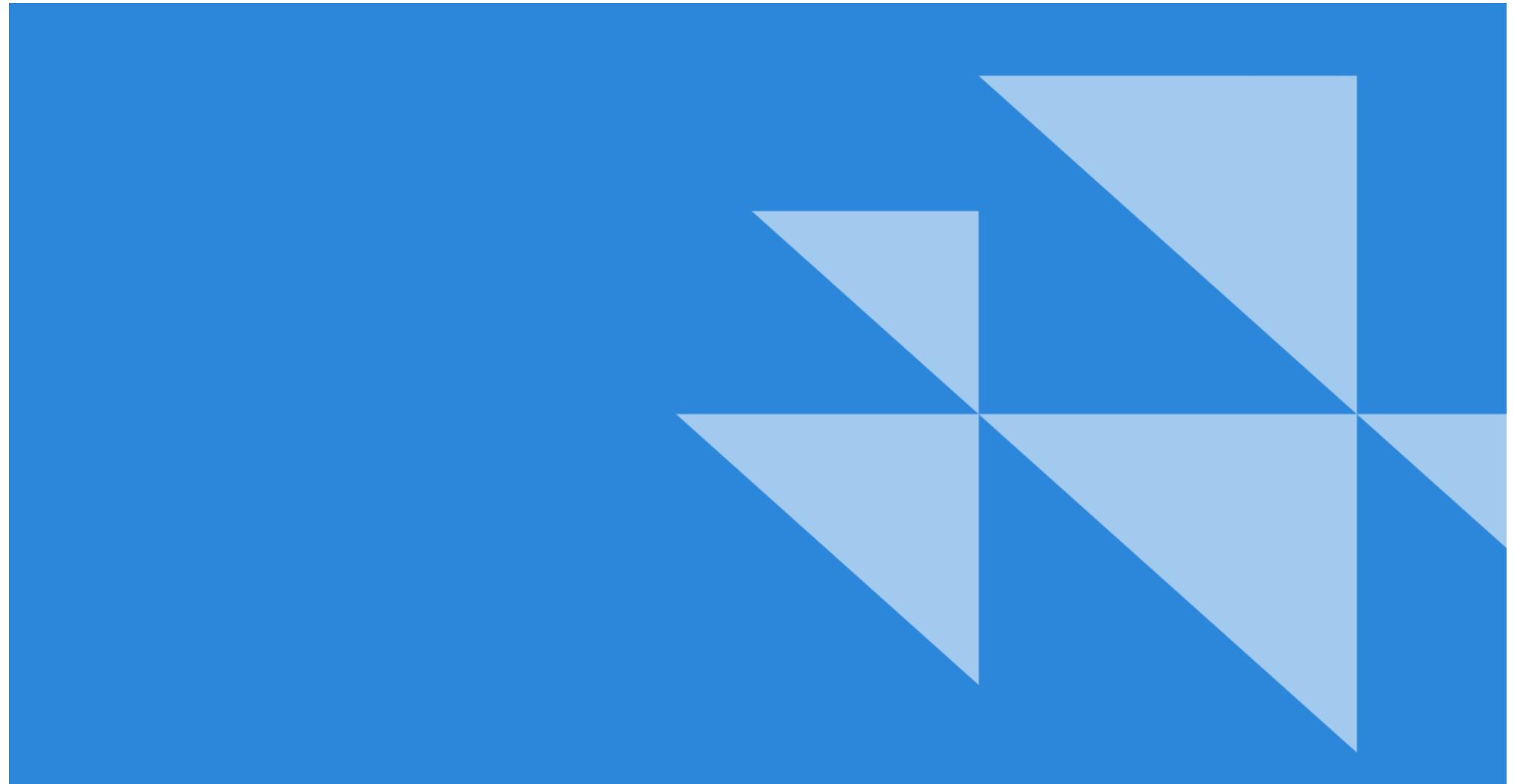

CDP Water Security Reporting Guidance 2018



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CDP Water Security 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 water security 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 Water Security)● Terms for responding to Supply Chain Members (2018 Water Security)

0.3	Revised: Jan - Mar 2018	<p>Questionnaire preview</p> <p>The following revisions were made to the water security questions:</p> <p>General questions</p> <ul style="list-style-type: none"> • Facility accounting: W5.1b (discharge destinations). Columns merged to match the discharge destination options for the corporate level disclosure. • Facility accounting: W5.1c (recycling). Column deleted and question wording modified; to reduce reporting effort we no longer request volumes recycled/reused for facilities at risk. <p>All high-impact sectors</p> <ul style="list-style-type: none"> • Incentives for senior management: W-FB6.4a/W-CH6.4a/W-EU6.4a/W-OG6.4a/W-MM6.4a. Drop-down options modified (column 3 – from 'Efficiency project or target – downstream' to 'Efficiency project or target – downstream in the value chain' and 'Efficiency project or target – upstream' to 'Efficiency project or target – upstream in the value chain'). Drop-down option deleted ('No indicator for incentivized performance'). <p>Chemicals sector</p> <ul style="list-style-type: none"> • Water intensity: W-CH1.3a. Header modified (column 3). Drop-down options deleted (column 1 'No potential water pollutants identified' and column 5 - 'Not applicable'). • Potential water pollutants: W-CH3.1a. Drop-down option deleted (column 2 - 'Does not apply'). <p>Food, beverage & tobacco sector</p> <ul style="list-style-type: none"> • Dependency on water intensive crops: W-FB1.1a. Drop-down options deleted (column 1 - 'None', column 2 - 'Not relevant' and 'Don't know'). • Produced/sourced from stressed areas: W-FB1.2e. Drop-down option added (column 1 - from 'Other commodities from W-FB1.1a, please specify'); W-FB1.2f. Question text corrected. Drop-down option added (column 1 – 'Other produced commodities from W-1.2e, please specify'); W-FB1.2g. Drop-down option added (column 1 - 'Other sourced commodities from W-1.2e, please specify'). • Water intensity: W-FB1.3. Drop-down option added (column 1 - 'Other commodities from W-FB1.1a, please specify'); W-FB1.3a. Headers modified (columns 2 and 5). Drop-down option added (column 1 'Other produced commodities from W-1.3, please specify'); W-FB1.3b. Headers modified (columns 3, 4 and 5). Drop-down option added (column 1 - 'Other sourced commodities from W-1.3, please specify'). • Sector-specific drop-down options modified for: Business impacts W-2.1 (columns 5 and 7); Water risks and responses W4.2 and W4.2a; Corporate water targets W8.1a; Linkages and trade offs W9.1a. <p>Metals & mining sector</p> <ul style="list-style-type: none"> • Water recycling & reuse: W-MM1.2j. Column 2 - modified from numerical field to selection of intervals Drop down option deleted (column 3 - 'Not applicable'). • Tailings dams management procedures: W-MM3.2. Drop-down option added (column 1 - 'Other, please specify') and drop-down option modified (column 1 - from 'Country drop-down list' to 'Organization-specific country list'); W-MM3.2a. Drop-down options deleted (column 2). • Sector-specific drop-down option added for: Business impacts W2.1a (column 4); Water risks and responses W4.2 (column 4) and W4.2a (column 5). <p>Electric utilities sector</p> <ul style="list-style-type: none"> • Monitoring water aspects in hydroelectric operations: W-EU1.2a. Response options modified (column 2 - modified from numerical field to selection of intervals). • Facility accounting: W5.1 Drop-down option added (column 7 - 'Other non-renewable') <p>Oil & gas sector</p> <ul style="list-style-type: none"> • Water volumes by business division: W-OG1.2c. Merged columns ('Water aspect' & 'Business division' into column 1 - 'Water aspect by business division'). Column header modified (column 4 - from 'Comment' to 'Please explain'). • Water recycling & reuse: W-OG1.2j. Question wording modified from "What proportion of water do you recycle..." to "What proportion of your total water use do you recycle...". Column 2 - modified from numerical field to selection of intervals Drop down option deleted (column 3 - 'Not applicable'). • Water intensity: W-OG1.3a. Response option modified (column 1 from 'Select from' to 'Select all that apply'). • Management procedures for potential water pollutants: W-3.1a. Header modified (column 6 - from 'Description of response' to 'Please explain'). Drop-down options added (column 4 – 'No formal management procedure in place' and 'Management procedure under development').
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0.4	Revised: 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> water security 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 – water security' • 'Introduction to CDP water security reporting guidance' • 'Appendix: River basin list' <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> water security questions • 'Pathway diagrams' for all general water security questions
0.6	Revised: Apr 9, 2018	<p>Questionnaire preview, Reporting guidance</p> <p>The following revisions were made to the water security questions:</p> <p>General questions</p> <ul style="list-style-type: none"> • Facility-level water accounting: W5.1 and W5.1a-c. Changed to 'Add Row' tables. <p>Food, beverage & tobacco sector</p> <ul style="list-style-type: none"> • Dependency on water intensive crops: W-FB1.1a. Drop-down options deleted <p>Reporting guidance</p> <p>The following changes were made to the 'Requested content' section:</p> <ul style="list-style-type: none"> • Dependence: W1.1. Added clarification around the definition of 'good quality freshwater' (Requested content, General). • Facility-level water accounting: W5.1 and W5.1a-c. Changed guidance for companies exporting their response from the ORS to a spreadsheet (Requested content, General)
0.7	Revised: Apr 13, 2018	<p>Reporting guidance</p> <p>The following change was made to the 'Requested content' section:</p> <ul style="list-style-type: none"> • Company-wide water accounting: W1.2 and W1.2b. Added links to CDP's Technical Note - Water Accounting Definitions (Requested content, General).

0.8	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 CEO Water Mandate. <p>The following changes were made to the 'Response options' section:</p> <ul style="list-style-type: none"> • Risks and opportunities: W4.2 and W4.2a. 'All countries in which we operate' removed from the list of countries. <p>The following changes were made to the 'Question dependencies' section:</p> <p><i>General questions</i></p> <ul style="list-style-type: none"> • Company-wide water accounting: W1.2b. Corrected the route from W1.1. • Value chain engagement: W1.4d. Corrected the route from W1.4. <p><i>Oil & gas sector</i></p> <ul style="list-style-type: none"> • Company-wide water accounting: W-OG1.2c. Corrected the route from W1.1. <p><i>Electric utilities sector</i></p> <ul style="list-style-type: none"> • Water intensity: W-EU1.3. Corrected the route from W-EU0.1a. <p><i>Chemicals sector</i></p> <ul style="list-style-type: none"> • Water intensity: W-CH1.3. Corrected the route from previous questions. <p>The following change was made to the 'minimum version' of the 2018 Water Security Questionnaire:</p> <ul style="list-style-type: none"> • Risks and opportunities: W4.1c. This question was added to the 'minimum version'.
0.9	Revised: Apr 27, 2018	<p>Questionnaire preview, Reporting guidance</p> <p>The following changes were made to the 'Response options' section:</p> <p><i>Food, beverage & tobacco sector</i></p> <ul style="list-style-type: none"> • Produced/sourced from stressed areas: W-FB1.2f-g. Reworded drop-down options in column 1. • Water intensity: W-FB1.3a-b. Reworded drop-down options in column 1. <p>The following changes were made to the 'Question dependencies' section:</p> <p><i>General questions</i></p> <ul style="list-style-type: none"> • Compliance impacts: W2.2b. 'Question dependencies' corrected to reflect the 'Response options' presented in W2.2. <p><i>Food, beverage & tobacco sector</i></p> <ul style="list-style-type: none"> • Produced/sourced from stressed areas: W-FB1.2f-g. 'Question dependencies' revised. • Water intensity: W-FB1.3a-b. 'Question dependencies' revised. <p>The following change was made to the 'minimum version' of the 2018 Water Security Questionnaire:</p> <ul style="list-style-type: none"> • Country: W0.3. This question was added to the 'minimum tier' version. <p>Reporting guidance</p> <p>The following change was made to the 'Requested content' section:</p> <ul style="list-style-type: none"> • Value chain engagement: W1.2b. Corrected guidance for column 5 which refers to columns 3 and 4.

1.0	May 4, 2018	<p>Questionnaire preview, Reporting guidance</p> <p>The following change was made to the 'Response options' section:</p> <ul style="list-style-type: none"> • Water policy: W6.1a. Table was changed from 'Add Row' to fixed row. <p>The following changes were made to the 'Question dependencies' section:</p> <ul style="list-style-type: none"> • Country: W0.3. Removed 'Question dependencies' section. • Water-related risks and response: W4.2a. Corrected route from W4.1. <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 <p>The following changes were made to the 'Requested content' section:</p> <p>General questions</p> <ul style="list-style-type: none"> • Water recycling & reuse: W-1.2j. The following text was added. '...of water used in your operations. This can be calculated as the sum...' and '(minus any sent to storage)'. <p>Electric utilities sector</p> <ul style="list-style-type: none"> • Monitoring hydroelectric operations: W-EU1.2a. The following text was deleted: 'Please provide a label for the water aspect in the text field provided. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.' <p>Oil & gas sector</p> <ul style="list-style-type: none"> • Recycling & reuse: W-OG1.2j. The following text was added: 'business division' in column 1. <p>Food, beverage, & tobacco sector</p> <ul style="list-style-type: none"> • Produced from stressed areas: W-FB1.2f. Column 3: character limit changed from 1,000 to 1,500.
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1.1	May 18, 2018	<p>Questionnaire preview, Reporting guidance</p> <p>Disclosure deadlines were updated in the 'CDP disclosure cycle 2018' section.</p> <p>The following changes were made to the 'Question text' section:</p> <p>Oil & gas sector</p> <ul style="list-style-type: none"> Potential water pollutants: W-CH3.1a. The question text was corrected. <p>The following changes were made to the 'Response options' section:</p> <p>General questions</p> <ul style="list-style-type: none"> Impacts section: W2.1a. Added sector-specific drop-down options in column 7 ('Primary response') for food, beverage, & tobacco sector. Company-wide water accounting: W1.2j. Added '76-99' to the list of percentages in column 1 ('% recycled or reused'). Facility-level water accounting: W5.1c. Added '76-99' to the list of percentages in column 3 ('% recycled or reused'). Risk identification and assessment: W3.3a. Removed 'Water risks are not assessed at this stage of the value chain' from column 3 ('Risk assessment procedure'). Facility details: SW1.2a. Changed column 1 to a text field with the heading: 'Identifier'. <p>Food, beverage & tobacco sector</p> <ul style="list-style-type: none"> Water intensity: W-FB1.3a and W-FB1.3b. The headers from columns 4 and 5 respectively have been changed from to "Comparison with previous reporting year". <p>Metals & mining sector</p> <ul style="list-style-type: none"> Water reuse & recycling: W-MM1.2j. The response options were corrected. <p>The following changes were made to the 'question dependencies' section:</p> <ul style="list-style-type: none"> Facility details: SW1.1a. Clarified the route from SW1.1. <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 select questions. 'Explanation of terms', or detailed definitions for specific terminology, for select questions. A 'Glossary', consisting of a subset of 'Explanation of terms'. <p>The following changes were made to the 'Requested content' section:</p> <ul style="list-style-type: none"> Company-wide water accounting: W1.2h-i. New guidance for column 2 ('Relevance') and column 4 ('Comparison from last year'). <p>Chemicals sector</p> <ul style="list-style-type: none"> Water intensity: W-CH1.3a. The guidance was corrected.
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1.2	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 Water Security)' ● 'Terms for responding to Supply Chain Members (2018 Water Security)' ● '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>The following details were released, to assist companies in preparing their disclosures:</p> <p><i>General questions</i></p> <ul style="list-style-type: none"> ● 'Example responses' for questions: W0.6a; W3.3c; W4.2; W5.1; W9.1a; SW0.2a. ● 'Additional information' for questions: W0.5; SW0.2; SW1.2a; SW2.1; SW2.2a; SW3.1. <p><i>Chemical sector</i></p> <ul style="list-style-type: none"> ● 'Example responses' for questions: W-CH3.1; W-CH3.1a. <p><i>Electric utilities sector</i></p> <ul style="list-style-type: none"> ● 'Example responses' for questions: W1.2; W1.2b. <p><i>Food, beverage & tobacco sector</i></p> <ul style="list-style-type: none"> ● 'Example responses' for questions: W-FB1.3; W-FB1.3a; W-FB1.3b. <p><i>Metals & mining sector</i></p> <ul style="list-style-type: none"> ● 'Example responses' for questions: W-MM3.2; W-MM3.2a. <p>Revisions were made to the 'Requested content' section to clarify that the potential financial impact figure could also be a range.</p>
1.3	Revised: June 1, 2018	<p>Version Control</p> <p>The following revision summary was added to this table for version 1.0:</p> <p><i>The following change was made to the 'Response options' section:</i></p> <ul style="list-style-type: none"> ● Water policy: W6.1a. Table was changed from 'Add Row' to fixed row.

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 water security questionnaire

CDP's water security program and water security questionnaires

CDP's water security program works to catalyze action to improve water security across the globe by collecting information for investors, customer and policy makers on a company's management, governance, use and stewardship of water resources.

The CDP water security questionnaire provides data users and the companies themselves with an insight on current and future water-related risks and opportunities. Along with CDP's water scoring methodology, the water security questionnaire helps companies to drive improvements in water management and enables benchmarking against leading practice.

The water security program has grown significantly since it was established in 2010, in terms of the numbers of companies disclosing, the value of associated assets and the number of investors and customers requesting the data. CDP now holds the world's largest corporate water dataset, with more companies reporting than ever before. In 2017, 2,025 companies worth approximately US\$20 trillion in market capitalization disclosed through us.

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.

One initiative companies can commit to on the [We Mean Business](#) platform is to improve water security. This commitment can be tracked in CDP's water security questionnaire:

- Overview: We Mean Business and the Business Alliance for Water and Climate invite companies to commit to taking a specific set of actions around water use measurement, management, and reporting to ensure they are following best practice on corporate water stewardship.
- Reporting: Companies can report progress against this commitment in the following questions:
 - Analyzing water-related risks (W3.3a, W3.3b, W3.3c) and implementing collaborative response strategies (W1.4a, W4.1b, W4.2a, W4.3, W8.1, W8.1b);
 - Measuring and reporting water use data (W1.2b, W1.2h, W1.2i, W8.1); and
 - Reducing impacts on water availability and quality in direct operations and along the value chain (W1.4a, W8.1, W4.2, W4.2a, W4.3a)

General water security questionnaire structure

The structure of the water security questionnaire was revised in 2014 to improve alignment with the CEO Mandate Water Guidelines and has been stable since then.

From 2018, revisions to the questionnaire structure and content reflect trends in corporate water reporting, the evolving needs of water data users, developments in public policy agendas, greater alignment with CDP's climate change and forests questionnaires, and CDP's move to sector questionnaires.

The modular structure still broadly reflects the narrative of the CEO Water Mandate Guidelines, assisting companies on a water stewardship journey. However, there are revised module and section headings, and some sections and questions have moved position. There are new and revised modules, sections and questions to improve the discloser's experience and provide more robust and relevant data.

There are 11 water modules, including the Signoff, plus a module presented only to organizations that supply goods or services to the member companies of CDP's supply chain program.

The journey through CDP's general water questionnaire includes the following:

- water dependence and water accounting metrics
- value chain engagement activities
- business impacts
- risk assessment procedures
- risks, opportunities and responses to them
- facility water accounting
- water governance and business strategy
- targets and environmental linkages

General water security questionnaire developments

A detailed document on [water security question changes from 2017 to 2018](#) is now available. Revisions and changes to questions are also indicated by "Change from 2017" as: no change, minor change, modification, or 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.

The main substantive changes to the water questionnaire include:

Forward-looking focus and financial information	<ul style="list-style-type: none"> ● Data points throughout reflect CDP's move to more forward-looking disclosure, and CDP data users' need for more financial information on the impacts of water-related risks and opportunities.
From supply chain to value chain	<ul style="list-style-type: none"> ● The scope of questions that previously asked about dependency, water management or water risks in the supply chain now include all phases of the value chain. This is in recognition that water availability or quality downstream of direct operations (in product use, for example) as well as upstream is increasingly an issue for many companies.
Water accounting	<ul style="list-style-type: none"> ● Companies are asked to indicate the percentage of withdrawals from stressed basins, reflecting a move towards more context-based water reporting, ● In recognition of the SDGs and the trend in corporate water management, a question has been included on the recycling and reuse of water.
Risk disclosure tables:	<ul style="list-style-type: none"> ● The tables for disclosing risks have been extended and clarified. Information is requested about potential impacts to the business arising from risk drivers either within direct operations or elsewhere in the value chain (and no longer simply the supply chain). Companies are requested to provide a numerical financial value for the potential impact.
Facility level data	<ul style="list-style-type: none"> ● Geolocation data is requested for facilities exposed to risks that could generate a substantive change to the business.
Governance	<ul style="list-style-type: none"> ● Revised and new data points, on oversight and public policy influence, allow companies to show how water matters are considered as part of corporate governance mechanisms.
Strategy	<ul style="list-style-type: none"> ● A section on strategy asks companies to disclose how water has been integrated into long-term strategic business plans (including their use of scenario analysis and water pricing).
Targets and goals	<ul style="list-style-type: none"> ● Companies are asked about their approach to setting targets and goals at any level of the organization. Details are requested only for targets and goals that are monitored at the corporate level.

Sector approach

- From 2018, companies in high-impact sectors for water will be presented with sector specific requests for information, either in addition to or instead of the general water data points.
- The rationale for developing a refined questionnaire for each of these sectors is outlined in each sector introduction.
- Questions that are unique to companies in a particular sector are labeled using a two-letter abbreviation within the question number (see below). Some general water questions, beginning with the letter W, may include sector-specific data requests. In the disclosure platform these will be presented only to companies in the relevant sector.

2018 water sectors:

- Agriculture: Food, beverage & tobacco (FB)
- Energy: Electric utilities (EU); Oil & gas (OG)
- Materials: Chemicals (CH); Metals & mining (MM)

Preparing and submitting your CDP response

CDP disclosure support

Reporting guidance

CDP reporting guidance includes the following sections. Please be sure to review the guidance for all questions to which you are submitting a response, even if you have previously disclosed to CDP.

- Module-level guidance: for select modules this guidance provides an overview, key changes, sector-specific modifications for the module, and important disclosure notes. This section also presents question pathway diagrams showing the flow of questions through each module.
- Question-level guidance: at the question level, guidance is separated into the following components, to provide clarity around questions, terminology and requirements.
 - Rationale: provides reasoning behind the inclusion of each question;
 - Connections to other frameworks: notes linkages to the SDGs and The CEO Water Mandate for each relevant question in the water security questionnaire;
 - Requested content: offers context around each question and requested criteria;
 - Explanation of terms: provides detailed definitions for specific terminology;
 - Example responses: forthcoming by May 31 for select questions; and
 - Additional information: forthcoming by May 31 for select questions
- Glossary: viewable at the end of the reporting guidance, the glossary contains a subset of "Explanation of terms"
- Appendix: River basin list — and South African Water Management Areas — by country

If you have any questions that are not answered in the reporting guidance, or the additional guidance noted below, please contact your local CDP office or respond@cdp.net.

Additional CDP guidance

Links to CDP questionnaires, guidance, scoring methodologies, and select technical notes can be found on the [guidance for companies](#) page of CDP's website. The full suite of these materials will also be accessible from the guidance tool, after signing in.

Webinars and workshops

CDP is hosting a series of events through May, online and in person, to help companies with their disclosure in 2018. Visit the [workshops and webinars](#) and [water security](#) pages of CDP's website for more details.

CDP reporter services

CDP reporter services offers tailored support, enhanced data access and thought leadership on managing and reporting environmental risk to your business. Access the tools you need to move from disclosure to leadership on integrating climate, water security and forests management into your wider business strategy. For year-round, personalized disclosure support from a CDP account manager, a gap analysis of your previous response, and analytics tools to benchmark yourself against peers and understand best practice, contact reporterservices@cdp.net and visit the [reporter services](#) page of CDP's website for more information.

CDP water consultancy solutions providers

CDP accredited water consultancy solutions providers support companies looking to engage with and improve their water management. Partners are subject to strict selection criteria and once approved are able to work closely with companies to provide expertise on critical topics including: water accounting, water risk assessment, the development of water strategies and development and implementation of corporate water stewardship plans. Visit the [accredited solutions providers](#) page of CDP's website or contact partnerships@cdp.net to learn more.

Notes for completing your disclosure

Acronyms

Avoid using bespoke internal acronyms unless required for your organization's response, in which case please provide their meaning to enable correct analysis and scoring.

Blank responses

Leaving a response blank is interpreted as non-disclosure. For numeric fields, values of zero (0) imply a measurement has been made, and the value is zero (0). For numeric fields where no measurement has been made, please leave the field blank and provide an explanation in an open text field for that same question (e.g. 'Comment' or 'Please explain'). If there is no open text field for the question, you may provide an explanation in the 'Further information' field in the online response system (ORS) at the end of your disclosure. Leaving a response blank and entering a value of zero (0) have different scoring implications. Please see the scoring methodology for more details.

Character limits

Limits noted in the guidance and the online response system (ORS) include spaces.

Company-specific information

Some questions request company-specific information. Be sure to include company-specific detail, such as references to activities, programs, products, services, methodologies, or operating locations specific to your company's business or operations. A company-specific explanation should include details that make the answer true for the responding company and are distinct from other companies in the same industry and/or geography. This level of detail gives data users confidence that the issue at hand has been thoroughly considered in the context of the responder's own business and not simply assessed in general terms.

Consistency

CDP encourages a comprehensive and consistent response. Please ensure there is no conflicting information in your responses, both within a question and across the questionnaire.

Drop-down options ('Other, please specify')

Please select from the categories provided whenever possible, and only select 'Other, please specify' when none of the listed options is appropriate. This greatly assists data analysis.

'Further information' field

At the end of the questionnaire, there is an opportunity to provide additional information or context that you feel is relevant to your organization's response. This field is optional and not scored.

Personal data

It is important that you do not include the name of any individual or any other personal data in your response. For questions that ask for the positions of staff, out of respect for personal data privacy we are asking only for the position and not for the individual's name or any other information relating to them.

Submitting your response through CDP's online response system (ORS)

Please refer to [Using CDP's Online Disclosure Platform](#) for more details.

Introduction to CDP water security reporting guidance

Water reporting

Water presents a unique set of measurement and reporting challenges on both the local and global scales.

- First and foremost, water management is a local or regional issue. Local contexts matter. Challenges and opportunities depend on patterns of local precipitation, watersheds and aquifers, as well as the degree and nature

of local use, and the extent and efficacy of water governance and regulation. Unlike a ton of carbon dioxide that will have the same impact whether emitted in Stockholm or Sydney, the geographical scale, location and timing of water use is critical. A cubic meter of water used in Sydney has very different consequences from a cubic meter used in Stockholm. This creates complexities in managing water use in a way that progresses water security for all, as well as in creating meaningful corporate water indicators.

- Standards for water reporting are not yet as consistently or universally established as those for GHG emissions.
- While GHG emissions which can be expressed in tons of CO₂e, there is no single or interchangeable quantitative unit of measurement for tracking the risks and impacts associated with water. Factors that must be considered include available volumes, water quality, the degree of competition in the region concerned, as well as future scenarios for physical, regulatory, market and technological changes.
- Compounding this complexity, the global nature of business and supply chains mean that water use is linked across multiple geographies. Even when their own operations or assets are not affected, many businesses may be exposed to and significantly affected by changing patterns of water availability. For large companies with complex supply chains containing potentially thousands of suppliers, assessing water use and related product or supply chain issues can be highly complex.

CDP's approach to water reporting

Alignment

To support the development of standards that are both valuable for companies and provide investors, policy makers and other data-users with meaningful information, CDP works with a range of organizations; such as the CEO Water Mandate, the World Resources Institute, WWF, World Business Council for Sustainable Development, the Global Reporting Initiative, the Alliance for Water Stewardship, Ceres, Sustainability Accounting Standards Board (SASB) and similar organizations. Standardization is needed to facilitate transparency and reporting as well as to support consistency and comparability for data users.

CDP's water security request and our reporting guidance draw on reporting principles, frameworks definitions and standards from these and other organizations and align wherever possible. Where differences remain, they reflect each organization's particular approach and aims.

Note on 2018 alignment with the GRI standards: *GRI 303: Water* is under review and publication of the new standard is planned for May 2018. CDP's 2018 water security questionnaire incorporates some changes anticipated for the GRI standard, but due to differing timelines it has not been possible to assess and review alignment at this stage. In 2017, we published a document setting out the [linkages with GRI](#) 303 and GRI 306, but this is not valid for CDP's 2018 questionnaire. CDP will review the new GRI standard after publication, and wherever feasible may consider revisions to our questions and guidance for our 2019 disclosure.

For CDP's 2018 disclosure cycle, companies must consult our revised question-level reporting guidance when responding to our water security questionnaire as the guidance has been updated.

Journey to water security

Our water security questionnaire is structured from start to finish as framework to assist organizations to progress the maturity of their water management and corporate reporting. It presents a journey to water stewardship and water security.

Collecting and disclosing information on management and governance responses to risk and opportunities, as well as the integration of water into long term strategic objectives, provides data for decision making and catalyzes corporate action. This is the value of disclosure.

Accounting

To progress water security for all and to minimize water-related risks, organizations must eliminate any detrimental impact on water ecosystems and resources. Impact and risk exposure occurs as water flows into and out of a company's boundaries, so CDP's collects information to determine how well a company understands this flow. Companies are encouraged to account for all their interaction with water, and to minimize that interaction (e.g. through reduced withdrawals, efficiency improvements, or by changing their business activities). This means that CDP seeks more nuanced information than volumetric reductions in freshwater removal or consumption. Most important is that companies have robust monitoring and accounting in place for all aspects of their corporate hydrology, and that they demonstrate an understanding of their dependence on water.

Measurements of withdrawal, discharge and consumption take place as water crosses the company boundary, at either the corporate level or facility level. This makes the concept of the organizational boundary central to our disclosure request at the corporate and the facility level.

Context and geographic scale

Water presents local issues which need to be understood and managed at a local level; typically at river basin, or at least a country level, rather than the corporate level. Investors are increasingly interested in this type of granularity when it comes to assessing the water risk within their portfolios.

Some CDP data users wish to assess an organization's ability to access the granular data needed for mature water management and sound risk management across all its operations and locations. This is deemed to be best practice. A separate module (W5) requests water accounting data for any facilities exposing the company to substantive water-related risk (note that we do not ask for data for all facilities).

In addition, CDP invites companies to report their risks at the river basin level and several questions include a column so that companies can indicate the location associated with their data. An organization will not have a comprehensive understanding of its risk exposure and the most appropriate response unless it is able to take account of local basin context and conditions. River basin level risk assessment is particularly relevant to a water stewardship approach to securing water resources as collaboration with other basin users and external stakeholders is central to understanding and managing risk.

Building on this, CDP is partnering in a multi-organization initiative to provide companies with guidance on setting context-based water targets (see [Exploring the case for context based water targets](#), April 2017).

Reporting risk

CDP provides its data users with information about the inherent risks faced by companies. This allows them to independently assess the appropriateness and adequacy of the management and governance response, and thus the residual risk and resilience of the business.

To provide data users with confidence in their disclosure, companies are encouraged to give a full picture of their approach to risk assessment and how water-related issues have been integrated into their business strategy.

Reporting impacts

When referring to 'impacts', some frameworks and standards use the term to mean the effects of a business on communities and ecosystems, such as the CEO Water Mandate Guidelines and the GRI standards. For CDP, this term refers to the effects of water challenges on the business, i.e. 'business impacts', be they due to physical, regulatory or market drivers.

CDP asks for information about past water-related impacts on the business and responses to them (in module W1 'Current State'). Data users may judge a company's potential future performance using this data.

Principles of true and fair reporting

The GHG Protocol outlines five principles to ensure a true and fair account of a company's GHG emissions (see [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard](#)) developed by the World Resources Institute and the World Business Council for Sustainable Development). CDP suggests that all of these principles be adopted for the purpose of water reporting. These principles are as follows:

- **Relevance:** Ensure the water use inventory appropriately reflects actual water use and serves the decision-making needs of users – both internal and external to the company.
- **Completeness:** Account for and report on all water activities within the chosen inventory boundary. Disclose and justify any specific exclusion(s).
- **Consistency:** Use consistent methodologies to allow for meaningful comparisons of company's use of water over time.
- **Transparency:** Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.
- **Accuracy:** Ensure the quantification of water use is sufficiently accurate to enable users to make decisions with reasonable assurance as to the integrity of the reported information.

Information is considered relevant if it contains the detail that users, both internal and external to the company, need for their decision-making. When considering what to disclose, please identify and report information that is likely to be of use and benefit to the audience requesting it (for example, the investment community and your customers).

Instructions for responding to the water security questionnaire

1. **Units:** Volumes must be reported in megaliters per year (1 megaliter = 1 million liters or 1,000 m³) in all questions, unless otherwise stated.

2. Blank cells: Please ensure that fields and cells in tables are only intentionally left blank if you have no data to disclose. Blank cells are interpreted as non-disclosure, i.e. information is not available due to lack of measurement or choosing not to disclose. They are therefore awarded no points by the scoring methodology.

3. Values of zero: Entering a 0 (zero) figure implies that a measurement has been made, and the value being disclosed is 0(zero).

4. Data accuracy: CDP recognizes that there may be uncertainty linked to data – this can arise from data gaps, assumptions, metering/measurement constraints including equipment accuracy etc. CDP allows estimated data to be submitted. However, an emphasis is placed on reporting transparently and this means that companies should always provide an explanation when its reported data is not accurate and detail the uncertainty (use the “please explain” or “comment” columns provided in the question).

5. River basins: From the drop-down list in specific questions, select the river basin associated with the disclosure, or select “Other, please specify” and provide the name of the river basin. CDP’s dropdown list of river basins aligns with the CEO Water Mandate’s [Interactive Database of the World’s River Basins](#). For companies operating in South Africa, the list also includes the nine Water Management Areas for South Africa (see CDP’s Appendix: *River basin list — and South African Water Management Areas — by country*).

You may wish to enter a sub-basin of a listed river basin. In this case use the “Other, please specify” option in the following format: “Putumayo, Amazon”.

For companies withdrawing water from large confined aquifers that do not discharge to the river basin they are located in, e.g. Ogallala aquifer in the United States, please select “Other, please specify” and type in the name of the local aquifer source.

If you do not know the river basin associated with the data you are disclosing, the following tools have the functionality to identify the river basin locations of facilities by typing in geolocation coordinates, for example:

- The CEO Water Mandate [Interactive Database of the World’s River Basins](#)
- The [Water Footprint Assessment Tool](#) developed by the Water Footprint Network (WFN)
- The [Water Risk Filter](#) developed by WWF and DEG
- The [WRI Aqueduct Water Risk Atlas Tool](#) developed by the World Resources Institute (WRI)
- The [Global Water Tool](#) developed by the World Business Council for Sustainable Development (WBCSD)

W0 Introduction module

Module Overview

This module requests information about your organization's disclosure to CDP and will help data users to interpret your responses in the context of your business operations, timeframe and reporting boundary.

The information provided here should apply consistently to your responses throughout the questionnaire and be complete and accurate as it may determine response options presented in subsequent modules.

For this reason, you should respond to every question in this module and save your response before accessing the rest of the questionnaire.

Key changes

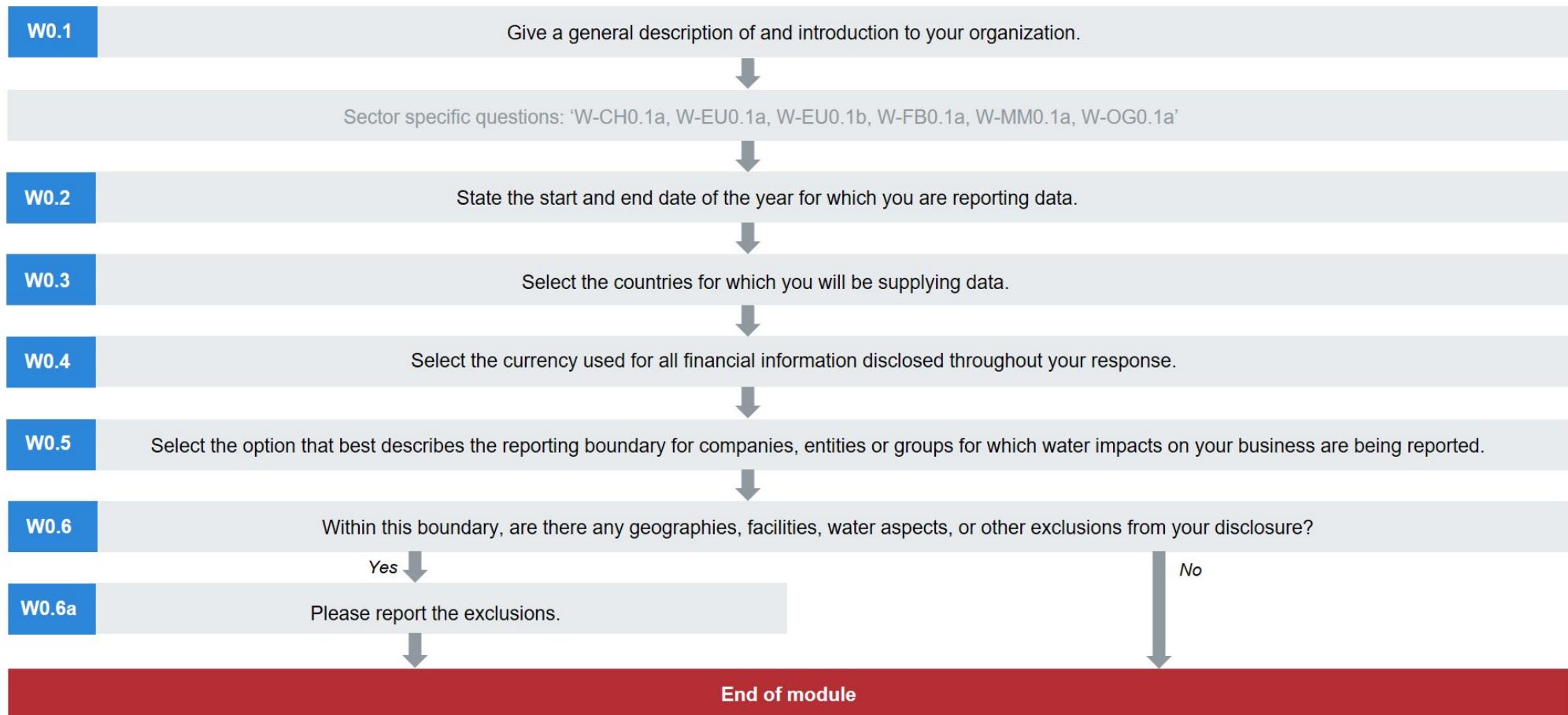
- New question asks companies to state the countries in which they operate.
- New question asks companies to state the currency in which they will disclose financial figures. This is to standardize all financial information you provide.
- New questions for high-impact sectors.

Sector modifications

- Additional questions for: Chemicals, Electric Utilities, Food, Beverage & Tobacco, Metals & Mining, Oil & Gas.

Pathway diagram - questions

This diagram shows the general questions contained in module W0. To access question-level guidance, use the menu on the left to navigate to the question.



Introduction

(W0.1) Give a general description of and introduction to your organization.

Change from 2017

No change (2017 W0.1)

Rationale

This will help data users interpret your responses within the context of your business activities and sector.

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.

Requested content

General

- Provide information about your operations and business activities to help data users understand your business and how it relates to water risk and corporate strategy. This information provides context for your answers throughout this disclosure.

Explanation of terms

- Organization:** Throughout this information request, "your organization" refers collectively to all the companies, businesses, other entities or groups that fall within the definition of your reporting boundary (provided in W0.5). This term is used interchangeably with "your company", but CDP recognizes that some disclosing organizations may not consider themselves to be, or be formally classified, as "companies".

(W0.2) State the start and end date of the year for which you are reporting data.

Change from 2017

No change (2017 W0.2)

Rationale

This will help data users interpret your responses in relation to the timeframe reported.

Response options

Please complete the following table:

Start date	End date
From: [MM/DD/YYYY]	To: [MM/DD/YYYY]

Requested content

General

- Apply this reporting year to your answers for the entire questionnaire.
- If you are using the Export/Import functionality, please check that the imported date is correct.
- The current reporting year is the most recent 12-month period for which data is reported.
- The investment community generally prefers a company's disclosure period to match the fiscal year for their financial jurisdiction. This facilitates the assessment of environmental performance data in alignment with their financial performance data.
- CDP recommends companies provide a year for which they have complete data for their response if possible. If you do not have data for the entirety of your reporting year, you have the option to extrapolate or estimate your data to cover the entire reporting year.

(W0.3) Select the countries/regions for which you will be supplying data.

Change from 2017

New question

Rationale

This will help data users interpret your responses and enables the auto-population of country/region drop-down lists in subsequent questions.

Response options

Please complete the following table:

Country/Region
Select all that apply: <ul style="list-style-type: none">● Country/region drop-down list● Other, please specify

Requested content

General

- Select all countries/regions in which you operate from the drop-down list provided.
- If your organization operates in an area not included in the drop-down list of countries/regions, please select "Other, please specify" to provide a country/region label. If adding more than one area, please separate with a comma. If you need a total of more than 40 characters, you should use the comment box by clicking on the "speech bubble" icon. When applicable, you will need to include these additional areas in subsequent questions requesting that you select a 'country/region'.

(W0.4) Select the currency used for all financial information disclosed throughout your response.

Question dependencies

- All disclosed financial figures throughout the questionnaire will be in the same currency. The currency reported in this question will apply to all reported figures throughout this request.

Change from 2017

New question

Rationale

CDP encourages companies to report financial figures associated with impacts, risks, and opportunities. Establishing a single currency will facilitate the collection of comparable financial information. This will benefit investors and other data users when assessing the costs and benefits reported by your organization.

Response options

Please complete the following table:

Currency
Select from: <ul style="list-style-type: none">● Currency drop-down list

Requested content

General

- The currency you select will be applied to all financial information and metrics reported in your disclosure.
- For example, if you select USD (\$) here, this will determine the currency applied to the figure you give for 'Financial impact' reported in W2.1a.

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Change from 2017

No change (2017 W0.3)

Rationale

This will help data users interpret how your responses relate to your business operations.

Response options

Select one of the following options:

- Companies, entities or groups over which financial control is exercised
- Companies, entities or groups over which operational control is exercised
- Companies, entities or groups in which an equity share is held
- Other, please specify

Requested content

General

- References in the questionnaire to "your organization" are to the entities within your organizational boundary for which you are providing information.
- This question asks you to define the organizational boundary for which you are supplying data. This indicates the way your organizational entities such as groups, businesses, and companies have been identified for inclusion within your reporting boundary. Please apply this definition consistently when responding to questions.
- The options in the drop-down for this question are based on the [GHG Protocol Corporate Standard](#).

- Financial control: An organization has financial control over an operation if it has the ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities. Generally, an organization has financial control over an operation for GHG accounting purposes if the operation is treated as a group company or subsidiary for the purposes of financial consolidation.

- Operational control: An organization has operational control over an operation if it or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation.

- Equity share: Under the equity share approach, a company accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects the economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation. Typically, the share of economic risks and rewards in an operation is aligned with the company's percentage ownership of that operation, and equity share will normally be the same as the ownership percentage. Where this is not the case, the economic substance of the relationship the company has with the operation always overrides the legal ownership form to ensure the equity share reflects the percentage of economic interest. The principle of economic substance taking precedence over legal form is consistent with international financial reporting standards.

- Other, please specify: select this only if none of the other options apply If you select this option, provide a label in the text field provided. If you need more than 40 characters to explain how your reporting boundary is defined, please use the comment box by clicking on the "speech bubble" icon.

- Note: throughout this information request, when calculating figures for corporate level reporting take a "consolidation approach", unless stated otherwise. The information you provide throughout the information request should be one "consolidated" result, covering all of the companies, entities, or businesses within your reporting boundary and aggregating more granular data at facility/business level, for example. Please consistently apply this organizational boundary when responding to questions unless specifically asked for data about another category of activities.
- Note: in W0.6a you have the opportunity to explain any data you have excluded from the reporting boundary you select here.

Explanation of terms

- **Company:** throughout this information request, "your company" refers collectively to all the companies, businesses, organizations, other entities or groups that fall within you're the definition of your reporting boundary. It is used interchangeably with "your organization".
- **Organization:** this term is used interchangeably with "your company". CDP recognizes that some disclosing organizations may not consider themselves to be, or be formally classified, as "companies".
- **Reporting boundary:** this determines which organizational entities, such as groups, businesses and companies, are included in or excluded from your disclosure. These may be included according to your financial control, operational control, equity share, or another measure.

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

Change from 2017

Minor change (2017 W0.4)

Rationale

CDP seeks to share comprehensive and representative water data. If companies do need to exclude areas of their business from their disclosure, data users must be informed of the exclusions as this may affect their analysis.

Response options

Select one of the following options:

- Yes
- No

Requested content

General

- References throughout the questionnaire to "your organization" include all the entities within your reporting boundary for which you are providing information. Please apply this logic consistently when responding to questions. However, you may exclude particular geographies, business activities, and/or small facilities for which it is difficult to gather data when water impacts are sufficiently small. This also applies to selected water inputs/outputs.
- In all cases, the following principles of relevance and transparency must apply to all disclosures (*adapted from the GHG Protocol*):
 - Relevance: Ensure the disclosure appropriately reflects the water use of the company and serves the decision-making needs of users – both internal and external to the company.
 - Transparency: Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.
- Any groups, companies, businesses or organizations falling within your organizational boundary but not included in your disclosure should be reported in W0.6a.
- Note that in some questions, e.g. in the facility level water accounting section, we will ask you to provide data only for facilities where significant water risk has been identified, rather than all facilities within your reporting boundary.

Explanation of terms

- **Facilities:** "Facilities" may be used throughout this questionnaire as a broad term and not restricted to a particular site or grouping of fixed buildings and factories. For example, if your organization is in the extractive industries you might normally collate business information for assets or business units, and so you may wish to define 'facility' information in this way.

Additional information

The [GHG Protocol](#) states that an acknowledgement of all exclusions should be made each year to enhance transparency despite disclosure of the same exclusion in previous years. This ensures all data users are always aware of what data has been included in your response.

For further information on allowable exclusions, please refer to the GHG Protocol and the CDP 2018 Water Scoring Methodology.

(W0.6a) Please report the exclusions.

Question dependencies

- This question only appears if you select "Yes" in response to W0.6.

Change from 2017

Minor change (2017 W0.4a)

Rationale

CDP seeks to share comprehensive and representative water data. Data users need to be informed of exclusions that may affect their analysis.

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.

Exclusion	Please explain
Text field [maximum of 2,500 characters]	Text field [maximum of 2,500 characters]

[Add Row]

Requested content

General

- Identify and explain when any of the following are being excluded from your disclosure:
 - Geographical locations**, e.g. low water usage or data limitations may make reporting infeasible for operations in a country or region;
 - Activities**, e.g. a product line, type of business process, or type of supplier, may be excluded due to limited data or reporting feasibility;
 - Facilities** may be excluded due to recent mergers, acquisitions and divestitures, outsourcing and in-sourcing of activities (smaller facilities for which it is not currently possible to track water use may also be considered for exclusion); and
 - Water inputs and outputs** e.g. a company may use rainwater at some facilities but not track the quantity or quality of this source in which case the source may be considered for exclusion.
 - Any groups, companies, businesses or organizations** that fall within your organizational boundary but are not included in your disclosure.
- For all exclusions, clearly explain why they are not included in your disclosure. Provide a reasonable explanation as to how you arrived at this exclusion; e.g., as a result of a high-level risk scanning exercise.

Example response

Exclusion	Please explain
Distribution Centers	<i>Our company has not yet implemented a system to track the water impact in its distribution centers. We expect this to be a small fraction of our total water consumption and provide little exposure to water risk. This will be incorporated from 2019.</i>
Offices	<i>Small leased office spaces (fewer than 50 employees) where water use is minimal. It is provided through the lease and managed by our landlord.</i>

W1 Current state

Module Overview

The promotion of water security for all is supported when companies:

- reduce their dependency on fresh water sources and track their progress; this is additionally important where fresh water scarcity may pose water quality risks and impacts.
- collect and share volumetric data on their interactions with water resources.
- consider water throughout their value chain, beyond the fence-line of their direct operations.

Clean freshwater is becoming increasingly scarce, and this can impact operations relying on large volumes of water – either through absolute availability or through rising costs for water. The information in this module allows CDP data users to build a picture of the dependence of your direct operations and your wider value chain on sufficient amounts of water of a particular quality, currently and for future growth, and where in the value chain most dependence on water lies. To understand an organization's resilience, it is important to understand the potential to reduce reliance on freshwater sources.

The questions allow your company to demonstrate how well it understands its corporate hydrology by providing information on the monitoring of relevant water aspects, and volumetric data on withdrawals - including withdrawals in water stressed areas, discharges, consumption, and recycling. CDP also requests companies to comment on their projections for water accounting data.

The module also asks about your engagement activity around water in your value chain and a rationale for it. In regions where water sources are highly restricted, your organization's water consumption patterns can influence relations with other stakeholders and your access to water can be dependent on those relationships. Engagement can also identify opportunities, such as innovation in your supply chain to reduce dependency and in product design to reduce water-related impacts.

Investors use this current state information to better assess the adequacy, robustness and relevance of your water governance, management and stewardship activities, as well as your disclosure of your water risks and opportunities.

The information requested in sections W1.1 and W1.2 may help companies with their climate-related disclosures in line with the TCFD recommendations which recognise that a reliance on the availability of water exposes a company to climate-related, financial risk.

Note:

- Throughout the water security questionnaire, CDP has broadened the scope of questions about the supply chain to include other phases of the value chain. This will be particularly relevant to companies whose activities may be constrained or otherwise affected by water related issues beyond their direct operations and supply chains. It reflects a widening of company focus to, and greater investor interest in, risk exposure, opportunities and impacts within the value chain.
- W1.2 requests water accounting information at the corporate level. Module 5 asks for facility-level volumetric data - only for facilities that expose your organization to substantive financial or strategic risks, and so it is requested after you have reported your risk exposure in W4.

Disclosure note

CDP's approach to reporting water accounting data

- When reporting volumetric data please read the guidance for each question as well as the CDP Technical Note on water accounting definitions.
- To reduce their impact on water ecosystems and resources as well as their need to manage water-related risks, organization should minimize and be able to account for all their interaction with water. For this reason, CDP's focus is the collection of information to determine how well a company understands the flow of water into and out of its boundaries, and whether they have robust monitoring and accounting in place for all aspects of their water use.

- **Definitions:** CDP is looking for comparable data, reported against a standard methodology/definition. To ensure the quality of our data and a fair scoring methodology, CDP definitions should be used for all disclosures. This is particularly relevant where there is a lack of standardization. Companies must not provide water accounting data that does not align with the definitions given. Please refer to CDP's Technical Note on water accounting.
- **Units:** Volumes must be reported in megaliters per year (1 megaliter = 1 million liters or 1,000 m³) in all questions, unless otherwise stated.
- **Blank cells:** Please ensure when responding to these water accounting questions that cells are only intentionally left blank if you have no data to disclose. Blank cells are interpreted as non-disclosure, i.e. information is not available due to lack of measurement or choosing not to disclose, and are therefore awarded no points by the scoring methodology.
- **Values of zero:** entering a zero implies a measurement has been made, and the value is zero. For example, a value of zero consumption reported indicates that no water is incorporated into products or waste products or lost by evaporation from the company. Do not use a zero to indicate a lack of data. If a company enters a zero for discharge, it should provide an explanation.
- **Data accuracy:** CDP recognizes that there may be uncertainty linked to water accounting information that could impact on data accuracy. Uncertainty can arise from data gaps, assumptions, metering/measurement constraints including equipment accuracy, data management, etc. The emphasis should be on reporting transparently and on providing an explanation for why reported data is uncertain or wholly or partially estimated or modelled, rather than sourced from direct measurements.

Key changes

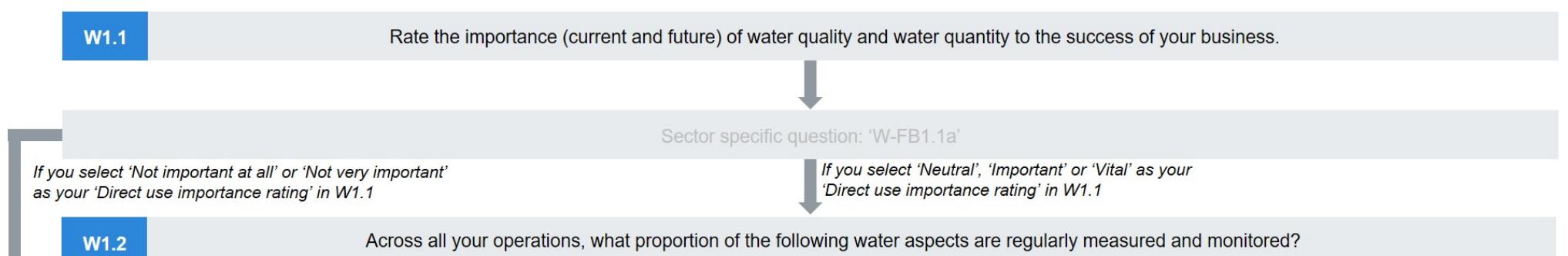
- Revised definitions - refer to CDP's [Technical Note on water accounting](#).
- Section heading changed from 'Context' to 'Dependence' as this provides information on how dependent a company's activities are on water resources. Furthermore, the term 'context' is being increasingly used to signify the local nature of water issues and the need to take account of specific contextual information when addressing water challenges.
- W1.1 - 'Indirect use' now refers to all stages of the value chain.
- W1.2b – 'Total volumes' for water withdrawals, discharges and consumption are reported together.
- New questions in section W1.2 on withdrawals from stressed areas, and recycling and reuse.
- New section W1.3 requests water intensity information from companies requested to respond to a CDP sector questionnaire.
- Section W1.4 on value chain engagement replaces the 2017 "Supplier reporting" section.

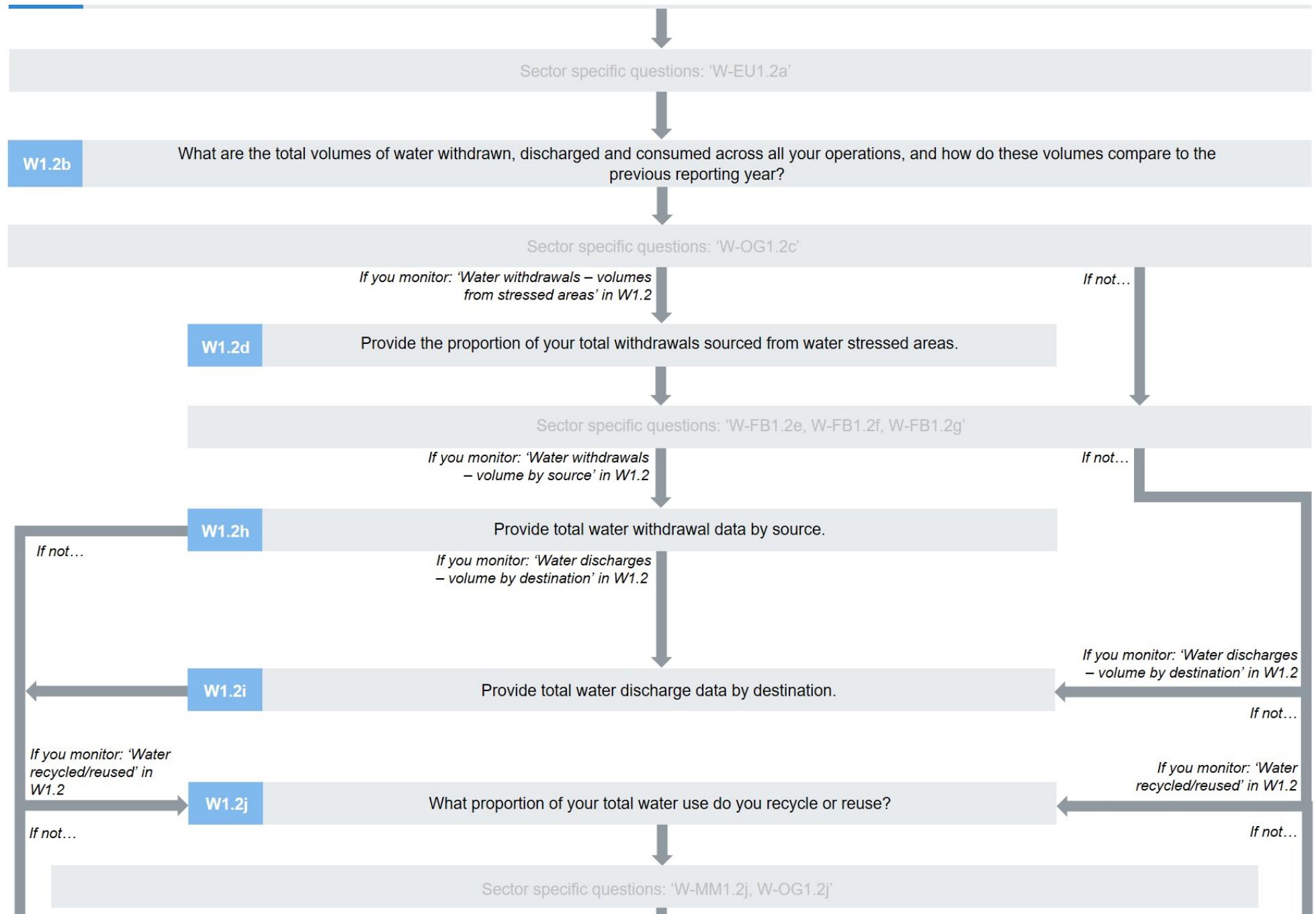
Sector modifications

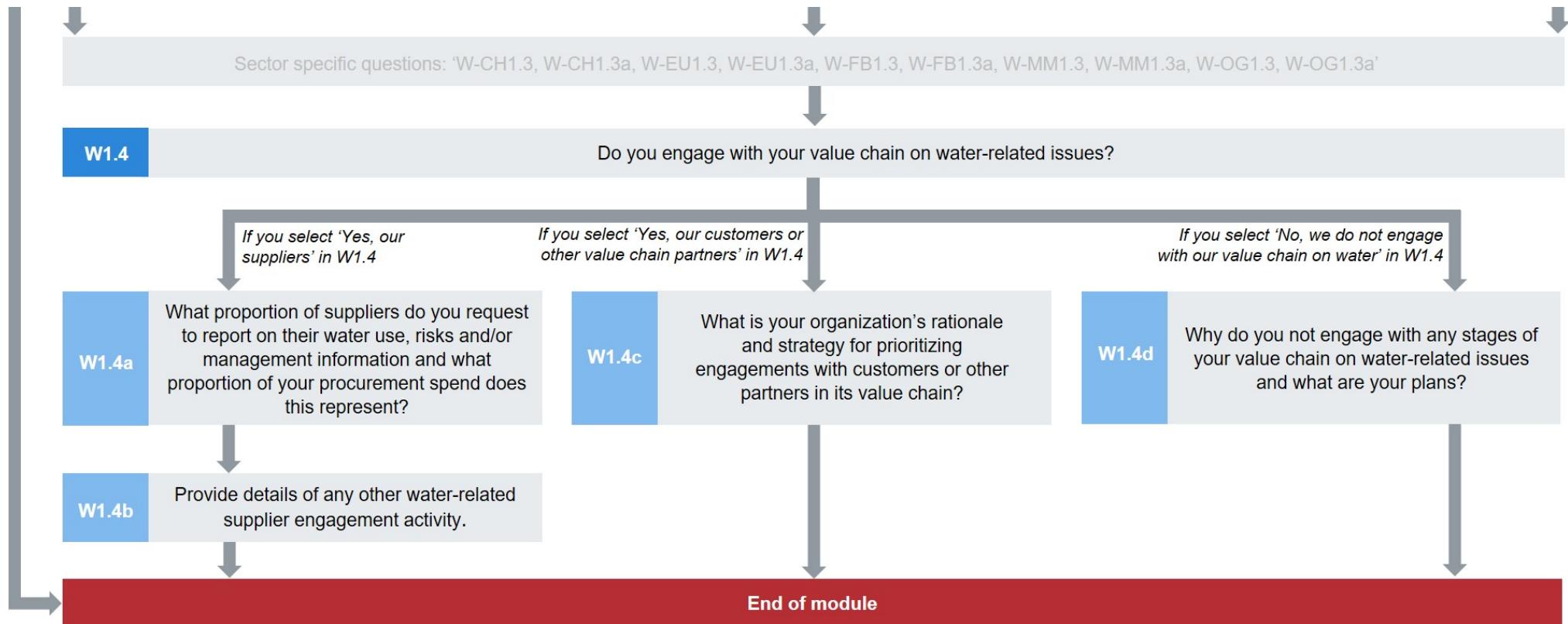
- Additional questions presented for in section W1.1 for Food, Beverage & Tobacco, and section W1.2 for Electric Utilities, Oil & Gas, Food, Beverage & Tobacco.
- Additional response options presented in W1.2 for Oil & Gas and Metals & Mining.
- Replacement questions presented for W1.2j for Oil & Gas and Metals & Mining.
- Section W1.3 requests water intensity information only for companies responding to CDP sector questions.
- Additional drop-down options presented in W1.4b for Food, Beverage & Tobacco.

Pathway diagram - questions

This diagram shows the general questions contained in module W1. To access question-level guidance, use the menu on the left to navigate to the question.







Dependence

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

Question dependencies

- Your response to W1.1 prompts subsequent questions. If your response to W1.1 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

Modified question (2017 W1.1)

Rationale

A dependence on good quality freshwater resources may pose a risk to companies where there is social, ecological or economic competition for those resources, or an otherwise unreliable supply. An ability to switch to using lower grade water mitigates that dependence, could improve a company's water security and reduces pressure on freshwater sources.

This question asks companies to disclose their dependence on access to good quality freshwater as this could limit their ability to switch to using lower quality water without incurring a cost to the business through having to

treat the water, for example.

Importance is independent of absolute volumes. For example, a company could require only a small amount of water used for an integral part of production for which access to alternative water sources could be restricted due to other local demands. The relative importance of access to that small volume would be considered as high.

Assessing how important access to good and lower quality water is to your organization is the first step to deciding how water-related issues may potentially present a risk to your company.

This information helps investors to understand why you have disclosed certain risks later in this questionnaire. It also demonstrates the ways that water could potentially constrain or enhance your business strategy.

Response options

Please complete the following table:

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Select from: <input type="radio"/> Not important at all <input type="radio"/> Not very important <input type="radio"/> Neutral <input type="radio"/> Important <input type="radio"/> Vital <input type="radio"/> Have not evaluated	Select from: <input type="radio"/> Not important at all <input type="radio"/> Not very important <input type="radio"/> Neutral <input type="radio"/> Important <input type="radio"/> Vital <input type="radio"/> Have not evaluated	Text field [maximum 1,000 characters]
Sufficient amounts of recycled, brackish and/or produced water available for use			

Requested content

General

- When answering this question, consider your organization's dependence on good quality freshwater versus lower quality water and how this has changed or might change over time.
- 'Good quality freshwater' is any water used for your organization's activities that must be of a quality requiring only minimal treatment to be acceptable for domestic, municipal or agricultural uses or safe for freshwater ecosystems. A company is considered dependent on this if it is not possible to use a lower quality water instead.
- 'Importance' should be considered in terms of the need for secure access to, and the availability at certain times of, an amount of water (large or small) that is sufficient for your operations; and not simply in terms of your net water consumption. So, activities involving large volumes of water would be expected to answer "Vital" or "Important" because large withdrawals would be required, even if discharges were also large resulting in relatively low consumption.
- Metals & mining sector only:** Organizations dependent on freshwater of low quality (categories 2 and 3 of the Water Accounting Framework from the Mineral Council of Australia) should indicate this dependency in row 2 (...recycled, brackish and/or produced water sources). Dependency on low rather than high quality water reduces pressure on good quality freshwater sources.

Importance rating (columns 2-3)

- CDP recognizes that the importance ratings are subjective. The following description of the categories aims to assist with comparability rather than providing rigid definition and general examples are given.
- Vital:** Water is of 'vital' importance when future production could be compromised, and output and finances affected at the corporate level, if the water supply was insufficient – either in terms of quantity and quality - in the locations of your production processes or your value chain. When water is vital for product use, scarcity may curtail sales or have reputational implications.
- Important:** access to sufficient volumes and good quality water is required in direct or indirect operations, though these operations may not be water intensive and/or diversification of supply chain could mediate risk.
- Neutral:** water quality can be poor as long as enough water is available.
- Not very important:** water is not a key component of operations directly or indirectly but a local issue e.g. drought or poor water quality, or localized flooding may impact on local operations or supply chain. However, this would not affect the business overall.
- Not important at all:** water is not a key component of operations directly or indirectly and water quantities in particular are of less concern.
- Have not evaluated:** have not evaluated how much water or the quality of water required for operations and/or value chain.
- When considering the importance rating for indirect use, you should include the importance of water in all stages of your value chain that are upstream and downstream of your direct operations; e.g. within your supply

chain, and also for the use/consumption of your products or services.

Please explain (column 4)

- State the **primary use of water** for both the direct and indirect parts of your value chain, for both good quality freshwater and lower quality options. Describe how water use is distributed across the value chain; giving percentages if possible.
- Describe **how you have determined** your stated importance ratings for water quality and quantity for both good quality and lower quality options.
- Specify how **future water dependency** is likely to differ from the current, and provide an explanation for your answer.

Explanation of terms

- **Direct operations:** An organization's operations include anything it does itself for the purpose of producing goods and services and maintaining the functionality of the business. This covers any internal supply chains between the organization's business units. For example, a business unit within a company that supplies components to another business unit within the company would be considered part of the organization's direct operations.
- **Direct water use:** Includes all water that is used for activities within your organization (as defined by your 'reporting boundary').
- **Good quality freshwater:** Any water used for your organization's activities that must be of a quality requiring only minimal treatment to be acceptable for domestic, municipal or agricultural uses or safe for freshwater ecosystems. A company is considered dependent on this if it is not possible to use a lower quality water instead. Water quality can refer to physical, chemical, biological, and organoleptic properties of water. 'High quality' fresh water sources, of potable standard, are typically characterized as having concentrations of dissolved solids less than 1,000 mg/l.
- **Indirect water use:** Includes all water use that takes place anywhere within your value chain outside your direct operations and direct control. This includes water use upstream of your direct operations, use such as by your suppliers, and downstream, for example water needed for the use of your products.
- **Sufficient amounts of recycled, brackish and/or produced water:** This refers to any low quality water requiring significant treatment to be acceptable for human consumption or other purposes, and for which the source can be easily substituted. Water quality can refer to the physical, chemical, biological, and organoleptic properties of water.
- **Water availability:** The natural runoff (through groundwater and rivers) minus the flow of water that is required to sustain freshwater and estuarine ecosystems and the human livelihoods and well-being that depend on these ecosystems. Water availability typically varies within the year and also from year to year. Water availability might be reduced by decreases in both the water quantity and quality of water resources (Adapted from [CEO Water Mandate's "Corporate Water Disclosure Guidelines"](#)).
- **Water quality:** Refers to the physical, chemical, biological and organoleptic (taste-related) properties of water (see CDP's definition for "Good quality freshwater") (adapted from [CEO Water Mandate's "Corporate Water Disclosure Guidelines"](#)).

Company-wide water accounting

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

Question dependencies

- This question only appears if you select "Neutral" "Important" or "Vital" as your "Direct use importance rating" in response to W1.1.
- Your response to W1.2 will determine which subsequent questions are presented. If your response to W1.2 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions.
- If you select "Not monitored" or "Not relevant" in response to W1.2, you will not be able to disclose associated volumetric data in this section. The guidance for each question indicates if it is a dependent question.

Change from 2017

Modified question (2017 W1.2)

Rationale

This question allows your company to indicate to investors, customers, and other data users the extent to which it monitors different aspects of its water use. Comprehensive water accounting is a first step in understanding the importance of water to your business and any potential water-related impacts to your business. This data may also be relevant to a company's regulatory compliance.

Connection to other frameworks

CEO Water Mandate

Current state: Performance

SDG

Goal 6: Clean water and sanitation

Response options

Please complete the following table:

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	Select from: <input type="radio"/> Not monitored <input type="radio"/> Less than 1% <input type="radio"/> 1-25 <input type="radio"/> 26-50 <input type="radio"/> 51-75 <input type="radio"/> 76-99 <input type="radio"/> 100% <input type="radio"/> Not relevant	Text field [maximum 1,000 characters]
Water withdrawals – volumes from water stressed areas		
Water withdrawals – volumes by source		
[METALS & MINING SECTOR ONLY] Produced water associated with your metals & mining sector activities - total volumes		
[OIL & GAS SECTOR ONLY] Produced water associated with your oil & gas sector activities - total volumes		
Water withdrawals quality		
Water discharges – total volumes		
Water discharges – volumes by destination		
Water discharges – volumes by treatment method		
Water discharge quality – by standard effluent parameters		
Water discharge quality – temperature		
Water consumption – total volume		
Water recycled/reused		
The provision of fully-functioning, safely managed WASH services to all workers		

Requested content

- Note: organizations responding to an electric utilities, metals & mining or oil & gas sector request should refer to additional sector-specific guidance on this question at the end of the "Requested content" section.

General

- This question seeks a company-wide response about your monitoring of various water aspects. "Across all your operations" refers to all entities included in your reporting boundary, indicated in W0.5.
- Please refer to CDP's water accounting definitions (included in [CDP Technical Note – Water Accounting Definitions](#)) before completing this question.
- You should only select "Not monitored" if you do not collect any data on these water aspects across your operations. If you have data from any information sources, you should reflect this in your response by indicating the percentage of sites/facilities/operations this represents in the "% of sites/facilities/operations" column.
- If water accounting information cannot be provided for all operations within your reporting boundary, then please use column 3 to explain the level of coverage.
- The proportion of sites/facilities/operations reported in column 2 is not considered an indication of the proportion of total water volumes monitored in your organization. It provides organizational coverage of monitoring activity only.
- Note that for column 2, 'sites/facilities/operations' could include a broad variety of groupings of business operations, assets, fixed buildings, factories or sites etc. A company-specific explanation may be provided in column 3.

Water aspect (column 1)

- Definitions for each type of water aspect are included in the 'Explanation of terms' for this question (and repeated in the Glossary).

% of sites/facilities/operations (column 2)

- Please select the proportion of your organization's facilities that are regularly measured and monitored for each of the defined aspects; e.g. a company that has 100 facilities across its total operations and regularly measures and monitors total volumes of water withdrawals for 50% (50 facilities) would select "26-50".
- Select 'Not relevant' if it is not technically feasible or technically desirable for your organization to monitor this aspect; e.g. your operations do not consume water so measurement of this is not required, you discharge to a single destination so do not monitor discharge destinations, your company does not recycle/reuse water because it is not considered cost effective. Provide your explanation in column 3.
- Select 'Not monitored' if your company does not monitor this aspect, though it would be technically possible or desirable; e.g. your company does recycle/reuse water but it is not yet monitored at the corporate level. Provide your explanation in column 3.

Please explain (column 3)

- You should provide an explanation for your response in column 2; such as why your organization measures/monitors the water aspect at this proportion of its operations, and explain which sites/facilities/operations are excluded and why.
- Please state if your response in column 2 relates to facilities, sites or operations, or another kind of grouping, and explain how you are using the term; e.g. "For our company, 'facilities' refers to our warehouses and retail outlets"; "Our response in this row relates to our different geographic operations. We do not have facilities or sites because we provide a range of services that are not tied to a specific location".
- If you indicated that you monitor 'Water withdrawals quality' to determine the suitability of the water for its intended use, you may include details such as a list of parameters measured, and the frequency of data collection. This row supports the aims of the UN Environment Global Environment Monitoring System for Freshwater (GEMS/Water), a long term project to generate data flows on global water quality.

Explanation of terms

- **Boundaries of your organization:** This term is key within CDP water accounting definitions and is a management boundary, rather than a physical boundary or a legal entity. Water is considered to have crossed the boundary of your organization, at either the corporate or site level, when your organization in any way uses it, comes into contact with it, is required to manage it or when it becomes incorporated into your products. It therefore includes any water use and management by your organization outside of its physical corporate fence; for example, to provide a street cleaning service or in fields remote from a processing plant. The scope of this organizational boundary is defined by your chosen reporting boundary.
- **Measurement:** The collection of quantified data for a water aspect - either as a single volume/quality figure or an aggregation of volumes/quality figures.
- **Monitoring:** This is the tracking of measurements over time, i.e. a trend or indication of change in measured figures.
- **Produced water:** Water which enters the organization's boundary as a result of the extraction, processing, or use of any raw material, so that it must be managed by the organization. When reporting to CDP, this water should not be counted as recycled water when put to use within a single cycle of a business process. Examples of produced water include moisture derived from vegetation such as in sugar cane crushing and the water content in crude oil. (Note that companies with oil and gas activities should refer to CDP's sector specific guidance for this water aspect).
- **Produced water (Metals & mining sector only):** In the metals & mining sector produced water refers to the volumes of water in the raw material.
- **Produced water (Oil & gas sector only):** Water that is brought to the surface during the production of hydrocarbons including formation water, flow-back water and condensation water (adapted from IPIECA's [Oil and gas industry guidance on voluntary sustainability reporting](#), 3rd edition, 2016).
- **Recycled/reused water:** Water and wastewater (treated or untreated) that has been used more than once before being discharged from the organization's boundary, so that water demand is reduced. This may be in the

same process (recycled), or used in a different process within the same facility or another of the organization's facilities (reused). It can include wastewater re-used from household processes such as washing dishes, laundry, and bathing (grey water).

- **Safely managed WASH services:** The universal provision of safely managed water, sanitation, and hygiene services has dedicated targets within the Sustainable Development Goals (SDG 6.1 and 6.2). As a minimum, this disclosure refers to a company's tracking of its provision of drinking water for all workers, available when needed and from sources compliant with faecal and chemical standards, as well as sanitation facilities where excreta are safely disposed in situ or transported and treated offsite.
- **Water consumption:** The amount of water that is drawn into the boundaries of the organization and not discharged back to the water environment or a third party over the course of the reporting year.
- **Water discharges – total volumes:** The sum of effluents and other water leaving the organization's boundary and released to surface water, groundwater water or to third parties over the course of the reporting year.
- **Water discharges – volume by destination:** This refers to the proportion of your discharges that are tracked to different types of discharge destinations; e.g. freshwater, brackish surface water/seawater, groundwater, or third parties.
- **Water discharges – volume by treatment method:** This refers to the proportion of your discharge that you track according to treatment method applied before being returned to the environment - primary, secondary, or tertiary treatment types etc. Different industries will have different requirements to meet compliance standards, or a company may have an internal standard they adhere to.
- **Water discharge quality data – by standard effluent parameters:** This refers to the quality of your discharged water/effluents tracked according to parameters such as Biological Oxygen Demand (BOD) or Total Suspended Solids (TSS). The specific choice of quality metrics will vary depending on the organization's products, services, and operations but should be consistent with those used in the organization's sector, and may need to vary depending on national or regional regulations.
- **Water discharge quality data – temperature:** This refers to the temperature of your discharged water/effluents. Though not yet a standard effluent parameter in many industries, thermal pollution can play a significant role in ecosystem degradation by altering levels of dissolved oxygen and harming wildlife.
- **Water diversions (Metals & mining sector only):** According to the [Water Accounting Framework from the Mineral Council of Australia](#) water diversions are flows from an input to an output without being utilized by the operational facility. The flow is not stored with the intention of being used in a task or treated.
- **Water recycled/reused:** Water and wastewater (treated or untreated) used more than once before being discharged from the organization's boundary, so that water demand is reduced. This may be in the same process (recycled), or in a different process within the same facility or another of the organization's facilities (reused).
- **Water recycled/reused (Oil & gas sector only):** Water and wastewater (treated or untreated) that has been used more than once, in order to reduce water (adapted from IPIECA's ["Oil & gas industry guidance on voluntary sustainability reporting", 3rd edition, 2016](#)).
- **Water withdrawals – total volumes:** The sum of all water drawn into the boundaries of the organization (or facility) from all sources for any use over the course of the reporting period. (Source: adapted from GRI Standards Glossary 2016).
- **Water withdrawals quality:** This refers to the quality of raw water that your company draws into its boundary (from sources, such as rivers, lakes, groundwater and coastal zones).
- **Water withdrawals – volumes by source:** This refers to the proportion of withdrawals that your organization can trace to different types of water withdrawal source e.g. freshwater, brackish surface water/ seawater, produced water and third party sources, and a breakdown of groundwater by renewable and non-renewable sources.
- **Water withdrawals – volumes from water stressed areas:** The total volumes withdrawn from sources located in areas where there is a lack of ability to meet human and ecological demand for water due to poor availability, quality or accessibility (adapted from the [CEO Water Mandate's "Corporate Water Disclosure Guidelines, 2014 definition of water stress"](#)).

Additional information

The provision of safely managed WASH services at the workplace, and respecting the human rights to water and sanitation

The provision of safely managed WASH services at the workplace (and extending such expectations to other actors within its value chain) is aligned with the aims of the [Sustainable Development Goals](#) (SDG 6.1 and 6.2) and the UN Human Rights Council endorsed [Guiding Principles on Business and Human Rights](#). These are established and authoritative global reference points on how companies should respect human rights in their own activities and business relationships, focusing on the risks to people rather than the risks to the business. Provision requirements may also be linked to Health and Safety regulations applicable to your operations. In practice, companies need to implement due diligence to identify actual and potential impacts on human rights and to prevent, mitigate, and remediate them. This could mean a company may need to collaborate with others in the basin to reduce their collective water use when withdrawals limit the water availability for local communities in a way that impacts their right to water.

- The [Guide to Business and Human Rights \(2014\)](#) published by the UK Equality and Human Rights Commission states that a business can respect the right to a safe environment for employees by 'ensuring access to clean toilet facilities and drinking water' amongst other criteria.
- The World Business Council for Sustainable Development (WBCSD) [Pledge for Access to Safe Water, Sanitation, and Hygiene](#) (WASH) provides resources for companies looking to implement WASH in the workplace, including a reference for what represents [best practice in providing WASH services](#) in different workplaces.

Water withdrawals quality and GEMS

The UN Environment [Global Environment Monitoring System for Freshwater \(GEMS/Water\)](#) provides the world community with sound data on water quality to support scientific assessments and decision-making on the

subject. Surface and groundwater quality monitoring data collected from the global GEMS/Water monitoring network is shared through the GEMStat information system.

Within UN Environment, GEMS/Water was identified as being the mechanism to support countries to fulfill their reporting obligations for the UN Sustainable Development Goals. GEMS/Water provides appropriate support, based on capacity needs at national and regional levels, and develops training for delivery in countries all over the world.

(W-EU1.2a)

This question only applies to organizations with activities in the electric utilities sector - it will not be displayed here unless you opted to view these sector-specific questions.

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

Question dependencies

- This question only appears if you select "Neutral" "Important," or "Vital" as your "Direct use importance rating" in response to W1.1.

Change from 2017

Modified question (2017 W1.2a, W1.2b, W1.2c)

Rationale

This question incentivizes companies to have a complete view of their water balance at the corporate level.

Total volumes can indicate the organization's relative significance as a user of water and provide a baseline figure for other calculations. Along with trend data, these volumes can also suggest the level of risk posed by future disruptions to water supplies or increases in the cost of water.

Water consumption measures water that is no longer available for use by the ecosystem or local community in the reporting period. Reporting the volume of water consumption contributes to an organization's understanding of the overall scale of its impact due to water withdrawal on downstream water availability.

Connection to other frameworks

CEO Water Mandate

Current state: Performance

SDG

Goal 6: Clean water and sanitation

Response options

Please complete the following table:

Water aspect	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	Numerical field [enter a range of 0-999,999,999,999 using a maximum of two decimal places]	Select from: <ul style="list-style-type: none"><input type="radio"/> Much lower<input type="radio"/> Lower<input type="radio"/> About the same<input type="radio"/> Higher<input type="radio"/> Much higher<input type="radio"/> This is our first year of measurement	Text field [maximum 2,000 characters]
Total discharges			
Total consumption			

Requested content

- Note: Organizations responding to an electric utilities, metals & mining, or oil & gas sector request should refer to additional sector-specific guidance on this question at the end of the "Requested content" section.

General

- This question is asking you to report aggregated company-wide volumetric data. If you do not have the aggregated data, if you are estimating or extrapolating to provide complete coverage, please give an explanation in column 3 (Please explain). Please remember that a zero should only be used for reporting zero volumes and not for an absence of data.
- Please refer to CDP's water accounting definitions before completing this question.**Report volumetric data in megaliters per year for the reporting year**(the time period you stated in response to W0.2). (1 megaliter = 1 million liters or 1,000 m³).
- Cooling water:** Cooling water (freshwater or sea water) is often withdrawn in large quantities and discharged back to its original source with negligible losses or variation in quality. However, this should be included in your water accounts.
- Rainwater:** If a company is managing rainwater (for example, by harvesting for use or storage, or to prevent flooding), or is dependent on it for production of goods or the delivery of services, it should try to estimate and disclose it as a withdrawal from the hydrological system into the company boundary. Note that in some jurisdictions rainwater is considered a withdrawal source and organizations are required to report its collection and use.

- Companies may choose to exclude collected rainwater and domestic sewage from their water withdrawal/discharge volumes only if the resulting error in their water balance would be less than 5%. (This avoids your discharge volumes being larger than your withdrawals).
- Including rainwater helps companies better understand their water dependency and risks. For some companies, precipitation/rainwater volumes may constitute a principal input of water at site level. This includes run-off where it has to be managed. In these cases, excluding rainwater from water accounting – withdrawal and discharge - would not be a true reflection of site water balance. In addition, there may be reduced impacts from using rainwater in place of other local freshwater sources.

Volumes (column 2)

- Please report volumetric data in megaliters per year for the reporting year (the time period you stated in response to W0.2). (1 megaliter = 1 million liters or 1,000 m³).
- For withdrawals, data may be collected from several sources, including "water meters, water bills, calculations derived from other available water data or the organization's own estimates (if neither water meters nor bills or reference data exist).
- Before deciding whether your withdrawals, discharges or consumption can be reported as 0 (zero), please refer to[CDP's Technical Note on Water Accounting Definitions](#).
- If reporting "zero consumption" please remember to check your discharge volumes. Scorers will check that discharge and withdrawals volumes balance (approximately).

Comparison with previous year (column 3)

- CDP does not define the threshold for considering a value as 'much higher' rather than simply 'higher' (or 'much lower'/'lower'). CDP requests this information from many different industries with huge variations in water use, and it would therefore be difficult to provide a universal threshold that is meaningful (as proportions will equate to different absolute values and impacts).
- CDP recommends that you define your own threshold for what is 'much higher' (and 'much lower') and apply it consistently so that the reported data for this question is comparable and data users can track your water accounts more effectively each year. A company-specific explanation for these thresholds should be provided in column 4 (Please explain).

Please explain (column 4)

- Include any contextual information necessary to understand how the volumetric data have been compiled, such as any standards, methodologies, and assumptions used.
- If you have left column 2 blank because you do not have the data, please describe the barriers to reporting that data and any plans to collect and report it.
- Describe the thresholds for what is 'much higher' and 'much lower' for the change in volume for each water aspect compared to the previous year.
- You should account for the change compared to last year and also describe future projections for these volumes.
- If there is any level of uncertainty in your 'Total' figures in column 2, or if there is an estimated figure, you should explain it in this field and give the range of uncertainty. Uncertainty can arise from data gaps, assumptions, metering/measurement constraints including equipment accuracy, data management, etc.
- **Note:** CDP expects withdrawals, discharges and consumption figures to balance (approximately; +/- 5%) so if there is a good reason why this cannot happen, it should be explained in here.

Please explain – additional guidance for consumption volume (row 3)

- For the "water consumption" row, you should indicate if your figure is based on an aggregation of local measurements, an aggregation of local calculations, or is a company-wide calculation (for example using withdrawals minus discharges).
- If known, please provide a breakdown of this figure (with reference to CDP's definition of consumption) and a brief explanation. Breakdowns include:
 - volume incorporated into products, crops or waste
 - volume evaporated or transpired
 - volume consumed by humans or livestock
 - net volume stored in a controlled manner
 - net volume stored for future use
 - volumes otherwise excluded from discharges out of the organization's boundary
- It is important that you explain a negative consumption figure where this is the case. This would indicate that your discharges are larger than your withdrawals for the reporting year - due to a net release of water from storage, for example.

Explanation of terms

- **Water balance:** An account of the volumes of water flowing into and leaving an organisation across its boundary. When the two volumes are equal, the net water balance will be zero.
- **Water consumption:** The amount of water that is drawn into the company boundary and not discharged back to the water environment or a third party. It is important to distinguish the term 'consumption' from the term 'water withdrawal' or 'water use'. Water consumed is water that during the reporting year:

- has been incorporated into products, crops or waste;
- has evaporated or transpired;
- consumed by humans or livestock;
- has been stored in a controlled manner because it is polluted to the point of being unusable by other users, and so that it does not leave the organization's boundary;
- has been stored during the reporting year for use or discharge in a subsequent reporting period;
- is otherwise excluded from discharges out of the organization's boundary so that it is no longer available for use by the ecosystem or local community.

Consumption may be measured directly or modelled, or it can be calculated by subtracting the total water discharge from company boundary from total water withdrawn into the company boundary during the reporting period. As CDP data users require comparability, all disclosing companies should use this method.

If the company discharges more water than it withdraws, for example, because it has used and then discharged previously stored water, a negative consumption value is possible. This would indicate a net contribution to the water environment in the reporting year.

- **Water discharges – total volumes:** The sum of effluents and other water leaving the organization's boundary and released to surface water, groundwater water or to third parties over the course of the reporting year. This includes all water leaving the company boundary, whether it is:

- considered used or unused;

- released through a defined discharge point (point source discharge), or;
- released over land in a dispersed or undefined manner (non-point source discharge), or as;
- wastewater removed from the organization via truck.

Water discharge can be authorized (in accordance with discharge consent) or unauthorized (if discharge consent is exceeded).

- **Water diversions (Metals & mining sector only):** According to the [Water Accounting Framework from the Mineral Council of Australia](#) water diversions are flows from an input to an output without being utilized by the operational facility. The flow is not stored with the intention of being used in a task or treated.

(W-OG1.2c)

This question only applies to organizations with activities in the oil & gas sector - it will not be displayed here unless you opted to view these sector-specific questions.

(W1.2d) Provide the proportion of your total withdrawals sourced from water stressed areas.

Question dependencies

- This question only appears if you indicate in W1.2 that you monitor the following water aspect(s):
- Water withdrawals – volumes from stressed areas

Change from 2017

New question

Rationale

Since water is a shared resource, and water-related impacts are localized, organizations are increasingly being encouraged to prioritize action in areas with water stress and to understand and respond to local contexts. This question on water from stressed areas supports a trend towards context-based metrics for corporate water reporting and target setting, and in addition, the TCFD recommends disclosure of reliance on water from areas of water stress.

The data requested assists the assessment of your organization's dependence on potentially contested sources (regardless of whether your facility itself is located in a stressed area), as well as your potential impact on sensitive locations.

Water stress occurs when the demand for water exceeds availability during a certain period, or when access is restricted due to poor quality or regulatory enforcement for example. It can compound basin challenges, both in terms of quantity (e.g., stress can result in rivers running dry causing problems for fish, transportation, as well as in long term changes to water sources) and quality (e.g., stress can worsen eutrophication, organic matter pollution, saline intrusion, etc.).

Water stress is a driver of business risk and, as it is likely to worsen, transparency is critical. Gaining an insight into the potential for an increased exposure to elevated business risk due to operations in water stressed areas is very important for the investor community, and overtime this question will allow data users to review the trend in dependency on water from stressed basins. While CDP provides investors, customers and other data users with data about inherent risk exposure such as this, it also provides information about your response to that exposure which can be used to understand the residual risk.

Knowledge of water-related hot spots helps your company identify where water stress may be affecting its operations, now or in the future, as well as to prioritize your sustainable water management practices.

- Note that to identify whether withdrawals are located in water stressed areas, companies can use one of the publicly available credible tools detailed in the guidance for this question or otherwise explain the approach taken.

Connection to other frameworks

CEO Water Mandate

Current state: Performance

SDG

Goal 6: Clean water and sanitation

Response options

Please complete the following table:

% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: <ul style="list-style-type: none"><input type="radio"/> Much lower<input type="radio"/> Lower<input type="radio"/> About the same<input type="radio"/> Higher<input type="radio"/> Much higher<input type="radio"/> This is our first year of measurement	Select from: <ul style="list-style-type: none"><input type="radio"/> WBCSD Global Water Tool<input type="radio"/> WRI Aqueduct<input type="radio"/> WWF Water Risk Filter<input type="radio"/> IPIECA Global Water Tool for Oil and Gas [oil & gas companies only]<input type="radio"/> Other, please specify	Text field [maximum 5,000 characters]

Requested content

General: Identifying withdrawals from stressed areas

- This disclosure does not request volumetric data – only a figure for the proportion of withdrawals from stressed areas. Please refer to CDP's water accounting definitions and the Explanation of terms for this question before completing the table.
- Organizations should report which approach/tool they use to assess whether their withdrawals are from a 'stressed area'. They should explain the approach taken and which data sets were used to assess 'water stress'.
- Credible, publicly available methodologies for assessing levels of water stress include WRI [Aqueduct Water Risk Atlas](#), WWF-KfW DEG [Water Risk Filter](#), WBCSD [Global Water Tool](#), and the IPIECA [Global Water Tool for Oil and Gas](#) (see Additional information for more details about these tools).
- As good practice, a water-stressed area must be measured, at a minimum catchment level, and when using the above tools, companies should use the following indicators and thresholds for defining an area as water stressed for the purposes of disclosure to CDP:
 - Baseline water stress is equal to/greater than high: 40-80%
 - Water depletion is equal to/greater than 75% on an annual, seasonal and inter-annual timescale
- These indicators account for water stress only in terms of the quantity of water resource available. There are currently no tools/indicators available which also take account of accessibility and water quality and which would reflect the CEO Water Mandate's more inclusive definition of water stress. This definition is adopted by CDP – see the Explanation of Terms for this question and the Glossary. The tools and indicators recommended will be reviewed over time.
- Organizations can complement the results of these tools with their own assessments or by using other methodologies. Some companies will use more granular level data and local knowledge of the basins in which they operate to assess which withdrawals are from stressed areas. For example, a company may consider its facility to be in a water-stressed sub basin or other smaller geographic level, though a global data set suggests that the particular catchment is not stressed.
- Many national and regional water authorities will also have suitable maps, databases and environmental assessments available. (These may be included in the [FAO/AquaStat database](#), or in reports of progress against [SDG 6.4.2](#).)
- Note that this question asks about the location of withdrawal sources rather than your facilities. In most cases, these will not be different at a catchment level. If you are supplying data based on the location of facilities, because you do not know the exact location of all your withdrawal sources, please indicate this is column 4.

% withdrawn from stressed areas (column 1)

- Your disclosure should include all withdrawals within stressed areas and all sources listed in W1.2h, including third party suppliers. The proportion is calculated as:

$$\frac{\text{Volume withdrawn in stressed areas}}{\text{Total volume for company-wide withdrawals}} \times 100$$

- 'Total volume of company-wide withdrawals' is the sum of all water drawn into the company boundary from all the relevant sources as disclosed in W1.2b.
- If you have no withdrawals from stressed areas in the current reporting year, please enter a zero and explain in column 4.

- If you do have withdrawals from stressed areas in the current reporting year you may provide an estimate and explain this why this is the case in column 4.

Comparison with previous reporting year (column 2)

- If you left column 1 blank because you are unable to report or estimate a withdrawal figure this year, you may use this column to provide an estimated response of the change compared to last year, and explain that this is the case in column 4.
- CDP does not define the threshold for considering a value as 'much higher' rather than simply 'higher' (or 'much lower')/lower'). CDP requests this information from many different industries with huge variations in water use, and it would therefore be difficult to provide a universal threshold that is meaningful (as proportions will equate to different absolute values and impacts). CDP recommends that you define your own threshold for what is 'much higher' (and 'much lower') and apply it consistently so that each year the reported data for this question is comparable and data users can track your water accounts more effectively. A company-specific explanation for these thresholds should be provided in column 4 (Please explain).

Identification tool (column 3)

- Select the tool your organization uses to identify whether its withdrawals are located in geographic areas of water stress.
- If you have used a different tool, methodology or data set, please select 'Other, please specify' and provide a label for the tool/approach in the text field provided (if you need more than 40 characters, use the comment box by clicking on the "speech bubble" icon) and give details in column 4.

Please explain (column 4)

- Use this field also to give more details about:
 - the proportion you reported in column 1
 - any exclusions in your reporting of withdrawal volumes and reasons for them
- If you entered a zero in column 1, please give an explanation.
- If you left column 1 or column 2 blank, please provide an explanation for why you have no data this year and indicate any plans to report this in the future.
- If your responses to column 1 or column 2 are partially or wholly estimated, please explain your approach to estimation.
- If you have selected a recommended tool in column 3, give a reason for your selection and the data sets you use within the tool.
- If you have not used one of the tools recommended, please describe:
 - the tool and your rationale for using it
 - how "stressed areas" are defined and identified, including the threshold applied
 - if possible, the methodology used such as the data sets that your assessment is based on (see Additional information)
- This question asks about the location of withdrawal sources rather than your facilities. Please indicate if you are only able to supply data based on the location of facilities and give your reason.
- If desired, you may give an explanation of your company's management response the exposure to business risks associated with the percentage disclosed in column 2, and your experience of working in water stressed areas. This is optional but may provide data users with context to better interpret the significance of the figures reported.

Explanation of terms

- **Baseline water stress:** the ratio of total annual water withdrawals to total available annual renewable supply.
 - This measure is used in the [World Resources Institute's Aqueduct tool](#), WBCSD [Global Water Tool](#), and the IPIECA [Global Water Tool for Oil and Gas](#).
 - High baseline water stress is when withdrawals are in the range of 40-80% of total annual available blue water. Extremely high baseline water stress is when withdrawals are >80% of availability of blue water.
- **Water availability:** Is defined as the natural runoff (through groundwater and rivers) minus the flow of water that is required to sustain freshwater and estuarine ecosystems and the human livelihoods and well-being that depend on these ecosystems. Water availability typically varies within the year and also from year to year. Water availability might be reduced by decreases in both the water quantity and quality of water resources (adapted from [CEO Water Mandate's "Corporate Water Disclosure Guidelines"](#)).

- **Water depletion:** A metric based on the percentage of consumptive use to renewable available water in a water shed.

- This is used in the [WWF/DEG KfW Water Risk Filter](#) (indicator 1.1 - Water Depletion). A depletion score of 'Medium' or a Risk score of 3+ represents basins where a 75% threshold is exceeded on a dry-year basis (Medium), seasonal basis (High), or annual average basis (Very High). This approach shows the temporal and spatial dimensional of water stress on a single map.

- **Water scarcity:** refers to the volumetric lack of freshwater resources. It is a human-driven concept; it is a function of the volume of human water consumption relative to the volume of water resources in a given area. As such, an arid region with very little water, but no human water consumption would not be considered "scarce," but rather "arid."

Water scarcity (unlike water stress) is a physical, objective reality that can be measured consistently across regions and over time. Water scarcity reflects the physical abundance of fresh water rather than whether that water is actually suitable for use. For instance, a region may have abundant water resources but have such severe pollution that those supplies are unfit for human or ecological uses. This region would not be considered water scarce, but would be considered water stressed (based on the CEO Water Mandate's [Corporate Water Disclosure Guidelines](#), 2014).

- **Water stress:** the ability, or lack thereof, to meet human and ecological demand for fresh water. Compared to scarcity, "water stress" is a more inclusive and broader concept. It considers several physical aspects related to water resources, including water availability, water quality, and the accessibility of water. It can also be based on subjective elements so that it is assessed differently depending on societal values, such as the suitability of water for drinking, the requirements to be afforded to ecosystems, and whether people can make use of the physically available water supplies. This is often a function of the infrastructure and the affordability of water, among other things. Consider for instance, a region may have abundant water resources (and thus not be considered water scarce), but it may have such severe pollution that those supplies are unfit for human or ecological uses. Consider also that a sector able to use any quality of water may enjoy more availability than another sector in the same catchment that depends on high quality water (based on the CEO Water Mandate's definition of water stress, [Corporate Water Disclosure Guidelines](#), 2014).

- **Water stressed area:** there is no universally accepted methodology for classifying an area as water stressed, nor for identifying whether facilities are located in a water stressed area. As good practice, a water stressed area should be at the catchment level as a minimum. CDP's reporting guidance for W1.2d suggests some publicly available and credible tools for identifying water stressed areas based simply on physical scarcity.

[\(W-FB1.2e\)](#) [\(W-FB1.2f\)](#) [\(W-FB1.2g\)](#)

Questions W-FB1.2e to W-FB1.2g apply only to organizations with activities in the food, beverage and tobacco sector - they will not be displayed here unless you opted to view these sector-specific questions.

[\(W1.2h\) Provide total water withdrawal data by source.](#)

Question dependencies

- This question only appears if you indicate in W1.2 that you monitor the following water aspect(s):
- Water withdrawals – volume by source

[Change from 2017](#)

Modified question (2017 W1.2a)

Rationale

Distinguishing between source types and reporting volume of water withdrawn by source contributes to an understanding of the potential risks and impacts associated with an organization's water use as this level of detail can be significant. For example, withdrawing water from an overdrawn aquifer will have different consequences for local water stress and a company's water security than does withdrawing seawater. Clean freshwater is becoming increasingly scarce, and this can impact production processes that rely on large volumes of water.

In regions where water sources are highly restricted, the organization's water consumption patterns can also influence relations with other stakeholders.

[Connection to other frameworks](#)

[CEO Water Mandate](#)

Current state: Performance

[SDG](#)

Goal 6: Clean water and sanitation

Response options

Please complete the following table:

Source	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Select from: <input type="radio"/> Relevant <input type="radio"/> Relevant but volume unknown <input type="radio"/> Not relevant	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Select from: <input type="radio"/> Much lower <input type="radio"/> Lower <input type="radio"/> About the same <input type="radio"/> Higher <input type="radio"/> Much higher <input type="radio"/> This is our first year of measurement	Text field [maximum 1,000 characters]
Brackish surface water/seawater				
Groundwater – renewable				
Groundwater – non-renewable				
Produced water				
Third party sources				

Requested content

- Note: Organizations responding to an electric utilities or metals & mining sector request should refer to additional sector-specific guidance on this question at the end of the "Requested content" section.

General

- For the different sources, this question is requesting a figure for aggregated withdrawal volumes from across your organization. Information about your withdrawals by their source allows a better understanding of your company's dependency on different sources, the trend in that dependency, and your risk exposure from different water sources. If you do not have aggregated company-wide volumetric data, you may provide an estimate and give an explanation in column 5 (Please explain).
- Cooling water:** Cooling water (freshwater or sea water) is often withdrawn in large quantities and discharged back to its original source with negligible losses or variation in quality. However, this should be included in your water accounts. For example, a utility company may use large volumes of surface water for cooling purposes, and the water quality may not need to be fresh. Companies should report this information by selecting 'Non-fresh surface water/seawater', to demonstrate to investors that they are not dependent on potentially scarce fresh surface water sources and therefore their risk exposure is likely to be less than if they were dependent on freshwater resources.
- Rainwater:** If a company is managing rainwater (for example, by harvesting for use or storage, or to prevent flooding) or is dependent on it for production of goods or the delivery of services, it should try to estimate and disclose it as a withdrawal from the hydrological system into the company boundary.

- Companies may choose to exclude collected rainwater and domestic sewage from their water withdrawal/discharge volumes only if this would result in less than 5% error in their water balance.
- Including rainwater helps companies better understand their water dependency and risks. For some companies, precipitation/rainwater volumes may constitute a principal input of water at site level. In these cases, excluding rainwater from water accounting – withdrawal and discharge - would not be a true reflection of site water balance. In addition, there may be reduced impacts from using rainwater in place of other local freshwater sources.

- Oil & gas sector only: Groundwater** - As part of groundwater withdrawal volumes (be it from renewable or non-renewable sources), organizations should include all withdrawals from aquifers (other than the formation being exploited). These withdrawals may be intended for any use in the organization, including injection to maintain well pressure or as part of the fracture fluids.

Source (column 1)

- **Fresh surface water:** For the purposes of this disclosure you should include all surface water sources of a higher quality than brackish (i.e. a TDS lower than 10,000 mg/l).

Relevance (column 2)

- Select:
 - "Relevant" if your company uses, has used or plans to use the source, even if the withdrawal is zero for this reporting year.
 - "Relevant but volume unknown" if your company uses, has used or plans to use the source, but the volume for this year is unknown and can not be estimated. Columns 3 and 4 will then be disabled and you should provide further explanation in column 5 (Please explain).
 - "Not relevant" if your company does not withdraw from the source. Columns 3 and 4 will then be disabled. You may provide further explanation in column 5 (Please explain).

Volume (column 3)

- Volumes should be reported in megaliters per year (1 megaliter = 1 million liters or 1000 m³). Your reporting year is the time period you stated in response to question W0.2.
- If you do have volumetric data for the current reporting year you may provide an estimate and explain this why this is the case in column 5.
- Please remember that a zero should only be used for reporting zero volumes and not for an absence of data.
- If reporting zero withdrawals, provide an explanation in column 5.
- If reporting zero withdrawals, provide an explanation in column 5. Before deciding whether your withdrawals should be reported as "zero", please refer to CDP's definition of water withdrawals.

Comparison with previous reporting year (column 4)

- CDP does not define the threshold for considering a value as 'much higher' rather than simply 'higher' (or 'much lower'/'lower'). CDP requests this information from many different industries with huge variations in water use, and it would therefore be difficult to provide a universal threshold that is meaningful (as proportions will equate to different absolute values and impacts).
- CDP recommends that you define your own threshold for what is 'much higher' (and 'much lower') and apply it consistently so that each year the reported data for this question is comparable and data users can track your water accounts more effectively. A company-specific explanation for these thresholds should be provided in column 5 for each source.

Please explain (column 5)

- To assist CDP data users to understand a company's water use, you should explain your selections for relevance, volumes and trend (columns 2, 3 and 4), and include company-specific information.
- Report whether your volumes for each source are estimated, modelled, or sourced from direct measurements. If estimation or modelling has been used, report the estimation or modelling methods.
- Please explain any zero volumes for relevant sources. For example, "we sometimes withdraw water from this source but the volume for the reporting year was zero".
- Please give an explanation of the thresholds used for the trends reported in column 4, and describe anticipated future trends.
- For 'Fresh surface water' (row 1), it is important that you state which of the sources apply (rainwater, water from wetlands, rivers and lakes). Also state whether those sources are monitored and if you know whether the withdrawal volume for each source is increasing or decreasing. If you are using and managing rainwater and the volume equates to more than 5% of your water balance, please explain if it is harvested, treated etc. and the benefits and impacts of using it.
- For 'Third party' (row 6), if possible please specify whether the third party is a municipal supplier or another type of third party organization. This is particularly important if the third party is known to be located in a water stressed area.

Explanation of terms

- **Brackish surface water/seawater:** Surface water in which the concentration of salts is high and far exceeds normally acceptable standards for municipal, domestic or irrigation use (at least higher than 10,000 mg/l TDS). Seawater has a typical concentration of salts above 35,000 mg/l TDS.
- **Fresh surface water, including rainwater, water from wetlands, rivers and lakes:** Water that is naturally occurring water on the Earth's surface in ice sheets, ice caps, glaciers, icebergs, bogs, ponds, lakes, rivers and streams, and has a low concentration of dissolved solids.
For the purposes of reporting water accounting data to CDP, this surface water source includes water of a quality generally acceptable for, or requiring minimal treatment to be acceptable for, domestic, municipal or agricultural uses (at least <10,000 mg/l TDS, though a range of additional quality properties may also be considered). 'High quality' fresh water sources considered acceptable for potable use are typically characterized as having concentrations of dissolved solids less than 1,000 mg/l.
- **Groundwater (non-renewable):** Water which is being held in, and can be recovered from, an underground formation. Non-renewable groundwater has a negligible rate of natural recharge on the human time-scale (more than 50 years), and is generally located at deeper depths than renewable groundwater. This is sometimes referred to as "fossil" water.

- **Groundwater (renewable):** Water which is being held in, and can be recovered from, an underground formation. Renewable groundwater sources can be replenished within 50 years and are usually located at shallow depths.
- **Produced water:** Water which enters the organization's boundary as a result of the extraction, processing, or use of any raw material, so that it must be managed by the organization. When reporting to CDP, this water should not be counted as recycled water when put to use within a single cycle of a business process. Examples of produced water include moisture derived from vegetation such as in sugar cane crushing and the water content in crude oil (note that companies with oil and gas activities should refer to [CDP's sector specific guidance](#) for this water aspect).
- **Produced water (Oil & gas sector only):** Water that is brought to the surface during the production of hydrocarbons including formation water, flow-back water and condensation water (adapted from IPIECA's "[Oil and gas industry guidance on voluntary sustainability reporting](#)", 3rd edition, 2016).
- **Third party sources:** This includes water provided by municipal water suppliers, public or private utilities, and wastewater from any other organization.
- **Water withdrawal:** The sum of all water drawn into the boundaries of the organization from all sources for any use over the course of the reporting period.

(W1.2i) Provide total water discharge data by destination.

Question Dependencies

- This question only appears if you indicate that you monitor the following water aspect(s):
 - Water discharges - volume by destination

Change from 2017

Modified question (2017 W1.2b)

Rationale

Reporting volume of water discharged to specific destinations contributes to an understanding of the specific risks and impacts associated with an organization's water discharges.

Connection to other frameworks

CEO Water Mandate

Current state: Performance

SDG

Goal 6: Clean water and sanitation

Response options

Please complete the following table:

Destination	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Select from: <ul style="list-style-type: none"><input type="radio"/> Not relevant<input type="radio"/> Relevant<input type="radio"/> Relevant but volume unknown	Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places]	Select from: <ul style="list-style-type: none"><input type="radio"/> Much lower<input type="radio"/> Lower<input type="radio"/> About the same<input type="radio"/> Higher<input type="radio"/> Much higher<input type="radio"/> This is our first year of measurement	Text field [maximum 1,000 characters]
Brackish surface water/seawater				
Groundwater				
Third-party destinations				

Requested content

- Note: Organizations responding to an electric utilities or metals & mining sector request should refer to additional sector-specific guidance on this question at the end of the "Requested content" section.

General

- This question is requesting an aggregated figure for your discharge volumes across your organization. If you do not have aggregated company-wide volumetric data, you should provide and estimate and give an explanation in column 5 (Please explain).
- Zero discharge permit:** If your company has a zero discharge permit, please consider any discharges that may exist outside this permit and may still be relevant to CDP's definition of discharges.
- Rainwater:** Rainwater/run-off that enters the site/facility boundary and is captured could also be counted as an output or discharge (even if not used in operations) if returned to the water environment via a dedicated discharge destination; e.g. river or groundwater via soakaway/filtration pond. You may choose to exclude collected rainwater from your discharge accounting, unless this would result in an error in your balance of more than 5%.

- Please note that in the mining industry precipitation/rainwater volumes may constitute a principal input of water at site level and excluding rainwater would not be a true reflection of their site water balance.
Companies in this sector (and others to which this is relevant) should report rainwater/runoff drawn into the boundaries of their operations and then discharged and explain this in column 5.

- Cooling water:** Cooling water (freshwater or sea water) is often withdrawn in large quantities and discharged back to its original source with negligible losses or variation in quality. However, this should be included in your water accounts.
- Domestic sources:** Domestic sewage is not regarded as water discharge. However, if wastewater comes from domestic sources but is pre-dominantly generated from sector business activities e.g. healthcare residential properties, this should be reported if it would result in an error in your balance of more than 5%.
- Aquifer reinjection:** reinjection to aquifers should be considered as a discharge to groundwater.
- Soakaway:** Water returning to a groundwater source via a soakaway should be considered as a discharge.
- Oil & gas sector only: Groundwater** - In oil production, as part of secondary and tertiary recovery operations, water-based fluids (from various sources) may be used to maintain the pressure, and to displace the hydrocarbons and move them towards the production wells. For CDP disclosure, organizations must report these volumes as discharges to groundwater bodies, to enable comparability and have an accurate water balance.

Relevance (column 2)

- Select:
 - "Relevant" if your company uses, has used or plans to use the source, even if the discharge is zero for this reporting year.
 - "Relevant but volume unknown" if your company uses, has used or plans to use the source, but the volume for this year is unknown. Columns 3 and 4 will then be disabled. You should provide further explanation in column 5 (Please explain).
 - "Not relevant" if your company does not withdraw from the source. Columns 3 and 4 will then be disabled. You should provide further explanation in column 5 (Please explain).

Volume (column 3)

- Volumes should be reported in megaliters per year (1 megaliter = 1 million liters or 1000 m³). Your reporting year is the time period you stated in response to question W0.2. If reporting zero withdrawals, provide an explanation in column 5.
- If you do have volumetric data for the current reporting year you may provide an estimate and explain this why this is the case in column 5.
- Please remember that a zero should only be used for reporting zero volumes and not for an absence of data.
- If reporting zero discharges, provide an explanation in column 5.
- Before deciding whether your discharges should be reported as "zero", please refer to CDP's definition of water discharges. This may be the case, for example, if a closed water circuit, or zero liquid effluent discharge complex, is in operation and a facility does not discharge water as all water is re-used by the operation(s) during processing/production.

Comparison with previous reporting year (column 4)

- CDP does not define the threshold for considering a value as 'much higher' rather than simply 'higher' (or 'much lower'/'lower'). CDP requests this information from many different industries with huge variations in water use, and it would therefore be difficult to provide a universal threshold that is meaningful (as proportions will equate to different absolute values and impacts).
- CDP recommends that you define your own threshold for what is 'much higher' (and 'much lower') and apply it consistently so that each year the reported data for this question is comparable and data users can track your water accounts more effectively. A company-specific explanation for these thresholds should be provided in column 5 for each destination.

Please explain (column 5)

- To assist CDP data users to understand a company's water use, you should explain your selections for relevance, volumes and trend (columns 2, 3 and 4), and include company-specific information.
- Report whether your volumes for each destination are estimated, modelled, or sourced from direct measurements. If estimation or modelling has been used, report the estimation or modelling methods.
- To give data users confidence in your response, please explain any zero volumes for relevant destination's; e.g. if a completely closed loop cooling system has been introduced. Please remember to report any discharged water that exceeds site storage capacity, e.g. excessive rainfall, as a separate discharge.
- Please give an explanation of the thresholds used for the trends reported in column 4, and describe anticipated future trends.
- For discharges to a Third-party, it is important to state if this includes water to other organizations for further use.

Explanation of terms

- **Brackish surface water/seawater:** Surface water in which the concentration of salts is high and far exceeds normally acceptable standards for municipal, domestic or irrigation use (at least higher than 10,000 mg/l TDS). Seawater has a typical concentration of salts above 35,000 mg/l TDS.
- **Fresh surface water, including wetlands, rivers and lakes:** Water that is naturally occurring water on the Earth's surface and has a low concentration of dissolved solids.
- **Groundwater:** Water which is being held in, and can be recovered from, an underground formation. Discharge to groundwater, by human activity or natural activity, refers to a destination beneath the soil surface, such as a water bearing layer of rock (aquifer). Examples of discharges to groundwater include disposal of sewage, trade effluent and surface water run-off from urban areas, through such methods as spreading basins, soakaways, swales or injection wells.
- **Third-party destinations:** This includes municipal wastewater plants, public or private utilities, and other organizations involved in the transport, treatment, disposal or further use of wastewater.
 - Note that to qualify as a third-party destination, "other organizations" using your wastewater must be outside your reporting boundary given in question W0.5.
 - Any of your wastewater that has been treated on your own site should be reported as discharge according to its ultimate destination (for example, to groundwater), as this is where any potential risks for the company lie.
- **Water discharge:** The sum of effluents and other water leaving the boundaries of the organization and released to surface water, groundwater, or third parties over the course of the reporting period (adapted from GRI Standard 306-1, 2016). This includes all water leaving the company boundary, whether it is:
 - considered used or unused;
 - released through a defined discharge point (point source discharge);
 - released over land in a dispersed or undefined manner (non-point source discharge);
 - wastewater removed from the organization via truck.

Companies may choose to exclude collected rainwater and domestic sewage from their water discharge volume unless this would result in an error in their water balance of more than 5%.

Water discharge can be authorized (in accordance with discharge consent) or unauthorized (if discharge consent is exceeded).

(W1.2j) What proportion of your total water use do you recycle or reuse?

Question dependencies

- This question only appears if you indicate in W1.2 that you monitor the following water aspect(s):
- Water recycled/reused

Change from 2017

New question

Rationale

There is a growing focus on recycling and reuse activity in corporate water management practice and reporting. The recirculation and subsequent use, with or without treatment, of a water volume that would otherwise be discharged can be a measure of efficiency, and indicate an organization's commitment to reducing total water withdrawals and discharges. Increased reuse and recycling can reduce water demand, treatment, and associated disposal costs and risks. Reducing water demand over time may also contribute to public policy goals at all levels, such as [Sustainable Development Goal 6.4](#).

There is no single standard approach to defining recycling activity or volumes due to infinite variations in the way that water is used and processed through operations and production systems. Therefore, the aim of this question is to drive transparency on recycling/reuse activity and commitment. Providing a comparison with the previous year can help data users to understand the trend as part of your water stewardship and security commitments.

Some industries do have established standard approaches to measuring recycling activity, and these should be used wherever possible. [For companies disclosing to a CDP Metals & Mining and Oil & Gas sector request, a sector-specific question will be presented, and sector-specific guidance provided].

Information about your water recycling and reuse across all operations builds a picture of how prevalent this practice is throughout your business. We are asking about this for all your locations, not simply stressed areas, as we do not wish to de-incentivize water recycle/reuse projects in non-water stressed regions (which may contribute to avoiding future stress in those regions).

The question requests the proportion of your water use that is recycled/reused. Absolute volumes may indicate a water efficiency increase, but freshwater dependency and environmental impact are only reduced if this translates into a reduction in absolute withdrawals. Leading companies should be able to demonstrate a reduction in demand and dependence as a result of increased recycling and reuse.

- Note that in section W5 (Facility Level Water Accounting), you may be presented with questions about recycling and reuse activity at facilities that expose your company to risk.

Connection to other frameworks

CEO Water Mandate

Response: Internal actions

SDG

Goal 6: Clean water and sanitation

Response options

Please complete the following table:

% recycled or reused	Comparison with previous reporting year	Please explain
Select from: <input type="radio"/> None <input type="radio"/> Less than 1% <input type="radio"/> 2-10 <input type="radio"/> 11-25 <input type="radio"/> 26-50 <input type="radio"/> 51-75 <input type="radio"/> 76-99 <input type="radio"/> 100%	Select from: <input type="radio"/> Much lower <input type="radio"/> Lower <input type="radio"/> About the same <input type="radio"/> Higher <input type="radio"/> Much higher <input type="radio"/> This is our first year of measurement	Text field [maximum 2,500 characters]

Requested content

- Note: organizations responding to a metals & mining or oil & gas sector request will be presented with an additional question on this topic (W-MM1.2j; W-OG1.2j) relating specifically to their activities in those sectors. Data submitted for W1.2j should be with associated with their whole organization as defined by their reporting boundary.

General

- When responding to this question, consider the proportion of your water demand that is being met through recycling/reuse activity. It is expected that the higher the proportion, the more your withdrawals may be reduced. Also, consider the trend and potential significance of recycling/reuse for your operations.
- We recognize that a high level of recycling is not always advantageous to a company nor beneficial to the environment in all circumstances; e.g. there are energy tradeoffs, water quality requirements, it is not cost effective for your type of operation or your withdrawals are mainly from low quality water sources. For this reason, this disclosure simply requests that companies report and explain their level of activity and their approach. This will enable data-users to build an understanding of practice in your industry.
- This question refers to recycling /reuse activity within your company boundary, and not your use of water that was recycled by, or previously used by, a third-party organization. The disclosure does not request volumetric data – only a figure and trend for the proportion of total water demand that is met by recycling/reuse.
- There is no internationally agreed methodology for quantitatively reporting water recycling activity and no single method that fits all industries and circumstances. To facilitate comparability, we encourage you to refer CDP's water accounting definitions before completing the table and to use the approach suggested by CDP, if feasible for your operations.
- **If this suggested approach is not technically feasible or does not reflect your industry standard, you may disclose a figure based on a different approach and provide details of that approach**
- Note that for CDP's approach:

- This disclosure includes both water treated and not-treated prior to reuse.
- The use may be within the same process (recycling) or another process (reuse) of the same facility.
- The recycling/reuse may be within the same facility or at another facility of the same organization.
- This disclosure does not include the first use of wastewater from another organization, nor the first use of harvested rainwater (as these are withdrawal sources – see W1.2h).
- You may include the use of domestic greywater in your reuse volumes where this is significant for your operations.
- The use of produced water is not considered as recycling/reuse, as this is a water withdrawal category for CDP.

- If your organization uses a different approach/method to arrive at your figure, provide a detailed description in column 3; e.g. how you account for volumes of recycled or reused water or which water volumes do you consider as part of your water use.
- **Electric utilities sector only:** In hydroelectric operations, only pumped-storage operations can be considered for water reuse. It is expected that most organizations will report 0 for their hydroelectric operations in this question.

% recycled and reused (column 1)

- Please select the option that best indicates the water recycled and reused across your organization as a proportion of your total water use in all your operations.

-'Total water recycled and reused' should indicate the reduction in the volume of water demand over the reporting period that resulted from the reuse/recycling.

-'Total water use' is the sum of water used in your operations. This can be calculated as the sum of all water drawn into the company boundary as disclosed in W1.2b (minus any sent to storage), any use of stored

water and the volumes of water you recycle/reuse.

- The percentage reported will be the proportion your total water use that is met by recycling/reuse. The proportion is calculated as:

$$\frac{\text{Total water recycled and reused}}{\text{Total water recycled and reused} + \text{total water withdrawals (minus any sent to storage)} + \text{total use of stored water}} \times 100$$

- If you have not recycled or reused water in the current reporting year, please select 'None' and explain in column 3.
- You may provide an estimate and explain why this is the case in column 3.
- If you are unable to use the approach recommended by CDP, please use column 3 to explain the approach and calculation your organization uses to arrive at a percentage.

Comparison with previous reporting year (column 2)

- If you left column 1 blank because you are unable to report a calculated or estimate figure this year, you may give an estimate for the change if possible.
- CDP does not define the threshold for considering a value as 'much higher' rather than simply 'higher' (or 'much lower'/'lower'). CDP requests this information from many different industries with huge variations in water use, and it would therefore be difficult to provide a universal threshold that is meaningful (as proportions will equate to different absolute values and impacts).
- CDP recommends that you define your own threshold for what is 'much higher' (and 'much lower') and apply it consistently so that each year the reported data for this question is comparable and data users can track your water accounts more effectively. A company-specific explanation for these thresholds should be provided in column 3 (Please explain).

Please explain (column 3)

- Describe the approach or method your organization has taken to report your percentage recycled/reused. State clearly whether CDP's definition and calculation method were used, or an alternative.
- If you did not use CDP's definition and method, provide an explanation including the definition you've used and why CDP's proposed method is not feasible or optimal, e.g. because you have followed industry guidance.
- Please explain how the volume of water recycled and reused was measured or calculated, e.g. how multiple cycles of recirculation were counted.
- Please include any barriers to your recycling/reuse activity if they apply, giving company-specific details. For example: "Further treatment of waste water would generate more energy use, emissions, chemical use and air emissions as well as financial cost. Thus, we do not consider increasing levels of recycling to be a useful performance metric and further recycling efforts are assessed on a case by case basis".
- You may include a description of the actual or anticipated impact of the recycling/reuse; e.g. reduced withdrawal of or dependence on freshwater, reduced need to develop new sources, protection of a contested source, significant cost savings.
- You may include an explanation of the trend disclosed in column 2, and also describe your anticipated trend/future initiatives for recycling and reuse and limitations on the opportunity to increase recycling further.
- If your responses to column 1 or column 2 are wholly or partially estimated, please give details of the methodology for your estimation.
- If you selected 'None' in column 1 because you did not recycle or reuse in the current year, please explain why this is the case.
- If you left column 1 or column 2 blank because you are unable to report a figure, please explain why this is the case and state any plans for reporting this figure in the future.

Explanation of terms

- **Total water use:** The sum of water used for all activities in direct operations in the reporting year. This volume can be calculated as the sum of water drawn into the organisation's boundary (water withdrawals put into storage should be subtracted where this is more than 5% of withdrawals), plus water taken from storage for use prior to discharge, plus water that is recycled/reused within your operations.
- **Water recycled/reused:** Water and wastewater (treated or untreated) that has been used more than once before being discharged from the organization's boundary, so that water demand is reduced. This may be in the same process (recycled), or in a different process within the same facility or another of the organization's facilities (reused).

Water intensity

The questions in this section are presented to high-impact sectors only and will not be displayed here unless you have opted to view sector-specific questions.

Value-chain engagement

(W1.4) Do you engage with your value chain on water-related issues?

Question dependencies

- This question only appears if you select "Neutral", "Important", or "Vital" as your "Indirect use importance rating" in response to W1.1.
- Your response to W1.4 prompts subsequent questions. If your response to W1.4 is amended, data already entered in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

New question

Rationale

Companies indicating in W1.1 that water is important in their indirect operations, either upstream and/or downstream, can explain how they are engaging with their value chain beyond their direct operations to manage risks, take collective action or facilitate the transition to a water secure future.

There are multiple drivers and benefits and engagement ranges from mandating supplier reporting of water use and risks to innovative partnerships for water stewardship with product users.

The questions in this section are based on CDP's extensive experience through its supply chain program. Companies need to rationalize their engagement and its coverage, and so this section is not seeking evidence of engagement throughout your value chain. Companies are asked to explain their engagement strategy (e.g. by operational risk, location in stressed areas etc.), and whether, for example, its scope extends to tier 2 suppliers.

- Note that this does **not** ask for the water accounting data of your value chain.

Connection to other frameworks

CEO Water Mandate

Response: Internal actions

Response options

Select all that apply from the following options:

- Yes, our suppliers
- Yes, our customers or other value chain partners
- No, not currently but we intend to within the next two years
- No, we do not engage with our value chain on water

Requested content

General

- You should select all that apply for the reporting year.
- If you select either of the "No" responses, do not select any other options.

Explanation of terms

- **Value chain:** The entire sequence of activities or partners that provide value to or receive value from an organization's products and services, either within, upstream or downstream of direct operations.
- **Value chain partner:** A value chain partner includes any organization/individual a company that provides or receives value from the organisation's products and services, up or downstream of its direct activities; for example, a customer, a franchisee or contractor the company engages with on water stewardship strategies.

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Question dependencies

- This question only appears if you select "Yes, our suppliers" in response to W1.4.

Change from 2017

Modified question (2017 W1.3a)

Rationale

Your supplier engagement activity, such as the percentage of suppliers that report their water management, risks and opportunities, is of interest to investors and other data users wishing to know whether you have a complete picture of the role of water in your value chain and how water security is being protected or progressed.

Connection to other frameworks

CEO Water Mandate

Response: Internal actions

SDG

Goal 6: Clean water and sanitation

Response options

Please complete the following table:

% of suppliers by number	% of total procurement spend	Rationale for this coverage	Impact of the engagement and measures of success	Comment
Select from: <ul style="list-style-type: none">None and we do not plan to request this from suppliersNone currently, but we plan to request this within the next two yearsUnknownLess than 1%1-2526-5051-7576-100	Select from: <ul style="list-style-type: none">UnknownLess than 1%1-2526-5051-7576-100	Text field [maximum 1,000 characters]	Text field [maximum 1,000 characters]	Text field [maximum 500 characters]

Requested content

General

- The focus of this question is your approach to supplier reporting of their water use, risks, and management. For example, this might include information relevant to understanding impacts and risks such as water accounting data, water dependency, water pollution incidents, and risk response.

% of suppliers by number (column 1)

- Select the proportion of suppliers requested by your organization to report water-related information. For example, if you have 100 suppliers and you request 20 of them to report you would select "1-25%" here.
- If you engage with none of your suppliers in this way please provide an explanation in column 3 (Rationale).
- If the figure is unknown, you may provide an estimate or select 'Unknown' and explain why in column 3 (Rationale). For example, this may be because of a lack of resources or instruction from management, or because of poor supplier tracking.

% of total procurement spend (column 2)

- Select the proportion of your procurement spend represented by the suppliers you request to report on water related information.
- For example, 20% of your suppliers by number may account for 80% of your total procurement spend.
- Note that it is not assumed that this figure is an indication of the level of risk within your supply chain.
- If the figure is unknown you may provide an estimate or select 'Unknown' and explain why in column 3 (Rationale).

Rationale for the coverage (column 3)

- Use this space to provide details as to how your suppliers are selected for engagement e.g. how your coverage is determined or prioritized.
- Also include any further details required to understand the rationale for the coverage reported in columns 1 and 2, and why you request your suppliers to report on their water use, risks, and management.
- If you indicated in column 1 (% suppliers by number) that you do not request your suppliers to report on water-related issues, or if the figure in columns 1 and 2 is unknown or estimated, you should explain why, including a company-specific reason for any plans.

Impact of the engagement and measures of success (column 4)

- Briefly describe the information that suppliers are requested to report to you and how the information is used.
- Include the beneficial outcomes of requesting your suppliers to report on their water use, risks, and management. Beneficial outcomes can be either potential or already realized.
- Additionally, describe here how success is measured, for example which metrics you use to assess the success of this engagement activity, and explain why these measures were selected.

Comment (column 5)

- This is optional.

(W1.4b) Provide details of any other water-related supplier engagement activity.

Question dependencies

- This question only appears if you select "Yes, our suppliers" in response to W1.4.

Change from 2017

New question

Rationale

Details of your engagement activity, such as the percentage of suppliers and the percentage of procurement spend it covers, is of interest to investors and other data users wishing to know whether you have a complete picture of the role of water in your value chain and how water security is being protected or progressed. The nature of your engagement activities provides insight into your approach to water stewardship and collective action to address water challenges for your company, and to support public policy objectives, be they local or otherwise, such as the SDGs.

This question gives companies the opportunity to explain their approach and informs the data that is reported in W4 regarding both exposure to risks throughout the value chain and the company's response.

Connection to other frameworks

CEO Water Mandate

Response: Internal actions

SDG

Goal 6: Clean water and sanitation

Response options

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

Type of engagement	Details of engagement	% of suppliers by number	% of total procurement spend	Rationale for the coverage of your engagement	Impact of the engagement and measures of success	Comment
Select from: <ul style="list-style-type: none"> <input type="radio"/> No other supplier engagements <input type="radio"/> Onboarding & compliance <input type="radio"/> Incentivizing for improved water management and stewardship <input type="radio"/> Innovation & collaboration <input type="radio"/> Other 	Select all that apply: <ul style="list-style-type: none"> <input type="radio"/> Response drop-down options below table 	Select from: <ul style="list-style-type: none"> <input type="radio"/> None <input type="radio"/> Unknown <input type="radio"/> Less than 1% <input type="radio"/> 1-25 <input type="radio"/> 26-50 <input type="radio"/> 51-75 <input type="radio"/> 76-100 	Select from: <ul style="list-style-type: none"> <input type="radio"/> None <input type="radio"/> Unknown <input type="radio"/> Less than 1% <input type="radio"/> 1-25 <input type="radio"/> 26-50 <input type="radio"/> 51-75 <input type="radio"/> 76-100 	Text field [maximum 1,000 characters]	Text field [maximum 1,000 characters]	Text field [maximum 500 characters]

[Add Row]

Details of engagement (column 2)

Onboarding & compliance <ul style="list-style-type: none"> <input type="radio"/> Inclusion of water stewardship and risk management in supplier selection mechanism <input type="radio"/> Requirement to adhere to our code of conduct regarding water stewardship and management <input type="radio"/> Other, please specify Incentivizing for improved water management and stewardship <ul style="list-style-type: none"> <input type="radio"/> Water management and stewardship is integrated into supplier evaluation processes <input type="radio"/> Water management and stewardship is featured in supplier awards scheme <input type="radio"/> Offer financial incentives to suppliers reducing your operational water impacts through the products they supply to you <input type="radio"/> Offer financial incentives to suppliers improving water management and stewardship across their own operations and supply chain <input type="radio"/> Other, please specify 	Innovation & collaboration <ul style="list-style-type: none"> <input type="radio"/> Encourage/incentivize innovation to reduce water impacts in products and services <input type="radio"/> Encourage/incentivize suppliers to work collaboratively with other users in their river basins <input type="radio"/> Provide training and support on sustainable agriculture practices to improve water stewardship (food, beverages & tobacco sector only) <input type="radio"/> Educate suppliers about water stewardship and collaboration <input type="radio"/> Other please specify Other <ul style="list-style-type: none"> <input type="radio"/> Other, please specify
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Requested content

General

- In this question you have the opportunity to report your different supplier engagement activities (in addition to the supplier reporting activity reported in W1.4a) and to describe how it is driving water security.

Type of engagement (column 1)

- If your organization uses more than one of the three types of supplier engagement listed, or wishes to report an additional engagement type (select 'Other'), please add rows as needed.
- If your organization has no supplier engagement activity (other than that indicated in W1.4a), please select "No other supplier engagement" and use column 5 (Rationale) to explain why this is the case. Note that all other columns in this question will be disabled.

Details of engagement (columns 2)

- Your selection in column 1 will determine the options shown in column 2. If you select "Other, please specify", please provide a label for the details of engagement. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

% of suppliers by number (column 3)

- Select the proportion of your suppliers that are covered by the engagement activity.
- For example, if you have 100 suppliers and 20 of them are engaged in the activity specified in column 2 (Details of engagement) you would select "1-25%" here.
- If the figure is unknown you may provide an estimate or select 'Unknown' and explain why in column 5 (Rationale). For example, this may be because of a lack of resources or instruction from management, or because of

poor supplier tracking.

% of total procurement spend (column 4)

- Select the proportion of your procurement spend represented by the engagement activity specified in column 2 (Details of engagement).
- For example, 20% of your suppliers by number may account for 80% of your total procurement spend.
- Note that it is not assumed that this figure indicates the level of risk within your supply chain.
- If the figure is unknown you may provide an estimate or select 'Unknown' and explain why in column 5 (Rationale).

Rationale for the coverage of your engagement (column 5)

- Include any details that would help data users to understand why you use this type of engage activity with your suppliers, and give a rationale for the coverage you indicated in columns 3 and 4.
- If you indicated in column 1 (% suppliers by number) that you do not use any supplier engagement, or if the figure in columns 3 and 4 is unknown or estimated, you should explain why, including a company-specific reason any plans.

Impact of the engagement and measures of success (column 6)

- Detail the beneficial outcomes of the engagement activity. Beneficial outcomes can be either potential or already realized. For example, you may wish to describe how the engagement has progressed or protected water security for your company or for other users, or how it has helped your company or your suppliers to build resilience.
- Additionally, describe here how success is measured, for example which metrics you use to assess the success of this engagement activity, and explain why these measures were selected.

Comment (column 7)

- If you wish to explain any other aspect of your approach to engagement with suppliers, please use this column. This is optional.

Explanation of terms

- **Onboarding:** The process used to support and facilitate working with a new supplier.

(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

Question dependencies

- This question only appears if you select "Yes, our customers or other value chain partners" in response to W1.4.

Change from 2017

New question

Rationale

This question will be particularly relevant to companies whose activities may be affected by water issues outside of their supply chain. Such companies will wish to engage with other partners in order to reduce risk and encourage stewardship and innovation, e.g. in their wider value chain.

Connection to other frameworks

CEO Water Mandate

Response: Internal actions

Response options

This is an open text question with a limit of 2,000 characters.

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

Requested content

General

- This question is asking about how your organization engages with its value chain beyond its suppliers. This can include customers but also other partners in the value chain e.g. certain franchisees who meet the criteria outlined in your answer here.
- If you are participating in collective action initiatives, for instance, details of this could be reported here.
- Use this field to include examples of your methods of engagement, measures for success, and a description of impact.

(W1.4d) Why do you not engage with any stages of your value chain on water-related issues and what are your plans?

Question dependencies

- This question only appears if you select "No, not currently but we intend to within two years" or "No, we do not engage with our value chain on water" in response to W1.4.

Change from 2017

Modified question (2017 W1.3b)

Rationale

Engaging with value chain partners on water matters is essential for companies wishing to understand the current and future risks and opportunities associated with these relationships.

If your company is dependent on water, CDP data users wish to know why you are not engaging in any way and what your plans are to do so in the future.

Response options

Please complete the following table:

Primary reason	Please explain
Select from: <ul style="list-style-type: none">● We are planning to do so within the next two years● Judged to be unimportant● No instruction from management● Important but not an immediate business priority● Lack of internal resources● Other, please specify	Text field [maximum 1,500 characters]

Requested content

Primary reason (column 1)

- Select the primary reason why you do not engage with partners in any stages of your value chain on water-related issues, including after use, risk, or management, or indicate your plans.
- If you select "Other, please specify", provide a label for your primary reason. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Please explain (column 2)

- Use the text field to provide further details, specific to your organization, which explain why you do not engage with your value chain.
- If you have plans to engage with your value chain in the future, you should detail them here. If you have no plans, please provide your reasoning.

W2 Business impacts

Module Overview

This module asks about water-related impacts on your organization and your response to them. These are impacts that have occurred in the past reporting year, including those resulting from regulatory violations (Module 4 asks about potential impacts, i.e. risks).

Demonstrating that your organization understands how water related issues have impacted it in the past helps provide insight into the water risks you may be exposed to, the risk assessment process needed, and which stakeholders and contextual issues should be included. The financial related information that is requested may help companies with their climate-related disclosures in line with the TCFD recommendations.

Note: For CDP disclosure, the effects of water challenges on a business are referred to as 'impacts'. The CEO Water Mandate's Corporate Water Disclosure Guidelines and the GRI generally use the term 'impacts' to mean the effects of the business on ecosystems and communities.

Key changes

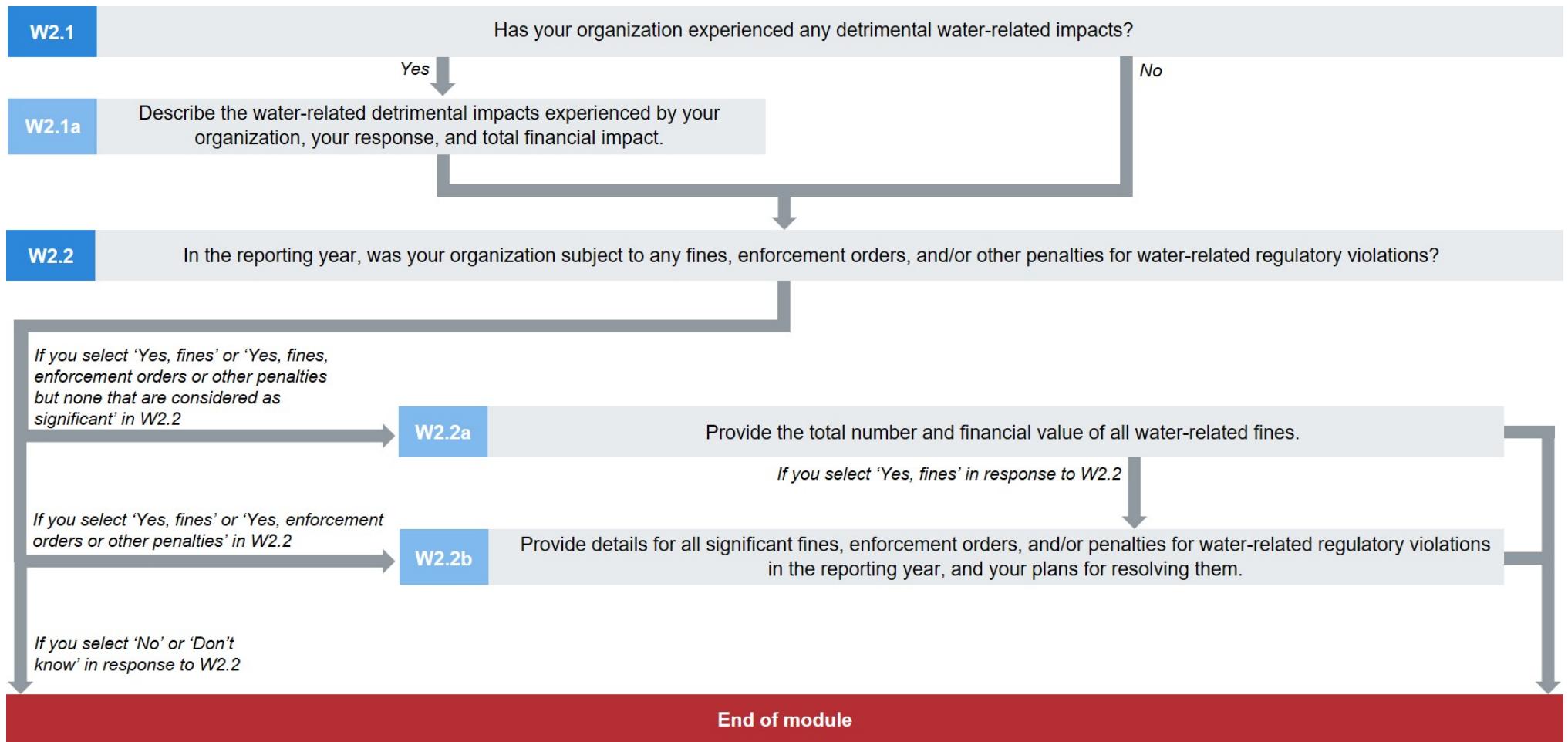
- This new module is formed from the Impacts section from the 2017 Current State module and the Compliance section from the 2017 Response module.

Sector modifications

- Sector specific additions to drop downs in W2.1a: Metals & Mining, Food, Beverage & Tobacco, Chemicals.

Pathway diagram - questions

This diagram shows the general questions contained in module W2. To access question-level guidance, use the menu on the left to navigate to the question.



Recent impacts on your business

(W2.1) Has your organization experienced any detrimental water-related impacts?

Change from 2017

Minor change (2017 W1.4)

Rationale

Past impacts are a useful indicator of inherent risks that your organization may be exposed to. Your response to this question lets CDP data users know whether your business was impacted by water-related issues during the reporting period. Follow up questions indicate how you responded and allow you to explain how you are building resilience.

Connection to other frameworks

CEO Water Mandate

Implications: External impacts

Response options

Select one of the following options:

- Yes
- No

Requested content

General

- Select 'Yes' if you have experienced any detrimental impacts in your business operations, revenue or expenditure in the reporting year that were related to water.
- For businesses, detrimental impacts may include direct financial impacts such as on production, revenue, or assets, but may also include any other impacts such as loss of a license, policy engagement, or brand image.

Explanation of terms

- **Inherent risk:** The risk that exists in the absence of controls, i.e. not taking into account any potential mitigation or management measures that could be implemented.
- **Water-related impact:** The effects on an organisation of a physical, regulatory, reputational or technological challenge, event or action related directly or indirectly to water. Note that the CEO Water Mandate's Corporate Water Disclosure Guidelines, and the GRI standards, generally refer to "impacts" as the effects of the business on ecosystems and communities.

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Question dependencies

- This question only appears if you select "Yes" in response to W2.1.

Change from 2017

Modified question (2017 W1.4a)

Rationale

Past impacts are a useful indicator of inherent risks that your company may be exposed to. Your response strategy to past impacts informs CDP data users how you are attempting to prevent future impacts and build resilience. 'Total financial impact' is an important indicator of how your organization quantifies the importance of that water issue.

Connection to other frameworks

CEO Water Mandate

Implications: External impacts

SDG

Goal 6: Clean water and sanitation

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.

Country/Region	River basin	Type of impact driver	Primary impact driver	Primary impact
Select from: <ul style="list-style-type: none"> <input type="radio"/> Country/region list <input type="radio"/> Other, please specify 	Select from: <ul style="list-style-type: none"> <input type="radio"/> River basin drop-down list <input type="radio"/> Not known <input type="radio"/> Other, please specify 	Select from: <ul style="list-style-type: none"> <input type="radio"/> Physical <input type="radio"/> Regulatory <input type="radio"/> Reputation & markets <input type="radio"/> Technology 	Select from: <ul style="list-style-type: none"> <input type="radio"/> Response drop-down options below table 	Select from: <ul style="list-style-type: none"> <input type="radio"/> Response drop-down options below table
Description of impact	Primary response	Total financial impact	Description of response	
Text field [maximum 1,500 characters]	Select from: <ul style="list-style-type: none"> <input type="radio"/> Response drop-down options below table 	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 1,500 characters]	

[Add Row]

[Primary impact driver \(column 4\)](#)

<p>Physical</p> <ul style="list-style-type: none"> ● Declining water quality ● Dependency on water intensive energy sources ● Drought ● Ecosystem vulnerability ● Flooding ● Inadequate infrastructure ● Increased levels of plastic in fresh water bodies ● Increased water scarcity ● Increased water stress ● Pollution incident ● Rationing of municipal water supply ● Seasonal supply ● Supplier dependency on water intensive energy sources ● Variability/inter annual variability ● Severe weather events ● Change in land-use ● Soil degradation (food, beverages & tobacco sector only) ● Pollution of water bodies due to fertilizer, other chemical use or animal residues (food, beverages & tobacco sector only) ● Acid rock drainage and metal leaching (metals & mining sector only) ● Leaching of pollutants to groundwater bodies (metals & mining sector only) ● Rupture of tailings dams and toxic spills (metals & mining sector only) ● Other, please specify <p>Regulatory</p> <ul style="list-style-type: none"> ● Changed product standards ● Higher water prices ● Increased difficulty in obtaining withdrawals/operations permit ● Lack of transparency of water rights ● Limited or no river basin/catchment management ● Mandatory water efficiency, conservation, recycling or process standards ● Poor coordination between regulatory bodies ● Poor enforcement of water regulation ● Increased difficulty in supplier obtaining withdrawals/operations permit ● Litigation against supplier ● Tighter regulatory standards ● Regulation of discharge quality/volumes ● Litigation against supplier ● Regulatory uncertainty ● Statutory water withdrawal limits/changes to water allocation ● Other, please specify 	<p>Reputation & markets</p> <ul style="list-style-type: none"> ● Changes in consumer behavior ● Community opposition ● Inadequate access to water, sanitation, and hygiene services ● Increased stakeholder concern or negative stakeholder feedback ● Water-related litigation ● Negative media coverage ● Other, please specify <p>Technology</p> <ul style="list-style-type: none"> ● Data access/availability ● Substitution of existing products with lower water impact options ● Transitioning to water efficient and low water intensity technologies and products ● Transitioning to water intensive, low carbon energy sources ● Unsuccessful investment in new technologies ● Mine closure (metals & mining sector only) ● Transitioning to bio-based chemicals (chemicals sector only) ● Other, please specify
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Primary impact (column 5)

<ul style="list-style-type: none"> ● Brand damage ● Changing revenue mix and sources ● Constraint to growth ● Closure of operations ● Diminished ability to reduce GHG emissions ● Disruption to sales ● Fines, penalties or enforcement orders ● Impact on company assets ● Disruption to workforce management and planning ● Increased insurance premiums ● Increased capital costs ● Increased compliance costs 	<ul style="list-style-type: none"> ● Increased operating costs ● Increased production costs ● Litigation ● Loss of license to operate ● Reduction or disruption in production capacity ● Reduced demand for products and services ● Reduction in capital availability ● Reduced revenues from lower sales/output ● Upfront costs to adopt/deploy new practices and processes ● Supply chain disruption ● Other, please specify
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Primary response (column 7)

<ul style="list-style-type: none"> ● Adopt water efficiency, water re-use, recycling and conservation practices ● Amend the Business Continuity Plan ● Aquifer storage to accrue recharge credits ● Comply with local regulatory requirements ● Develop drought emergency plans ● Develop flood emergency plans ● Develop new products and/or markets ● Engage with customers ● Engage with local communities ● Engage with NGOs/special interest groups ● Engage with regulators/policymakers ● Engage with suppliers ● Establish site-specific targets ● Geographic diversification of facilities ● Greater due diligence ● Implement internal pricing on water ● Implement nature based solutions ● Improve alignment of our public policy influencing activity with our water stewardship commitments ● Improve monitoring ● Increase insurance coverage ● Increase investment in new technology ● Increased capital expenditure ● Infrastructure maintenance ● Pollution abatement and control measures ● Re-siting of facilities 	<ul style="list-style-type: none"> ● River basin restoration ● Secure alternative water supply ● Supplier diversification ● Tighter supplier performance standards ● Use of risk transfer instruments ● Water management incentives ● Water-related capital expenditure ● Adopting alternative crop management strategies to reduce fertilizer and pesticide use (food, beverages & tobacco sector only) ● Adopting alternative livestock management practices (food, beverages & tobacco sector only) ● Adopting alternative livestock management practices to reduce use of veterinary products (food, beverages & tobacco sector only) ● Adopting better animal waste management practices (food, beverages & tobacco sector only) ● Adopting soil conservation practices (food, beverages & tobacco sector only) ● Adopting sustainable irrigation practices (food, beverages & tobacco sector only) ● Efficient fertilizer and pesticide management (food, beverages & tobacco sector only) ● Use of drought resistant crop varieties (food, beverages & tobacco sector only) ● Promoting the adoption of alternative crop management strategies to reduce fertilizer and pesticide use among suppliers (food, beverages & tobacco sector only) ● Promoting the adoption alternative livestock management practices to reduce use of veterinary products among suppliers (food, beverages & tobacco sector only) ● Promoting the adoption better animal waste management practices among suppliers (food, beverages & tobacco sector only) ● Promoting the adoption soil conservation practices among suppliers (food, beverages & tobacco sector only) ● Promoting the adoption sustainable irrigation practices among suppliers (food, beverages & tobacco sector only) ● Promoting the adoption efficient fertilizer and pesticide management among suppliers (food, beverages & tobacco sector only) ● Promoting the use of drought resistant crop varieties among suppliers (food, beverages & tobacco sector only) ● Promoting the adoption alternative livestock management practices among suppliers (food, beverages & tobacco sector only) ● Other, please specify
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Requested content

General

- This question requests information on the water-related detrimental impacts that your organization experienced in the reporting year, the driver of the impact, your response and the total financial impact.
 - Each row in this table should report a primary impact driver for a primary impact, and your organization's primary response.
 - For a particular river basin, if you wish to report more than one impact driver or impact, use the "Add Row" function and enter this information. Please refrain from providing more than three impact drivers per river basin.
- Report the drivers causing the most substantive impacts.

Country/Region (column 1)

- From the drop-down menu provided, please select the country/region associated with the impact driver for the impact you are reporting.
- If the impact driver for the impact you are reporting is in an area not included in the drop-down list of countries/regions, please select "Other, please specify" to provide a country/region label that you entered in to W0.3. If adding more than one area, please separate with a comma. If you need a total of more than 40 characters, you should use the comment box by clicking on the "speech bubble" icon.

River basin (column 2)

- From the drop-down options provided, select the river basin associated with the impact driver. If you do not see the basin required, select "Other, please specify" and write in the correct river basin using the text box provided.
- For companies withdrawing water from large confined aquifers that may not discharge to the river basin they are located in e.g. Ogallala aquifer in the United States, please select "Other, please specify" and type in the name of the local aquifer source. Ensure that the correct country/region name is selected in column 1 (Country/Region).
- You may want to put the sub-basin of a bigger river basin identified in the drop-down menu. In this case use the "Other, please specify" option in the following format: "Putumayo, Amazon".
- If you select "Other, please specify", provide a label for the river basin. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- For full instructions see the Introduction to CDP's water security reporting guidance.

Type of impact driver (column 3)

- Consider whether the impact you wish to report was primarily related to, triggered by or caused by, a physical water issue/event, regulatory issues or reputational/market issues.
- This will determine the list of impact drivers that appears in column 4.

Primary impact driver (column 4)

- CDP provides a list of impact drivers for responding companies to choose from. They are separated into three main groups: physical, regulatory, and reputational (see 'Additional Information').
- The drop-down options presented depend on the type of impact driver you selected in column 3.
- Note that the driver you select should relate the river basin selected in column 2.
- In the case that there may be more than one driver, or a chain of causes, for an impact, you should select what you consider to be the primary driver.
- If you do want to choose an additional driver for a river basin, you will need to add another row to report the details.
- If you select "Other, please specify", provide a label for the primary impact driver. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Primary Impact (column 5)

- Select the primary water-related impact your organization felt in the reporting year due to the driver in column 4.
- Impacts can be operational or financial and can affect your organization, your consumers or other stakeholders.
- If none of the available options are suitable to your organization, please select "Other, please specify" and a text box will be available for you to complete.
- If you have identified multiple/secondary impacts, select the primary impact here and describe the secondary impacts in column 8.
- If you select "Other, please specify", provide a label for the primary impact. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Description of impact (column 6)

- Explain the ways in which the impact was detrimental to your organization. For example, did it require additional spending to maintain normal output? Was output reduced?
- Include details as to the length of time your business was impacted or if it persists (e.g. severe drought was experienced for five months of the reporting year. Some processes were unable to operate.).
- If you are able to provide quantitative data relevant to the detrimental impact (e.g. proportion of sales lost) please do so.

Primary response (column 7)

- From the drop-down list, select the primary response strategy that most closely describes how your organization has responded to the impact driver in column 4.
- If your organization implemented/will implement more than one response strategy, you may provide details in column 8.
- If an appropriate response strategy is not listed, please select “Other, please specify” and a text box will be provided so that you can write in your own response. If you need more than 40 characters, please use the comment box by clicking on the “speech bubble” icon.

Total financial impact (column 8)

- Enter a figure for total financial impact. This is the total cost to the business - so a sum of the financial implications of the impact itself *plus* the actual or anticipated cost of the response to deal with it.
- This figure should be in the same currency that you selected for all financial information disclosed throughout your response in question W0.4.
- If you do not know the financial impact, you may provide an estimate. Remember that a zero should not be used for an absence of data.

Description of response (column 9)

- Provide additional details of your organization's response strategy. You may include any secondary response strategies.
- Include the timeframe expected for the response strategy to be implemented. Is the response underway, not yet implemented, or completed?
- Describe what difference the response has made/is likely to make, including:
 - How effective the response has been/is expected to be in preventing the inherent impact driver reoccurring.
 - How effective the response has been/is expected to be improving your organization's resilience, so preventing future financial or operational impacts.
 - Whether water security for your company is likely to improve as a result, at either the asset or corporate level.
 - Whether water security for other users is likely to improve as a result.
 - Whether the response contributes to the progress of other UN Sustainable Development Goals.
 - Whether the response strategy involves any collective action initiatives.
- For companies indicating that they would be interested in having their public response data transferred to the Water Action Hub (see W11.2), we ask that you provide as much information about your response as possible, particularly local projects, including:
 - Who else is involved in the joint project /initiative (such as names of organizations or government offices) or who you would like to work with (government agencies, other companies, NGOs, etc.)
 - The geographic or other scale of the project.
 - What the project seeks to accomplish including expected benefits for the watershed beyond the company.
 - When the project started and if it has concluded or if it is continuing.
 - If possible, the specific location of the project.
- Note that these criteria are not scored but are crucial to building a project for the Water Action Hub and without this detail the project may not be suitable to transfer to this platform.
- Provide details on the total financial impact your organization has suffered as a result of the impact and your response, including:
 - Methods for calculating your answer to column 7 (including any assumptions the figure is dependent on).
 - Whether this is a recurring or a fixed cost.
 - What timescale this cost is likely to be.
- If you do not know the financial impact and you left column 7 blank, write “Impact not quantified financially” and give an explanation.

Explanation of terms

- **Impact driver:** The factor/ driving force causing the impact being reported. Impact drivers are typically physical (e.g. weather extreme events), regulatory, reputational and markets related, or technological.

Compliance impacts

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

Question dependencies

- Your response to W2.2 will determine which subsequent questions are presented in this section. If your response to W2.2 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

Modified question (2017 W7.1)

Rationale

Knowledge of compliance related fines and other non-financial penalties across your organization demonstrates an awareness by your organization of its impact on the local operating environment as well as the potential financial implications of its water management.

This information helps investors and other data users to gain some insight into the effectiveness of your control procedures at a corporate level.

Connection to other frameworks

CEO Water Mandate

Current state: Compliance

Response options

Select all that apply from the following options:

- Yes, fines
- Yes, enforcement orders or other penalties
- Yes, fines, enforcement orders or other penalties but none that are considered as significant
- No
- Don't know

Requested content

General

- Note that this question asks about fines, penalties and/or enforcement orders that were issued to your company during the reporting year.
- You should not include information about fines and penalties that were issued to your company in a previous year but became payable in this year.

Explanation of terms

- Enforcement order:** A non-financial restriction as punishment for a regulatory violation or other compliance offence. Examples of non-financial enforcement orders include removal of abstraction licenses or discharge consents.
- Fine:** A specific type of penalty that requires payment of money as punishment for a regulatory violation or other compliance offence.
- Penalty:** A punishment of any kind due to a regulatory violation or other compliance offence.

(W2.2a) Provide the total number and financial value of all water-related fines.

Question dependencies

- This question only appears if you select "Yes, fines" or "Yes, fines, enforcement orders or other penalties but none that are considered as significant" in response to W2.2.

Change from 2017

Modified question (2017 W7.1b, W7.1c)

Rationale

Providing aggregated information, for absolute numbers and the tracking of numbers of compliance-related fines, is evidence that your organization is monitoring its local operating environments and keeping track at corporate level.

Connection to other frameworks

CEO Water Mandate

Current state: Compliance

Response options

Please complete the following table:

Total number of fines	Total value of fines	% of total facilities/operations associated	Number of fines compared to previous reporting year	Comment
Numerical field [enter a number from 0-999,999,999,999]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: <ul style="list-style-type: none"><input type="radio"/> Much lower<input type="radio"/> Lower<input type="radio"/> About the same<input type="radio"/> Higher<input type="radio"/> Much higher<input type="radio"/> This is our first year of measurement	Text field [maximum 1,000 characters]

Requested content

Total number of fines (column 1)

- Note that this question asks about fines that were issued to your company during the reporting year.
- You should not include information about fines that were issued to your company in a previous year but became payable in this year.

Total value of fines (column 2)

- This figure should be in the same currency that you selected for all financial information disclosed throughout your response in question W0.4.

% of total facilities/operations associated (column 3)

- Indicate the percentage of your sites that were associated with the compliance-related fines reported in column 1. For example, if 10 facilities are listed in column 1 and you have 100 facilities worldwide, then the response here would be 10 percent.

Number of fines compared to previous year (column 4)

- Select the option most applicable to the change in the number of fines compared to the previous year. CDP does not define the categories in this menu as it is difficult to prescribe a threshold that is meaningful to all organizations. You may use column 5 to explain your selection and the threshold you applied.
- CDP recognizes that a change in the total number of fines does not equate to the change in magnitude of the total financial penalty.

Comment (column 5)

You may use this column to provide details to help data users understand your response; such as an explanation for your reported trend or the relationship between the total number of fines and the total value of the fines, e.g., whether one fine accounts for a large part of the total financial penalty.

(W2.2b) Provide details for all significant fines, enforcement orders and/or other penalties for water-related regulatory violations in the reporting year, and your plans for resolving

them.

Question Dependencies

- This question only appears if you select "Yes, fines" or "Yes, enforcement orders or other penalties" in response to W2.2.

Change from 2017

Modified question (2017 W7.1a)

Rationale

Providing these details of fines and other non-financial penalties, such as location and your plans for resolving them, demonstrates to CDP data users that your organization is keeping track at the corporate level and also that it has an awareness of impacts in their local operating environment.

Connection to other frameworks

CEO Water Mandate

Current state: Compliance

Response options

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

Type of penalty	Financial value of penalty	Country/Region	River basin	Type of incident	Description of penalty, incident, regulatory violation, significance and resolution
Select from: <ul style="list-style-type: none">FineEnforcement orderOther penalty type, please specify	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Select from: <ul style="list-style-type: none">Country/region drop-down listOther, please specify	Select from: <ul style="list-style-type: none">River basin drop-down listNot knownOther, please specify	Select from: <ul style="list-style-type: none">Spillage, leakage, or discharge of potential water pollutantFailure to monitor effluentEffluent limit exceedancesAbstraction without a permit or abstraction that exceeded permitOther non-compliance with permits, standards, or regulationsOther, please specify	Text field [maximum 1,000 characters]

[Add Row]

Requested content

General

- CDP does not provide guidance as to what constitutes a "significant" regulatory violation, as this will vary by local context and the nature of the business. However, it will usually imply a major impact on the environment, community and/or business(es).
- Organizations should develop a consistent use of the term throughout their response. If you need further guidance as to what constitutes "significant", CDP recommends companies consider the general definition of "materiality" provided in the [GRI Standards](#) as a starting point. This definition puts the onus on companies to determine a materiality threshold based on internal, industry, and external stakeholder interests.
- Note:** this question asks about fines, enforcement orders and/or penalties that your company was issued with during the reporting year. You should not include information about fines and penalties that were issued to your company in a previous but became payable in this year.

Type of penalty (column 1)

- If you select "Other, please specify", provide a label for the type of penalty. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Financial value of penalty (column 2)

- Your response should include all costs related to the regulatory violation, i.e. financial penalties imposed on your organization, costs related to an enforcement order or any other operational or capital expenditure resulting directly to the violation itself or actions to prevent its reoccurrence, such as having to install new technology to meet the requirements of an enforcement order or employing new staff to monitor for compliance etc.
- This figure should be in the same currency that you selected for all financial information disclosed throughout your response in question W0.4.

Country/Region (column 3)

- Note that this is asking for the location of the incident associated with the penalty selected in column 1.
- If more than one country/region applies, please select a primary country/region and explain this in column 6.
- If the incident occurred in an area not included in the drop-down list of countries/regions, please select "Other, please specify" to provide a country/region label that you entered in to W0.3. If adding more than one area, please separate with a comma. If you need a total of more than 40 characters, you should use the comment box by clicking on the "speech bubble" icon.

River basin (column 4)

- Note that this is asking for the river basin associated with the incident that led to the penalty reported in column 1.
- From the drop-down options provided, select the appropriate river basin. If you do not see the basin required, select "Other, please specify" and write in the correct river basin using the text box provided.
- For companies withdrawing water from large confined aquifers that may not discharge to the river basin they are located in e.g. Ogallala aquifer in the United States, please select "Other, please specify" and type in the name of the local aquifer source. Ensure that the correct country/region name is selected in column 3 (Country/Region).
- You may want to put the sub-basin of a bigger river basin identified in the drop-down menu. In this case use the "Other, please specify" option in the following format: "Putumayo, Amazon".
- If you select "Other, please specify", provide a label for the river basin. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- For full instructions see the Introduction to CDP's water security reporting guidance.

Type of incident (column 5)

- Select the type of incident that is most applicable to the penalty selected in column 1.
- If you select "Other, please specify", provide a label for the type of incident. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Description of penalty, incident, regulatory violation, significance, and resolution (column 6)

- **Penalty:** Your response here could include any details that would help CDP data users understand the fine, enforcement order or other penalty selected in column 1.
- **Significance:** You may include a description of how and why your organization is classifying the penalty in column 1 as significant for your organization.
- **Incident and regulatory violation:** For each penalty you list in column 1, you may give details of the incident and regulatory violation that resulted in the penalty, e.g.:
 - more details on the incident/violation selected in column 5; e.g. the nature of a breach in an abstraction license or a discharge consent, or the nature of other water and wastewater related regulation violation.
 - whether the penalty was for a single incident or multiple incidents, and the frequency with which it/they occurred.
 - the impact the incident and the penalty had on your business, other water users and/or the natural environment; whether there were any criminal sanctions.
- **Resolution:** Please provide a brief description of how your organization has resolved or is planning to resolve the incident, including steps taken to ensure the regulatory violation is not repeated. This may include, for example, internal actions and/or external engagement such as: upgrading facilities, changing treatment methods, decreasing volume of discharge, increasing volumes of reused or recycled water, engaging with policymakers, or engaging with local communities. If your organization has a compliance assurance system in place, you may provide details.

W3 Procedures

Module Overview

This module requests information about the procedures that organizations have in place to manage issues salient to their sector and to understand inherent risk exposure. These management procedures are considered important for water security - independent of a company's own perception or assessment of any associated net risk for their company. This is why we ask companies to answer these questions *before* disclosing whether they consider themselves exposed to substantive water-related risk and what those risks are.

Questions in sections W3.1 and W3.2 are targeted at specific sectors only and focus on water pollution issues.

As there is no globally recognized standard for water risk assessment, this module provides evidence as to the robustness, comprehensiveness and integrity of an organization's risk assessment. Companies are asked to explain what processes and procedures have been implemented at the corporate level and other more local levels due to the importance of matching response strategies to the local context.

This data helps provides data users with confidence that the organization's disclosure of water risks in module 4 is comprehensive.

Key changes

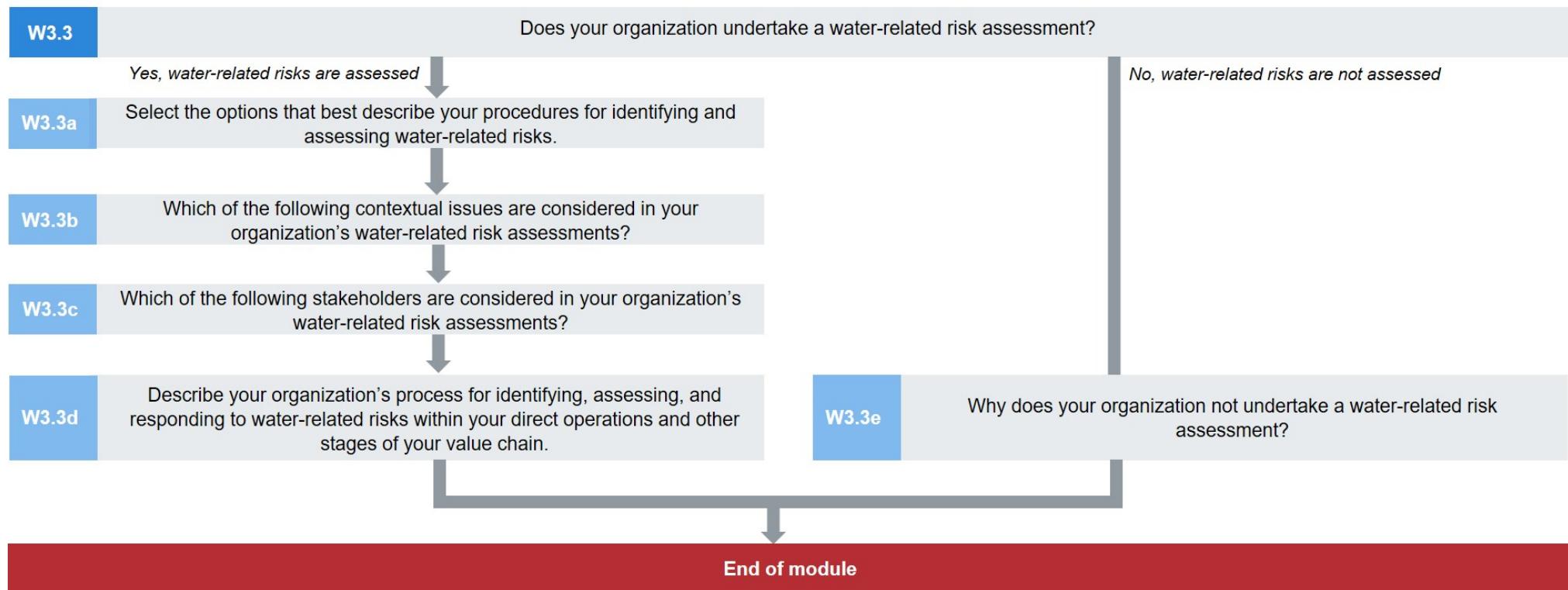
- Removed questions: Some questions on risk assessment were removed as data points were merged within the tables. Questions concerning the effect of risk on strategy were removed as there is a new section on business strategy later in the questionnaire.
- Companies are asked to provide risk assessment information for each stage of their value chain.
- New question (W3.3d) asks for an explanation of your approach to risk assessment.

Sector modifications

- Additional sections for all high impact sectors: W3.1
- Additional section for Metals & Mining: W3.2
- Additional drop-down options in W3.3a for Oil & Gas and Electric Utilities.

Pathway diagram - questions

This diagram shows the general questions contained in module W3. To access question-level guidance, use the menu on the left to navigate to the question.



Potential water pollutants management procedures

The questions in this section only apply to organizations with activities in certain sectors. Questions will not appear unless you have opted to view the following sector-specific questions:

- Food, beverage & tobacco
- Chemicals
- Oil & gas
- Electric utilities

Other management procedures

The questions in this section only apply to organizations with activities in certain sectors. Questions will not appear unless you have opted to view the following sector-specific questions:

- Metals & mining

Risk identification and assessment procedures

(W3.3) Does your organization undertake a water-related risk assessment?

Question Dependencies

- Your response to W3.3 prompts subsequent questions to be presented. If your organization does not currently incorporate a water risk assessment into its core business procedures you will be presented with question W3.3e. If your response to W3.3 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question. The guidance for each question indicates if it is a dependent question.

Change from 2017

No change (2017 W2.1)

Rationale

CDP asks about water-related risk assessment so that data-users may gauge the thoroughness of your company's understanding of its risk exposure.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

Response options

Select one of the following options:

- Yes, water-related risks are assessed
- No, water-related risks are not assessed

Requested content

General

- Please select "Yes":

- if you have completed a water-related risk assessment for at least part of your operations or value chain, or
- if your organization has an integrated environmental risk assessment that considers any water-related risks among other environmental aspects.

- Only select "No" if you have not conducted any form of water-related risk assessment.

Explanation of terms

- **Inherent risk:** The risk that exists in the absence of controls, i.e. not taking into account any potential mitigation or management measures that could be implemented.
- **Residual risk:** The risk remaining after a specific action has been taken to manage the risk.
- **Water-related risk:** The possibility of an organization experiencing a water-related challenge (e.g., water scarcity, water stress, flooding, infrastructure decay, drought (adapted from the [CEO Water Mandate's "Corporate Water Disclosure Guidelines"](#)).

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Question dependencies

- This question only appears if you select "Yes, water-related risks are assessed" in response to W3.3.

Change from 2017

Modified question (2017 W2.2, W2.3)

Rationale

Providing details of your water risk assessment coverage and procedures allows CDP data users to assess the thoroughness of your risk assessment and whether this is appropriate for the water dependency and risks that you disclose for each stage of your value chain.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

Response options

Please complete the following table:

Value chain stage	Coverage	Risk assessment procedure	Frequency of assessment	How far into the future are risks considered?	Type of tools and methods used	Tools and methods used	Comment
Direct operations	Select from: <ul style="list-style-type: none">FullPartialNone	Select from: <ul style="list-style-type: none">Response drop-down options below table	Select from: <ul style="list-style-type: none">Six-monthly or more frequentlyAnnuallyEvery two yearsNot defined	Select from: <ul style="list-style-type: none">Up to 1 year2 to 5 years6 to 10 yearsMore than 10 yearsUnknown	Select all that apply: <ul style="list-style-type: none">Tools on the marketEnterprise Risk ManagementInternational methodologiesDatabasesOther	Select all that apply: <ul style="list-style-type: none">Response drop-down options below table	Text field [maximum 500 characters]
Supply chain							
Other stages of the value chain							

Risk assessment procedure (column 3)

- | | |
|--|--|
| <ul style="list-style-type: none">Water risks are assessed as part of an enterprise risk management frameworkWater risks are assessed as part of other company-wide risk assessment systemWater risks are assessed in an environmental risk assessment | <ul style="list-style-type: none">Water risks are assessed as a standalone issueWater risks are not assessed in this stage of our value chainOther, please specify |
|--|--|

Tools and methods used (column 7)

<p>Tools on the market</p> <ul style="list-style-type: none"> ● Ecolab Water Risk Monetizer ● GEMI Local Water Tool ● Global Water Tool for Power Utilities [electric utilities only] ● IPIECA Global Water Tool [oil & gas only] ● Water Footprint Network Assessment tool ● WBCSD Global Water Tool ● WRI Aqueduct ● WWF-DEG Water Risk Filter ● SIWI Water Tool ● Ceres AquaGauge ● Other, please specify <p>Enterprise Risk Management</p> <ul style="list-style-type: none"> ● COSO Enterprise Risk Management Framework ● ISO 31000 Risk Management Standard ● Other, please specify 	<p>International methodologies</p> <ul style="list-style-type: none"> ● Environmental Impact Assessment ● Life Cycle Assessment ● IPCC Climate Change Projections ● Alliance for Water Stewardship Standard ● Other, please specify <p>Databases</p> <ul style="list-style-type: none"> ● FAO/AQUASTAT ● Maplecroft Global Water Security Risk Index ● Regional government databases ● UNEP Vital Water Graphics ● Other, please specify <p>Other</p> <ul style="list-style-type: none"> ● Internal company methods ● External consultants ● National-specific tools or standards ● Other, please specify ● Don't know
--	--

Requested content

General

- In this question, along with W3.3b and W3.3c, you are asked for information about the procedures and tools used for risk identification, information collection and assessment. W3.3d asks for a rationale for your approach to risk assessment and the choice of procedures and tools you describe in this question.

Value chain stage (column 1)

- **Other stages of the value chain:** Companies with no dependency on water in their value chain (according to their response in W1.1) may select 'None'. Other companies are encouraged to provide the information requested if their risk assessment extends beyond direct operations and suppliers. This could include franchisees you engage with on water stewardship strategies.

Coverage (column 2)

- For each row, indicate if the stage of your value chain is partially or completely covered by your water-related risk assessment.
- If you select 'None', columns 3, 4, 5, 6, and 7 will be disabled. Please provide an explanation in W3.3d.
- **Supply chain:** CDP recognizes that companies may not have awareness of or information about of every tier of their supply chain. For e.g., if they buy cotton on the open market we would expect that they assess the main growing regions to see if they are exposed to water risks. Similarly, if a company's main product uses silicon chips from multiple sources and suppliers they should assess the main geographic production hubs. This would allow a company to better understand its supply chain risks. In these cases, you should select 'Partial', and provide brief details in the comment section. You should give your company-specific rationale for this approach in W3.3d.

Risk assessment procedure (column 3)

- For the stage of your value chain shown in column 1, indicate your company's main procedure for identifying and assessing water-related risk. If multiple approaches apply, select the main or primarily applicable procedure and note this in column 8.
- If none of the available options are suitable, select "Other, please specify" to provide a label for the risk assessment procedure. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- You will be able to explain your approach and give a rationale in W3.3d.
- Note: "Enterprise risk management" is an established standardized framework for integrating sustainability risks into company risk assessment. See the 'Explanation of terms'.

Type of tools and methods used/Tools and method used (columns 6-7)

- Your selection in column 6 will determine which tools/response options appear in column 7.
- If you select "Other, please specify", provide a label for the tool or method used. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Comment (column 8)

- If 'Partial' is selected in column 2, provide the level of coverage, e.g. which geographies, business units, products or which tiers of supply chain.
- If "Other" tools are selected in column 7, you can give some details here.
- You will be able to explain your approach and give a rationale in W3.3d.

Explanation of terms

- **Direct operations:** Your organization's operations include anything your company does itself for the purpose of producing goods and services and maintaining the functionality of the business. This covers any internal supply chains between your organization's business units. For example, a business unit within your company that supplies components to another business unit within your company would be considered part of your organization's own operations.
- **Supply chain:** Your organization's supply chain is comprised of all external inputs to your operations, including materials, components, consumable inputs, and services. The scope of your supply chain may extend to multiple levels of supply, e.g. component suppliers and the suppliers of raw materials used to produce those components.
- **Value chain stage:** One part of the sequence of activities that provide value to or receive value from the organization's products and services. This can include activities within the organization's direct operations, or up or downstream of those operations; such as the supply chain, joint ventures, franchisees, product users.
- **Risk management:** Risk management involves understanding, analyzing and addressing risk to make sure organizations achieve their objectives. So it must be proportionate to the complexity and type of organization involved ([Institute of Risk Management, 2016](#))
- **Enterprise risk management:** This is an integrated and joined up approach to managing risk across an organization and its extended network [Institute of Risk Management, 2016](#).

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

Question Dependencies

- This question only appears if you select "Yes, water-related risks are assessed" in response to W3.3.

Change from 2017

Modified question (2017 W2.6)

Rationale

As an indication of the comprehensiveness of the risk assessment, CDP data users need to know which contextual issues inform your understanding of water related risks within the markets, jurisdictions and geographies you operate in, and which are considered relevant and why.

Connection to other frameworks

SDG

Goal 6: Clean water and sanitation

Response options

Please complete the following table:

Contextual issue	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Select from: <input type="radio"/> Relevant, always included <input type="radio"/> Relevant, sometimes included <input type="radio"/> Relevant, not included <input type="radio"/> Not relevant, included <input type="radio"/> Not relevant, explanation provided <input type="radio"/> Not considered	Text field [maximum 2,000 characters]
Water quality at a basin/catchment level		
Stakeholder conflicts concerning water resources at a basin/catchment level		
Implications of water on your key commodities/raw materials		
Water-related regulatory frameworks		
Status of ecosystems and habitats		
Access to fully-functioning, safely managed WASH services for all employees		
Other contextual issues, please specify		

Requested content

General

- When answering this question, consider which contextual issues are relevant for a water-related risk assessment for your organization.
- The table has fixed rows for different contextual issues which may be factored into your organization's risk assessment. Complete each row with as much data as possible for each of the contextual issues.
- If any contextual issues are factored into your risk assessment and are not included in this table, in the last row select 'Relevant, always included' or 'Relevant, sometimes included' and provide details in column 3.

Relevance & inclusion (column 2)

- For each row, select the option that most accurately represents your organization's inclusion of the contextual issue in your risk assessment.
- If no other contextual issues are included in your risk assessment, select 'Not considered' in the last row.
- Only select 'Relevant, always included' if the contextual issue is factored into your water risk assessment throughout your entire organization.
- If you select 'Relevant, not included' or 'Not considered', you should describe any future plans in column 3.
- Only select 'Not relevant, included' if your company considers the issue as not relevant for its water risk assessment but nevertheless continues to include it in assessment procedures. This may be for a number of reasons, such as the completeness of a standard or to facilitate future consideration.
- If you select 'Not relevant, explanation provided' you should use column 3 to explain why it is not currently relevant and if you anticipate it to be relevant in the future.

Please explain (column 3)

- Where a contextual issue is included in your company's risk assessment, you should provide company-specific information regarding each row. This may include:

- why you include this information, and why this issue is important to your business
- how you assess this contextual issue to be relevant/how relevance is defined
- if, and why, the issue is covered for all three stages of your value chain
- if the issue is particularly relevant for specific organizational levels
- whether both current and emerging issues are included.

- If you have selected an option in column 2 to indicate that a contextual issue is not relevant or not included, please provide your explanation here.
- In W3.3d, you can also explain how this information on contextual issues is used for decision making.

Explanation of terms

- **Contextual issue:** External influences relevant to the organization's water security and water-related risks.
- **Water availability:** The natural runoff (through groundwater and rivers) minus the flow of water that is required to sustain freshwater and estuarine ecosystems and the human livelihoods and well-being that depend on these ecosystems. Water availability typically varies within the year and also from year to year. Water availability might be reduced by decreases in both the water quantity and quality of water resources (adapted from the [CEO Water Mandate's "Corporate Water Disclosure Guidelines"](#)).

(W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?

Question Dependencies

- This question only appears if you select "Yes, water-related risks are assessed" in response to W3.3.

Change from 2017

Minor change (2017 W2.7)

Rationale

There are no international standards for water-related risk assessment, so companies need to identify which stakeholders are relevant to their business and their risk exposure. When considering your risk disclosure, it is useful for CDP data users to know if your consideration of stakeholders in your risk assessment process is appropriate for the importance rating you assigned to water in your indirect operations in W1.1 and enables a comprehensive understanding of water-related risks.

Response options

Please complete the following table:

Stakeholder	Relevance & inclusion	Please explain
Customers	Select from: <input type="radio"/> Relevant, always included <input type="radio"/> Relevant, sometimes included <input type="radio"/> Relevant, not included <input type="radio"/> Not relevant, included <input type="radio"/> Not relevant, explanation provided <input type="radio"/> Not considered	Text field [maximum 2,000 characters]
Employees		
Investors		
Local communities		
NGOs		
Other water users at a basin/catchment level		
Regulators		
River basin management authorities		
Statutory special interest groups at a local level		
Suppliers		
Water utilities at a local level		
Other stakeholder, please specify		

Requested content

General

- When answering this question, consider which stakeholders are relevant for a water-related risk assessment for your organization.
- The table has fixed rows for different stakeholders which may be factored into your organization's risk assessment. Complete each row with as much data as possible for each of the stakeholders.

Stakeholder (column 1)

- If you are uncertain whether one of your stakeholders fits well into one of the categories listed here, please use the row anyway and explain the uncertainty in the last column.
- Note that 'Water utilities at a local level' includes municipal, industrial, and private water suppliers, and water utilities that treat municipal or industrial wastewater. Though the provision of water could be considered part of your supply chain, CDP distinguishes it from 'Suppliers' in this question due to its importance in the context of a water risk assessment.
- If your risk assessment considers stakeholders that are not included in this table, in the last row select 'Relevant, always included' or 'Relevant, sometimes included' in column 2 and provided details in the last column.

Relevance & inclusion (column 2)

- For each row, select the option that most accurately indicates the relevancy of the stakeholder for inclusion in your risk assessment.
- If no other stakeholders are included in your risk assessment, select 'Not considered' in the last row.
- Only select 'Relevant, always included' if the stakeholder was factored into your organization's water risk assessment throughout the entire organization.
- If you select 'Relevant, not included' or 'Not considered' for any other row, you should describe any future plans in the last column.
- Only select 'Not relevant, included' if your organization considers the stakeholder as not relevant for its water risk assessment but nevertheless continues to include it in assessment procedures – for e.g., because of the need for completeness for a standard, or to facilitate future consideration of the stakeholder.

- If you select 'Not relevant, explanation provided' you should use the last column to explain why the stakeholder is not currently relevant and if you anticipate it to be relevant in the future.

Please explain (column 3)

- Where a stakeholder is included in your company's risk assessment, you should provide company-specific information. This may include:

- why you include this stakeholder in your risk assessment procedure, and why they are important to your business
- how you assess this stakeholder to be relevant, and how relevance is defined
- if, and why, the stakeholder is covered for all three stages of your value chain
- if the stakeholder is particularly relevant for specific organizational levels or geographies
- whether this is a current or future stakeholder.

- Where a stakeholder is considered not relevant, please explain why this is the case. For example, there may not be a river basin authority (or equivalent body) in the locations where you operate, or this role may be otherwise performed by the regulator.

- In W3.3d, you can also explain how this information related to stakeholders is used for decision making.

Explanation of terms

- **River basin management authorities:** Any organization with public responsibility for managing and/or regulating any aspect of water for an entire river basin. This can include national, regional, or municipal bodies.

Example response

Stakeholder	Relevance & inclusion	Please explain
Customers	Relevant, always included	We assess the environmental performance of our products from farm to consumer and beyond using our internally developed Sustainable Design Tool, including the water footprint on a five year basis, to assess how water intensive our products are. The water used by consumers to prepare or consume our products is factored in when assessing the hotspots of our products. We engage with our customers through marketing surveys.
Employees	Relevant, always included	Water restrictions due to municipal supply constraints could impact on our employee's output in our locations in Mexico. We strive to continually improve our water performance through training of all new employees and raising awareness and review this annually.
Investors	Relevant, always included	We report water risks and responses in our integrated annual sustainability reporting pack that is sent to shareholders by our Investor Reporting team so our investors can assess their investment. This information is also provided to our CEO and CFO.
Local communities	Relevant, always included	We have a particular responsibility toward our production sites' neighbors, and discuss current issues with them in Community Advisory panels, which meet quarterly, according to need. In our breweries, local communities and related water-issues are incorporated into site management and contingency plans and this is led by our site managers and human resources colleagues.
NGOs	Relevant, always included	We conduct an annual materiality analysis based on the level of stakeholder concern regarding local water issues and level of potential impact on our business and engage with local NGO experts to facilitate stakeholder meetings to discuss possible solutions as a part of this annual process.
Other water users at a basin/catchment level	Relevant, always included	Our annual Water Resource Reviews help our facility staff to gain a greater understanding/sense of ownership about water challenges in their locality such as equity of supply in the Goring catchment during summer periods when hands-off flows are applied by the river catchment authorities. They also enabled us to identify 5 high priority areas within operations where water stewardship initiatives are needed and where engagement with other local water users (other business, domestic users, farmers) is necessary to inform our corporate risk assessments.
Regulators	Relevant, always included	We continue to maintain a strong presence at multi-stakeholder initiatives linked to our industry and chaired by the industry regulator, the Minerals Council of Australia. These initiatives consider water policy and related challenges that may impact on our business and operating environments. Timely renewal of appropriate water permits is essential for us to operate our mines and thus regular engagement with regulators is key to mitigating this risk in all our operating locations. We respond to all consultations run by national regulators as they are held, and in Australia chaired the Australia Mining Association water sub-committee during 2015 which met twice with the regulator.
River basin management authorities	Relevant, always included	Due to the majority of our business being situated in the UK we have regular contact with the UK river basin management authority, the Environment Agency, though in California in the United States, the equivalent organization varies by state so our operations staff engage with the California State Water Resources Control Board. Our meetings happen on an ad-hoc basis though an annual catch-up meeting is usually scheduled to maintain the relationship outside of critical situations (e.g. surface water drought) and keep parties informed on both sides.
Statutory special interest groups at a local level	Relevant, always included	We work closely with the Texas State Soil and Water Conservation Board to align our water targets to complement their work in our local catchment of Kintacky River, including water efficiency so that more water is returned to the local catchment for environmental flows. This helps our company reputation in our local market. We meet on an ad-hoc basis as projects require.
Suppliers	Relevant, always included	Through our entire supply chain, we are committed to engage with suppliers to promote water conservation practices through our supplier training programs which are run biannually, and on an ongoing basis through the water component of our Supplier Scorecard. Twelve suppliers in water stressed areas have signed up to our "Water conservation collaboration" pilot initiative to implement water efficiency targets and the results will inform our supply chain risk assessment.
Water utilities at a local level	Relevant, always included	We have an Environmental Target Setting Program, designed to further optimize energy and water consumption. Water experts together with water suppliers go on-site annually to identify further improvement opportunities. In 2015, we identified 610 projects expected to deliver energy savings of about 2 million GJ and 2.6 million m ³ of water. Our collaboration with local water utilities has enhanced our understanding of possible risk factors associated with supply of water and drainage to our facilities as well as risk mitigation opportunities.
Other stakeholder, please specify		

(W3.3d) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

Question dependencies

- This question only appears if you select "Yes, water-related risks are assessed" in response to W3.3.

Change from 2017

New question

Rationale

By providing an explanation for the steps and procedures that make up your risk assessment process, including identification, prioritizing and decision making, investors and other data users will know whether your organization has a robust approach to risk management. They will be able to consider whether it is optimal for your activities, and the locations and markets that you and your suppliers operate in.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

Response options

This is an open text question with a limit of 2,000 characters.

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

Requested content

General

- This question asks you to provide a rationale for your approach to risk assessment and to explain your choice of procedures and tools described in W3a, b and c. This should include an explanation of:
 - Level of coverage:
 - why you have chosen the level of coverage (how coverage is determined e.g. which tiers of supply chain), the horizon and tool for each of the 3 stages of the value chain.
 - How risks are classified:
 - at a company level, and at an asset level. Asset level is defined as anything below company level such as individual sites and subsidiaries.
 - for the 3 different stages of your value chain.
 - how decisions are made on the severity of the risk.
 - Your decision-making process for risk response— including for e.g.:
 - how the information collected, such as on contextual and stakeholder issues, is used in decision making.
 - how decisions are made to mitigate, transfer, accept, or control risks.
 - references to risks terminology / approaches that you employ.
- Note that specific details of inherent risks and opportunities faced by your organization should be disclosed in Module 4.
- **Note that your response to this question may refer to the position of employees relevant to your risk assessment process. In this case, do not include the name of any individual or any other personal data in your response.**

Explanation of terms

- **Inherent risk:** The risk that exists in the absence of controls, i.e. not taking into account any potential mitigation or management measures that could be implemented.
- **Residual risk:** The risk remaining after a specific action has been taken to manage the risk.
- **Risk procedures:** The details of the steps that make up a risk identification, assessment and management process, such as frequency, geographic scope, tools used, issues addressed and stakeholders considered.

- **Risk process:** The combination of steps taken to identify, quantify, monitor, record, prioritize, and respond to risk to minimize its likelihood or impact so that business objectives can be met.

(W3.3e) Why does your organization not undertake a water-related risk assessment?

Question Dependencies

- This question only appears if you select "No, water-related risks are not assessed" in response to W3.3.

Change from 2017

Minor change (2017 W2.8)

Rationale

Your company has received this questionnaire because it is believed to conduct activities with a high dependency on a stable supply of fresh water and/or has a significant potential for polluting freshwater resources. As such, investors are likely to consider that you are exposed to water-related risks.

A thorough risk assessment is integral to appropriately identifying, understanding and addressing water-related risks. Without undertaking a risk assessment, companies may be unable to determine the best ways to prepare for future uncertainties and liabilities.

Companies may have many reasons for not undertaking risk assessments, and CDP data users are interested in learning more about why this is the case for your company and the planning processes and contexts for this.

Response options

Please complete the following table:

Primary reason	Please explain
<p>Select from:</p> <ul style="list-style-type: none"> ● We are planning to introduce a risk assessment process within 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 1,500 characters]

Primary reason (column 1)

- Choose the option that best explains why your organization does not undertake a water-related risk assessment.
- If multiple options reasonably apply to your company, select the primary option in column 1 and explain any additional reasons in column 2.
- If you select "Other, please specify", provide a label for the primary reason. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Please explain (column 2)

- Use this space to provide company-specific insight as to your selection in column 1.
- Your answer here should align with the importance you assign to water in W1.1.
- Describe any future plans to undertake a water risk assessment (or details of any risk assessment process currently underway) and the likely timescale for implementation. Include company-specific information in your description.

W4 Risks and opportunities

Module Overview

The structure of the water security questionnaire allows a company to tell investors, customers and other data users about its water stewardship journey. With modules 1-3 complete, data users now understand the current state of a company's use of water and how water related risks are identified.

An understanding of the number, location and nature of inherent water risks is valuable for disclosing companies, as well as CDP data users. Module 4 allows companies to show that they have a clear awareness of the extent to which they are exposed to inherent water risks in their direct operations and other parts of their value chain.

CDP asks companies to report substantive water-related risks, the potential impacts of those risks and share details of their associated response strategies. We also invite companies to share any water-related operational or market opportunities being realized that could substantively benefit their business.

The financial related information requested in W4.1, W4.2, and W4.3 may help companies with their climate-related disclosures in line with the TCFD recommendations.

Note:

Providing information about inherent risk exposure rather than residual risk allows data-users to consider the potential impact and the appropriateness of the organization's response. Water risk impacts the cost of doing business and may impact on stock volatility.

CDP asks about risks anywhere in your business that are substantive at the corporate level (not those that are significant only at the facility level, for example). We wish only to know about risks that have the ability to impact the business, financially, strategically or otherwise, at the corporate level.

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.

Key changes

- The company's definition of substantive risk should now refer to any probability threshold applied.
- A new question requests figure for the total number of facilities exposing the organization to substantive risk.
- To facilitate comparability, a single potential business impact indicator is now requested - proportion of global revenue
- Per river basin, companies should select what they consider to be the primary risk driver causing a particular substantive impact, rather than selecting all drivers that apply. This facilitates data analysis.
- A numerical figure for the potential financial impact of the risk is requested, and the cost of the response strategy.
- The previous 'supply chain' risk table now asks about risks drivers anywhere in the value chain, and the impacts on the company itself.
- New data points included for a description of water-related opportunities and their financial impact. A location for each opportunity is no longer requested.

Sector modifications

- W4.1c presents an additional column for Oil & Gas, Metals & Mining, Electric utilities.
- Sector specific additions to drop downs in risk tables: Metals & Mining, Food, Beverage & Tobacco, Chemicals.
- Sector specific additions to drop downs in opportunities table: Oil & Gas

Pathway diagram - questions

This diagram shows the general questions contained in module W4. To access question-level guidance, use the menu on the left to navigate to the question.

W4.1

Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

W4.1a

How does your organization define substantive financial or strategic impact on your business?

If you select a 'Yes' option in W4.1

No in W4.1

W4.1b

What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

W4.1c

By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive impact on your business, and what is the potential business impact associated with those facilities?

If 'Yes, both in direct operations and the rest of our value chain' or 'Yes, only within our direct operations' in W4.1

If 'Yes, both in direct operations and the rest of our value chain' or 'Yes, only in our value chain beyond our direct operations' in W4.1

If 'No' or 'Yes, only in our value chain beyond our direct operations' in W4.1

If you select a 'No' or 'Yes, only within our direct operations' in W4.1

W4.2

Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

If 'Yes, both in direct operations and the rest of our value chain'

If 'Yes, only within our direct operations' continue to W4.2c'

W4.2a

Provide details of risks identified within your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

If 'Yes, only in our value chain beyond our direct operations'

W4.2b

Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?

W4.2c

Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

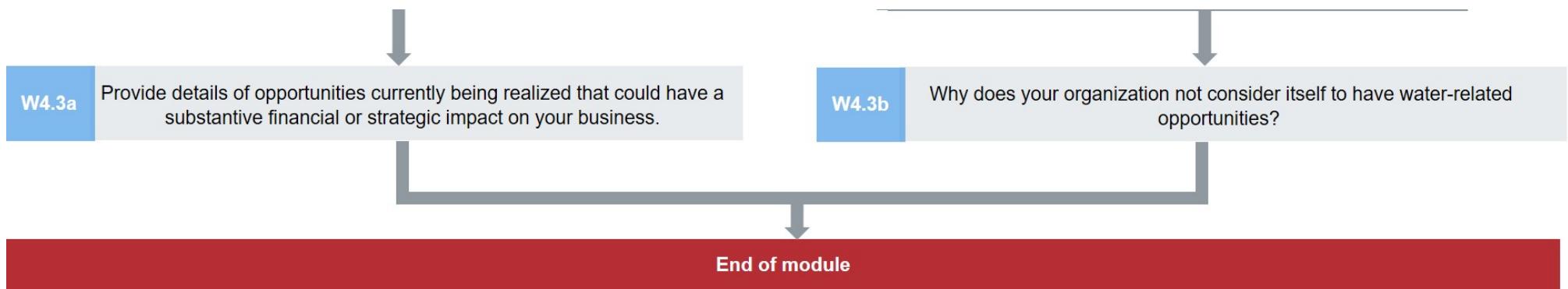
W4.3

Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

Yes, we have identified opportunities but are unable to realize them

No



Risk exposure

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Question dependencies

- Your response to W4.1 will determine which subsequent questions are presented. If your response to W4.1 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

Modified question (2017 W3.1)

Rationale

Data users wish to know whether your organization has knowledge of any water risks across any part of your value chain that are substantive at the corporate level. This information is critical for guiding investments and actions to improve business resilience and water stewardship.

Note that we only request information on issues that are exposing your facilities, business units etc. to risks that have the potential to substantively impact, strategically as well as financially, on your business at the corporate level.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

SDG

Goal 6: Clean water and sanitation

Response options

Select one of the following options:

- Yes, both in direct operations and the rest of our value chain
- Yes, only within our direct operations

- Yes, only in our value chain beyond our direct operations
- No

Requested content

General

- Indicate if you have identified any inherent water-related risks, and in which part of your value chain; or select 'No' if none have been identified and explain why not (W4.2b and/or W4.2c will be presented).
- For the purposes of this response, the risks considered should only be those which:

- pose potential substantive financial or strategic impacts (as per the definition of "substantive" you provide in W4.1a)
- pose a risk at the corporate level, and not simply at the asset/business unit/geographic level at which they may occur
- are inherent (the risk that exists in the absence of controls, i.e. before taking into account any potential mitigation or management measures that have been or could be implemented).

- These risks may have the potential to impact on your organization either currently or in the future.

Explanation of terms

- **Direct operations:** An organization's operations include anything it does itself for the purpose of producing goods and services and maintaining the functionality of the business. This covers any internal supply chains between the organization's business units. For example, a business unit within a company that supplies components to another business unit within the company would be considered part of the organization's direct operations.
- **Inherent risk:** The risk that exists in the absence of controls, i.e. not taking into account any potential mitigation or management measures that could be implemented.
- **Residual risk:** The risk remaining after a specific action has been taken to manage the risk.
- **Substantive impact:** An impact that has a considerable or relatively significant effect on an organization at the corporate level. This could include operational, financial or strategic effects that undermine the entire business or part of a business.
- **Value chain:** The entire sequence of activities or partners that provide value to or receive value from an organization's products and services, either within, upstream or downstream of direct operations.
- **Water-related risk:** The possibility of an organization experiencing a water-related challenge (e.g., water scarcity, water stress, flooding, infrastructure decay, drought) (adapted from the [CEO Water Mandate's "Corporate Water Disclosure Guidelines"](#)). The extent of risk is a function of the likelihood of a specific challenge occurring and the severity of the challenge's impact. The severity of impact depends on the intensity of the challenge, as well as the vulnerability of the organisation.

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

Change from 2017

Minor change (2017 W3.2)

Rationale

Explaining your threshold for including risk data in this disclosure provides critical context for CDP data users. What is considered as a substantive impact for a business will be different for each responding company, so before proceeding with any further questions in this module, it is important that companies explain how they define a substantive impact at the corporate level.

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.

Requested content

General

- Describe and quantify, in detail, how your organization defines a 'substantive impact' on your business at the corporate level, in the context of a water-related risk.
- What constitutes a substantive impact will vary between companies. For example, a 1% reduction in profits could have a different effect on different companies depending on their respective profit margins. Companies

are therefore asked to determine 'substantive' in the way that they would use for their business decision-making. For example, a substantive impact of relatively high magnitude could occur because of a large number for any one of the following aspects, or because of a small number for all three combines to create a larger impact:

- the proportion of business units affected
 - the size of the impact on those business units
 - the dependency of the organization on that unit
 - the potential for shareholder or customer concern.
- The description of your definition should make clear the thresholds for:
 - the magnitude
 - probability
 - frequency of the impact
 - and how they are applied together.
 - Include details of any metrics used and report how often these metrics are reviewed and updated.
 - The substantive change may relate, for example, to operations, revenue or expenditure, assets & liabilities, or capital allocation. Examples of substantive change would be: the closure of two strategic facilities for which the probability is over 30%; a reduction of 10% in projected revenue; an unexpected prolonged drop in consumer interest over a busy shopping period.
 - Indicate if your definition/thresholds/metrics relate to direct operations and/or other parts of your value chain.
 - Note that in this question, we are not requesting:
 - information about what is a substantive impact at the level of facilities, business units, etc; only about what is substantive for the company as a whole
 - details of the risks your organization is exposed to, but to illustrate your response you should include at least one example of an impact at any level of your organization and why it is considered as substantive to your business.

Explanation of terms

- **Substantive impact:** an impact that has a considerable or relatively significant effect on an organization at the corporate level. This could include operational, financial or strategic effects that undermine the entire business or part of the business.

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

Question dependencies

- This question only appears if you select any of the following options in response to W4.1:
 - Yes, both in direct operations and the rest of value chain
 - Yes, only within our direct operations
 - Yes, only in our value chain beyond our direct operations

Change from 2017

Modified question (2017 W3.2a)

Rationale

Water is a local issue, and CDP data users want to know that companies are considering risks and impacts at the facility level. Reporting on the total number of facilities that expose your company to substantive risk and the proportion of your facilities that this represents provides a basic but useful indication of risk exposure.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

Response options

Please complete the following table:

Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Numerical field [enter a number from 0-1,000 using no decimals or commas]	Select from: <input type="radio"/> Less than 1% <input type="radio"/> 1-25 <input type="radio"/> 26-50 <input type="radio"/> 51-75 <input type="radio"/> 76-99 <input type="radio"/> 100% <input type="radio"/> Unknown	Text field [maximum 4,500]

Requested content

General

- This question only requests information about facilities exposed to risks with the potential to substantively impact your business at the corporate level (as defined in W4.1a). Do not count local risks unless they are substantive for the organization as a whole.
- Note that you are requested to disclose inherent risks – so include those that your organization is exposed to prior to the implementation of any response strategies.
- For the facilities you report here as being exposed to substantive water risk, W4.1c requests their river basin location.

Total number of facilities exposed to water risk (column 1)

- The term 'facilities' may be used broadly to describe types of business operations as well as fixed buildings or factories. For example, organizations in the extractive industries might normally collate information by asset or business unit and may wish to define facility in this way. Likewise, organizations in the hotel industry or construction industry may have hundreds of hotels or sites. They may wish to report facilities by aggregate, rather than individual buildings or sites. For example, a hotel chain may wish to group hotels by grade or resort type. Rather than assessing each of its 20 hotels individually it may be more appropriate to combining 20 hotels within the same river basin into one 'facility', and then assess this against its threshold for substantive change to the business.
- Due to the local nature of water risks and impacts, only facilities in the same river basins should be aggregated. Aggregation should only be considered as an option where the facility level data is not meaningful; e.g., because water use in particular facilities is very small and therefore the associated risks and impacts are more material at the river basin level.

% company-wide facilities this represents (column 2)

- Detail the proportion of your organization's company-wide facilities exposed to substantive water risk - as represented by the number given in column 1. For example, the 11 facilities that are exposed to substantive water risk reported in column 1 may comprise 26-50% of your organization's total facilities company-wide. You may estimate this data and use column 3 to state that this is the case.
- If you cannot provide this figure, select "unknown" and explain your response in column 3.

Comment (column 3)

- You may comment on how you have defined 'facility'. If your organization does aggregate for reporting purposes, please state that this approach has been taken and briefly describe the methodology for aggregation.
- To help data users understand the number of facilities you have reported, please provide any further context. This is optional. For example, you may wish to give a general, company-specific comment on the nature, severity and location of the corporate-level risks your company is exposed to, whether they result from any particular business activity, and the relationship between the inherent risk and your residual risk exposure. You may have reported that 60% of your facilities are exposed to inherent risks due to their location, but this represents only a 30% of your total output and the residual risk has been much reduced due to the introduction of new controls. It is helpful to data-users if you give company-specific information.
- Note that river basin level information about facilities at risk should be disclosed in W4.1c.

Explanation of terms

- **Facility:** "Facilities" may be used throughout this questionnaire as a broad term and not restricted to a particular site or grouping of fixed buildings and factories. For example, if your organization is in the extractive industries you might normally collate business information for assets or business units, and so you may wish to define 'facility' information in this way.
- **Inherent risk:** The risk that exists in the absence of controls, i.e. not taking into account any potential mitigation or management measures that could be implemented.
- **Residual risk:** The risk remaining after a specific action has been taken to manage the risk.

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive impact on your business, and what is the potential business impact associated with those facilities?

Question Dependencies

- This question only appears if you select any of the following options in response to W4.1:
 - Yes, both in direct operations and the rest of our value chain
 - Yes, only within our direct operations
 - Yes, only in our value chain beyond our direct operations
- Note that W5 will request water accounting data for facilities located in the basins reported here.

Change from 2017

Modified question (2017 W3.2a, W3.2b)

Rationale

This information provides a list of hot-spot basins for CDP data users to focus on when reviewing your CDP disclosure and enables a deeper understanding of the potential significance of the water risk exposure associated with each basin.

Knowing the percentage of facilities at risk for each basin and the potential impact of this risk exposure helps companies with decision making based on basin level issues. It allows financial planning at that level to take account of water issues and provides a powerful indicator to support river basin action and investment.

Assigning and understanding the amount of financial productivity that may be at risk from water-related issues in any one basin provides a powerful indicator for any business case for investment in those basins, and the potential significance of the water risk exposure associated with that basin.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

SDG

Goal 6: Clean water and sanitation

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.

Country/Region	River basin	Number of facilities exposed to water risk	% company-wide facilities this represents
Select from: <ul style="list-style-type: none"><input type="radio"/> Country/region drop-down list<input type="radio"/> Other, please specify	Select from: <ul style="list-style-type: none"><input type="radio"/> River basin drop down list<input type="radio"/> Not known<input type="radio"/> Other, please specify	Numerical field [enter a number from 0-1,000 using no decimals or commas]	Select from: <ul style="list-style-type: none"><input type="radio"/> Less than 1%<input type="radio"/> 1-25<input type="radio"/> 26-50<input type="radio"/> 51-75<input type="radio"/> 76-99<input type="radio"/> 100%<input type="radio"/> Unknown

[METALS & MINING SECTOR ONLY] Production value for the metals & mining activities associated with these facilities	[ELECTRIC UTILITIES SECTOR ONLY] % company's annual electricity generation that could be affected by these facilities	[OIL & GAS SECTOR ONLY] % company's global oil & gas production volume that could be affected by these facilities	% company's total global revenue that could be affected	Comment
Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Select from: <ul style="list-style-type: none"><input type="radio"/> Less than 1%<input type="radio"/> 1-25<input type="radio"/> 26-50<input type="radio"/> 51-75<input type="radio"/> 76-99<input type="radio"/> 100%<input type="radio"/> Unknown	Select from: <ul style="list-style-type: none"><input type="radio"/> Less than 1%<input type="radio"/> 1-25<input type="radio"/> 26-50<input type="radio"/> 51-75<input type="radio"/> 76-99<input type="radio"/> 100%<input type="radio"/> Unknown	Select from: <ul style="list-style-type: none"><input type="radio"/> Less than 1%<input type="radio"/> 1-25<input type="radio"/> 26-50<input type="radio"/> 51-75<input type="radio"/> 76-99<input type="radio"/> 100%<input type="radio"/> Unknown	Text field [maximum 5,000 characters]

[Add Row]

Requested content

- Note: Organizations responding to a metals & mining sector request should refer to additional sector-specific guidance on this question at the end of the "Requested content" section.

General

- Consider risks with the potential to substantively impact your business at the corporate level. Do not consider local risks unless they are substantive for the organization as a whole. For example, a business may have 10 facilities in one river basin exposed to water risk, but only three of those might lead to a substantive impact to the business at the corporate level should they materialize. So, it is only those three facilities that should be reported.
- Note that you are requested to disclose inherent risk – so consider risks those that your facilities are exposed to prior to the implementation of any response strategies.
- Module 5 requests water accounting information for all the 'facilities' you disclose here as being exposed to substantive water risk.
- If you have facilities exposed to water risks in a basin which covers multiple countries, please add a new row for each country/region and disclose the number of facilities located in that country.
- Note that W4.2 and W4.2a ask for details of individual risk drivers, their impact and your response, so any information provided here should relate to the basin level.
- **Oil & gas sector only:** Data on the organization's production volume associated with these facilities will provide further information on the potential implications of the water risk exposure and assist with the assessment of the company's response.
- **Electric utilities sector only:** Data on the organization's annual electricity generation associated with these facilities will provide further information on the potential implications of the water risk exposure and assist with the assessment of the company's response.

Country (column 1)

- If your facilities are exposed to risks in an area not included in the drop-down list of countries/regions, please select "Other, please specify" to provide a country/region label that you entered in to W0.3. If you need a total

of more than 40 characters, you should use the comment box by clicking on the "speech bubble" icon.

River basin (column 2)

- From the drop-down options provided, select the river basin where your facilities are exposed to substantive water risk. If you do not see a basin that applies to your organization, select "Other, please specify" and write in the correct river basin using the text box provided. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- For companies withdrawing water from large confined aquifers that may not discharge to the river basin they are located in e.g. Ogallala aquifer in the United States, please select "Other, please specify" and type in the name of the local aquifer source. Ensure that the correct country/region name is selected in column 1 (Country/Region).
- You may want to put the sub-basin of a bigger river basin identified in the drop-down menu. In this case use the "Other, please specify" option in the following format: "Putumayo, Amazon".
- For full instructions regarding this list, see the Introduction to CDP's water security reporting guidance.

Number of facilities exposed to water risk (column 3)

- For the selected river basin, indicate the number of facilities exposing your company to a potential substantive impact. This number will have been included in the total figure you reported in W4.1b. We are not asking for the total number of facilities located within each river basin, only those facilities facing a water risk that could generate a substantive change in your business, operations, revenue or expenditure. A business may have 10 facilities in one river basin exposed to water risk. However, if just three of them might lead to a substantive impact to the business at the corporate level, it is only those three facilities that should be reported here.
- The term 'facilities' may be used broadly to describe different types of business operations as well as fixed buildings or factories. Please refer to the guidance for W4.1b.
- If your organization does decide to aggregate facilities for reporting purposes, then please state that this approach has been undertaken and briefly describe the methodology for aggregation in the last column (Comment).

% company-wide facilities this represents (column 4)

- This column asks for the proportion of your total company facilities represented by the facilities reported in column 3. For example, the 11 facilities reported in column 3 may comprise 6-10% of your organization's total number of facilities globally.
- If you cannot provide this figure, select "unknown" and explain your response in the last column (Comment).

% of company's total global revenue

- This column seeks to answer the question: what proportion of your organization's total global revenue is derived from the facilities listed in column 3? For example, 11 facilities reported in column 3 may deliver 16-30% of your organization's total global revenue.
- This revenue may be at risk to some extent in the absence of an appropriate response strategy - if the facilities were unable to operate, for example.
- If you cannot provide this figure, please select "unknown", or you may estimate the figure. Use the last column (Comment) to explain your response.

Comment

- Provide any further context to help data users understand your basin level disclosure. This is optional. For example, you may wish to comment on the nature or severity of the risk in the river basin as a whole that these facilities are exposed to and the company's approach to addressing these risks.
- Provide any further details you wish to add about the figure you have provided for the potential value at risk in these river basins. This is optional but will provide context for data-users.
- If you have used estimates in any response, please state this.

Water-related risks and response

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Question Dependencies

- This question only appears if you select one of the following options in response to W4.1:
- Yes, both in direct operations and the rest of our value chain

- Yes, only within our direct operations

Change from 2017

Modified question (2017 question W3.2c)

Rationale

Your response to this question will allow CDP data users to see, in one place, details of the inherent water risks that your company is exposed to due to drivers associated with its direct operations within particular river basins, and also the estimated potential impact of the risk at the corporate level and your response strategy to address the risk.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

SDG

Goal 6: Clean water and sanitation

Response options

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

Country/Region	River basin	Type of risk	Primary risk driver	Primary potential impact	Company-specific description	Timeframe
Select from: <input type="radio"/> Country/region drop-down list <input type="radio"/> Other, please specify	Select from: <input type="radio"/> River basin drop-down list <input type="radio"/> Not known <input type="radio"/> Other, please specify	Select from: <input type="radio"/> Physical <input type="radio"/> Regulatory <input type="radio"/> Reputation & markets <input type="radio"/> Technology	Select from: <input type="radio"/> Response drop-down options below table	Select from: <input type="radio"/> Response drop-down options below table	Text field [maximum 1,500 characters]	Select from: <input type="radio"/> Current up to one year <input type="radio"/> 1-3 years <input type="radio"/> 4-6 years <input type="radio"/> More than 6 years

Magnitude of potential impact	Likelihood	Potential financial impact	Explanation of financial impact	Primary response to risk	Description of response	Cost of response	Explanation of cost of response
Select from: <input type="radio"/> High <input type="radio"/> Medium-high <input type="radio"/> Medium <input type="radio"/> Medium-low <input type="radio"/> Low <input type="radio"/> Unknown	Select from: <input type="radio"/> Virtually certain <input type="radio"/> Very likely <input type="radio"/> Likely <input type="radio"/> More likely than not <input type="radio"/> About as likely as not <input type="radio"/> Unlikely <input type="radio"/> Very unlikely <input type="radio"/> Exceptionally unlikely <input type="radio"/> Unknown	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 500 characters]	Select from: <input type="radio"/> Response drop-down options below table	Text field [maximum 1,500 characters]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 500 characters]

[Add Row]

[Primary risk driver \(column 4\)](#)

<p>Physical</p> <ul style="list-style-type: none"> ● Declining water quality ● Dependency on water intensive energy sources ● Drought ● Ecosystem vulnerability ● Flooding ● Inadequate infrastructure ● Increased levels of plastic in fresh water bodies ● Increased water scarcity ● Increased water stress ● Pollution incident ● Rationing of municipal water supply ● Seasonal supply variability/inter annual variability ● Severe weather events ● Change in land-use ● Soil degradation (food, beverages & tobacco sector only) ● Acid rock drainage and metal leaching (metals & mining sector only) ● Rupture of tailings dams and toxic spills (metals & mining sector only) ● Other, please specify <p>Regulatory</p> <ul style="list-style-type: none"> ● Changed product standards ● Higher water prices ● Increased difficulty in obtaining withdrawals/operations permit ● Lack of transparency of water rights ● Limited or no river basin/catchment management ● Mandatory water efficiency, conservation, recycling or process standards ● Poor coordination between regulatory bodies ● Poor enforcement of water regulation ● Tighter regulatory standards ● Regulation of discharge quality/volumes ● Regulatory uncertainty ● Statutory water withdrawal limits/changes to water allocation ● Other, please specify 	<p>Reputation & markets</p> <ul style="list-style-type: none"> ● Changes in consumer behavior ● Community opposition ● Inadequate access to water, sanitation, and hygiene services ● Increased stakeholder concern or negative stakeholder feedback ● Water-related litigation ● Negative media coverage ● Mine closure (metals & mining sector only) ● Other, please specify <p>Technology</p> <ul style="list-style-type: none"> ● Data access/availability ● Substitution of existing products with lower water impact options ● Transitioning to bio-based chemicals (chemicals sector only) ● Transitioning to water efficient and low water intensity technologies and products ● Transitioning to water intensive, low carbon energy sources ● Unsuccessful investment in new technologies ● Other, please specify
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Primary potential impact (column 5)

<ul style="list-style-type: none"> ● Brand damage ● Changing revenue mix and sources ● Constraint to growth ● Closure of operations ● Diminished ability to reduce GHG emissions ● Disruption to sales ● Fines, penalties or enforcement orders ● Impact on company assets ● Disruption to workforce management and planning ● Increased insurance premiums ● Increased capital costs ● Increased compliance costs 	<ul style="list-style-type: none"> ● Increased operating costs ● Increased production costs ● Litigation ● Loss of license to operate ● Reduction or disruption in production capacity ● Reduced demand for products and services ● Reduction in capital availability ● Reduced revenues from lower sales/output ● Upfront costs to adopt/deploy new practices and processes ● Supply chain disruption ● Other, please specify
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Primary response to risk (column 12)

<ul style="list-style-type: none">● Pollution abatement and control measures● Aquifer storage to accrue recharge credits● Improve alignment of our public policy influencing activity with our water stewardship commitments● Secure alternative water supply● Amend the Business Continuity Plan● Comply with local regulatory requirements● Develop flood emergency plans● Develop drought emergency plans● Engage with local communities● Engage with NGOs/special interest groups● Engage with customers● Engage with suppliers● Engage with regulators/policymakers● Establish site-specific targets● Water-related capital expenditure● Infrastructure maintenance● Greater due diligence● Geographic diversification of facilities● Increased capital expenditure	<ul style="list-style-type: none">● Increase investment in new technology● Increase insurance coverage● Implement internal pricing on water● Implement nature based solutions● Improve monitoring● Develop new products and/or markets● River basin restoration● Re-siting of facilities● Supplier diversification● Tighter supplier performance standards● Use of risk transfer instruments● Water management incentives● Adopt water efficiency, water re-use, recycling and conservation practices● Adopting soil conservation practices (food, beverages & tobacco sector only)● Adopting alternative crop management strategies to reduce fertilizer and pesticide use (food, beverages & tobacco sector only)● Adopting alternative livestock management practices (food, beverages & tobacco sector only)● Adopting better animal waste management practices (food, beverages & tobacco sector only)● Adopting alternative livestock management practices to reduce use of veterinary products (food, beverages & tobacco sector only)● Adopting sustainable irrigation practices (food, beverages & tobacco sector only)● Efficient fertilizer and pesticide management (food, beverages & tobacco sector only)● Use of drought resistant crop varieties (food, beverages & tobacco sector only)● Other, please specify
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Requested content

General

- This question asks about water-related risk drivers associated with your direct operations and their potential to substantively impact your organization, currently or in the future. (W4.2a asks about risk drivers in the rest of your value chain and their potential impact on your organization).
- For the purposes of this response, the risks reported should only be those which:
 - expose your organization to substantive financial or strategic impacts to your business - such as to operations, revenue, or expenditure, assets and liabilities, or capital allocation (as per the definition of 'substantive' you provide in W4.1a)
 - pose a risk at the corporate level, and not simply at the asset/business unit/geographic level at which they may occur
 - are inherent (a risk that exists in the absence of controls, so not taking into account any potential mitigation or management measures that have been or could be implemented).
- Use each row to report a primary risk driver and the potential substantive impact it could cause. If there is more than one impact, please select the primary impact. If there is more than one response to this risk, select the primary response.
- To report additional risk drivers or impacts associated with a basin, you are able to add a new row. Please report no more than 3 risk drivers or impacts per river basin and report the most substantive.

Country (column 1)

- From the drop-down menu provided, please select the country/region associated with the driver of the risk you are reporting.
- If your organization is exposed to risks in an area not included in the drop-down list of countries/regions, please select "Other, please specify" to provide a country/region label that you entered in to W0.3. If you need a total of more than 40 characters, you should use the comment box by clicking on the "speech bubble" icon.

River basin (column 2)

- From the drop-down menu provided, please select the river basin associated with the driver of the risk you are reporting. If you select "Other, please specify", provide a label for the river basin. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- For companies withdrawing water from large confined aquifers that may not discharge to the river basin they are located in e.g. Ogallala aquifer in the United States, please select "Other, please specify" and type in the name of the local aquifer source. Ensure that the correct country/region name is selected in column 1 (Country/Region).
- You may want to report the sub-basin for a main river basin that is listed. In this case select "Other, please specify" and use the following format: "Putumayo, Amazon".
- Refer to the instructions in the [Introduction](#) to CDP's water security reporting guidance for more details on how to response to 'River basin' columns.

Type of risk (column 3)

- Select the type of risk you would like to report. Your selection will determine the list of risk drivers that will appear in column 4.

Primary risk driver (column 4)

- The drop-down options presented are linked to the type of risk you selected in column 3.
- In the case that there may be more than one driver or a chain of causes for the potential substantive impact you are reporting, you should select what you consider to be the primary driver.
- If you do want to choose an additional driver for a river basin, you will need to add another row to report the details. Please refrain from providing more than three drivers per river basin.
- If you select "Other, please specify", provide a label for the primary risk driver. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Primary potential impact (column 5)

- Select the option that best describes the primary potential impact to your company due to the risk driver reported in column 4.
- The impact must be substantive at the corporate level as defined in W4.1a.
- If there is more than one potential impact associated with a risk driver, you should select what you consider to be the primary impact and use column 6 to describe the secondary impacts. This could, for example, be increased costs, decreased revenue, or closure of operations. Impacts can be operational or financial and can affect your organization, your consumers or other stakeholders as well as your company.
- If you do want to choose an additional substantive impact for a river basin or a risk driver, you will need to add another row to report the details. Please refrain from providing more than three impacts per river basin.
- If you select "Other, please specify", provide a label for the type of potential impact. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Company-specific description (column 6)

- Provide further contextual information on the risk driver selected in column 4, including more detail on its nature and location.
- Include a company-specific description of how the risk driver could impact your organization, including the nature of any secondary impacts.

Timeframe (column 7)

- Select the timeframe in which the inherent risks would be most likely to materialize. It is acknowledged that there is likely to be a higher degree of uncertainty associated with long-term risks. For example, you may consider your company to be at risk due to increasing pollution levels but this is unlikely to impact your business within the next 5 years. In this case you would select '4-6 years'.

Magnitude of potential impact (column 8)

- The magnitude describes the extent to which the impact, if it occurred, would affect your business. You should consider the business as a whole. This means that the potential magnitude of the impact can be a combination of the scale of the damage and your organization's state of resilience prior to responding to the risk.
- Magnitude of impact will vary from company to company. For example:

- Two companies may have identical facilities located on a coast in an area which is vulnerable to flooding. However, if company A relies on that facility for 90% of its production capacity and company B relies on it for only 40% of its production capacity, the magnitude of impact due to the same flooding damage will be comparatively higher on company A than on company B.
- A 1% reduction in profits will have different effects on different companies depending on the profit margins on which they work.

- As it is not possible for CDP to accurately define terms for magnitude of impact, companies are asked to determine and report magnitude using a qualitative 5 point scale from High to Low. Factors to consider when classifying the magnitude of the impact on your organization include:

- The proportion of business units affected
- The size of the impact on those business units
- The dependency of the company on those units
- The potential for shareholder or customer concern.
- An impact could have a relatively high magnitude for the company as a whole because of a large effect in one of these aspects or small effects in all four combining to create a larger impact.
- The magnitude should align with the proportion of global revenue at risk you reported in W4.1c for the river basin associated with the impact (selected in column 2). For example, if 50% of global revenue could be affected by water risk in the Yellow River basin then the magnitude for a risk reported in the Yellow River basin should align.
- If the financial impact has not been assessed by your organization, please select 'Unknown'.

Likelihood (column 9)

- Likelihood refers to the probability of the inherent impact occurring within the time frame reported in column 7. In the case of an inherent risk, the probability of the impact might be similar to the probability of the risk event (the risk driver) itself.
- Likelihood along with the magnitude are the building blocks for quantifying and prioritizing risk.
- The terms used to describe likelihood are taken from the [Intergovernmental Panel on Climate Change's \(IPCC\) 2013 report](#) and are consistent across all CDP information requests.
- As a guide to quantifying likelihood on a % basis, we suggest:

- Virtually certain (greater than 99% probability);
- Very likely (greater than 90% probability);
- Likely (greater than 66% probability);
- More likely than not (greater than 50% probability);
- About as likely as not (between 33% and 66% probability);
- Unlikely (less than 33% probability);
- Very unlikely (less than 10%);
- Exceptionally unlikely (less than 1% probability);
- Unknown

- For example, you may consider your company to be potentially exposed to a risk of water rationing in the next '4-6 years' which would cause an impact of high magnitude - but the risk is not considered very likely to materialize. You would select 'unlikely'. Alternatively, if the risk related to a piece of new legislation which has already been prepared in draft form, the likelihood of the impact associated with that risk occurring will be relatively high and you would select 'very likely'.

Potential financial impact (column 10)

- Provide a quantitative estimate of the inherent financial impacts of the risks (before taking into consideration any controls you may have in place to mitigate the impacts). This figure should be in the same currency that you selected for all financial information disclosed throughout your response in question W0.4.
- If you estimate that there will be no financial impact to your business from this risk, enter 0.
- If you are unable to provide an estimated financial impact, you may use column 11, "Explanation of financial impact", to provide a description of the impact in relative terms; for example, as a percentage relative to a stated or publicly available figure, or give a qualitative estimate of the financial impact.
- An example would be the value of stranded assets or the value lost due to halted production (before taking into consideration any insurance coverage you have that might compensate you).
- It is acknowledged that these figures will be estimates.
- If your estimate is a range, please provide the mid-point of that range and use column 11 to provide the range. Do not leave this field blank unless you are not disclosing any information.

Explanation of financial impact (column 11)

- Use this field to explain the figure provided in "Potential financial impact" (column 10).
- If your estimate of potential financial impact (column 10) consists of a range, please state the range here.
- Describe how you arrived at this figure (or range), including:

- what approach was employed to calculate the figure
 - any assumptions the figure is dependent on
 - the likely timescale for the financial impact.
- In case no figure is provided in column 10, provide a description of the financial impact in relative terms (for example as a percentage relative to a stated or publicly available figure) or give a qualitative estimate of the financial impact. Otherwise, if you have no information about the financial impact, please write "Impact not quantified financially".
 - You can also give a description here any financial impacts associated with the selected related risk driver (in addition to the main impact identified in column 5).

Primary response to risk (column 12)

- Select the response strategy that most closely describes how your organization expects to respond to the reported risk. If there is no appropriate response strategy for your organization included in the list, please select "Other, please specify" and add your own response label.
- If you select "Other, please specify", provide a label for the primary response to risk. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Description of response (column 13)

- Provide additional details of your organization's response to mitigate, control, transfer or accept the risk reported in this row. You may include any secondary response strategies.
- Include the timeframe expected for the response strategy to be implemented. Is the response underway, not yet implemented, or completed? What is the projected progress for lowering residual risk?
- Describe the difference the response has made/is likely to make. This may include:
 - How effective the response has been/is expected to be in preventing the inherent risk driver reoccurring, or for improving your organization's resilience at the asset or corporate level, so preventing future financial, operational or strategic impacts
 - Whether water security for your company is likely to improve as a result, at either the asset or corporate level
 - Whether water security for other users is likely to improve as a result
 - Whether the response contributes to the progress of other UN Sustainable Development Goals.
 - Whether the response strategy involves any collective action initiatives.
- Report whether the response strategy involves any collective action initiatives, or if it contributes to the progress of a UN Sustainable Development Goal.
- For those who indicate in W11.2 that they would be interested in having their public response data transferred to the Water Action Hub, we ask that you provide as much information about your response as possible, particularly local projects, including:
 - Who else is involved in the joint project /initiative (such as names of organizations or government offices) or who you would like to work with (government agencies, other companies, NGOs, etc.)
 - The geographic or other scale of the project.
 - What the project seeks to accomplish including expected benefits for the watershed beyond the company
 - When the project started and if it has concluded or if it is continuing
 - If possible, the specific location of the project.

- Note that these criteria are not scored but are crucial to building a project for the Water Action Hub and without this detail the project may not be suitable to transfer to this platform.

Cost of response (column 14)

- Provide a quantitative figure for the cost of your risk response and management actions. If there are no costs to responding to and managing the risk, enter 0". If the value you have reported is an estimate, please state this in column 15 (Explanation of cost of response).
- If you cannot provide an absolute value, you may use column 15 to provide a percentage value.
- This figure should be in the same currency that you selected for all financial information disclosed throughout your response in question W0.4.

Explanation of cost of response (column 15)

- Use this field to explain the figure provided in column 14. Please describe how you derived this figure, including:

- what approach was taken to arriving at the cost of your response strategy
 - if it is an estimate
 - any assumptions the figure is dependent on
 - the likely timescale for the cost of response
- In case no figure is provided in column 14, provide a description of the cost in relative terms or give a qualitative estimate of the cost of the response. Otherwise, if you have no information about the financial impact, please write "cost of response not quantified at corporate level".

Explanation of terms

- **Direct operations:** An organization's operations include anything it does itself for the purpose of producing goods and services and maintaining the functionality of the business. This covers any internal supply chains between the organization's business units. For example, a business unit within a company that supplies components to another business unit within the company would be considered part of the organization's direct operations.
- **Inherent risk:** The risk that exists in the absence of controls, i.e. not taking into account any potential mitigation or management measures that could be implemented.
- **Physical risk:** Risk driven by water stress or scarcity (too little water), flooding (too much water) or pollution (lower water quality). Disruption in water supply or decline in water quality can adversely affect operations where water is used for production, irrigation, material processing, cooling, washing and cleaning, and personal consumption. Physical risks can adversely affect production or cause damage to physical assets.

- Note that weather events such as snow, or physical events such as high tide or earthquakes, are not a water risks in themselves but may cause water risks. If snow or earthquakes cause flooding, then it is the flooding that is the water risk and should be reported as such. However, snow, high tide and earthquakes could be considered water risks if they could cause predictable disruption to water supply or have groundwater impacts. For example, if heavy snow on property is common it could cause pollution release incidents when it melts if not managed properly.

- **Regulatory risk:** Risks driven by an expected or unexpected change or uncertainty, in law or regulation that may have direct or indirect impacts on a company. A change in law or regulation can increase the costs of operating a business, reduce the attractiveness of an investment, or change the competitive landscape in which a company operates. Water regulatory measures may include, among others, new water permit structures, rate changes to control withdrawals and discharge, redistribution of water to various users, and restrictions on pollutant types and levels.
- **Reputational risk:** Risk driven by litigation, product risks due to changes in consumer behavior, and risks that may impact decisions made by investors, consumers and current/potential employees concerning a company.
- **Residual risk:** The risk remaining after a specific action has been taken to manage the risk.
- **Risk driver:** The factor/ driving force that could cause the potential impact. Risk drivers are typically physical (e.g. weather extreme events), regulatory, reputational and markets related, or technological.
- **Technological risk:** Risk driven by technological improvements or innovations; for example, those that support water security or the transition to a lower-carbon, energy-efficient economic system.
- **Water scarcity:** Refers to the volumetric abundance, or lack thereof, of freshwater resources. Scarcity is human driven; it is a function of the volume of human water consumption relative to the volume of water resources in a given area. As such, an arid region with very little water, but no human water consumption would not be considered scarce, but rather "arid." Water scarcity is a physical, objective reality that can be measured consistently across regions and over time. Water scarcity reflects the physical abundance of freshwater rather than whether that water is suitable for use. For instance, a region may have abundant water resources (and thus not be considered water scarce), but have such severe pollution that those supplies are unfit for human or ecological uses.

Example response

Country/Region	River basin	Type of risk	Primary risk driver	Primary potential impact
India	Sahayadri	Physical	Declining water quality	Closure of operations
Indonesia	Kapuas	Regulatory	Statutory water withdrawal limits/changes to water allocation	Constraint to growth
Japan	Mogami	Reputational and markets	Changes in consumer behavior	Brand damage
Kyrgyzstan	Issyk-Kul	Physical	Increased levels of plastic in freshwater bodies	Reduced revenues from lower sales/output

Company-specific description	Timeframe	Magnitude of potential impact	Likelihood	Potential financial impact
<i>The increased algae may affect our ability to pump water at our Pune based sites and use it for cooling purposes in our operations. This could lead to intermittent shutdowns while we clean the water intakes.</i>	Current - up to 1 year	Low-medium	Probable	300,000.00
<i>Municipal water supply is overstretched and new conditions of industrial water use are being drafted for potential future implementation. Water use limits may be imposed on water-intensive businesses like our paper mills; if these limits occur during peak production periods, reduced output could reduce revenue by up to US \$ 200,000 per day.</i>	4-6 years	Medium	Highly probable	1,450,000.00
<i>When making beverage purchase decisions, consumers in the Japanese market have come to consider not only product quality and safety, but also producers' corporate efforts to conserve water resources and information disclosure practices. If consumers were to gain the mistaken impression that the group did not make efforts to conserve water resources, or if they felt that such efforts were insufficient, our brands would lose consumers' trust, leading to a situation where they would not support or select our products when making beverage purchase decisions.</i>	>6 years	High	>6 years	500,000,000.00
<i>Plastic pollution in water bodies globally (both rivers and oceans) is increasingly in the public eye, and products containing microplastics and plastic fibers are contributing to the issue. As one of the largest manufacturers of athletic leisurewear, we recognize our role in this issue. We have identified a risk that our product sales will be affected by increasing consumer demand for plastic-free products. Secondary impacts include company brand damage from association with the plastic pollution issue.</i>	Current - up to 1 year	Medium	Probable	12,000,000.00

Explanation of financial impact	Primary response to risk	Description of response	Cost of response	Explanation of cost of response
<i>In 2015 our Pune site saw intermittent shutdowns as a result of high algae levels. During this time our organization made heavy losses as a direct result, and this figure is based on that but adjusted for inflation, changes to interest rates and the value of the Euro. This is the potential impact prior to implementing our response.</i>	Increased capital expenditure	<i>This was a one-off investment in mitigation technology i.e. algae detection equipment in order to minimize impact on critical periods of water use. This includes the installation of cleaning grids and algae retention systems. We expect this to improve water security, not just at our facilities here, but for the wider environment including other stakeholders in the basin. We are currently implementing this system and it will be completed by March 2019.</i>	100,000.00	<i>This was a one-off investment of EUR 100,000, however maintenance costs may decrease if monsoon rainfall is lower next year.</i>
<i>Calculated the number of days per year which could have seen limited supplies of water. As peak production times vary inter-annually we took these as potentially all occurring in peak production. This was calculated from 2012 onwards to give the average potential annual impact.</i>	Comply with local regulatory requirements	<i>We plan to research and implement a general water efficiency strategy for facilities in all water stressed locations by the end of 2016 with local conditions tailoring the implementation of this strategy.</i>	350,000.00	<i>Financial investment will depend on location and facility but this location has been flagged as a high priority by our Environmental Management System. Estimated US \$ 500,000 – 200,000 per site. Cost estimate is based on previous implementation in 2 similar pulp facilities in Malaysia and Thailand, with installation of water recycling equipment and training local engineers as the key expenditure items.</i>
<i>Based on our current market share and our internal risk analysis we have estimated that in the event of a high magnitude dip in consumer demand, 7.5% of our market value could be lost. There are high margins of error to this however, and it is primarily based on case studies of historical analogues and research from the university of Mogami.</i>	Engage with NGOs/special interest groups	<i>As well as disclosing information on the group's water management practices and environmental performance, we work to promote sustainable water management and conserve water resources with NGOs active at the local level like WWF-Japan so that all local water users and environmental eco-systems can access sufficient amounts of good quality water. We also donate to the Green Fund operated by the National Land Afforestation Promotion Organization to help improve local water quality by reducing soil erosion.</i>	20,000,000.00	<i>Annual expenditure on information disclosure and water management activities amounts to approximately 20 million yen in the reporting year.</i>
<i>We estimate the potential sales loss could be of the order of 12 million over the next 10 years. This is based on market research we commissioned on consumer preferences with regard to environmentally-conscious clothing, combined with our global sales data.</i>	Develop new products and/or markets	<i>Our company always seeks to innovate in accordance with changing attitudes and ways of doing business. Plastic pollution is unacceptable and we have committed to phasing out all plastics from our products by 2025. We have already begun work on this effort, starting with a year-long trial of plastic-free products in Spain, one of our largest markets. We have also invested US\$5 million in a five year research program to develop new plastic-free and resource efficient materials. To manage the residual risk from our existing products already in the market, we are working with washing machine manufacturers to develop filtration systems that would prevent the discharge of microplastics to the environment during the wash cycle. These efforts align with SDG6's target to reduce industrial wastewater volumes and improve water quality globally (6.3.1 and 6.3.2).</i>	9,000,000.00	<i>We estimate that we are spending a total of US\$9.5 million over the next five years on efforts to reduce this risk. This includes US\$5 million for the R&D program, approximately US\$500,000 on collaboration efforts with washing machine manufacturers, and US\$4 million in the roll out and expansion of the trial of plastic-free products.</i>

(W4.2a) Provide details of risks identified within your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Question Dependencies

- This question only appears if you select one of the following options in response to W4.1:
- Yes, both in direct operations and the rest of our value chain

- Yes, only in our value chain beyond our direct operations

Change from 2017

Modified question (2017 W3.2d)

Rationale

Your response to this question will allow CDP data users to see, in one place, details of the inherent water risks that your company is exposed to due to drivers associated with its value chain within particular river basins, and also the estimated potential impact of the risk at the corporate level and your response strategy to address the risk.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

SDG

Goal 6: Clean water and sanitation

Response options

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

Country/Region	River basin	Stage of value chain	Type of risk	Primary risk driver	Primary potential impact	Company-specific description	Timeframe
Select from: <input type="radio"/> Country/region drop-down list <input type="radio"/> Other, please specify	Select from: <input type="radio"/> River basin drop-down list <input type="radio"/> Not known <input type="radio"/> Other, please specify	Select from: <input type="radio"/> Supply chain <input type="radio"/> Use phase <input type="radio"/> Other, please specify	Select from: <input type="radio"/> Physical <input type="radio"/> Regulatory <input type="radio"/> Reputation & markets <input type="radio"/> Technology	Select from: <input type="radio"/> Response drop-down options below table	Select from: <input type="radio"/> Response drop-down options below table	Text field [maximum 1,500 characters]	Select from: <input type="radio"/> Current up to 1 year <input type="radio"/> 1-3 years <input type="radio"/> 4-6 years <input type="radio"/> More than 6 years <input type="radio"/> Unknown
Magnitude of potential impact	Likelihood	Potential financial impact	Explanation of financial impact	Primary response to risk	Description of response	Cost of response	Explanation of cost of response
Select from: <input type="radio"/> High <input type="radio"/> Medium-high <input type="radio"/> Medium <input type="radio"/> Medium-low <input type="radio"/> Low <input type="radio"/> Unknown	Select from: <input type="radio"/> Virtually certain <input type="radio"/> Very likely <input type="radio"/> Likely <input type="radio"/> More likely than not <input type="radio"/> About as likely as not <input type="radio"/> Unlikely <input type="radio"/> Very unlikely <input type="radio"/> Exceptionally unlikely <input type="radio"/> Unknown	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 500 characters]	Select from: <input type="radio"/> Response drop-down options below table	Text field [maximum 1,500 characters]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 500 characters]

[Add Row]

Primary risk driver (column 4)

<p>Physical</p> <ul style="list-style-type: none"> ● Declining water quality ● Supplier dependency on water intensive energy sources ● Drought ● Ecosystem vulnerability ● Flooding ● Inadequate infrastructure ● Increased levels of plastic in fresh water bodies ● Increased water scarcity ● Increased water stress ● Pollution incident ● Rationing of municipal water supply ● Seasonal supply variability/inter annual variability ● Severe weather events ● Soil degradation (food, beverages & tobacco sector only) ● Acid rock drainage and metal leaching (metals & mining sector only) ● Leaching of pollutants to groundwater bodies (metals & mining sector only) ● Rupture of tailings dams and toxic spills (metals & mining sector only) ● Other, please specify <p>Regulatory</p> <ul style="list-style-type: none"> ● Changed product standards ● Higher water prices ● Increased difficulty in supplier obtaining withdrawals/operations permit ● Lack of transparency of water rights ● Limited or no river basin/catchment management ● Litigation against supplier ● Mandatory water efficiency, conservation, recycling or process standards ● Poor coordination between regulatory bodies ● Poor enforcement of water regulation ● Tighter regulatory standards ● Regulation of discharge quality/volumes ● Regulatory uncertainty ● Statutory water withdrawal limits/changes to water allocation ● Other, please specify 	<p>Reputation & markets</p> <ul style="list-style-type: none"> ● Changes in consumer behavior ● Community opposition ● Inadequate access to water, sanitation, and hygiene services ● Increased stakeholder concern or negative stakeholder feedback ● Water-related litigation ● Negative media coverage ● Mine closure (metals & mining sector only) ● Other, please specify <p>Technology</p> <ul style="list-style-type: none"> ● Data access/availability ● Substitution of existing products with lower water impact options ● Transitioning to bio-based chemicals (chemicals sector only) ● Transitioning to water efficient and low water intensity technologies and products ● Transitioning to water intensive, low carbon energy sources ● Unsuccessful investment in new technologies ● Other, please specify
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Primary potential impact (column 5)

<ul style="list-style-type: none"> ● Company brand damage ● Changing revenue mix and sources ● Constraint to growth ● Closure of company operations ● Diminished ability to reduce value chain GHG emissions ● Disruption to sales due to value chain disruption ● Fines, penalties or enforcement orders ● Impact on company assets ● Disruption to workforce management and planning ● Increased insurance premiums ● Increased capital costs ● Increased compliance costs 	<ul style="list-style-type: none"> ● Increased operating costs ● Increased production costs due to changing input prices from supplier ● Litigation ● Loss of license to operate ● Reduction or disruption in production capacity ● Reduced demand for products and services ● Reduction in capital availability ● Reduced revenues from lower sales/output ● Upfront costs to adopt/deploy new practices and processes ● Supply chain disruption ● Other, please specify
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Primary response to risk (column 12)

<p>Direct operations</p> <ul style="list-style-type: none"> ● Include in Business Continuity Plan ● Water-related capital expenditure ● Increase investment in new technology ● Develop new products and/or markets ● Improve alignment of our procurement policy influencing activity with our water stewardship commitments ● Other, please specify <p>Upstream</p> <ul style="list-style-type: none"> ● Map supplier water risk ● Supplier diversification ● Tighter supplier performance standards ● Increase our insurance coverage ● Use of risk transfer instruments ● Other, please specify 	<p>Supplier engagement</p> <ul style="list-style-type: none"> ● Develop supplier drought emergency plans ● Develop supplier flood emergency plans ● Establish supplier performance targets ● Increase requested supplier reporting on water ● Promote greater due diligence among suppliers ● Promote adoption of waste water management procedures among suppliers ● Promote investment in infrastructure and technologies for water saving, re-use and recycling among suppliers ● Promote the use of insurance among suppliers ● Supplier water management incentives ● Work with supplier to engage with local communities ● Promote the adoption of alternative crop management strategies among suppliers to reduce use of fertilizers and pesticides (food, beverages & tobacco sector only) ● Promote the adoption of alternative livestock management practices among suppliers (food, beverages & tobacco sector only) ● Promote the adoption of alternative livestock management practices among suppliers to reduce use of veterinary products ● (food, beverages & tobacco sector only) ● Promote the adoption of better animal waste management among suppliers (food, beverages & tobacco sector only) ● Promote the adoption of soil conservation practices among suppliers (food, beverages & tobacco sector only) ● Promote the adoption of sustainable irrigation practices among suppliers (food, beverages & tobacco sector only) ● Promote efficient fertilizer and pesticide management among suppliers (food, beverages & tobacco sector only) ● Promote the use of drought resistant crop varieties among suppliers (food, beverages & tobacco sector only) ● Other, please specify <p>Downstream</p> <ul style="list-style-type: none"> ● Pollution abatement and control measures ● Work with supplier to engage with NGOs/special interest groups ● Work with supplier to engage with customers ● Work with supplier to engage with regulators/policymakers ● Infrastructure investment ● River basin restoration ● Implement nature based solutions ● Other, please specify
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Requested content

General

- This question asks about risk drivers associated with your value chain beyond your direct operations. Consider which risks drivers have the potential to substantively impact your organization at the corporate level, either currently or in the future, and what the response has been. (W4.2 asks about water-related risk drivers in your direct operations.).
- For the purposes of this response, the risks reported should only be those which:
 - expose your organization to substantive financial or strategic impacts to your business - such as to operations, revenue, or expenditure, assets and liabilities, or capital allocation (as per the definition of "substantive" you provide in W4.1a)
 - pose a risk at the corporate level, and not simply at the asset/business unit/geographic level at which they may occur
 - are inherent (a risk that exists in the absence of controls, so not taking into account any potential mitigation or management measures that have been or could be implemented).
- Use each row to report a primary risk driver and the potential substantive impact it could cause. If there is more than one impact, please select the primary impact. If there is more than one response to this risk, select the primary response.
- To report additional risk drivers or impacts associated with a basin, you are able to add a new row. Please report no more than 3 risk drivers or impacts per river basin and report the most substantive.

Country/Region (column 1)

- From the drop-down menu provided, please select the country/region associated with the driver of the risk you are reporting.
- If your organization is exposed to risks in an area not included in the drop-down list of countries/regions, please select "Other, please specify" to provide a country/region label that you entered in to W0.3. If you need a total of more than 40 characters, you should use the comment box by clicking on the "speech bubble" icon.

River basin (column 2)

- From the drop-down options provided, select the river basin associated with the driver of the risk you are reporting. If you select "Other, please specify", provide a label for the river basin. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- For companies withdrawing water from large confined aquifers that may not discharge to the river basin they are located in e.g. Ogallala aquifer in the United States, please select "Other, please specify" and type in the name of the local aquifer source. Ensure that the correct country/region name is selected in column 1 (Country/Region).
- You may want to report the sub-basin for a main river basin that is listed. In this case select "Other, please specify" and use the following format: "Putumayo, Amazon".
- Refer to the instructions in the [Introduction](#) to CDP's water security reporting guidance for more details on how to response to 'River basin' columns.

Stage of value chain (column 3)

- Select the stage of the value chain where you have identified a risk with the potential to impact your business either currently or in the future.
- If you select "Other, please specify", provide a label for the stage of value chain. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Type of risk (column 4)

- Select the type of risk you would like to report. Your selection will determine the list of risk drivers that will appear in column 5.

Primary risk driver (column 5)

- The drop-down options presented are linked to the type of risk you selected in column 4.
- In the case that there may be more than one driver or a chain of causes for the potential substantive impact, you should select what you consider to be the primary driver.
- If you do want to choose an additional driver for a river basin, you will need to add another row to report the details. Please refrain from providing more than three risk drivers per river basin.
- If you select "Other, please specify", provide a label for the primary risk driver. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Primary potential impact (column 6)

- Select the option that best describes the primary potential impact to your company due to the risk driver reported in column 5.
- The impact must be substantive at the corporate level as defined in W4.1a.
- If there is more than one potential impact associated with a risk driver, you should select what you consider to be the primary impact and describe the secondary impacts in column 7. This could, for example, be

increased costs, decreased revenue, or closure of operations. Impacts can be operational or financial and can affect your organization, your consumers or other stakeholders as well as your company.

- If you do want to choose an additional substantive impact for a river basin or a risk driver, you will need to add another row to report the details. Please refrain from providing more than three impacts per river basin.
- If you select "Other, please specify", provide a label for the stage or type of potential impact. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Company-specific description (column 7)

- Provide further contextual information on the risk driver selected in column 5, including more detail on its nature and location.
- Include a company-specific description of how the risk driver will impact your organization, including the nature of any secondary impacts.

Timeframe (column 8)

- Select the timeframe in which the inherent risks would be most likely to materialize. It is acknowledged that there is likely to be a higher degree of uncertainty associated with long-term risks. For example, you may consider your company to be at risk due to increasing pollution levels but this is unlikely to impact your business within the next 5 years. In this case you would select '4-6 years'.

Magnitude of potential impact (column 9)

- The magnitude describes the extent to which the impact, if it occurred, would affect your business. You should consider the business as a whole. This means that the potential magnitude of the impact can be a combination of the scale of the damage and your organization's state of resilience prior to responding to the risk.
- Magnitude of impact will vary from company to company. For example:
 - Two companies may have identical facilities located on a coast in an area which is vulnerable to flooding. However, if company A relies on that facility for 90% of its production capacity and company B relies on it for only 40% of its production capacity, the magnitude of impact due to the same flooding damage will be comparatively higher on company A than on company B.
 - A 1% reduction in profits will have different effects on different companies depending on the profit margins on which they work.
- As it is not possible for CDP to accurately define terms for magnitude of impact, companies are asked to determine and report magnitude using a qualitative 5 point scale from High to Low. Factors to consider when classifying the magnitude of the impact on your organization include:
 - The proportion of business units affected
 - The size of the impact on those business units
 - The dependency of the company on those units
 - The potential for shareholder or customer concern.
- An impact could have a relatively high magnitude for the company as a whole because of a large effect in one of these aspects or small effects in all four combining to create a larger impact.
- The magnitude should align with the proportion of global revenue at risk you reported in W4.1c for the river basin associated with the impact (selected in column 2). For example, if 50% of global revenue could be affected by water risk in the Yellow River basin then the magnitude for a risk reported in the Yellow River basin should align.
- If the financial impact has not been assessed by your organization, please select 'Unknown'.

Likelihood (column 10)

- Likelihood refers to the probability of the impact occurring within the time frame reported in column 8. In the case of an inherent risk, the probability of the impact might be similar to the probability of the risk event (the risk driver) itself.
- Likelihood along with the magnitude are the building blocks for quantifying and prioritizing risk.
- The terms used to describe likelihood are taken from the [Intergovernmental Panel on Climate Change's \(IPCC\) 2013 report](#) and are consistent across all CDP information requests.
- As a guide to quantifying likelihood on a % basis, we suggest:
 - Virtually certain (greater than 99% probability);
 - Very likely (greater than 90% probability);
 - Likely (greater than 66% probability);
 - More likely than not (greater than 50% probability);
 - About as likely as not (between 33% and 66% probability);

- Unlikely (less than 33% probability);
- Very unlikely (less than 10%);
- Exceptionally unlikely (less than 1% probability);
- Unknown

- For example, you may consider your company to be potentially exposed to a risk of water rationing in the next '4-6 years' which would cause an impact of high magnitude - but the risk is not considered very likely to materialize. You would select 'unlikely'. Alternatively, if the risk related to a piece of new legislation which has already been prepared in draft form, the likelihood of the impact associated with that risk occurring will be relatively high and you would select 'very likely'.

Potential financial impact (column 11)

- Provide a quantitative estimate of the inherent financial impacts of the risks (before taking into consideration any controls you may have in place to mitigate the impacts). This figure should be in the same currency that you selected for all financial information disclosed throughout your response in question W0.4.
- If you estimate that there will be no financial impact to your business from this risk, enter 0.
- If you are unable to provide an estimated financial impact, you may provide a description of the impact in relative terms in "Explanation of financial impact" (column 12), for example as a percentage relative to a stated or publicly available figure, or give a qualitative estimate of the financial impact.
- An example would be the value of stranded assets or the value lost due to halted production (before taking into consideration any insurance coverage you have that might compensate you).
- It is acknowledged that these figures will be estimates.
- If your estimate is a range, please provide the mid-point of that range and use column 12 to provide the range. Do not leave this field blank unless you are not disclosing any information.

Explanation of financial impact (column 12)

- Use this field to explain the figure provided in "Potential financial impact" (column 11).
- If your estimate of potential financial impact (column 11) consists of a range, please state the range here.
- Describe how you arrived at this figure (or range), including:
 - what approach was employed to calculate the figure
 - any assumptions the figure is dependent on
 - the likely timescale for the financial impact.
- In case no figure is provided in column 11, provide a description of the financial impact in relative terms (for example as a percentage relative to a stated or publicly available figure) or give a qualitative estimate of the financial impact. Otherwise, if you have no information about the financial impact, please write "Impact not quantified financially".
- You can also give a description here any financial impacts associated with the selected related risk driver (in addition to the main impact identified in column 6).

Primary response to risk (column 13)

- Select the response strategy that most closely describes how your organization expects to respond to the reported risk. If there is no appropriate response strategy for your organization included in the list, select "Other, please specify" and add your own response label.
- If you select "Other, please specify", provide a label for the stage of primary response to risk. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Description of response (column 14)

- Provide additional details of your organization's response to mitigate, control, transfer or accept the risk reported in this row. You may include any secondary response strategies.
- Include the timeframe expected for the response strategy to be implemented. Is the response underway, not yet implemented, or completed? What is the projected progress for lowering residual risk?
- Describe the difference the response has made/is likely to make; including:
 - How effective the response has been/is expected to be in preventing the inherent risk driver reoccurring, or for improving your organization's resilience at the asset or corporate level, so preventing future financial, operational or strategic impacts
 - Whether water security for your company is likely to improve as a result, at either the asset or corporate level
 - Whether water security for other users is likely to improve as a result

- Report whether the response strategy involves any collective action initiatives, or if it contributes to the progress of a UN Sustainable Development Goal.
- For those who indicate in W11.2 that they would be interested in having their public response data transferred to the Water Action Hub, we ask that you provide as much information about your response as possible, particularly local projects, including:

- Who else is involved in the joint project /initiative (such as names of organizations or government offices) or who you would like to work with (government agencies, other companies, NGOs, etc.)
- The geographic or other scale of the project.
- What the project seeks to accomplish including expected benefits for the watershed beyond the company
- When the project started and if it has concluded or if it is continuing
- If possible, the specific location of the project.
- Note that these criteria are not scored but are crucial to building a project for the Water Action Hub and without this detail the project may not be suitable to transfer to this platform.

Cost of response (column 15)

- Provide a quantitative figure for the cost of your risk response and management actions. If there are no costs to responding to and managing the risk, enter "0". If the value you have reported is an estimate, please state this in column 15 (explanation of cost of response).
- If you cannot provide an absolute value you may use column 15 to provide a percentage value.
- This figure should be in the same currency you selected for all financial information disclosed throughout your response in W0.4.

Explanation of cost of response (column 16)

- Use this field to explain the figure provided in column 14. Please describe how you derived this figure, including:

- what approach was taken to arrive at the cost of your response strategy
- if it is an estimate
- any assumptions the figure is dependent on
- the likely timescale for the cost of response

- In case no figure is provided in column 15, provide a description of the cost in relative terms or give a qualitative estimate of the cost of the response. Otherwise, if you have no information about the financial impact, please write "cost of response not quantified at corporate level".

Explanation of terms

- **Inherent risk:** The risk that exists in the absence of controls, i.e. not taking into account any potential mitigation or management measures that could be implemented.
- **Physical risk:** Risk driven by water stress or scarcity (too little water), flooding (too much water) or pollution (lower water quality). Disruption in water supply or decline in water quality can adversely affect operations where water is used for production, irrigation, material processing, cooling, washing and cleaning, and personal consumption. Physical risks can adversely affect production or cause damage to physical assets.

- Note that weather events such as snow, or physical events such as high tide or earthquakes, are not a water risks in themselves but may cause water risks. If snow or earthquakes cause flooding, then it is the flooding that is the water risk and should be reported as such. However, snow, high tide and earthquakes could be considered water risks if they could cause predictable disruption to water supply or have groundwater impacts. For example, if heavy snow on property is common it could cause pollution release incidents when it melts if not managed properly.

- **Regulatory risk:** Risks driven by an expected or unexpected change or uncertainty, in law or regulation that may have direct or indirect impacts on a company. A change in law or regulation can increase the costs of operating a business, reduce the attractiveness of an investment, or change the competitive landscape in which a company operates. Water regulatory measures may include, among others, new water permit structures, rate changes to control withdrawals and discharge, redistribution of water to various users, and restrictions on pollutant types and levels.
- **Reputational risk:** Risk driven by litigation, product risks due to changes in consumer behavior, and risks that may impact decisions made by investors, consumers and current/potential employees concerning a company.
- **Residual risk:** The risk remaining after a specific action has been taken to manage the risk.
- **Risk driver:** The factor/ driving force that could cause the potential impact. Risk drivers are typically physical (e.g. weather extreme events), regulatory, reputational and markets related, or technological.
- **Technological risk:** Risk driven by technological improvements or innovations; for example, those that support water security or the transition to a lower-carbon, energy-efficient economic system.

● **Water scarcity:** Refers to the volumetric abundance, or lack thereof, of freshwater resources. Scarcity is human driven; it is a function of the volume of human water consumption relative to the volume of water resources in a given area. As such, an arid region with very little water, but no human water consumption would not be considered scarce, but rather "arid." Water scarcity is a physical, objective reality that can be measured consistently across regions and over time. Water scarcity reflects the physical abundance of freshwater rather than whether that water is suitable for use. For instance, a region may have abundant water resources (and thus not be considered water scarce), but have such severe pollution that those supplies are unfit for human or ecological uses.

● **Value chain (beyond direct operations):** The sequence of activities or partners, either upstream or downstream of direct operations, that provide value to or receive value from an organization's products and services; for example, suppliers, product users and franchisees.

(W4.2b) Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?

Question Dependencies

- This question only appears if you select "No" or "Yes, only in our value chain beyond our direct operations" in response to W4.1.

Change from 2017

Minor change (2017 W3.2e)

Rationale

A risk assessment may identify no substantive water-related risks. This conclusion is important to disclose and explain. Knowing why your organization has concluded that it is not exposed to risks is crucial for data users to understand your business. This is especially relevant if you responded to W1.1 by rating water as important to your direct operations.

Response options

Please complete the following table:

Primary reason	Please explain
Select from: <ul style="list-style-type: none">Risks exist, but no substantive impact anticipatedEvaluation in progressNot yet evaluatedOther, please specify	Text field [maximum 2,000 characters]

Requested content

Primary reason (column 1)

- Choose the option that best explains why your organization does not consider itself exposed to any water-related risks in your direct operations with the potential to have a substantive financial or strategic impact on your business - given your own definition of substantive reported in W4.1a.
- If none of the reasons listed are applicable, select "Other, please specify" and fill in the text box with the appropriate reason. If you need more than 40 characters, please use the comment box by clicking the "speech bubble" icon.

Please explain (column 2)

- Your explanation should include company-specific details such as:

- your evaluation process that is in progress
- or reasons why you have not yet conducted a risk assessment
- or why no substantive impacts to your organization are anticipated due to water-related risks that have been identified in your direct operations.

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

Question dependencies

- This question only appears if you select "No" or "Yes, only within our direct operations" in response to W4.1.

Change from 2017

Modified question (2017 W3.2f)

Rationale

A risk assessment may identify no substantive water-related risks. This conclusion is important to disclose and explain. Knowing why your organization has concluded that it is not exposed to risks is crucial for data users to understand your business. This is especially relevant if you responded to W1.1 by rating water as important to your value chain.

Response options

Please complete the following table:

Primary reason	Please explain
Select from: <ul style="list-style-type: none">● Risks exist, but no substantive impact anticipated● Evaluation in progress● Not yet evaluated● Lack of visibility of supply chain● Other, please specify	Text field [maximum 2,000 characters]

Requested content

Primary reason (column 1)

- Choose the option that best explains why your organization does not consider itself exposed to any water-related risks anywhere in your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business - given your own definition of substantive reported in W4.1a.
- If none of the reasons listed are applicable, select "Other, please specify" and fill in the text box with the appropriate reason. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Please explain (column 2)

- Your explanation should include company-specific details such as:

- your evaluation process that is in progress for your value chain
- or reasons why you have not yet conducted a risk assessment for your value chain
- any plans to improve supplier visibility
- or why no substantive impacts to your organization are anticipated due to water-related risks that have been identified in your value chain.

Water-related opportunities

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Question dependencies

- Your response to W4.3 will determine which subsequent questions are presented. If your response to W4.3 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

Minor change (2017 W4.1)

Rationale

Changes in water management, availability, climatic conditions and other physical, market or regulatory developments related to water may pose commercial or other opportunities to some companies. CDP data users are interested in understanding how companies are approaching and capitalizing on potential water-related opportunities, especially those with market significance and financial value.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

Implications: Business opportunities

Response options

Select one of the following options:

- Yes, we have identified opportunities, and some/all are being realized
- Yes, we have identified opportunities but are unable to realize them
- No

Request content

General

- Consider whether your organization has identified water-related opportunities that could have a substantive impact on your business at the corporate level. Also consider whether or not the opportunities are being realized.
- Select one of the 'Yes' options if water presents a strategic, operational or market opportunity that is substantively benefiting, or has the potential to substantively benefit, your organization.
- The opportunities may:
 - be commercial or operational in nature
 - be driven at the asset, business unit, geographic or other level
 - bring direct financial benefits
 - bring other kinds of benefits, such as policy influence, strengthening of reputation, or reduced environmental impact
 - also be of benefit to other water users; for example through stewardship or collective action programs that address shared risks or aim to secure water for all.
- Select 'Yes, we have identified opportunities, and some/all are being realized' if your organization has taken action to pursue any substantive opportunities. More details will be requested in W4.3a.
- Select 'Yes, we have identified opportunities but are unable to realize them' if your organization has not taken action to pursue any substantive opportunities. More details will be requested in W4.3b.
- Only select 'No' if you have not identified any substantive opportunities.

Explanation of terms

- **Substantive impact:** An impact that has a considerable or relatively significant effect on an organization at the corporate level. This could include an operational, financial or strategic effect on the entire business or part of a business

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Question dependencies

- This question only appears if you select "Yes, we have identified opportunities, and some/all are being realized" in response to question W4.3.

Change from 2017

Modified question (2017 W4.1a)

Rationale

Investors and data users are interested to know if you are realizing the opportunities stemming from changes in water availability, climatic conditions, and other water-related developments and their potential financial impact. Details related to these opportunities can be important when evaluating businesses' plans and environmental strategies.

Connection to other frameworks

CEO Water Mandate

Implications: Business risks

Response options

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

Type of opportunity	Primary water-related opportunity	Company-specific description & strategy to realize opportunity	Estimated timeframe for realization	Magnitude of potential financial impact	Potential financial impact	Explanation of financial impact
Select from: <ul style="list-style-type: none">● Efficiency● Resilience● Products and services● Markets● Other	Select from: <ul style="list-style-type: none">● Response drop-down options below table	Text field [maximum 1,500 characters]	Select from: <ul style="list-style-type: none">● Current - up to 1 year● 1 to 3 years● 4 to 6 years● 6 years● Unknown	Select from: <ul style="list-style-type: none">● Low● Low-medium● Medium● Medium-high● High● Unknown	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 1,500 characters]

[Add Row]

Primary water-related opportunity (column 2)

<p>Efficiency</p> <ul style="list-style-type: none">● Cost savings● Improving water efficiency in operations● Improved field recovery factor [oil & gas only] <p>Resilience</p> <ul style="list-style-type: none">● Increased resilience to impacts of climate change● Increased supply chain resilience● Resilience to future regulatory changes <p>Products and services</p> <ul style="list-style-type: none">● New R&D opportunities● Increased sales of existing products/services● Sales of new products/impacts● Reduced impact of product use on water resources	<p>Markets</p> <ul style="list-style-type: none">● Expansion into new markets● Improved community relations● Improved staff retention● Improved customer satisfaction● Increased brand value● Increased shareholder value● Strengthened social license to operate● Stronger competitive advantage <p>Other</p> <ul style="list-style-type: none">● Other, please specify
--	---

Requested content

General

- For the purposes of this response, the opportunities reported should only be those which currently or potentially have a positive substantive impact on your business at the corporate level, directly or indirectly.
- You should only report opportunities which you are currently taking action to realize.
- The opportunities may:

- be commercial or operational in nature
- be driven at the asset, business unit, geographic or other level
- bring direct financial benefits
- bring other kinds of benefits, such as policy influence, strengthening of reputation, or reduced environmental impact
- also be of benefit to other water users; for example through stewardship or collective action programs that address shared risks or aim to secure water for all.

Type of opportunity/Primary water-related opportunity (columns 1 and 2)

- The drop-down options presented in column 2 depend on the type of opportunity you selected in column 1.
- If you select "Other, please specify", provide a label for the primary water-related opportunity. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- Other examples of opportunity types are provided in the Additional Information row.

Description of opportunity & strategy to realize opportunity (column 3)

- Include details of the opportunity:
 - a description of the actual or anticipated positive benefit for your organization, for example, a description of the strategic or financial impact
 - where in the organization the benefit applies, e.g. - company-wide, to a certain location, geographic scale, business line, stage of your value chain, or with a particular product or service
 - what is driving the opportunity and where in the organization the opportunity originates, e.g. - company-wide, to a certain location, geographic scale, business line, stage of your value chain, or with a particular product or service
 - whether the benefits are company-wide, restricted to a certain location, geographic scale, business line, or relate to a particular product or service
- Describe how you have defined 'substantive' impact in the context of an opportunity, and reference the definition of substantive impact you gave in W4.1a if applicable.
- With reference to your organization specifically, describe the strategy your organization has in place to take advantage of the opportunities and include an example of the strategy in action, if possible. Actions might include, for example, developing new product lines to address water challenges or increased demand for certain product lines due to changing consumer attitudes; or strengthening catchment relationships in order to realize a collective action opportunity.

Estimated timeframe for realization (column 4)

- The timeframe refers to the likely timeframe within which you expect the benefits to materialize.

Magnitude of potential financial impact (column 5)

- Indicate your understanding of the magnitude of the financial benefit that has arisen or will arise due to this opportunity. Your response should be in terms of your entire organization, rather than a local asset/business unit/geography.
- This is an estimate of the inherent potential financial benefit of the opportunities i.e. before taking into consideration any processes you may have in place to capitalize on the opportunity.
- The 'magnitude' of the potential benefit arising from a financial value will vary in scale and metric from company to company, so it is not possible for CDP to accurately define the listed terms for magnitude. For example, two companies may report a potential financial impact figure of \$500,000. For company A this could represent a 1% increase in profits, but a 15% increase in revenue for company B.
- For this reason, companies are asked to determine and report magnitude using a qualitative 5-point scale from High to Low, and then give more details in column 7.
- If the financial impact has not been assessed by your organization, please select 'Unknown'.

Potential financial impact (column 6)

- Provide an estimated figure for the potential financial benefit of the opportunities.
- If you estimate that there will be no financial impact to your business from this opportunity, enter 0.
- If you are unable to provide an estimated financial impact in absolute values you may provide a description of the impact in relative terms in "Explanation of financial impact" (column 7), for example as a percentage relative to a stated or publicly available figure, or give a qualitative estimate of the financial impact.
- It is acknowledged that these will be estimates and, where possible, assumptions made in arriving at a financial impact figure should be stated column 7.
- This figure should be in the same currency that you selected for all financial information disclosed throughout your response in question W0.4.
- If your estimate is a range, please provide the mid-point of that range and use column 17 to provide the range. Do not leave this field blank unless you are not disclosing any information.

Explanation of potential financial impact (column 7)

- Comment on your selection in column 5, how you arrive at that assessment of magnitude and the assumptions made in calculating the financial figure (or range) given in column 6.
- If your estimate of potential financial impact (column 6) consists of a range, please state the range here.
- Include any further information with regards to the information provided, including for example the geographic scale associated with the potential financial impact.
- If applicable you should explain why you could not calculate a quantitative figure, or why you do not anticipate any financial impact on your business.

(W4.3b) Why does your organization not consider itself to have water-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 W4.3.

Change from 2017

Minor change (2017 W4.1b)

Rationale

Investors and other data users are interested to know whether you are aware of water-related opportunities. An explanation of why your organization has concluded that it is not exposed to opportunities is crucial for understanding how your business strategy is aligned with water issues.

Response options

Please complete the following table:

Primary reason	Please explain
Select from: <ul style="list-style-type: none"> ● Opportunities exist, but 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 	Text field [maximum 2,000 characters]

Requested content

Primary reason (column 1)

- Select the reason that best describes why you consider your organization not exposed to water-related opportunities, or why you have been unable to realize them.
- If you select "Other, please specify", provide a label for the reason. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Please explain (column 2)

- Explain further why there are no apparent water opportunities for your company how you assessed them, and if relevant to your selection in column 1:
 - give reasons why your organization considers there to be no water-related opportunities for your organization
 - make reference to how you defined "opportunities"
 - include how you have defined 'substantive' impact in the context of an opportunity and reference the definition of substantive impact you gave in W4.1a if applicable
 - describe when you will next repeat an assessment of opportunities
 - include specific reasons why you have not yet conducted a risk assessment/why it is considered unimportant for your business
 - provide any other company-specific details such as your evaluation process.

W5 Facility-level water accounting

Module Overview

The module is only presented if companies have reported in W4 that they have facilities exposing the company to risk. It asks companies to disclose water accounting data at facility level – only for sites exposing the company to a potential substantive change (as defined in W4.1a and reported in W4.1c). This is why this accounting data is requested after risks have been disclosed and is not included with the corporate level accounting questions in Module 1.

Data users are interested in a company's ability to measure, monitor, and disclose this granular accounting data as a proxy for sound risk assessment and management at the facility and corporate level. Limiting this disclosure to 'at risk' facilities helps a company to focus its understanding of how it uses and impacts water resources at 'hotspot' locations. Given the local nature of water risks, reporting at this level is considered as good practice. For any facilities for which you do not have data, please leave the field blank. Emphasis should be placed on reporting transparently and providing an explanation for lack of measured data, uncertainty in your data or estimated data.

Disclosure note:

- All organizations are advised to refer to the [CDP Technical Note](#) on water accounting definitions when responding to this module.
- You will need to complete this section only if you completed W4.1c because you have facilities exposed to water risks that have the potential to generate a substantive change to your business. CDP is not asking for information for all facilities, just those exposed to substantive water risk as defined in question W4.1a.
- The number of sites you provide this water accounting data for should be the same as the number of sites reported in section W4.1. A maximum of 50 rows is provided. If you have more than 50 sites you can aggregate your data at the river basin level.
- If you are reporting data for many facilities, you may prefer to complete this module offline. You can export questions by clicking the "Export" button and then entering/pasting your data directly into the fields of the exported spreadsheet. You can then import this file to populate the tables in these questions.
- **Units:** Volumes must be reported in megaliters per year (1 megaliter = 1 million liters or 1,000 m³) in all questions, unless otherwise stated.
- **Blank cells:** Please ensure when responding to these water accounting questions that cells are only intentionally left blank if you have no data to disclose. Blank cells are interpreted as non-disclosure, i.e. information is not available due to lack of measurement or a choice not to disclose, and are therefore awarded no points by the scoring methodology.
- **Values of zero:** entering a zero implies a measurement has been made, and the value is zero. Do not enter a zero if no data is available.
- **Data accuracy:** CDP recognizes that there may be uncertainty linked to water accounting information that could impact on data accuracy. Uncertainty can arise from data gaps, assumptions, metering/measurement constraints including equipment accuracy, data management, etc. The emphasis should be on reporting transparently and on providing an explanation for why reported data is uncertain or wholly or partially estimated or modelled, rather than sourced from direct measurements.

Key changes

- Facility withdrawals, discharges and consumption volumes requested together in one question (W5.1).
- Geolocation data is requested for each facility at risk (W5.1).
- Revised withdrawal sources and discharge destinations.
- New question on facility level recycling and reuse volumes.

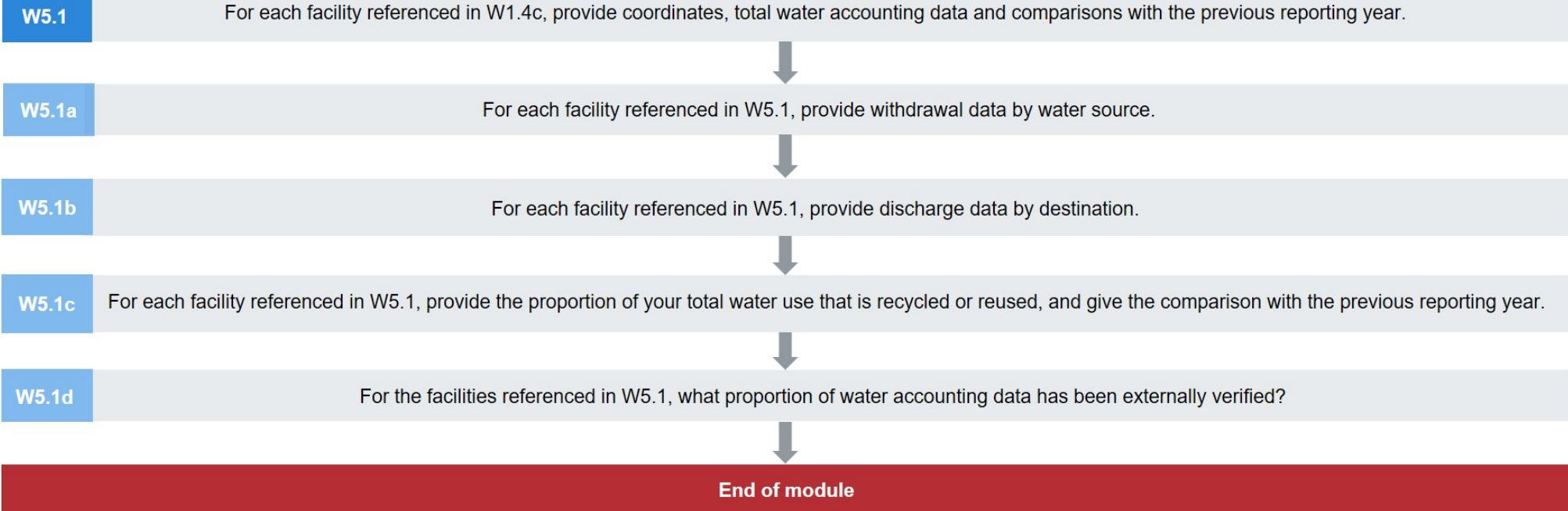
Sector modifications

- W5.1: Additional response options for Electric Utilities and Oil & Gas

Pathway diagram - questions

This diagram shows the general questions contained in module W5. To access question-level guidance, use the menu on the left to navigate to the question.

W5 only appears if you report that you have facilities exposed to water risk in W4.1c.



Facility-level water accounting

(W5.1) For each facility referenced in W4.1c, provide coordinates, total water accounting data and comparisons with the previous reporting year.

Question dependencies

- This question only appears if you report that you have facilities exposed to water risk in W4.1c.
- Your response to W5.1 prompts subsequent questions. If your response to W5.1 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

Modified question (2017 W5.1, W5.2, W5.3)

Rationale

Reporting information on facilities exposed to water-related risks helps CDP data users have confidence that your organization is monitoring local water aspects at the corporate level. The data are useful for demonstrating regulatory compliance (e.g. discharges to the local environment), for risk assessments and for providing insight to risk responses (e.g. tracking water efficiency improvements).

CDP now requests the geo-location coordinates for your facilities exposed to a risk that is substantive at the corporate level. This enables CDP data users to analyze geographically linked risks and to do so across multiple companies. This also makes possible the integration of CDP's water data with other geographically linked data.

Connection to other frameworks

SDG

Goal 6: Clean water and sanitation

Response options

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

Note that this question can be exported from CDP's disclosure platform.

Facility reference number	Facility name (optional)	Country/Region	River basin	Latitude	Longitude	[ELECTRIC UTILITIES SECTOR ONLY] Primary power generation source for your electricity generation at this facility
Select from: <input type="radio"/> Facility reference numbers: 1-50	Text field [maximum 500 characters]	Select from: <input type="radio"/> Country/region drop-down list <input type="radio"/> Other, please specify	Select from: <input type="radio"/> River basin drop-down list <input type="radio"/> Other, please specify	Numerical field [enter a number from 0 to +/-90.000000 using a maximum of six decimal places]	Numerical field [enter a number from 0 to +/-180.000000 using a maximum of six decimal places]	Select from: <input type="radio"/> Coal – hard <input type="radio"/> Lignite <input type="radio"/> Oil <input type="radio"/> Gas <input type="radio"/> Biomass <input type="radio"/> Waste (non-biomass) <input type="radio"/> Nuclear <input type="radio"/> Geothermal <input type="radio"/> Hydroelectric <input type="radio"/> Wind <input type="radio"/> Solar <input type="radio"/> Other renewable <input type="radio"/> Not applicable

[OIL & GAS SECTOR ONLY] Oil & gas sector business division	Total water withdrawals (megaliters/year) at this facility	Comparison of withdrawals with previous reporting year	Total water discharges (megaliters/year) at this facility	Comparison of discharges with previous reporting year	Total water consumption (megaliters/year) at this facility	Comparison of consumption with previous reporting year	Please explain
Select all that apply: <input type="radio"/> Upstream <input type="radio"/> Downstream <input type="radio"/> Chemicals <input type="radio"/> Other, please specify <input type="radio"/> Not applicable	Numerical field [enter a number from 0-999,999,999,999 using a maximum of two decimal places]	Select from: <input type="radio"/> Much lower <input type="radio"/> Lower <input type="radio"/> About the same <input type="radio"/> Higher <input type="radio"/> Much higher <input type="radio"/> This is our first year of measurement	Numerical field [enter a number from 0-999,999,999,999 using a maximum of two decimal places]	Select from: <input type="radio"/> Much lower <input type="radio"/> Lower <input type="radio"/> About the same <input type="radio"/> Higher <input type="radio"/> Much higher <input type="radio"/> This is our first year of measurement	Numerical field [enter a number from 0-999,999,999,999 using a maximum of two decimal places]	Select from: <input type="radio"/> Much lower <input type="radio"/> Lower <input type="radio"/> About the same <input type="radio"/> Higher <input type="radio"/> Much higher <input type="radio"/> This is our first year of measurement	Text field [maximum 500 characters]

[Add Row]

Requested content

- Note: Organizations responding to an electric utilities, metals & mining, or oil & gas sector request should refer to additional sector-specific guidance on this question at the end of the "Requested content" section.

General

- This question asks for accounting data only for your facilities exposed to substantive water risk (according to the definition you provided in W4.1a) – not for all your facilities.
- Enter data for each facility you identified in W4.1c as being exposed to risk. The table has 50 rows and you may enter up to a maximum of 50 facilities. The facilities you report here should be associated with the river basins you identified in W4.1c. Please refer to CDP's water accounting definitions before completing this question. If you have more than 50 facilities at risk, you may aggregate facilities within a river basin (in accordance with the guidance for W4.1b).
- **Question export:** If you have many facilities to report, you may prefer to complete this question offline. You can export questions by clicking the "Export" button and then entering/pasting your data directly into the fields of the exported spreadsheet. You can then import this file. The related ORS tables will be populated with the corresponding number of rows of your data (up to 50 rows).
- If using the Export/Import functionality, it is essential that you check that data has entered correctly into each field in a question.
- Please report volumetric data in megaliters per year for the reporting year (the time period you stated in response to W0.2). (1 megaliter = 1 million liters or 1000 ㎘).
- If you are estimating or extrapolating to provide complete coverage, please give an explanation in column 3 (Please explain). Please remember that a zero should only be used for reporting zero volumes and not for an absence of data.
- If you do not have a figure for any of the facilities you disclose here, you may provide an estimate. Explain this in the last column (Please explain). For withdrawals, data may be collected from several sources, including "water meters, water bills, calculations derived from other available water data or the organization's own estimates (if neither water meters nor bills or reference data exist).
- Before deciding whether your withdrawals, discharges or consumption can be reported as "zero", please refer to CDP's water accounting definitions.
- If reporting "zero consumption" please remember to check your discharge volumes. Scorers will check that discharge and withdrawals volumes balance (approximately).
- **Cooling water:** Cooling water (freshwater or sea water) is often withdrawn in large quantities and discharged back to its original source with negligible losses or variation in quality. However, this should be included in your water accounts.
- **Rainwater:** If a company is managing rainwater (for example, by harvesting for use or storage, or to prevent flooding), or is dependent on it for production of goods or the delivery of services, it should try to estimate and disclose it as a withdrawal from the hydrological system into the company boundary. Note that in some jurisdictions rainwater is considered a withdrawal source and organizations are required to report its collection and use.
 - Companies may choose to exclude collected rainwater and domestic sewage from their water withdrawal/discharge volumes only if the resulting error in their water balance would be less than 5%. (This avoids your discharge volumes being larger than your withdrawals).
 - Including rainwater helps companies better understand their water dependency and risks. For some companies, precipitation/rainwater volumes may constitute a principal input of water at site level. This includes run-off where it has to be managed. In these cases, excluding rainwater from water accounting – withdrawal and discharge - would not be a true reflection of site water balance. In addition, there may be reduced impacts from using rainwater in place of other local freshwater sources.

Facility reference number (column 1)

- This CDP facility reference number is used to track information related to the same facility in subsequent questions. It is not specific to your organization, however it does prevent you from having to repeat contextual information e.g. river basin and facility name.

Facility name (column 2)

- You may use the text box to provide a name for the facility. This is to ease reporting and analysis. This name should be used for the same facility throughout the questionnaire.

Country/Region (column 3)

- If your facilities are located in an area not included in the drop-down list of countries/regions, please select "Other, please specify" to provide a country/region label that you entered in to W0.3. If adding more than one area, please separate with a comma. If you need a total of more than 40 characters, you should use the comment box by clicking on the "speech bubble" icon.

River basin (column 4)

- From the drop-down options provided, select the river basin where the facility is located. If you do not see the basin required, select "Other, please specify" and write in the correct river basin using the text box provided.

- For companies withdrawing water from large confined aquifers that may not discharge to the river basin they are located in e.g. Ogallala aquifer in the United States, please select "Other, please specify" and type in the name of the local aquifer source. Ensure that the correct country/region name is selected in column 3 (Country/Region).
- You may want to put the sub-basin of a bigger river basin identified in the drop-down menu. In this case use the "Other, please specify" option in the following format: "Putumayo, Amazon".
- If you select "Other, please specify", provide a label for the river basin. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- For full instructions see the Introduction to CDP's water security reporting guidance.

Latitude (column 5)

- Enter the latitude coordinates for the facility reported in column 1. Your response should be in the format of decimal degrees and can range from 0 to +/-90.000000.
- If you are disclosing for a cluster of facilities (in accordance with the guidance for W4.1b), you may provide the coordinates for the facility with the largest total withdrawal volumes.

Longitude (column 6)

- Enter the longitude coordinates for the facility reported in this row. Your response should be in the format of decimal degrees and can range from 0 to +/-180.000000.
- If you are disclosing for a cluster of facilities (in accordance with the guidance for W4.1b), you may provide the coordinates for the facility with the largest total withdrawal volumes.

Comparisons with previous reporting year (columns 10, 12, 14)

- CDP does not define the threshold for considering a value as 'much higher' rather than simply 'higher' (or 'much lower'/'lower'). CDP requests this information from many different industries with huge variations in water use, and it would therefore be difficult to provide a universal threshold that is meaningful (as proportions will equate to different absolute values and impacts).
- You should define your own threshold for what is 'much higher' (and 'much lower') and apply it consistently so that each year the reported data for this question is comparable and data users can track your water accounts more effectively. A company-specific explanation for these thresholds should be provided in the last column (Please explain).
- If your response is an estimate, please explain why in the last column.

Please explain (column 9)

- Please comment on the location coordinates, as required. If the facility is an aggregate of multiple locations, ensure that you explain how your methodology for aggregating facilities was applied here.
- To assist CDP data users to understand a facility's water use, you should explain the volumetric data and trends that you report for withdrawals, discharges and consumption and include company-specific information.
- Report whether your volumes for each facility are estimated, modelled, or sourced from direct measurements. If estimation or modelling has been used, report the estimation or modelling methods. If there is any level of uncertainty in your response, or if there is an estimated figure, you should explain it in this field and give the range of uncertainty
- Include any contextual information necessary to understand how the volumetric data have been compiled, such as any standard methodologies used and any assumptions made.
- To give data users confidence in your response, please explain any zero volumes.
- If you have left any column blank because you do not have the data, please describe the barriers to reporting that data and any plans to collect and report it.
- Describe the thresholds for what is 'much higher' and 'much lower' for the change in volume for each water aspect compared to the previous year.
- You should also describe future projections for these volumes.
- Note:** CDP expects withdrawals, discharges and consumption figures to balance (approximately; +/- 5%) so if there is a good reason why this cannot happen, it should be explained in here.

Please explain – additional guidance for consumption volume

- Regarding your water consumption figure, you should indicate if your figure is based on local measurements or is a calculation (for example using withdrawals minus discharges).
- If known, you may provide breakdown of this figure (with reference to CDP's definition of consumption) including:
 - volume incorporated into products, crops or waste
 - volume evaporated or transpired
 - volume consumed by humans or livestock
 - net volume stored in a controlled manner
 - net volume stored for future use
 - volumes otherwise excluded from discharges out of the organization's boundary.
- It is important that you explain a negative consumption figure where this is the case. This would indicate that your discharges are larger than your withdrawals for the reporting year - due to a net release of water from

storage, for example.

Explanation of terms

- **Facility:** "Facilities" may be used throughout this questionnaire as a broad term and not restricted to a particular site or grouping of fixed buildings and factories. For example, if your organization is in the extractive industries you might normally collate business information for assets or business units, and so you may wish to define 'facility' information in this way.
- **Facility boundary:** This is a management boundary, rather than a physical boundary or a legal entity. Water is considered to have crossed the boundary of your facility when your organization in any way uses it, comes into contact with it, is required to manage it or when it becomes incorporated into your products. It therefore includes any water use and management by your organization outside of the physical fence of a facility; for example, to provide a street cleaning service or when used in fields that are remote from a processing plant.
- **Facility reference number:** The facility reference number is used to track information related to a facility that is disclosed in different questions. The number is not specific to an organization, but simply avoids an organization having to repeat contextual information such as river basin and facility name.
- **Latitude and longitude:** Geographic coordinates that specify, respectively, the north-south and east-west position, of a point on the Earth's surface. They are expressed as angular measures and thus, latitude can vary from 0 to +/-90 and longitude from 0 to +/-180.
- **Water consumption:** The amount of water drawn into the boundaries of the organization (or facility) and not discharged back to the water environment or a third party over the course of the reporting period.
- **Water discharge:** The sum of all water drawn into the boundaries of the organization (or facility) from all sources for any use over the course of the reporting period.
- **Water withdrawal:** The sum of all water drawn into the boundaries of the organization (or facility) from all sources for any use over the course of the reporting period.
- **Water diversions (Metals & mining sector only):** According to the [Water Accounting Framework from the Mineral Council of Australia](#) water diversions are flows from an input to an output without being utilized by the operational facility. The flow is not stored with the intention of being used in a task or treated.

Example response

Facility reference number	Facility name (optional)	Country/Region	River Basin	Latitude	Longitude
Facility 1	Oxford Press Distilleries	Scotland	Tweed	55.7652	-1.9909
Facility 2	Budapest Process Plant	Hungary	Danube	47.492503	19.051389

Total water withdrawals at this facility(megaliters/year)	Comparison of withdrawal with previous reporting year	Total water discharges at this facility (megaliters/year)	Comparison of discharges with previous reporting year	Total water consumption at this facility (megaliters/year)	Comparison of consumption with previous reporting year	Please explain
12804.34	Higher	9072.30	About the same	3690.00	Higher	<p>The Oxford Pass Distilleries comprise two sites producing our beverage range. In the reporting year withdrawals increased 10% here, in line with increased water consumption and facility production levels. Despite this, discharges have remained stable and product water intensity has decreased. This reflects capital investments over the past decade. Consumption is directly measured and accurate to +/-5%.</p> <p>Trend thresholds are applied consistently to all our businesses: anything over +/- 4% is 'Higher'/'Lower' compared to the previous year, and anything +/-20% is 'Much higher'/'Much lower'.</p>
1159.63	Higher	451.55	Lower	708.08	Higher	<p>The Budapest Process Plant saw both increased production volumes and increased withdrawals in 2017. Water savings projects improved the site water efficiency by 4%, leading to reduced discharges. Water consumption rose proportionately in line with the increase in production (consumption volume is a calculation based on direct measurements of withdrawals and discharges).</p> <p>Trend thresholds are applied consistently to all our businesses: anything over +/- 4% is 'Higher'/'Lower' compared to the previous year, and anything +/-20% is 'Much higher'/'Much lower'.</p>

(W5.1a) For each facility referenced in W5.1, provide withdrawal data by water source.

Question dependencies

- This question only appears if you list facilities exposed to water risk in W5.1.

Change from 2017

Modified question (2017 W5.1a)

Rationale

The data provides insight to dependency on different sources and risk exposure for each facility. For example, withdrawing water from an overdrawn aquifer will have significantly different consequences for local water stress and a company's water security than does withdrawing seawater. Clean freshwater is becoming increasingly scarce, and this can impact production processes that rely on large volumes of water. In regions where water sources are highly restricted, the organization's water consumption patterns can also influence relations with other stakeholders.

Connection to other frameworks

[CEO Water Mandate](#)

Current state: Performance

SDG

Goal 6: Clean water and sanitation

Response options

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

Note that this question can be exported from CDP's disclosure platform.

Facility reference number	Facility name	Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Brackish surface water/seawater	
Select from: • Facility reference numbers: 1-50	Text field [maximum 500 characters]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	
Groundwater (renewable)	Groundwater (non-renewable)	Produced water	Third party sources	Comment
Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 500 characters]

[Add Row]

Requested content

- Note: Organizations responding to an electric utilities or metals & mining sector request should refer to additional sector-specific guidance on this question at the end of the "Requested content" section.

General

- Volumes should be reported in megaliters per year (1 megaliter = 1 million liters or 1,000 m³). Your reporting year is the time period you stated in response to question W0.2.
- If reporting 0 (zero) withdrawals, provide an explanation in column 9 (Comment). Before deciding whether your withdrawals should be reported as "zero," please refer to CDP's definition of water withdrawals.
- **Question export:** If you have many facilities to report, you may prefer to complete this question offline. You can export questions by clicking the "Export" button and then entering/pasting your data directly into the fields of the exported spreadsheet. You can then import this file. The related ORS tables will be populated with the corresponding number of rows of your data (up to 50 rows).
- If using the Export/Import functionality, it is essential that you check that data has entered correctly into each field in a question.
- **Cooling water:** Cooling water (freshwater or sea water) is often withdrawn in large quantities and discharged back to its original source with negligible losses or variation in quality. However, this should be included in your water accounts. For example, a utility company may use large volumes of surface water for cooling purposes, but the water quality may not need to be fresh. Companies should report this information by selecting 'Brackish surface water/seawater,' to demonstrate to investors that they are not dependent on potentially scarce fresh surface water sources and therefore their risk exposure is likely to be less than if they were dependent on freshwater resources.
- **Rainwater:** If a company is managing rainwater (for example, by harvesting for use or storage, or to prevent flooding) or is dependent on it for production of goods or the delivery of services, it should try to estimate and disclose it as a withdrawal from the hydrological system into the company boundary. Note that in some jurisdictions rainwater is considered a withdrawal source and organizations are required to report its collection and use.
 - Companies may choose to exclude collected rainwater and domestic sewage from their water withdrawal/discharge volumes only if the resulting in an error in their water balance would be less than 5% (this avoids your discharge volumes being larger than your withdrawals).
 - Including rainwater helps companies better understand their water dependency and risks. For some companies, precipitation/rainwater volumes may constitute a principal input of water at site level. This includes

run-off where it has to be managed. In these cases, excluding rainwater from water accounting – withdrawal and discharge - would not be a true reflection of site water balance. In addition, there may be reduced impacts from using rainwater in place of other local freshwater sources.

- **Oil & gas sector only: Groundwater** - As part of groundwater withdrawal volumes (be it from renewable or non-renewable sources), organizations should include all withdrawals from aquifers (other than the formation being exploited). These withdrawals may be intended for any use in the organization, including injection to maintain well pressure or as part of the fracture fluids.

Facility reference number (column 1)

- The facility reference number is used by CDP to track information related to the same facility in following questions. It is not specific to your organization, however it does prevent you from having to repeat contextual information e.g. river basin and facility name.

Facility name (column 2)

- You may use the text box to provide a name for the facility. This is to ease reporting and analysis. This name should be used for the same facility throughout the questionnaire.

Fresh surface water (column 3)

- For the purposes of this disclosure you should include all surface water sources of a higher quality than brackish (i.e. a TDS lower than 10,000 mg/l).

Comment (column 9)

- Report whether your volumes for each destination are estimated, modelled, or sourced from direct measurements. If estimation or modelling has been used, report the estimation or modelling methods.
- For fresh surface water, it is important that you state which of the sources apply (rainwater, water from wetlands, rivers and lakes). Also state whether those sources are monitored and if you know whether the withdrawal volume for each source is increasing or decreasing. If you are using and managing rainwater and the volume equates to more than 5% of your water balance (in which case your discharge volumes could be larger than your withdrawals), please explain if it is harvested, treated etc. and the benefits and impacts of using it.
- For Third party sources, if possible please specify whether the third party is a municipal supplier or another type of third party organization.

Explanation of terms

- **Brackish surface water/seawater:** Surface water in which the concentration of salts is high and far exceeds normally acceptable standards for municipal, domestic or irrigation use (at least higher than 10,000 mg/l TDS). Seawater has a typical concentration of salts above 35,000 mg/l TDS.

- **Fresh surface water, including rainwater, water from wetlands, rivers and lakes:** Water that is naturally occurring water on the Earth's surface in ice sheets, ice caps, glaciers, icebergs, bogs, ponds, lakes, rivers and streams, and has a low concentration of dissolved solids.

For the purposes of reporting water accounting data to CDP, this surface water source includes water of a quality generally acceptable for, or requiring minimal treatment to be acceptable for, domestic, municipal or agricultural uses (at least <10,000 mg/l TDS, though a range of additional quality properties may also be considered). 'High quality' fresh water sources considered acceptable for potable use are typically characterized as having concentrations of dissolved solids less than 1,000 mg/l.

- **Groundwater (non-renewable):** Water which is being held in, and can be recovered from, an underground formation. Non-renewable groundwater has a negligible rate of natural recharge on the human time-scale (more than 50 years), and is generally located at deeper depths than renewable groundwater. This is sometimes referred to as "fossil" water.

- **Groundwater (renewable):** Water which is being held in, and can be recovered from, an underground formation. Renewable groundwater sources can be replenished within 50 years and are usually located at shallow depths.

- **Produced water:** Water which enters the organization's boundary as a result of the extraction, processing, or use of any raw material, so that it must be managed by the organization.

When reporting to CDP, this water should not be counted as recycled water when put to use within a single cycle of a business process. Examples of produced water include moisture derived from vegetation such as in sugar cane crushing and the water content in crude oil (note that companies with oil and gas activities should refer to CDP's sector specific guidance for this water aspect).

- **Produced water (Oil & gas sector only):** water that is brought to the surface during the production of hydrocarbons including formation water, flow-back water and condensation water (adapted from IPIECA's [Oil and gas industry guidance on voluntary sustainability reporting](#), 3rd edition, 2016).

- **Third-party sources:** This includes water provided by municipal water suppliers, public or private utilities, and wastewater from any other organization.

- **Water withdrawal:** The sum of all water drawn into the boundaries of the organization (or facility) from all sources for any use over the course of the reporting period.

(W5.1b) For each facility referenced in W5.1, provide discharge data by destination.

Question dependencies

- This question only appears if you list facilities exposed to water risk in W5.1.

Change from 2017

Modified question (2017 W5.2a)

Rationale

Reporting volume of water discharged to specific destinations helps with understanding the risks exposure and potential impacts associated with water discharges.

Connection to other frameworks

SDG

Goal 6: Clean water and sanitation

Response options

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

Note that this question can be exported from CDP's disclosure platform.

Facility reference number	Facility name	Fresh surface water	Brackish surface water/Seawater	Groundwater	Third party destinations	Comment
Select from: • Facility reference numbers: 1-50	Text field [maximum 500 characters]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 500 characters]

[Add Row]

Requested content

- Note: Organizations responding to an electric utilities or metals & mining sector request should refer to additional sector-specific guidance on this question at the end of the "Requested content" section.

General

- Volumes should be reported in megaliters per year (1 megaliter = 1 million liters or 1,000 m³). Your reporting year is the time period you stated in response to question W0.2. If reporting zero withdrawals, provide an explanation in column 5.
- **Question export:** If you have many facilities to report, you may prefer to complete this question offline. You can export questions by clicking the "Export" button and then entering/pasting your data directly into the fields of the exported spreadsheet. You can then import this file. The related ORS tables will be populated with the corresponding number of rows of your data (up to 50 rows).
- If using the Export/Import functionality, it is essential that you check that data has entered correctly into each field in a question.
- Before deciding whether your discharges should be reported as "zero", please refer to CDP's definition of water discharges. This may be the case, for example, if a closed water circuit, or zero liquid effluent discharge complex, is in operation and a facility does not discharge water as all water is re-used by the operation(s) during processing/production. If reporting zero withdrawals, provide an explanation in column 7 (Comment).
- **Zero discharge permit:** If your company has a zero discharge permit, please consider any discharges that may exist outside this permit and may still be relevant to CDP's definition of discharges.
- **Rainwater:** Rainwater/run-off that enters the site/facility boundary and is captured could also be counted as an output or discharge (even if not used in operations) if returned to the water environment via a dedicated discharge destination; e.g. river or groundwater via soakaway/filtration pond.

- You may choose to exclude collected rainwater from your discharge accounting, unless this would result in an error in your balance of more than 5%.
- Including rainwater helps companies better understand their water dependency and risks. For some companies, precipitation/rainwater volumes may constitute a principal input of water at site level. In these cases, excluding rainwater from water accounting – withdrawal and discharge - would not be a true reflection of site water balance. In addition, there may be reduced impacts from using rainwater in place of other local

freshwater sources.

- **Cooling water:** Cooling water (freshwater or sea water) is often withdrawn in large quantities and discharged back to its original source with negligible losses or variation in quality. However, this should be included in your water accounts.
- **Domestic sources:** Domestic sewage is not regarded as water discharge. However, if wastewater comes from domestic sources but is pre-dominantly generated from sector business activities e.g. healthcare residential properties, this should be reported if it would result in an error in your balance of more than 5%.
- **Aquifer reinjection:** reinjection to aquifers should be considered as a discharge to groundwater.
- **Soakaway:** Water returning to a groundwater source via a soakaway should be considered as a discharge.
- **Oil & gas sector only: Groundwater**- In oil production, as part of secondary and tertiary recovery operations, water-based fluids (from various sources) may be used to maintain the pressure, and to displace the hydrocarbons and move them towards the production wells. For CDP disclosure, organizations must report these volumes as discharges to groundwater bodies, to enable comparability and have an accurate water balance.

Facility reference number (column 1)

- The facility reference number is used by CDP to track information related to the same facility in following questions. It is not specific to your organization, however it does prevent you from having to repeat contextual information e.g. river basin and facility name.

Facility name (column 2)

- You may use the text box to provide a name for the facility. This is to ease reporting and analysis. This name should be used for the same facility throughout the questionnaire.

Comment (column 7)

- Report whether your volumes for each destination are estimated, modelled, or sourced from direct measurements. If estimation or modelling has been used, report the estimation or modelling methods.
- To give data users confidence in your response, please explain any zero volumes for relevant destination's; e.g. if a completely closed loop cooling system has been introduced. Please remember to report any discharged water that exceeds site storage capacity, e.g. excessive rainfall, as a separate discharge.
- For discharges to a Third party, it is important to state if this includes water to other organizations for further use.

Explanation of terms

- **Brackish surface water/seawater:** Surface water in which the concentration of salts is high and far exceeds normally acceptable standards for municipal, domestic or irrigation use (at least higher than 10,000 mg/l TDS). Seawater has a typical concentration of salts above 35,000 mg/l TDS.
 - **Fresh surface water, including wetlands, rivers and lakes:** Water that is naturally occurring water on the Earth's surface and has a low concentration of dissolved solids.
 - **Groundwater:** Water which is being held in, and can be recovered from, an underground formation. Discharge to groundwater, by human activity or natural activity, refers to a destination beneath the soil surface, such as a water bearing layer of rock (aquifer). Examples of discharges to groundwater include disposal of sewage, trade effluent and surface water run-off from urban areas, through such methods as spreading basins, soakaways, swales or injection wells.
 - **Third-party sources:** This includes municipal wastewater plants, public or private utilities, and other organizations involved in the transport, treatment, disposal or further use of wastewater.
- Note that to qualify as a third-party destination, "other organizations" using your wastewater must be outside your reporting boundary given in question W0.5.
- Any of your wastewater that has been treated on your own site should be reported as discharge according to its ultimate destination (for example, to groundwater), as this is where any potential risks for the company lie.
- **Water discharge:** The sum of effluents and other water leaving the boundaries of the organization (or facility) and released to surface water, groundwater, or third parties over the course of the reporting period.

(W5.1c) For each facility referenced in W5.1, provide the proportion of your total water use that is recycled or reused, and give the comparison with the previous reporting year.

Question dependencies

- This question only appears if you list facilities exposed to water risk in W5.1.

Change from 2017

New question

Rationale

- Increased reuse and recycling can reduce water demand, treatment, and associated disposal costs and risks. This activity may be particularly desirable for facilities at risk.

- The information requested is the percentage of water use at the facility that is met by recycled/reused water.
- There is no single standard approach to defining recycling activity or volumes due to infinite variations in the way that water is used and processed through operations and production systems. Therefore, the aim of this question is to drive transparency on recycling/reuse activity. Providing a comparison with the previous year can help data users to understand the trend as part of your water stewardship and security commitments.
- Some industries do have established standard approaches to measuring recycling activity, and these should be used wherever possible.
- [For companies disclosing to a CDP Electric Utilities, Metals & Mining and Oil & Gas sector request, sector-specific guidance is provided].

Connection to other frameworks

CEO Water Mandate

Response: Internal actions

SDG

Goal 6: Clean water and sanitation

Response options

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

Note that this question can be exported from CDP's disclosure platform.

Facility reference number	Facility name	% recycled or reused	Comparison with previous reporting year	Please explain
Select from: ● Facility reference numbers: 1-50	Text field [maximum 500 characters]	Select from: ● Not monitored ● None ● Less than 1% ● 2-10 ● 11-25 ● 26-50 ● 51-75 ● 76-99 ● 100% ● Not relevant	Select from: ● Much lower ● Lower ● About the same ● Higher ● Much higher ● This is our first year of measurement	Text field [maximum 500 characters]

[Add Row]

Requested content

Note: Organizations responding to a metals & mining or oil & gas sector request should refer to additional sector-specific guidance on this question at the end of the "Requested content" section.

General

- **Question export:** If you have many facilities to report, you may prefer to complete this question offline. You can export questions by clicking the "Export" button and then entering/pasting your data directly into the fields of the exported spreadsheet. You can then import this file. The related ORS tables will be populated with the corresponding number of rows of your data (up to 50 rows).
- If using the Export/Import functionality, it is essential that you check that data has entered correctly into each field in a question.
- When responding to this question, consider the volume and proportion of water demand that is being met at each facility through recycling/reuse activity. It is expected that the higher the proportion, the more your withdrawals may be reduced. Also, consider the trend and potential significance of recycling/reuse for your facility.
- We recognize that a high level of recycling is not always advantageous to a company nor beneficial to the environment in all circumstances; e.g. there are energy tradeoffs, water quality requirements, it is not cost

effective for your type of operation or your withdrawals are mainly from low quality water sources. For this reason, this disclosure simply requests that companies report and explain their level of activity and approach. This will enable data-users to build an understanding of practice in your industry.

- This question refers to recycling /reuse activity within your facility boundary, and not your use of water that was recycled by, or previously used by, a third-party organization. (refer to CDP's definition of facility boundary).
- There is no internationally agreed methodology for quantitatively reporting water recycling activity and no one method that fits all industries and circumstances. To facilitate comparability, we encourage you to refer to CDP's water accounting definitions before completing the table and use the approach suggested by CDP if feasible for your operations.
- If this suggested approach is not technically feasible or does not reflect your industry standard, you may disclose a figure based on a different approach.
- Note that for CDP's approach:

- This disclosure includes both water treated and not-treated prior to reuse.
 - The use may be within the same process (recycling) or another process (reuse) of the same facility. The recycling/reuse must be within the same facility for the purposes of this question.
 - This disclosure does not include the first use of wastewater from another organization, nor the first use of harvested rainwater (as these are withdrawal sources – see W1.2h).
 - You may include the use of domestic greywater in your reuse volumes where this is significant for your operations.
 - The use of produced water is not considered as recycling/reuse, as this is a water withdrawal category for CDP. [Note that this does not apply to companies in CDP's oil & gas sector].
- If you use a different approach/method to arrive at your figure, please provide an explanation in column 6e.g. how you account for volumes of recycled or reused water or which water volumes do you consider as part of your water use.
 - **Electric utilities sector only:** In hydroelectric operations, only pumped-storage operations can be considered for water reuse. It is expected that most organizations will report 0 for their hydroelectric operations in this question.

Facility reference number (column 1)

- The facility reference number is used by CDP to track information related to the same facility in following questions. It is not specific to your organization, but does prevent you from having to repeat contextual information e.g. river basin and facility name.

Facility name (column 2)

- You may use the text box to provide a name for the facility. This is to ease reporting and analysis. This name should be used for the same facility throughout the questionnaire.

% recycled and reused (column 3)

- Please select the option that best indicates the water recycled and reused at the facility as a proportion of your total water use at the facility.

- 'Total water recycled and reused' should indicate the reduction in the volume of water demand over at the facility the reporting period that resulted from the reuse/recycling. The reduction in demand may have reduced the withdrawals or use of stored water at the facility.
- 'Total water use' for the facility is the sum of all water drawn into the facility boundary (as disclosed in W5.1), any use of stored water at the facility and the volumes of water recycled/reused at the facility.

- The percentage reported will be the proportion your water use at this facility that is met by recycling/reuse. The proportion is calculated as:

$$\frac{\text{Total water recycled and reused}}{\text{Total water recycled and reused} + \text{total water withdrawals} + \text{total use of stored water}} \times 100$$

- Select 'None' only if recycling/reuse is feasible and is monitored for this facility, but the volume for this year is zero. Provide your explanation in column 5.
- Select "Not monitored" only if recycling/reuse takes place at the facility but it is not monitored. Provide your explanation in column 5.
- Select 'Not relevant' only if recycling/reuse is not technically feasible or technically desirable at your facility. Provide your explanation in column 5.
- If you have recycled or reused water in the current reporting year but are unable to report a figure, you may provide an estimate and explain why this is the case in column 5.
- If you are unable to use the approach recommended by CDP, please use column 5 to explain the approach and calculation your organization uses to arrive at a percentage.

Comparison with previous reporting year (column 4)

- This request relates to the proportion of water use met by recycled/reused water (column 3).
- If you left column 3 blank because you are unable to report a figure this year, you may give an estimate for the trend if you know it.
- CDP does not define the threshold for considering a value as 'much higher' rather than simply 'higher' (or 'much lower'/'lower'). CDP requests this information from many different industries with huge variations in water use, and it would therefore be difficult to provide a universal threshold that is meaningful (as proportions will equate to different absolute values and impacts).
- CDP recommends that you define your own threshold for what is 'much higher' (and 'much lower') and apply it consistently so that each year the reported data for this question is comparable and data users can track your water accounts more effectively. A company-specific explanation for these thresholds should be provided in column 5 (Please explain).

[Please explain \(column 5\)](#)

- Describe the approach or method your organization has taken to report your percentage recycled/reused. State clearly whether CDP's definition and calculation method were used, or an alternative.
- If you did not use CDP's definition and method, provide an explanation including the definition you've used and why CDP's proposed method is not feasible or optimal, e.g. because you have followed industry guidance.
- Please explain how the volume of water recycled and reused was measured or calculated (the numerator), e.g. how multiple cycles of recirculation were counted.
- If your response to columns 3 and 4 are wholly or partially estimated, you should give details of the methodology for your estimation.
- If you selected 'Not relevant', 'Not monitored' or 'None' in columns 3, please explain why this is the case.
- If you left columns 3 or 4 blank because you are unable to provide a response, please explain why this is the case and state any plans for reporting this figure in the future.
- You should include an explanation of the trend disclosed in column 4, and also describe your anticipated trend/future initiatives for recycling and reuse and limitations on the opportunity to increase recycling further.
- Please include any barriers to your recycling/reuse activity at the facility, giving company-specific details. For example: "Further treatment of waste water would generate more energy use, emissions, chemical use and air emissions as well as financial cost. Thus, we do not consider this as a useful performance metric and further recycling efforts are assessed on a case by case basis".
- You may include a description of the actual or anticipated impact of the reuse; e.g. these may include reduced withdrawal of or dependence on freshwater, reduced need to develop new sources, protection of a contested source, significant cost savings.

Explanation of terms

- **Facility boundary:** This is a management boundary, rather than a physical boundary or a legal entity. Water is considered to have crossed the boundary of your facility when your organization in any way uses it, comes into contact with it, is required to manage it or when it becomes incorporated into your products. It therefore includes any water use and management by your organization outside of the physical fence of a facility; for example, to provide a street cleaning service or when used in fields that are remote from a processing plant.
- **Water recycled/reused:** Water and wastewater (treated or untreated) that has been used more than once before being discharged from the organization's boundary, so that water demand is reduced. This may be in the same process (recycled), or in a different process within the same facility or another of the organization's facilities (reused).
- **Water recycled/reused (Oil & gas sector only):** Water and wastewater (treated or untreated) that has been used more than once, in order to reduce water withdrawals.
- **Produced water (Oil & gas sector only):** Water that is brought to the surface during the production of hydrocarbons including formation water, flow-back water and condensation water (adapted from IPIECA's [Oil and gas industry guidance on voluntary sustainability reporting](#), 3rd edition, 2016).

[\(W5.1d\) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?](#)

Question dependencies

- This question only appears if you list facilities exposed to water risk in W5.1.

Change from 2017

Modified question (2017 W5.4)

Rationale

Providing external verification for water accounting data at facilities exposed to water risks gives CDP data users increased confidence in the data you are reporting.

Response options

Please complete the following table:

Water aspect	% verified	What standard and methodology was used?
Water withdrawals – total volumes	Select from: <input type="radio"/> Not verified <input type="radio"/> 1-25 <input type="radio"/> 26-50 <input type="radio"/> 51-75 <input type="radio"/> 76-100	Text field [maximum 500 characters]
Water withdrawals – volume by source		
Water withdrawals – quality		
Water discharges – total volumes		
Water discharges – volume by destination		
Water discharges – volume by treatment method		
Water discharge quality – quality by standard effluent parameters		
Water discharge quality – temperature		
Water consumption – total volume		
Water recycled/reused		

Requested content

General

- CDP recognizes the lack of universally applied verification standards for water accounting and therefore requests that you disclose the extent of any current verification practices and the standards used.
- Please note, in this question we are not asking about verification of water accounting data across your entire organization.

% verified (column 2)

- For the facilities reported on in W5 (facilities exposing your organization to substantive risk), select the proportion that have externally verified the water accounting aspect in column 1.
- If the accounting data at all facilities in your organization are verified, then you would be able to select 76-100% here. However, if only a sample of your facilities are verified, then you will need to check with your verifier on how many of the facilities at risk were included and then calculate the proportion of all facilities reported in W5.1 that this represents.

What standard and methodology was used? (column 3)

- For the water aspects in column 1 that have been externally verified, provide details of the standard used to verify the accounting data including the methodology and scope (e.g. the sampling method where there was not 100% coverage).
- If you selected "Not verified" in column 2 you should provide an explanation. If you have any plans to verify an aspect in the future, give details here.

Explanation of terms

- Verification (external):** Procedure carried out by an independent third party for checking that a product, process, service or system meets the requirements specified by a recognized and relevant standard.

W6 Governance

Module Overview

This module captures the governance structure and mechanisms of your organization with regards to water security. For CDP's high impact sectors, the module includes a question on the use of performance incentives for senior employees linked to water matters.

It provides data users with an understanding of the organization's approach to water-related issues at the board level and below board-level.

Board-level oversight of water-related issues, a public water policy and processes for aligning external policy influence with it are considered good practice and an indication of the importance of water-related issues to the organization.

Key changes

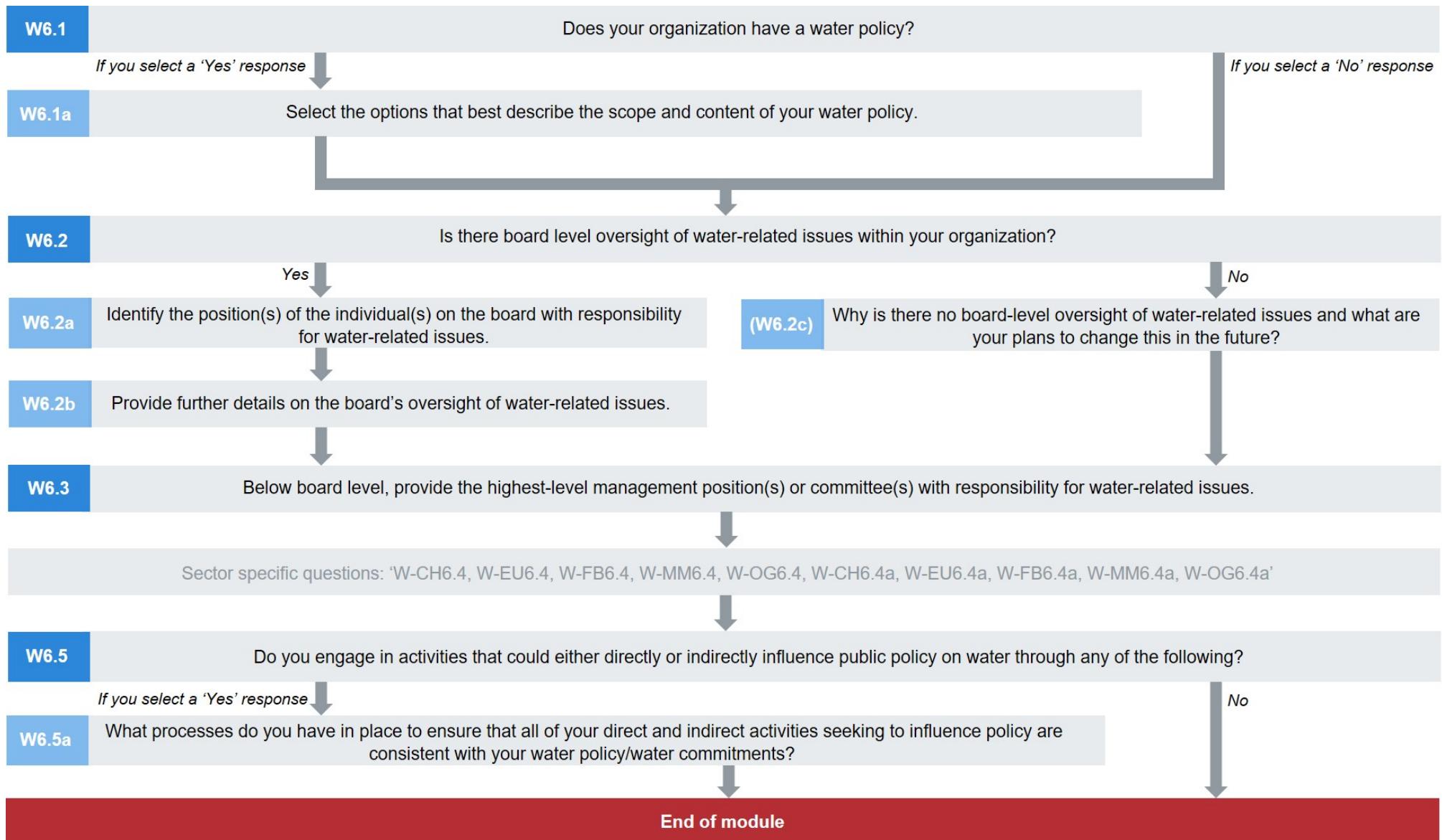
- This new module includes topics previously presented within the 2017 Response module plus new questions on the mechanisms of governance for water, the position of the individual(s) beneath the board with highest management responsibility for water-related issue, and a description of mechanisms for ensuring that public policy influence aligns with commitments on water security.

Sector modifications

- W6.4: Employee incentives – an additional question presented to all high impact sectors.

Pathway diagram - questions

This diagram shows the general questions contained in module W6. To access question-level guidance, use the menu on the left to navigate to the question.



Water policy

(W6.1) Does your organization have a water policy?

Question dependencies

- Your response to W6.1 will determine if subsequent questions are presented in this section. If your response to W6.1 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

Minor change (2017 W6.3)

Rationale

CDP data users want to know that companies have articulated and documented a policy that:

- recognizes the importance of water-related issues to their business, and;
- sets out clear commitments, and guidelines for action and the integration of water into core business decision making and management processes.

For accountability to the organization's stakeholders, the policy should be publicly available.

Connection to other frameworks

CEO Water Mandate

Response: Policies, governance and targets

Response options

Select one of the following options:

- Yes, we have a documented water policy that is publicly available
- Yes, we have a documented water policy but it is not publicly available
- No, but we plan to develop one within the next 2 years
- No

Requested content

General

- Click a 'yes' option if your organization has a water policy that articulates your water commitments and challenges, and the ways that action will be driven to meet those commitments.
- This may be a stand-alone water policy document, no matter what the title is, or an equivalent document that includes the company-wide water policy such as an 'sustainability policy'.
- You should select 'No' if the above does not apply and indicate your plans.
- CDP understands that companies may additionally or otherwise integrate water matters to some extent into numerous other corporate policy and procedural documents such as supplier codes, agricultural policies, environmental standards and procurement policies. We are not asking for information about those here.

Explanation of terms

- Water policy:** A statement of an organization's water-related commitments, and the actions that will achieve them, that applies to all its activities.

(W6.1a) Select the options that best describe the scope and content of your water policy.

Question dependencies

- This question only appears if you select "Yes, we have a documented water policy that is publicly available" or "Yes, we have a documented water policy, but it is not publicly available" in response to W6.1.

Change from 2017

Modified question (2017 W6.3a).

Rationale

A water policy is a key governance tool. CDP understands that policies are likely to be varied and complex, but we wish to move companies towards good practice regarding content and communication of a policy that sets out:

- company-wide water commitments to water security;
- the challenges they face due to water-related issues; and
- the ways that action to meet those commitments and address the challenges will be driven, and integrated into core business decision making and management processes.

Connection to other frameworks

CEO Water Mandate

Response: Policies, governance and targets

Response options

Please complete the following table.

Scope	Content	Please explain
Select from: <ul style="list-style-type: none">• Company-wide• Select facilities, businesses, or geographies only	Select all that apply: <ul style="list-style-type: none">• Description of business dependency on water• Description of business impact on water• Description of water-related performance standards for direct operations• Description of water-related standards for procurement• Reference to international standards and widely-recognized water initiatives• Company water targets and goals• Commitment to align with public policy initiatives, such as the SDGs• Commitments beyond regulatory compliance• Commitment to water-related innovation• Commitment to stakeholder awareness and education• Commitment to water stewardship and/or collective action• Acknowledgement of the human right to water and sanitation• Recognition of environmental linkages, for example, due to climate change• Other, please specify	Text field [maximum 1,000 characters]

Requested content

General

- Provide details about the document (or other media) that articulates your water commitments and challenges, and the ways that action to meet those commitments will be driven.
- This may be a stand-alone water policy document, no matter what the title is, or another equivalent document that includes your water policy such as a 'sustainability policy'.

Scope (column 1)

- Select the option that best applies to your organization's water policy. If it covers your entire organization, please select 'company-wide, otherwise chose "Select facilities, businesses, or geographies only" and give more details and an explanation in column 3.

Content (column 2)

- Select the options that apply to your organization's water policy. If there is important content missing from the list, please select "Other, please specify" and provide a description. If you select "Other, please specify", provide a label for the content. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Please explain (column 3)

- Give more details and an explanation for your selections in columns 1 and 2.
- You should include the rationale for the scope and content of your policy; e.g. why your water policy is not company-wide, and why it does not include some of the content listed.

Note:

- Attaching a file: you may attach a copy of your policy document. Please click the "File upload" button (paperclip icon) to drag and drop a file.
- This is optional but will help data users understand your public commitments to water security. If your policy is in a format that cannot be attached (such as web page), you may attach a screen shot.

Board oversight

(W6.2) Is there board level oversight of water-related issues within your organization?

Question dependencies

- Your response to W6.2 will determine if subsequent questions are presented in this section. If your response to W6.2 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

Modified question (2017 W6.1)

Rationale

This provides an indication of the importance of water to your business by demonstrating board level oversight of water-related matters.

Connection to other frameworks

CEO Water Mandate

Response: Policies, governance and targets

Response options

Select one of the following options:

- Yes
- No

Requested content

General

- In answering this question, consider whether the board and/or board committees consider water-related issues when carrying out their governance and oversight duties such as reviewing and guiding their business strategy, major plans of action, risk management policies, annual budgets, and budget plans as well as setting the organization's performance objectives, monitoring implementation and performance, and overseeing major capital expenditures, acquisitions, and divestitures. If any of these options is true, please select 'yes'.
- You should also select 'yes':
 - if your organization has board-level oversight of an integrated environmental risk assessment that includes water-related risks among other environmental aspects.
 - if a specific board member or committee has responsibility for any water-related policies, strategy or information.

Explanation of terms

- **Board:** The board, or board of directors, refers to a body of elected or appointed members who jointly oversee the activities of a company or organization. Some countries use a two-tiered system where "board" refers to the "supervisory board" while "key executives" refers to the "management board" (adapted from the [Recommendations of the Task Force for Climate Related Financial Disclosure, 2017](#)).
- **Board-level oversight:** This involves the board having direct responsibility and accountability; for example, for setting commitments and guiding strategy, ensuring the efficacy and efficiency of management, for financial stability and regulatory compliance, and reviewing the progress of objectives and policies.
- **Governance:** A system whereby an organization is influenced and controlled based on the interests of shareholders and stakeholders. This involves relationships and communication between management, the board, the shareholders and stakeholders. Governance provides a framework for an organization to set objectives, monitor performance, and evaluate results (adapted from the [Recommendations of the Task Force for Climate Related Financial Disclosure, 2017](#)).

(W6.2a) Identify the position(s) of the individual(s) on the board with responsibility for water-related issues.

Question dependencies

- This question only appears if you select "Yes" in response to W6.2.

Change from 2017

Modified question (2017 W6.1)

Rationale

If you have rated that water is important to your organization (W1.1), and/or have identified risks of high magnitude within your direct operations or value chain (W4.1) that could generate a substantive change to your business, CDP data users might expect to see that a board member has accountability for water within your organization. If there are reasons why this is not so, you have the opportunity to explain.

Connection to other frameworks

CEO Water Mandate

Response: Policies, governance and targets

Response options

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

Position of individual	Please explain
Select from: <ul style="list-style-type: none"> ● Board Chair ● Director on board ● Chief Executive Officer (CEO) ● Chief Financial Officer (CFO) ● Chief Operating Officer (COO) ● Chief Procurement Officer (CPO) ● Chief Risk Officer (CRO) ● Chief Sustainability Officer (CSO) ● Other C-Suite Officer ● President ● Other, please specify 	Text field [maximum 1,000 characters]

[Add Row]

Requested content

General

- Report where in the board the responsibility for oversight of water issues lies. This may be with an individual or a committee, e.g. executive financial director, sustainability committee, risk committee, etc.
- Note that this question is asking about direct responsibility and oversight. In practical terms, this is the person or committee at the top of the chain of command specifically managing information on water-related issues, making decisions about what the company will do and adapting those decisions based on water-related information. The CEO is ultimately responsible for everything in the company; however, this question is looking to identify responsibility specifically on water-related issues. While this may be the CEO, it is not necessarily the case.

Position of individual(s) (column 1)

- Select the position of the individual on the board with responsibility for water-related issues.
- If the position is not listed here, or the responsibility lies with a board-level committee, you should select "Other, please specify" to add the position or the name of the committee. If you select "Other, please specify", provide a label for the position of the individual. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- **Note that this question asks about the position and not about the names of the staff holding these positions. Do not include the name of any individual or any other personal data in your response.**
- If there is more than one position, please add a row.

Please explain (column 2)

- Provide a description of the position(s)/committee(s) in the corporate structure and the level of responsibility they have towards water-related issues.
- **Note that this question asks about the position and not about the names of the staff holding these positions. Do not include the name of any individual or any other personal data in your response.**
- Provide a rationale for the assignment of responsibilities for water-related issues to the position(s)/committee(s) for example subject matter expertise, or a particular strategy goal.
- You can use this text field to enter any relevant information.

Explanation of terms

- **C-suite:** A term used to collectively refer to the most senior executive team.

(W6.2b) Provide further details on the board's oversight of water-related issues.

Question dependencies

- This question only appears if you select "Yes" in response to W6.2.

Change from 2017

New question

Rationale

This provides an indication of how water-related issues are overseen at board level and the frequency of briefings on water issues.

CDP data users are interested in understanding an organization's awareness and management of water-related risks at the board level; how intertwined this is with organizational strategy, plans of action, management policies, performance objectives; and how the board monitors progress against targets and goals, for example.

Response options

Please complete the following table:

Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Select from: <input type="radio"/> Scheduled - all meetings <input type="radio"/> Scheduled - some meetings <input type="radio"/> Sporadic - as important matters arise <input type="radio"/> Other, please specify	Select all that apply: <input type="radio"/> Monitoring implementation and performance <input type="radio"/> Overseeing acquisitions and divestiture <input type="radio"/> Overseeing major capital expenditures <input type="radio"/> Providing employee incentives <input type="radio"/> Reviewing and guiding annual budgets <input type="radio"/> Reviewing and guiding business plans <input type="radio"/> Reviewing and guiding major plans of action <input type="radio"/> Reviewing and guiding risk management policies <input type="radio"/> Reviewing and guiding strategy <input type="radio"/> Reviewing and guiding corporate responsibility strategy <input type="radio"/> Reviewing innovation/R&D priorities <input type="radio"/> Setting performance objectives <input type="radio"/> Other, please specify	Text field [maximum 1,500 characters]

Requested content

General

- This question seeks information about the nature and frequency of board-level oversight of water-related issues.
- This includes the frequency that water issues are discussed at board level, an explanation for that frequency, an indication of the aspects of governance that water matters are integrated into, and the competency of the board on water-related issues.

Frequency that water-related issues are a scheduled agenda item (column 1)

- Indicate the board's/board committee's approach to including water issues as an agenda item by selecting a frequency and providing an explanation in column 3. Only use this column to report the frequency of scheduled discussion.
- To indicate a specific frequency, or a determinant of frequency, select "Other, please specify" to provide a label for the frequency e.g. scheduled quarterly. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon

Governance mechanisms into which water-related issues are integrated (column 2)

- Select all governance mechanisms in which water-related issues are included.
- If you select "Other, please specify", provide a label for the governance mechanism. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Please explain (column 3)

- Provide further details of your selection in column 1; e.g., regarding who briefs the board and on what matters: "The committee meets quarterly and a report from each Business Head regarding performance against water targets is reviewed".
- Note that your response to this question may refer to the position of employees relevant to board oversight mechanisms. In this case, do not include the name of any individual or any other personal data in your response.**
- Describe how the governance mechanisms selected in column 2 contribute to the board's oversight of water-related issues. For e.g.:

- how responsibility for water policies, strategy and information is delegated and how management is held accountable and/ or incentivized for implementation of the organization's policies;
- the nature of the underlying information and control systems used to provide information to the Board on water related matters;
- who approves the release of water-related information.

- As much as possible, please give examples from the reporting year.

(W6.2c) Why is there no board-level oversight of water-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 W6.2.

Change from 2017

New question

Rationale

As CDP data users are interested in understanding an organization's awareness and management of water-related risks at the board-level, this question allows companies to explain why there is no board-level oversight.

Response options

Please complete the following table:

Primary reason	Board level oversight of water-related issues will be introduced in the next two years	Please explain
Text field [maximum 200 characters]	Select from: <input type="radio"/> Yes <input type="radio"/> No	Text field [maximum 1,500 characters]

Requested content

Primary reason (column 1)

- Provide your organization's rationale for not currently having board-level oversight of water-related issues. While there may be multiple reasons for this, please describe the primary justification.

Please explain (column 3)

- Use this column to provide an explanation of what you plan to implement in the next two years or why you have no plans.

Management responsibility

(W6.3) Below board level, provide the highest-level management position(s) or committee(s) with responsibility for water-related issues.

Change from 2017

Modified question (2017 W6.1)

Rationale

While it is most important for a member of the board to have responsibility for water related issues, assigning management level responsibility indicates that the organization is committed to implementing its water strategy.

Connection to other frameworks

SDG

Goal 6: Clean water and sanitation

Response options

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on water-related issues	Please explain
Select from: <ul style="list-style-type: none">● There is currently no management-level responsibility for water-related issues● 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, please specify● President● Risk committee● Sustainability committee● Safety, Health, Environment, and Quality committee● Corporate responsibility committee● Other committee, please specify● Business unit manager● Energy manager● Environmental health and safety manager● Environment/Sustainability manager● Facilities manager● Process operation manager● Procurement manager● Public affairs manager● Risk manager● Other, please specify	Select from: <ul style="list-style-type: none">● Assessing water-related risks and opportunities● Managing water-related risks and opportunities● Both assessing and managing water-related risks and opportunities● Other, please specify	Select from: <ul style="list-style-type: none">● More frequently than quarterly● Quarterly● Half-yearly● Annually● Less frequently than annually● As important matters arise● Not reported to board	Text field [maximum 1,000] characters]

[Add Row]

Requested content

General

- Provide details of the highest-level individual or committee below board level with a responsibility for water-related issues and implementing aspects of the organization's water policy and strategy.
- This may be immediately below the board or lower down the organization.
- The responsibility may be for assessing and/or managing water-related risks and opportunities, or have a different primary focus related to water.

Name of the position(s) and/or committee(s) (column 1)

- Select the best match for the position/committee in your organization, or select 'Other, please specify'. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- Note that this question asks about the position and not about the names of the staff holding these positions. Do not include the name of any individual or any other personal data in your response.**
- If there is more than one individual/committee below the board with high level responsibility and you would like to describe this, you may use the Add row button and describe their responsibilities in column 2. This is optional.

Responsibility (column 2)

- Select the best match for the responsibility of the position/committee reported in column 1, or select 'Other, please specify' and insert the main responsibility. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Please explain (column 4)

- Describe the individual's/committee's position in the corporate structure.
- Note that this question asks about the position and not about the names of the staff holding these positions. Do not include the name of any individual or any other personal data in your response.
- Provide further context for the specific responsibilities, duties and actions of this individual/committee.
- Describe the nature of the report to the board referred to in column 3.

Explanation of terms

- **Highest-level management:** The most senior individual or committee that holds specific executive power over the management of day-to-day tasks. Highest-level managers would hold ultimate responsibility over the implementation of the decisions taken at the board level.

Employee incentives

The questions in this section are presented to high-impact sectors only and will not be displayed here unless you opted to view sector-specific questions.

Public policy engagement

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Question dependencies

- Your response to W6.5 will determine whether W6.5a is presented. If your response to W6.5 is amended, data in W6.5a may be erased. In this case, be sure to re-enter data for W6.5a.

Change from 2017

New question

Rationale

It is important that boards have established mechanisms to ensure that activity seeking to externally influence policy agendas aligns with the company's commitments and strategic objectives for water security. This includes engagement with policy makers, trade associations and/or research funding organizations or any other organizations relevant to public policy. This question facilitates increased transparency and helps CDP data understand the company's priorities and stance on this aspect of water governance.

Response options

Select all that apply from the following options:

- Yes, direct engagement with policy makers
- Yes, trade associations
- Yes, funding research organizations
- Yes, other
- No

Requested content

General

- Select all that apply for your organization and that are relevant to the reporting year.
- External engagement is relevant here if it seeks to influence water policy or other water agendas, including policy makers, government departments, or regulatory bodies on a regional, local, national, or international

level.

- Only select "No" if you do not carry out any policy engagement activities related to water.

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Question dependencies

- This question only appears if you select any of the "Yes" options in response to W6.5.

Change from 2017

New question

Rationale

It is important that boards establish mechanisms to ensure that any activity seeking to externally influence policy agendas aligns with the company's commitments and strategic objectives for water security and that they maintain a consistent approach to addressing their water challenges.

This question enables companies to disclose the processes they use to make sure that their stated position on water security is compatible with their engagement and other activities.

Response options

This is an open text question with a limit of 1,500 characters.

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

Requested content

General

- The intention is to understand how your organization manages multiple water-related engagement activities across different business divisions and geographies to ensure that you have a common approach that is also consistent with your strategy on water security/stewardship/management.
- If you do not have any processes or plans in place, explain how you will to address this potential for conflict in the future.

W7 Business strategy

Module Overview

The purpose of this module is to collect information on how a company is adapting its long-term business model to secure a sustainable future, in terms of both its own resilience and securing water for all.

It flags that companies need to consider how to include water related issues in long term planning/strategy and they must also be accounted for financially. This strengthens the forward-looking focus of the water security questionnaire.

The questionnaire also seeks information for our data users on the use of an approaches to internal water valuation and the use of scenario analysis. The latter is a tool for strategically understanding different potential futures, their implications regarding water security and how a business model might be modified to maximize opportunities. This reflects the recommendations of the Task Force on Climate-related Financial Disclosures. Further information on conducting and disclosing scenario analysis can be found in the [CDP Technical Note on Scenario Analysis](#). Compared to most routine risk assessment approaches, scenario analysis involves a long-term horizon – typically beyond 35 years, a focus on macro, global trends which will interact with the more local trends and allows the analysis of complexity.

Key changes

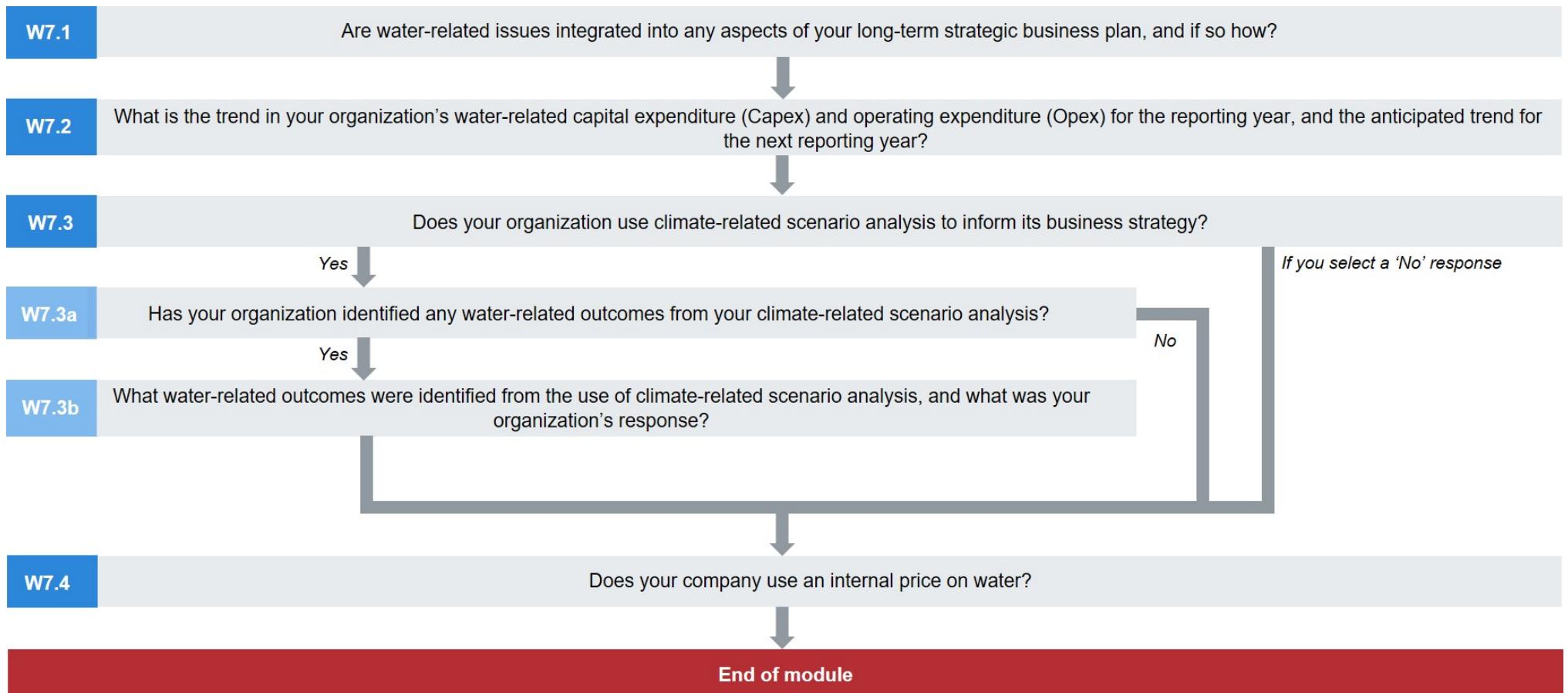
- This is a new module incorporating previous and new disclosure topics. New questions ask how water-related issues have affected an organization's long-term, strategic objectives; how they are achieved and financed; and about the use of scenario analysis and internal water pricing.

Sector modifications

- None

Pathway diagram - questions

This diagram shows the general questions contained in module W7. To access question-level guidance, use the menu on the left to navigate to the question.



Strategic plan

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

Change from 2017

New question.

Rationale

This question allows companies to explain how they have considered and acted upon water-related issues at a strategic level for the business, rather solely at the operational level.

This is not asking simply about your response to water risks. CDP data users, particularly investors are interested in forward-looking strategic innovations and financial decisions that have been driven by internal and external factors; e.g. both current and future market opportunities, public policy objectives, and corporate responsibility commitments related to water.

Connection to other frameworks

CEO Water Mandate

Response: Policies, governance and targets

SDG

Goal 6: Clean water and sanitation

Response options

Please complete the following table:

Aspect of strategic business plan	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Select from: <ul style="list-style-type: none">● Yes, water-related issues are integrated● No, water-related issues were reviewed but not considered as strategically relevant/significant● No, water-related issues not yet reviewed, but there are plans to do so in the next two years● No, water-related issues were not reviewed and there are no plans to do so	Select from: <ul style="list-style-type: none">● 5-10● 11-15● 16-20● 21-30● > 30	Text field [maximum 1,500 characters]
Strategy for achieving long-term objectives			
Financial planning			

Requested content

General

- When responding to this question, companies should consider if, what and how water-related issues have affected the 3 aspects of their business planning at the corporate level for a time horizon beyond 5 years.
- This could be in response to existing risks or future risks, but could also include other considerations, inside and outside of the company, related to water, such as current and future market opportunities, public policy agendas, and corporate responsibility commitments.
- In some cases, your action may be directly motivated by specific water-related issues, and in other cases, water-related issues may be an additional (but not exclusive) driver of the action.

Aspect of strategic business plan (column 1)

- Business objectives: when responding to this row, please report how water issues have been integrated into your future business objectives in a time horizon beyond 5 years.
- Strategy: when responding to this row, you should report how your future strategy, beyond 5 years, for achieving your business objectives has been influenced by a water-related issue.
- Financial planning: When responding to this row, you should consider how your future financial plans, for a period beyond 5 years, have been affected by water-related issues. This includes changes to revenue, expenditure, assets and liabilities, and the specific actions, assets, and resources that are deemed necessary to achieve your organization's long-term objectives (including changes to capital allocation).

Are water-related issues integrated? (column 2)

- You should select 'Yes' if water-related issues were considered and they were incorporated into or affected your corporate business objectives, strategy or strategic financial planning, i.e. beyond operational management.
- In all other cases, select one of the 'No' options to indicate that water risks/opportunities and other water issues have had no influence on your company's strategy for developing your business.

Long-term time horizon (column 3)

- Select the option that best describes how far into the future you considered water-related issues for each of the 3 aspects of strategy.

Please explain (column 4)

- For each row, you should provide an explanation for your answers in column 2 and 3.
- You should include company-specific examples of how water has been integrated in strategic planning.
- If you answered 'Yes', please explain:

- Which water issues were incorporated.
- How the business planning aspect in column 1 was affected. For example, you may have decided to introduce a new product range or cease the manufacturing of particular product, divest from a location, commit to a collective action approach to water management in the river basins where you operate, or increase capital expenditures on new technologies.
- Why this decision was taken; such as to avoid a loss in revenue due to anticipated higher water costs over the longer term, to benefit from increased asset valuations, to realize a positive linkage with long-term carbon emission reductions, to exploit new markets, because of a projected lack of resource availability, because of anticipated consumer behavior shifts.

- If you answered 'No', depending on which drop down you selected, for each row please describe:

- The primary reason your organization concluded that water-related issues need not impact on that aspect of its business planning in the long-term.
- Any plans to review how water-related issues might impact that aspect of your business planning in the long-term, include the rationale for those plans.
- The primary reason your organization has no plans to review how water-related issues might impact that aspect of its business planning in the long-term.

Explanation of terms

- **Business objectives:** These describe what the organization expects to accomplish over a specified time period, and typically include a statement of purpose and anticipated future state for the organization.
- **Financial planning:** Refers to an organization's consideration of how it will achieve and fund its objectives and strategic goals. The process of financial planning allows organizations to assess future financial positions and determine how resources can be utilized in pursuit of short- and long-term objectives. Organizations often create "financial plans" that outline the specific actions, assets, and resources (including capital) necessary to achieve its objectives over a 1-5 year period. However, 'financial planning' is broader as it includes long-term capital allocation and other considerations that may extend beyond the 5 year period (e.g., investment, research and development, manufacturing, and markets) (adapted from the [Recommendations of the Task Force for Climate Related Financial Disclosure, 2017](#)).
- **Strategy:** A plan of action to achieve your organization's long-term objectives/anticipated future state.

CAPEX/OPEX

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Change from 2017

Modified question (2017 W6.4)

Rationale

Within a company, this information raises the strategic understanding of the value of water for the business (beyond the price paid for it).

Signaling the direction of travel of capital expenditure and operating expenditure to CDP data users helps them understand their potential exposure.

The question asks for a reporting of trends and not absolute values. It identifies changes in water-related investment and operational costs. The information provided here should align with the information provided on risk response strategies and business opportunities (reported in W4.2 and W4.3).

Response options

Water-related CAPEX (+/- % change)	Anticipated forward trend for CAPEX (+/- % change)	Water-related OPEX (+/- % change)	Anticipated forward trend for OPEX (+/- % change)	Please explain
Percentage field [enter a percentage from 0 to +/- 999,999,999,999 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0 to +/- 999,999,999,999 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0 to +/- 999,999,999,999 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0 to +/- 999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 1,000 characters]

Requested content

General

- This question requires companies to consider the trend in their water-related capital and operational expenditure.
- You may provide estimates if necessary.
- You may report the figure as a negative or positive percentage up to 2 decimal places.
- Only enter a zero percentage if there has been no change. Please remember that a zero should not be used for an absence of data.

Water CAPEX (column 1 and 2)

- Examples of water-related CAPEX are stormwater drain rehabilitation, sewerage line replacements, pollution control devices, treatment facility retrofitting, solvent recovery units, landfill construction, pipelines.
- In column 1, provide a figure for the percentage change in your water-related capital expenditure in the last reporting year compared to the previous year.
- In column 2, provide a figure for the anticipated change in your water-related capital expenditure for the forthcoming reporting year.

Water OPEX (column 3 and 4)

- Examples of water-related OPEX are permit renewals, wetland protection, water quality testing, consulting services, well maintenance, groundwater monitoring, hiring additional specialist employees.
- In column 3, provide a figure for the percentage change in your water-related operational expenditure in the last reporting year compared to the previous year.
- In column 4, provide a figure for the anticipated change in your water-related operational expenditure for the forthcoming reporting year.

Please explain (column 5)

- State if your responses are estimates or if any exclusions apply to the data.
- You should provide details as to why your CAPEX or OPEX has increased, decreased, or remained the same compared to the previous reporting year.
- Please also comment on the direction and magnitude of the anticipated forward trend in CAPEX and OPEX, and explain your response.
- You could also provide an estimate of the proportion of your total OPEX and CAPEX that is water-related.

Explanation of terms

- **Capital expenditure (water-related CAPEX):** Represents the money invested by a company to acquire or upgrade fixed assets, such as buildings and equipment, related to water management or water security in any way. Examples are stormwater drain rehabilitation, pollution control devices, and pipelines. Fixed assets are those that are used repeatedly in production processes for more than a year (adapted from the [OECD Glossary of Statistical Terms](#)).
- **Operating expense (water-related OPEX):** This is the expenditure an organization incurs as a result of performing its normal business operation; for example, on its water bills. Examples are permit renewals, wetland protection, water quality testing, consulting services, and well maintenance. OPEX does not include taxes, depreciation, and interest (adapted from the [European Commission, Eurostat](#)).

W7.3 Scenario analysis

(W7.3) Does your organization use climate-related scenario analysis to inform its business strategy?

Question dependencies

- Your response to W7.3 will determine whether W7.3a is presented in this section. If your response to W7.3 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

New question

Rationale

This question establishes whether your company uses climate-related scenario analysis. This will determine whether questions on water-related outcomes are presented.

Your disclosure provides CDP data users an indication of the extent to which your company is considering a range of possible and probable futures when considering sustainability challenges and opportunities.

CDP is taking a staged approach to disclosure on this topic and this question encourages companies to connect their use of climate scenario analysis to water issues as there are frequently significant linkages which companies should pay attention to. Investors will be able to use information for comparability across companies as they review their portfolios.

This question will evolve to reflect leading practice as it becomes more common for companies to carry out water-focused scenario analysis. Over time, we expect companies that are high impact in terms of water to actively consider water-related issues in their development of possible future scenarios and their use of scenario analysis. It should become possible to make the link to possible futures at the river basin level so that companies can analyze impacts in greater detail.

Response options

Please complete the following table:

Use of climate-related scenario analysis	Comment
Select from: <ul style="list-style-type: none">YesNo, but we anticipate doing so within the next two yearsNo plans for the next two years	Text field [maximum 1,000 characters]

Requested content

General

- Note that, unlike CDP's climate change questionnaire, the water security questionnaire is not seeking detailed information about your approach to or methods for scenario analysis, nor incentivizing the use of any particular scenario analysis methodology.
- To determine whether questions on the water-related outcomes of climate-related scenario analysis are presented, please answer 'yes' if your company has used a climate-related scenario analysis tool to inform your long-term business objectives and/or your strategy for achieving them.

Comment (column 2)

- You may use this column to provide information that will help CDP data users to understand your selection; e.g. you may wish to explain your plans, or whether you have used this tool for only some parts of your business.
- We recognize that a small but growing number of companies in some sectors are conducting water-related scenario analysis. Please give details here if that applies to your company.

Explanation of terms

- Climate-related scenario analysis:** This forward-looking tool helps organizations developing resilient strategies for a low-carbon economy, consistent with a 2°C or lower future for example. There are publicly available climate-related scenarios that organizations can use, either as a direct tool or as a reference point for their own tailored scenarios. Please refer to the [CDP Technical Note on Scenario Analysis](#) for more information.
- Scenario analysis:** A strategic planning process/tool to help an organization understand how it might perform in a range of probable, possible or preferred futures. Scenarios are not forecasts or predictions but describe

potential paths leading to a specified outcome or goal. It draws attention to key factors complexities, and critical uncertainties that might drive or characterize that future. It allows decision makers to challenge “business-as-usual” assumptions, explore alternatives based on their relative impact and likelihood of occurrence, and evaluate the organization’s flexibility, resilience, or robustness across a range of potential outcomes. Companies use both narrative approaches and more detailed quantitative models to imagine and consider different futures. Scenario analysis not only identifies potential risks, but can also offer insight into opportunities including technologies, new products and services, new markets or assets, and increased resilience.

- **Water-related outcomes:** Scenario analysis enables decision makers to identify and evaluate potential outcomes for different scenarios and their effects on their organization, based on a variety of assumptions/input variables. The consequences may be water-related themselves, or have implications for the water management and governance of the organization, or for its wider business strategy.

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

Question dependencies

- This question only appears if you select “Yes” in response to W7.3.
- Your response to W7.3a will determine whether W7.3b is presented in this section. If your response to W7.3a is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

New question

Rationale

This question establishes whether under different climate scenarios water-related issues were identified as important for your company.

Response options

Select one of the following options:

- Yes
- No

Requested content

General

- Indicate whether you have identified any possible or probable water-related outcomes or implications for your company associated with future climate change scenarios.
- These may be challenges or opportunities arising from e.g. policy-based water restrictions due to drought, disruption to operations due to flooding or lack of cooling water, destruction of property, or increase in product demand.

Explanation of terms

- **Water-related outcomes:** Scenario analysis enables decision makers to identify and evaluate potential outcomes for different scenarios and their effects on their organization, based on a variety of assumptions/input variables. The consequences may be water-related themselves, or have implications for the water management and governance of the organization, or for its wider business strategy.

(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization’s response?

Question dependencies

- This question only appears if you select “Yes” in response to W7.3a.

Change from 2017

New question

Rationale

This question allows CDP data users to understand how your company has responded, or intends to respond, to the possible or probable water-related outcomes driven by different climate scenarios.

Response options

Please complete the following table:

Climate-related scenario(s)	Description of possible water-related outcomes	Company response to possible water-related outcomes
Select all that apply: <ul style="list-style-type: none">● 2DS● IEA 450● Greenpeace● DDPP● IRENA● RCP 2.6● IEA B2DS● IEA Sustainable Development Scenario● Nationally determined contributions (NDCs)● Other, please specify	Text field [maximum 1,500 characters]	Text field [maximum 1,500 characters]

Requested content

Climate-related scenario(s) (column 1)

- Please indicate whether your organization has used any of the common climate-related scenarios listed here as part of its use of strategic scenario analysis tools.
- If you use a scenario that is not listed here, please select 'Other, please specify' and provide its name. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- Note: This question is not asking about your company's response to future risks and opportunities associated with a 'business as usual' risk assessment exercise. You will have reported this in W4.

Description of possible water-related outcomes (column 2)

- Describe company-specific, possible or probable, water-related outcomes associated with the future climate scenarios selected in column 1.
- These may be possible or probable challenges or opportunities arising from, e.g., policy-based water restrictions due to drought, or disruption to operations due to temperature changes.

Company response to possible water-related outcomes (column 3)

- Describe your company's response to the water-related outcomes described in column 2 and include the anticipated timescale for your responses.
- These should be operational or strategic actions taken or already planned in response to the identification of possible or probable future scenarios and their implications for your company. This might include relocation plans, investment in technology, product diversification, divestment.
- You may wish to explain the extent to which the use of climate scenario analysis has been useful to your strategic water planning or for building resilience to different possible or probable long-term water futures.

Explanation of terms

- **Water-related outcomes:** Scenario analysis enables decision makers to identify and evaluate potential outcomes for different scenarios and their effects on their organization, based on a variety of assumptions/input variables. The consequences may be water-related themselves, or have implications for the water management and governance of the organization, or for its wider business strategy.

Water pricing

(W7.4) Does your company use an internal price on water?

Change from 2017

New question (2017 W6.2a)

Rationale

The true value of water is not accounted for in today's markets in many parts of the world and the costs of treatment and delivery, as well as opportunity costs and environmental and social costs, are not well captured. As

water becomes increasingly scarce and contested, businesses could see prices increase.

Applying an internal price on water that more accurately reflects the costs of the organization's water provision can help it understand opportunities for efficiencies and prepare for potential future price changes. It can help strengthen the business case for water-related investment.

As part of their assessment of a company's resilience, it is useful for CDP data users to know if companies are using an internal price for water, or exploring any other water valuation options.

Response options

Please complete the following table:

Does your company use an internal price on water?	Please explain
Select from: <ul style="list-style-type: none">● Yes● No, but we are currently exploring water valuation practices● No, and we do not anticipate doing so within the next two years	Text field [maximum 1,000 characters]

Requested content

General

- CDP recognizes that attributing financial value to water is an emerging field and there are different tools and methodologies available to companies and investors wanting to understand more about the materiality of water risk. For this reason, this question is simply asking companies to let us know whether or not they are using it and to provide details if so. At this stage, we are not recommending any method or evaluating the validity of any activity or method.

Please explain (column 2)

- If an internal price on water is used by your organization, please provide the value and currency and how this price was calculated.
- You may also describe:
 - the approach you adopted to establish the price
 - a company-specific example of how the use of water pricing affects/has affected spending and other decisions within the organization
 - how it compares to the price you are charged for water.
- If you have explored any other valuation practices, please include them here and comment.
- If an internal price on water is not currently used by your organization, please detail any plans to incorporate one, or any other valuation practices you are exploring. If you have no plans, please explain why you consider water valuation as unimportant for your business, or state if its relevancy has not been assessed.

Explanation of terms

- **Internal water price:** A metric reflecting the economic value of water to an organization in monetary terms - beyond the market price paid to water utilities or other direct costs of supply. This value may account for internal and/or external costs associated with water use as well as benefits to the company derived from water (e.g. regulatory costs, water-related capital expenditure, river basin water scarcity impacts, services provided by water ecosystems, social benefits, link to share price). This may be current and/or forward looking, and reflect various levels of time-scales, uncertainty, and geographies. An internal water price may be used in strategic, operational or financial planning.
- **Water valuation:** Method for arriving at a water price or any other type of metric associated with the value of water to the organization.

W8 Targets

Module Overview

This module collects information on your organization's water-related quantitative targets and qualitative goals to demonstrate your commitment to progressing water stewardship and security improving water management.

Details are requested only for targets and goals that are significant to the company as whole and therefore monitored at the corporate level. However, we ask you to describe your approach to how targets are set for any level of your organization, because local context is critical for addressing water challenges. For example, do you have more aggressive targets in areas of most water stress? What changes are your targets and goals driving? How does your target setting link to your business strategy? What processes are used to review their impact?

Key changes

- There is a new request to understand how your organization approaches target setting at all levels of the organization (such as what is taken in to account to make them relevant and robust and how they align with public policy goals).
- The tables request information about any targets and goals that are monitored at corporate level because they are significant for the company as a whole. Previously the request was for 'company-wide' targets and goals.

Sector modifications

- Additional drop-down options W8.1c: Food, Beverages & Tobacco

Pathway diagram - questions

This diagram shows the general questions contained in module W8. To access question-level guidance, use the menu on the left to navigate to the question.

W8.1

Describe your approach to setting and monitoring water-related targets and/or goals.

'Targets are monitored at the corporate level' in W8.1

W8.1a

Provide details of your water targets that are monitored at the corporate level, and the progress.

'Goals are monitored at the corporate level' in W8.1

W8.1b

Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

'Our company sets no targets and/or goals' in W8.1

W8.1c

Why do you not have water target(s) or goal(s) and what are your plans to develop these in the future?

End of module

Targets and goals

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

Question dependencies

- Your response to W8 will prompt which subsequent questions in this section are presented. If your response to W8.1 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

If you select "Our company sets no targets and/or goals" in column 1, you will be presented with W8.1c.

If you select "Targets are monitored at the corporate level" in column 2, you will be presented with W8.1a.

If you select "Goals are monitored at the corporate level" in column 2, you will be presented with W8.1b.

Change from 2017

Modified question (2017 W8.1)

Rationale

CDP data users wish to know about your organization's targets (quantitative) and goals (qualitative) for achieving its water policy and commitments, improving water management, and responding to current and future water risks.

Companies may set targets and/or goals that are corporate wide, applicable to all parts of their organization, and determined and monitored at the corporate level. Some will be a key tool for achieving the corporate water strategy, though they apply to specific brands, products, facilities, basins, regions, processes etc. Others will be associated with the day to day management of the company at a local level. Some targets will be set at the level of specific regions, brands, business units etc. and will not be monitored at the corporate level.

Context can be particularly relevant for water-related targets and goals. Risks and impacts, and their mitigation actions, are often specific to location and the contextual issues of a basin; such as, water quality/quantity, access to WASH, water governance, and local ecosystems.

Companies may contribute to targets and goals that go beyond or originate beyond their company "fence line" and work with other stakeholders to achieve them, particularly at the basin.

This question allows your organization to explain its approach to target and goal setting at all levels and to demonstrate to CDP data users how the targets and goals are linked to the water risks and impacts you disclose in this questionnaire.

Connection to other frameworks

CEO Water Mandate

Response: Policies, governance and targets

Response options

Please complete the following table:

Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Select all that apply: <ul style="list-style-type: none">● Our company sets no targets or goals● Company-wide targets and goals● Business level specific targets and/or goals● Activity level specific targets and/or goals● Site/facility specific targets and/or goals● Brand/product specific targets and/or goals● Country level targets and/or goals● Basin specific targets and/or goals● Other, please specify	Select all that apply: <ul style="list-style-type: none">● None are monitored at corporate level● Targets are monitored at the corporate level● Goals are monitored at the corporate level	Text field [maximum 2,000 characters]

Requested content

General

- Consider the range of water-related targets and goals set within your organization and the processes you have in place to ensure that they are meaningful and that their progress and impact is monitored. Also consider whether these are monitored at the corporate level. The targets may be related to your organization's direct operations, or other parts of its value chain.

Levels for targets and/or goals (column 1)

- Select all the options that apply to your organization for the current reporting year. Indicate if your organization uses targets and goals that are company-wide, local, specific to a business unit, product or brand etc. For example, if you have a target associated with water demand for a garment dying process and that target applies across all of your operations and geographies, you would select both 'Activity specific targets and goals' and 'Company-wide targets and goals.'
- If you select "Other, please specify," provide a label for the level of targets/goals. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Monitoring at corporate level (column 2)

- Indicate if any targets or goals are currently monitored at the corporate level (regardless of the level that they are set or their coverage). Please explain your response in column 3.
- Note that this refers to the monitoring of targets and goals, and determines the presentation of questions W8.1a and W8.1b. You may have site/basin/country/product targets and goals that are being monitored at the corporate level because they contribute to a corporate wide initiative, or because they are considered important for the company as a whole.
- Only select 'None' if no targets or goals are monitored outside of the site/basin/country/business division etc.

Approach to setting and monitoring targets and/or goals (column 3)

- Please give a company-specific description of your general approach to setting water-related targets and goals. This may include the following at any level of your organization:
 - how you identify targets and goals relevant to your water risks, impacts, and opportunities or relevant to shared water challenges, and how you prioritize them. For example, you may have a company-wide policy to set targets only in water stressed areas, or to set more aggressive targets in water stressed basins and this involves engagement with river basin authorities to ensure a consolidated approach.
 - how you ensure that targets and goals reflect geographic, regulatory, and other contextual factors, such as the use of science-based hydrological models or the needs of other users in a basin.
 - any formal motivations (company-wide or other) that drive the setting of targets and goals – such as, adherence to water-related public policy agendas such as the Sustainable Development Goals or local environmental initiatives.
 - how forward-looking strategic business plans, informed by scenario analysis tools for example, have influenced your targets and goals.
 - any other information that ensures your targets and goals are tracked, progressed in monitored, and they deliver meaningful outcomes for your organization or for other water users.
- If you set water-related targets and goals but none are currently monitored at the corporate level, you should explain here.
- Please provide examples to help CDP data users understand the robustness of your approach to target and goal setting and monitoring.

Explanation of terms

- **Goal:** A long term qualitative outcome or a specific change in behavior or circumstances.
- **Target:** A specific measurable output to be achieved within a specific timeline. Targets often act as steps towards a wider and long-term corporate goal.

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Question dependencies

- This question only appears if you select "Targets are monitored at the corporate level" in response to column 2 of W8.1.

Change from 2017

Modified question (2017 W8.1a)

Rationale

This question provides CDP data users with details about your water-related targets that are monitored at the corporate level. They may be significant for progressing water security or reducing other water-related risks, achieving other water commitments or strategic business objectives.

Connection to other frameworks

CEO Water Mandate

Response: Policies, governance and targets

SDG

Goal 6: Clean water and sanitation

Response options

Please complete the following table. The table is displayed over several rows for readability. If you have multiple targets, you are able to add rows by using the "Add Row" button at the bottom of the table.

Target reference number	Category of target	Level	Primary motivation	Description of target	Quantitative metric
Select from: ● Reference number drop down	Select from: ● Response drop-down options below table	Select from: ● Company-wide ● Business ● Business activity ● Site/facility ● Brand/product ● Country level ● Basin level ● Other, please specify	Select from: ● Response drop-down options below table	Text field [maximum 1,000 characters]	Select from: ● Response drop-down options below table

Baseline year	Start year	Target year	% achieved	Please explain
Numerical field [enter a number between 1900 and 2100 with no decimal places]	Numerical field [enter a number between 1900 and 2018 with no decimal places]	Numerical field [enter a number between 2017 and 2100 with no decimal places]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Text field [maximum 1,000 characters]

[Add Row]

Category of target (column 2)

<ul style="list-style-type: none"> ● Water withdrawals ● Water consumption ● Water discharge ● Product water intensity ● Water recycling/reuse ● Water use efficiency ● Water pollution reduction ● Water, Sanitation and Hygiene (WASH) services in the workplace ● Water, Sanitation and Hygiene (WASH) services in the community 	<ul style="list-style-type: none"> ● Monitoring of water use ● Product use-phase ● Community engagement ● Supplier engagement ● Watershed remediation and habitat restoration, ecosystem preservation ● Impact of packaging material ● Procurement/production of sustainable raw materials [food, beverages & tobacco only] ● Other, please specify
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Primary motivation (column 4)

<ul style="list-style-type: none"> ● Brand value protection ● Cost savings ● Increased revenue ● Sales of new products / services ● Reduced environmental impact ● Recommended sector best practice ● Risk mitigation 	<ul style="list-style-type: none"> ● Increasing freshwater availability for users/natural environment within the basin ● Commitment to the UN Sustainable Development Goals ● Corporate social responsibility ● Shared value ● Water stewardship ● Climate change adaptation and mitigation strategies ● Other, please specify
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Quantitative metric (column 6)

- Water withdrawals**
- Absolute reduction in total water withdrawals
 - % reduction in total water withdrawals
 - % reduction of water withdrawals from surface water
 - % reduction of water withdrawals from groundwater
 - % reduction of water withdrawals from municipal supply
 - % increase in withdrawals from third-party sources
 - % increase in rainwater harvesting
 - % increase in water recycling/reuse
 - % reduction per business unit
 - % reduction per revenue
 - % reduction per product
 - Absolute increase in investment related to this category
 - % increase in investment related to this category
 - % reduction per unit of production
 - Other, please specify

- Water consumption**
- % reduction in total water consumption
 - % reduction per business unit
 - % reduction per revenue
 - % reduction per product
 - Absolute increase in investment related to this category
 - % increase in investment related to this category
 - % reduction per unit of production
 - Other, please specify

- Water discharge**
- % reduction per business unit
 - % reduction per revenue
 - % reduction per product
 - Absolute increase in investment related to this category
 - % increase in investment related to this category
 - % reduction per unit of production
 - % increase in water recycling/reuse
 - Other, please specify

- Product water intensity**
- % reduction per business unit
 - % reduction per revenue
 - % reduction per product
 - Absolute increase in investment related to this category
 - % increase in investment related to this category
 - % reduction per unit of production
 - % increase in water recycling/reuse
 - Other, please specify

- Water recycling/reuse**
- % increase in water recycling/reuse
 - Absolute increase in investment related to this category

Water, Sanitation and Hygiene (WASH) services in the community

- Proportion of local population using safely managed drinking water services around our facilities and operations
- Proportion of local population using safely managed sanitation services, including a hand-washing facility with soap and water around our facilities and operations
- % increase in the proportion of local population using safely managed drinking water services around our facilities and operations
- % increase in the proportion of local population using safely managed sanitation services, including a hand-washing facility with soap and water around our facilities and operations
- Other, please specify

Monitoring of water use

- % sites monitoring water withdrawals total volumes
- % sites monitoring water withdrawals by source
- % sites monitoring water recycling/reuse
- % sites monitoring water discharge total volumes
- % sites monitoring water discharge by destination
- % sites monitoring water discharge quality - by treatment method
- % sites monitoring water discharge quality - by standard effluent parameter
- % sites monitoring water discharge quality - temperature
- % sites monitoring water consumption total volumes
- % sites monitoring the proportion of employees having access to safely managed drinking water and sanitation services around our facilities and operations
- % sites monitoring the proportion of population having access to safely managed drinking water and sanitation services around our facilities and operations
- Other, please specify

Product use-phase

- Absolute increase in revenue from products designed for use-phase resource efficiency
- % increase in revenue from products designed for use-phase resource efficiency
- Other, please specify

Community engagement

- Total number of population participating in community-engagement activities
- % increase in number of population participating in community-engagement activities
- % increase in investment in community engagement initiatives
- Absolute increase in investment in community engagement initiatives
- Other, please specify

Supplier engagement

- % increase in proportion of suppliers engaged
- % increase in number of suppliers engaged
- % increase in investment in supplier engagement initiatives
- Other, please specify

Watershed remediation and habitat restoration, ecosystem preservation

- Total number of watershed remediation and habitat restoration, ecosystem preservation activities
- % increase in watershed remediation and habitat restoration, ecosystem preservation activities
- Improvement in health of water-related ecosystems over time
- % increase in investment in watershed remediation and habitat restoration, ecosystem preservation activities

- % increase in investment related to this category
- Other, please specify

Water use efficiency

- % reduction in total water withdrawals
- % reduction of water withdrawals from surface water
- % reduction of water withdrawals from groundwater
- % reduction of water withdrawals from municipal supply
- % increase in withdrawals from third party sources
- % reduction in total water discharge
- Absolute increase in the % water recycling/reuse
- Other, please specify

Water pollution reduction

- % proportion of wastewater that is safely treated
- % reduction in concentration of pollutants
- % reduction in water discharge volumes
- Absolute increase in investment related to this category
- % increase in investment related to this category
- Other, please specify

Water, Sanitation and Hygiene (WASH) services in the workplace

- Proportion of employees using safely managed drinking water services
- Proportion of employees using safely managed sanitation services, including a hand-washing facility with soap and water
- % increase in the proportion of employees using safely managed drinking water services
- % increase in the proportion of employees using safely managed sanitation services, including a hand-washing facility with soap and water
- Other, please specify

- Absolute increase in investment in watershed remediation and habitat restoration, ecosystem preservation
- Other, please specify

Impact of packaging material

- % increase of biodegradable packaging material
- % decrease of packaging per product unit
- Other, please specify

Procurement/production of sustainable raw materials [food, beverages & tobacco only]

- % reduction in procurement/production of high water impact commodities [food, beverages & tobacco only]
- % increase in procurement/production of certified crops [food, beverages & tobacco only]
- % increase in procurement/production of crops using sustainable agriculture practices [food, beverages & tobacco only]
- % reduction in procurement/production of commodities from water-stressed areas [food, beverages & tobacco only]
- % increase in procurement/production of commodities with improved water management practices [food, beverages & tobacco only]
- Other, please specify

Other

- Other, please specify

Requested content

General

- This question requests information about your quantitative targets that are currently monitored at the corporate level. These may or may not be company-wide. For example, a company may have a commitment to improve water efficiency that is implemented through locally specific targets and activities that together contribute to a company-wide target. If progress is monitored at the corporate level, this target should be reported here.
- We are not requesting details of targets monitored at the facility, business, basin level etc. If a target is set at the facility, business, basin or country level etc. and it is monitored at the corporate level, because it is significant to the business as a whole, it should be reported.
- Only report targets that are ongoing or have reached completion during the reporting year.
- To add targets, use the "Add Row" button. You may report up to 25 targets.

Target reference number (column 1)

- Select a 'Target number' from the drop-down list to allocate a unique identifier to your target. This will allow you to track and report progress for this target in future disclosures to CDP, until the target is retired. The target reference number is not specific to your organization.

Category of target (column 2)

- Select the type of target you wish to report. Your selection will drive the metrics presented in column 6. Refer to the metrics list under the question table to see which quantitative metrics are linked to each category of targets listed (column 6).

- If you select "Other, please specify," provide a label for the type of target you wish to report. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Level (column 3)

- Select the organizational/geographic/other level or scope that the target applies to. For example, the target may apply to a particular product or a particular industrial process within your business. If you select "Other, please specify," provide a label for the level. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Primary motivation (column 4)

- Select the most applicable primary motivation behind the target you are reporting. If you select "Other, please specify," provide a label for the primary motivation. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Description of target (column 5)

- Provide additional company specific details that will help CDP data users understand your organization's target, its contribution to water security, and why it was chosen.
- Include a company-specific rationale for the target and its level of ambition, why it is important, and why it is being monitored at the corporate level.
- You may also include, for example:

- if the target is the same for all basins/facilities/products, or if it is aligned with local risk levels, for example.
- if a company-wide target is driven by local challenges; e.g. "Discharge treatment was found to be inadequate across several sites in different geographies. We have set a company-wide goal to review this risk and set a company-wide 100% compliance target to meet or go beyond regulatory requirements."
- how the target is being implemented and what investment in financial or personnel resources is necessary to achieve the target.

Quantitative metric (column 6)

- The drop-down list presented will depend on the type of target you selected in column 2. Some metrics are linked to more than one category.
- Select the metric used to quantitatively track your progress against the target, or how your organization measures the success of this target. If you select "Other, please specify," provide a label for the metric. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Baseline year (column 7)

- Enter a whole number between 1900 and 2018 to indicate the baseline against which your target is measured.
- The baseline year may be before, after, or the same as the start year.

Start year (column 8)

- Enter a whole number between 2000 and 2018 to indicate the year that the target was set.
- If you have a year-on-year rolling target, this will be the same as the baseline year in column 7.
- If you have a target based on financial years, please enter the start year for that period. If you have a target based on an average (e.g. five years average), please enter the year that applies to the start of the average period.

Target year (column 9)

- Enter a whole number between 2017 and 2100.
- If you have a year-on-year rolling target, your target year will be the current reporting year.
- If you have a target based on financial years, please enter the end year for that period. If you have a target based on an average (e.g. five years average), please enter the year that applies to the end of the average period.
- You should not report any target that was completed before the start of the reporting year.

% achieved (column 10)

- Indicate how much progress your organization has made against the base line year by the end of the reporting year. Please report the value up to two decimal places.

Please explain (column 11)

- Provide an explanation of the level of progress reported in column 10 (% achieved), whether this matches anticipated progress, if the original target has been revised in any way, and if so, why.
- You may comment on the Baseline, Start, or Target year.

(W8.1b) Provide details of your corporate water goal(s) that are monitored at the corporate level and the progress made.

Question dependencies

- This question only appears if you select "Goals are monitored at the corporate level" in response to column 2 of W8.1.

Change from 2017

Modified question (2017 W8.1b)

Rationale

CDP data users wish to know if your organization has any qualitative goals related to water and how they contribute to water security, reducing other water-related risks, and/or achieving other water commitments or strategic business objectives.

Connection to other frameworks

CEO Water Mandate

Response: Policies, governance and targets

SDG

Goal 6: Clean water and sanitation

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.

Goal	Level	Motivation	Description of goal	Baseline year	Start year	End year	Progress
Select from: ● Response drop-down options below table	Select from: ● Company-wide ● Business ● Business activity ● Site/facility ● Brand/product ● Country level ● Basin level ● Other, please specify	Select from: ● Response drop-down options below table	Text field [maximum 1,500 characters]	Numerical field [enter a number between 1900 and 2100 with no decimal places]	Numerical field [enter a number between 1900 and 2018 with no decimal places]	Numerical field enter a number between 2017 and 2100 with no decimal places]	Text field [maximum 1,500 characters]

[Add Row]

Goal (column 1)

<ul style="list-style-type: none"> ● Providing access to safely managed Water, Sanitation and Hygiene (WASH) in workplace ● Providing access to safely managed Water, Sanitation and Hygiene (WASH) in local communities ● Engaging with local community ● Engaging with customers to help them minimize product impacts ● Engagement with public policy makers to advance sustainable water management and policies ● Engagement with suppliers to help them improve water stewardship 	<ul style="list-style-type: none"> ● Engagement with suppliers to reduce the water-related impact of supplied products ● Promotion of sustainable agriculture practices ● Watershed remediation and habitat restoration, ecosystem preservation ● Promotion of water data transparency ● Reduce environmental impact of product in use phase ● Improve wastewater quality beyond compliance requirements ● Other, please specify
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Motivation (column 3)

<ul style="list-style-type: none"> ● Brand value protection ● Cost savings ● Increased revenue ● Sales of new products / services ● Reduced environmental impact ● Recommended sector best practice ● Risk mitigation 	<ul style="list-style-type: none"> ● Commitment to the UN Sustainable Development Goals ● Increasing freshwater availability for users/natural environment within the basin ● Corporate social responsibility ● Shared value ● Water stewardship ● Climate change adaptation and mitigation strategies ● Other, please specify
--	---

Requested content

General

- A goal is considered to be a qualitative outcome or a change in behavior or circumstances (such as 'improving water governance'), whereas a target is generally a specific, measurable output to be achieved within a specific timeline. A target could act to support a goal - as a quantitative assessment of progress.
- This question requests information about your goals that are currently monitored at the corporate level. These may or may not be company-wide goals but if progress is monitored at the corporate level, this goal may be reported here.
- We are not requesting details of goals set or monitored at the facility, business, basin level etc., unless they are significant to the business as a whole and therefore monitored at the corporate level.
- Only report goals that are ongoing or have reached completion during the reporting year.
- To add goals, use the "Add Row" button. You may report up to 25 goals.

Goal (column 1)

- Select the option that best matches your organization's goal. If there is not an option that is applicable, select "Other, please specify" to provide a label for the goal. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- You should provide more details of your goal in column 4.

Level (column 2)

- Select the organizational/geographic/other level or scope that the goal applies to. For example, the goal may apply to a particular product or a particular industrial process within your business. If you select "Other, please specify," provide a label for the level. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Motivation (column 3)

- Select the most applicable motivation behind the goal you are reporting. If you select "Other, please specify," provide a label for the primary motivation. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Description of goal (column 4)

- Provide additional details that will help data users to understand your organization's goal, its contribution to water security and why it was chosen.
- Include a company-specific rationale for the goal and its level of ambition, why it's important, and why it is being monitored at the corporate level.
- You should also include:

- why this goal was adopted for the level indicated in column 2.
- if the goal is the same for all basins/facilities/products, or if it is aligned with local risk levels, for example.
- how your company is implementing the goal at the associated level. You may give details of the financial and personnel resources that have been committed to achieving it.

Baseline year (column 5)

- Please enter a whole number between 1900 and 2100 to indicate the baseline against which your goal is assessed.
- The baseline year may be before, after, or the same as the start year.

Start year (column 6)

- Please enter a whole number between 2000 and 2018 to indicate the year that the goal was set.
- If you have a year-on-year rolling goal, this will be the same as the baseline year in column 6.
- If you have a goal based on financial years, please enter the start year for that period.
- If you have a goal based on an average (e.g. five years average), enter the year that applies to the start of the average period.

End year (column 7)

- Please enter a whole number between 2017 and 2100.
- If you have a year-on-year rolling goal, your end year will be the current reporting year.
- If you have a goal based on financial years, please enter the end year for that period.
- If you have a goal based on an average (e.g. five years average), enter the year that applies to the end of the average period.
- You should not report any goal that was completed before the start of the reporting year.

Progress (column 8)

- For each goal, specify the progress that has been achieved by the end of the reporting year.
- Provide details as to how your organization assesses the progress made, the indicators you use and how will you know when the goal has been achieved, e.g. the thresholds of success.

(W8.1c) Why do you not have water target(s) or goal(s) and what are your plans to develop these in the future?

Question dependencies

- This question only appears if you select "Our company sets no targets or goals" in response to column 1 of W8.1.

Change from 2017

Modified question (2017 W8.1c)

Rationale

Investors need an explanation as to why you do not have water-related targets or goals in place, especially if you have indicated a dependency on water or substantive water risks.

Response options

Please complete the following table:

Primary reason	Please explain
<p>Select from:</p> <ul style="list-style-type: none"> ● We are planning to introduce a target or goal within 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 	<p>Text field [maximum 1,500 characters]</p>

Requested content

Primary reason (column 1)

- If you select "Other, please specify," provide a label for the primary reason. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Please explain (column 2)

- Please use this open text field to provide any relevant details explaining why your organization does not have any targets or goals for the reporting year.
- If your organization has plans to develop these in the future, please include any information detailing your future plans here.

W9 Linkages and tradeoffs

Module Overview

This module asks about linkages and tradeoffs that may have been identified and/or considered when taking actions to manage risks or pursue opportunities related to water and other environmental issues.

Changes in the physical, regulatory, and market environment are likely to increase pressure to consider water in multiple environmental contexts. Increasingly, companies will be required to manage water withdrawals, consumption, and discharges simultaneously with management of other environmental issues e.g. energy consumption and greenhouse gas emissions. Understanding the linkages and tradeoffs between water and other environmental issues will help companies seize opportunities for more holistic management.

Key changes

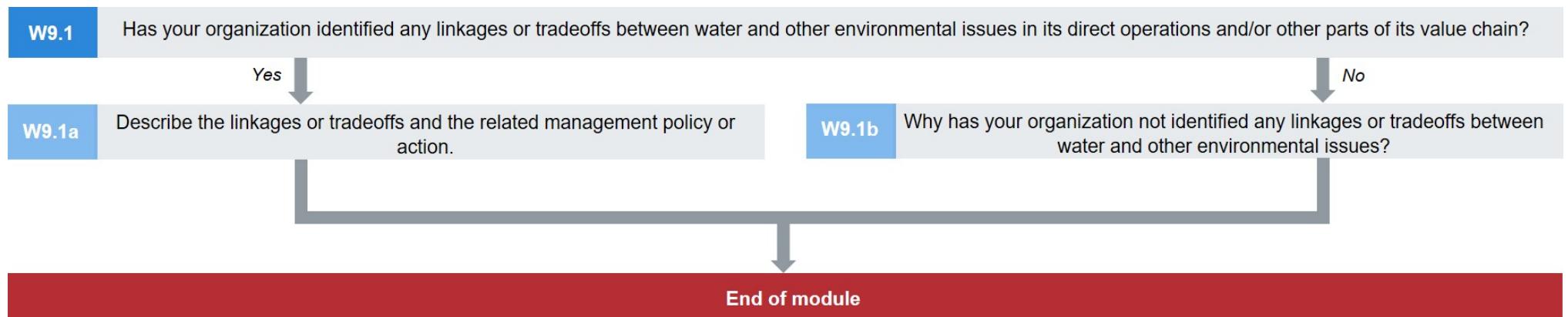
- The scope of the question has been expanded to all stages of value chain.

Sector modifications

- Additional drop downs in W9.1a for Food, Beverage & Tobacco.

Pathway diagram - questions

This diagram shows the general questions contained in module W9. To access question-level guidance, use the menu on the left to navigate to the question.



Managing linkages and tradeoffs

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?

Question Dependencies

- Your response to W9.1 will determine whether W9.1a is presented in this section. If your response W9.1 is amended, data in those dependent questions may be erased. In this case, be sure to re-enter data for all relevant questions. The guidance for each question indicates if it is a dependent question.

Change from 2017

Modified question (2017 W9.1)

Rationale

Due to the complex interconnected relationships between deforestation, climate change, and water issues, companies should take a holistic approach to responding to environmental impacts, risks, and opportunities. Companies demonstrate mature environmental stewardship by understanding both the implications of management actions on other environmental factors, as well as the linkages and tradeoffs between water and these additional environmental issues.

Connection to other frameworks

CEO Water Mandate

Linkages across sustainability issues

Response options

Select one of the following options:

- Yes
- No

Requested content

General

- Indicate whether your organization has identified and/or considered linkages or tradeoffs when taking actions to manage water-related risks, pursue opportunities related to water, or any other water management activity.
- Note that the question asks about linkages and tradeoffs throughout your direct operations and the rest of value chain, and may refer to local, national, and/or regional environmental issues and policies.

Explanation of terms

- Linkage:** A relationship where your management of water has a positive impact on another environmental issue. For example, extracting, processing, and treating water requires energy, which means that as a company increases their water efficiency, they may also increase their energy efficiency.
- Tradeoff:** A relationship where your management of water has a negative impact on another environmental issue. For example, mitigating water scarcity by desalination may significantly increase greenhouse gas emissions, which negatively impact climate-related goals, as desalination is traditionally energy intensive.

(W9.1a) Describe the linkages or trade-offs and the related management policy or action.

Question Dependencies

- This question only appears if you select "Yes" in response to W9.1.

Change from Last Year

Modified question (2017 W9.1a)

Rationale

This question provides evidence to CDP data users of your company's awareness of the environmental linkages and tradeoffs associated with actions it takes to manage risks or pursue opportunities related to water.

Connection to other frameworks

CEO Water Mandate

Linkages across sustainability issues

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.

Linkage/trade-off	Type of linkage/tradeoff	Description of linkage/trade-off	Policy or action
Select from: <ul style="list-style-type: none">● Linkage● Tradeoff	Select from: <ul style="list-style-type: none">● Response drop-down list below table	Text field [maximum 1,000 characters]	Text field [maximum 1,500 characters]

[Add Row]

Type of linkage/tradeoff (column 2)

Linkage <ul style="list-style-type: none">● Increased energy efficiency● Decreased energy use● Increased biodiversity● Environmental restoration● Decreased GHG emissions● Decreased wastewater treatment● Improved levels of ecosystem services (food, beverages & tobacco sector only)● Other linkage, please specify	Tradeoff <ul style="list-style-type: none">● Decreased energy efficiency● Increased energy use● Decreased biodiversity● Increased GHG emissions● Increased dust generation● Increased wastewater treatment● Reduced carbon sequestration (food, beverages & tobacco sector only)● Other tradeoff, please specify
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Requested content

General

- This question asks about environmental issues that have been identified as linkages and/or tradeoffs resulting from your organization's management of water, not those resulting from your organization's management of other environmental issues.

Type of linkage/trade-off (column 1)

- Your selection will determine which drop downs appear in column 2.

Type of linkage/trade-off (column 2)

- If you select "Other, please specify," provide a label for the type of linkage/tradeoff. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Description of linkage/trade-off (column 3)

- Provide details of the linkage/trade-off selected in column 2. In your description, include:

- where in your value chain these issues were identified.
- the policy or management action that gave rise to the linkage and/or tradeoff, and how these linkages or tradeoffs were revealed.
- the observed and/or potential impacts of this linkage/tradeoff.

Policy or action (column 4)

- Provide details of the decision or action taken in response to being faced with the challenge of a tradeoff or the opportunity of a linkage between water and another environmental issue.

Explanation of terms

- **Linkage:** A relationship where your management of water has a positive impact on another environmental issue. For example, extracting, processing, and treating water requires energy, which means that as a company increases their water efficiency, they may also increase their energy efficiency.
- **Tradeoff:** A relationship where your management of water has a negative impact on another environmental issue. For example, mitigating water scarcity by desalination may significantly increase greenhouse gas emissions, which negatively impact climate-related goals, as desalination is traditionally energy intensive.
- **Ecosystem services (Food, beverage & tobacco sector only):** The direct and indirect contributions of ecosystems to human well-being (synonymous with 'ecosystem goods and services') [The Economics of Ecosystems and Biodiversity synthesis report](#), 2010).

Example response

Linkage/tradeoff	Type of linkage/tradeoff	Description of linkage/tradeoff	Policy or action
Tradeoff	Increased energy use	<i>In efforts to reduce water use in our South Africa operations, investment in new refrigeration and air-conditioning systems has increased 20% in facilities located in water-stressed areas since 2016. Cooling systems are essential to our ability to distribute food to our supermarkets with minimum spoilage and waste, but potentially have severe impacts in water-stressed parts of South Africa. The new system does not use water cooling towers and has decreased our dependency on water in these areas, however our energy use has increased as a result of this.</i>	<i>We are currently piloting technological developments for refrigeration systems that utilize rainwater harvesting as a key source of water while being less energy intensive.</i>
Linkage	Increased biodiversity	<i>A company-wide policy for reducing water usage in our facilities located near wetlands has lessened the impact of our company on natural habitats in the region threatened by water scarcity. Research at a nearby university has found that over-exploitation of these wetlands has led to decreased species richness where water extraction is highest.</i> <i>Implementing water efficiency measures, such as condensing equipment at our potato processing factory in East Anglia, has led to a 10% reduction in withdrawals from this site.</i>	<i>We have partnered with the Fens Restoration Trust to provide staff volunteering programs to help protect the local wetland habitat. Educating staff about the linkages between reduced water use and protection of local threatened species helps induce positive behavior changes around water to complement the technical solutions we installed. We are investigating how we can repeat this model at other sites globally.</i>

(W9.1b) Why has your organization not identified any linkages or tradeoffs between water and other environmental issues?

Question dependencies

- This question only appears if you select "No" in response to W9.1.

Change from 2017

New question

Rationale

An explanation of why linkages and tradeoffs have not been found will help CDP's data users to understand your approach to water management and provide more context for the absence of linkages or tradeoffs within your organization.

Response options

Please complete the following table:

Primary reason	Please explain
Select from: <ul style="list-style-type: none"> ● Considered, but none were identified ● Not considered, but we have plan to do so within the next two years ● Not considered, and have no plans to do so ● Other, please specify 	Text field [maximum 500 characters]

Requested content

Primary reason (column 1)

- Select the option that best applies.
- If you select "Other, please specify," provide a label for the primary reason. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.

Please explain (column 2)

- If your organization intends to consider potential linkages or tradeoffs in the future, please include any information detailing your future plans here.
- If your organization has not considered this and has no plans to do so, please provide your reasoning.

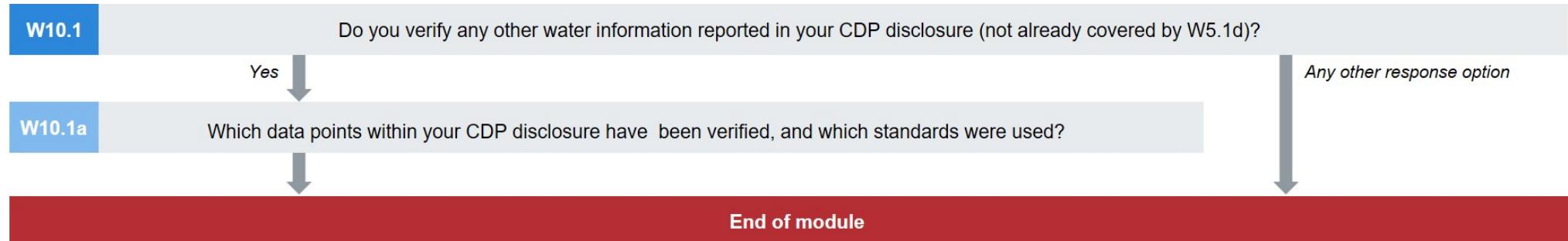
Explanation of terms

- **Linkage:** A relationship where your management of water has a positive impact on another environmental issue. For example, extracting, processing, and treating water requires energy, which means that as a company increases their water efficiency, they may also increase their energy efficiency.
- **Tradeoff:** A relationship where your management of water has a negative impact on another environmental issue. For example, mitigating water scarcity by desalination may significantly increase greenhouse gas emissions, which negatively impact climate-related goals, as desalination is traditionally energy intensive.

W10 Verification

Pathway diagram - questions

This diagram shows the general questions contained in module W10. To access question-level guidance, use the menu on the left to navigate to the question.



Verification of water information

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?

Question dependencies

- Your response to W10.1 will determine whether W10.1a is presented. If your response to W10.1 is amended, data in W10.1a may be erased. In this case, be sure to re-enter data for W10.1a.

Change from 2017

New question

Rationale

CDP data users often ask about the credibility/quality of data disclosed. The information requested in this question could help strengthen confidence in your organization's response to the water security questionnaire. CDP supports the development and use of verification methodologies as it promotes good practice in environmental disclosure.

To date the water security questionnaire has asked about verification of water accounting metrics only (W5). However, we have heard from companies, investors, and buyers that other data and reported activities are being verified and assured. CDP will collect this information to allow leading companies to report their efforts, and to highlight trends that CDP data users might begin to view as best practice among companies in the future.

Response options

Select one of the following options:

- Yes
- In progress
- No, but we are actively considering verifying within the next two years
- No, we are waiting for more mature verification standards and/or processes

- No, we do not currently verify any other water information reported in our CDP disclosure

Requested content

General

- CDP recognizes the lack of universally applied verification standards for water and therefore requests that you disclose the extent of any current verification practices and the standards currently used. This information will guide future development of questions on verification.
- If you select 'Yes', you may attach a copy of your verifier's report or equivalent document. Please click "File upload" button (paperclip icon) to drag and drop a file. This is optional but will support the robustness of your disclosure. Alternatively, if your report is not in a format that allows it to be attached (e.g. a web page) you may attach a screen shot.

Explanation of terms

- **Verification (external):** Procedure carried out by an independent third party for checking that a product, process, service or system meets the requirements specified by a recognized and relevant standard.

(W10.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Question dependencies

- This question only appears if you select "Yes" in response to W10.1.

Change from 2017

New question

Rationale

This information gives data-users confidence in the information provided in the company's response. It allows leading companies to report their efforts on this, and highlights trends in verification and assurance that investors and purchasing companies might expect in the future.

Response options

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

Disclosure module	Data verified	Verification standard	Please explain
Select from: <ul style="list-style-type: none"> ● W0 Introduction ● W1 Current state ● W2 Business impacts ● W3 Procedures ● W4 Risks and opportunities ● W6 Governance ● W7 Strategy ● W8 Targets ● SW Supply chain module 	Text field [maximum 1,000 characters]	Select from: <ul style="list-style-type: none"> ● AA1000AS ● ASAE3000 ● Compagnie Nationale des Commissaires aux Comptes (CNCC) ● IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues ● ISAE3000 ● RevR6 Procedure for assurance of sustainability report ● Other, please specify 	Text field [maximum 2,000 characters]

[Add Row]

Requested content

General

- Companies with existing verification programs may report their current verification practice to CDP and its data users. CDP is not making any judgement of the validity of any particular verification approach or standard, or a lack of verification, at this stage.
- For organizations presented with Module 5, information about the verification of facility-level accounting data is requested in W5.1d.

Data verified (column 2)

- For each module selected in column 1, state the reported information that has been verified. Where possible reference specific CDP question numbers and columns/rows where applicable.

Verification standard (column 3)

- The list contains some standards relevant to water which have previously been reported to CDP. Inclusion here does not mean that CDP has made a judgement about any standards or is promoting the use of any particular standard above another.
- Note that this list is not a comprehensive list of all acceptable water-related verification standards. It is provided to aid CDP data analysis and facilitate reporting.
- If you select "Other, please specify", provide a label for the verification standard. If you need more than 40 characters, please use the comment box. When providing a verification standard not currently listed as a drop-down response, please be as accurate as possible. This ensures CDP will be able to assess these options in future years and consider adding to the list of standards provided in this question.

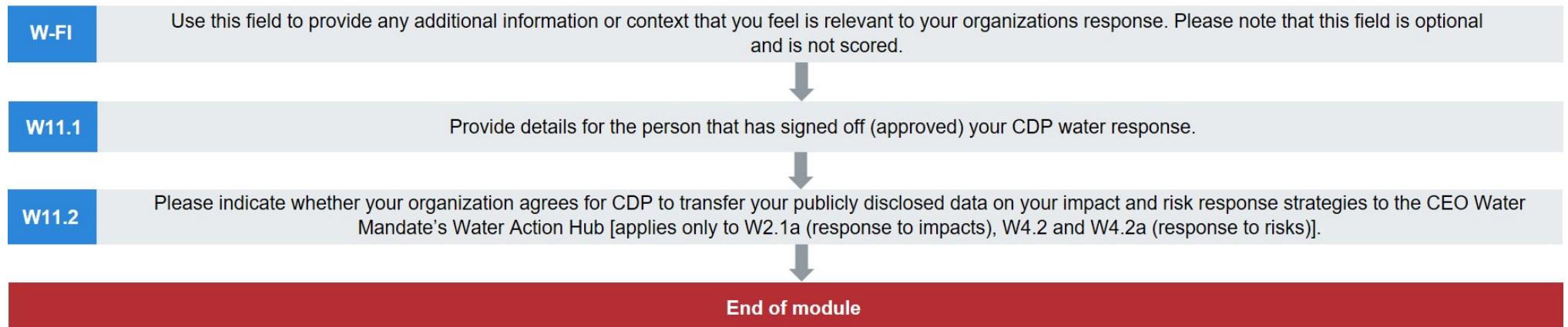
Please explain (column 4)

- Use this opportunity to describe why your company has chosen to verify the selected data points, and how the use of the standard was determined.
- You can also describe here the frequency with which you complete this verification and the scope it encompasses.

W11 Signoff

Pathway diagram - questions

This diagram shows the general questions contained in module W11. To access question-level guidance, use the menu on the left to navigate to the question.



Signoff

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

Change from 2017

No change (2017 W10.1)

Rationale

CDP asks companies to identify the job title and corresponding job category of the person signing off (approving) the CDP response.

This information indicates to investors where in the corporate structure direct responsibility is being taken for the response and the information contained therein.

Response options

Please complete the following table:

Job title	Corresponding job category
Text field [maximum 200 characters]	<p>Select from:</p> <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 ● EHS manager ● Energy manager ● Environment/Sustainability manager ● Facilities manager ● Process operation manager ● Procurement manager ● Public affairs manager ● Risk manager ● Other, please specify

Requested content

General

- Please enter the job title for the person who has approved this disclosure to CDP.
- If you select "Other, please specify", provide a label for the corresponding job category. If you need more than 40 characters, please use the comment box by clicking on the "speech bubble" icon.
- Note that this question asks about the position and not about the name of the individual holding this position. Do not include the name of any individual or any other personal data in your response.

Water Action Hub

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Change from 2017

No change (2017 W10.2)

Rationale

- Addressing water risks effectively, in many instances, requires collective action. CDP would like to support you in finding potential partners that are also working to tackle water challenges in the river basins you report on.
- The CEO Water Mandate Water Action Hub is an online platform that catalogues water stewardship projects around the world and enables interested parties to connect and work together to solve local and regional water challenges.
- Note: If you select 'Yes', CDP will provide your public response data from three questions to the CEO Water Mandate's Water Action Hub. Only your responses to W2.1a (response to impacts), W4.2 and W4.2a

(response to risks) will be shared and reviewed as potential water stewardship projects for upload to the Water Action Hub website.

Response options

Select one of the following options:

- Yes
- No

Requested content

General

- By selecting "Yes", you agree that CDP may share your response to specific data points and the email address of your registered CDP user with the CEO Water Mandate Secretariat.
- Only your responses to the following data points will be shared:
 - W2.1a (Water-related detrimental impacts): Country; River basin; Primary response; Description of response
 - W4.2 and W4.2a (Water risks and responses): Country; River basin; Primary response to risk; Description of response
- Your contact information will be kept confidential. This will allow the Hub administrator to alert your company if its response data includes a project with potential for inclusion on the Hub. For a two-week period, you will have an opportunity to review and amend the project details. You can also choose not to publish the project. After this period, the project will be published and your company notified. Log-in information provided to you directly from the CEO Water Mandate Secretariat will enable you to make amendments to the project profile at any time.

Appendix: River basin list — and South African Water Management Areas — by country

Sources: CEO Water Mandate (2016) [Interactive Database of the World's River Basins](#) WRI – river basins by country.

Country	Water Area
Afghanistan	Amy Darya, Helman, Indus, Murghab - Hari Rud, Tarim
Albania	Danube, Drin, Vilose
Algeria	Chelif, Dra, Lake Chad, Medjerda, Niger, Tafna
Andorra	Ebro, Garonne
Angola	Congo, Cuanza, Cunene, Okavango, Zambezi
Argentina	Baker, Biobio, Chubut, Colorado(Argentina,) Gallegos-Chico, Huasco, Lake Mar Chiquita, Lake Titicaca, Limari, Negro(Argentina,) Palena, Parana, Rapel, Rio Grande Rio Salado, Salado, Santa Cruz, Uruguay
Armenia	Kura - Ozero Sevan
Australia	Ashburton River, Blackwood River, Burdekin, Daly, De Grey River, Eyre Lake, Fitzroy River, Flinders River, Fortescue River, Gascoyne River, Gilbert River, Leichhardt River, Macarthur River, Mitchell River(N. Au,) Murchison River, Murray - Darling, Ord, Roper River, South Esk River, Victoria River
Austria	Danube, Elbe River, Rhine

Azerbaijan	Kura - Ozero Sevan
Bangladesh	Ganges - Brahmaputra
Belarus	Dniepr, Narv, Neman, Vuoksi - Neva, Western Dvina (Daugava) Wisla
Belgium	Meuse, Rhine, Seine
Belize	Grisalva
Benin	Mono, Niger, Oueme, Volta
Bhutan	Ganges - Brahmaputra
Bolivia (Plurinational State of)	Amazonas, Lake Titicaca, Loa, Parana
Bosnia and Herzegovina	Danube
Botswana	Limpopo, Okavango, Orange, Zambezi
Brazil	Amazonas, Corantijn, Cuyuni - Essequibo, Jequitinhonha, Lagoon Mirim, Maroni, Mucuri, Negro (Uruguay), Orinoco, Oyapock, Paraiba Do Sul, Parana, Rio Acara, Rio Araguari, Rio Capim, Rio De Contas, Rio Doce, Rio Gurupi, Rio Itapecuru, Rio Itapicuru, Rio Jacui, Rio Jaguaribe, Rio Mearim, Rio Paraguacu, Rio Paraiba, Rio Parnaiba, Rio Pindare, Rio Prado, Rio Ribeira Do Iguape, Rio Vaza-Barris, Sao Francisco, Tocantins, Uruguay
Bulgaria	Danube, Maritsa, Rezvaya, Struma, Vardar, Veleka
Burkina Faso	Comoe, Niger, Volta
Burundi	Congo, Nile
Cambodia	Chao Phraya, Mekong, Saigon
Cameroon	Congo, Cross, Lake Chad, Niger, Ntem, Nyong, Ogooue, Sanaga
Canada	Albany River, Alsek River, Anderson River, Arnaud, Attawapiskat River, Baleine Grande Riviere De La, Caniapiscau - Aux Melezes, Churchill River, Churchill Fleuve (Labrador), Columbia River, Connecticut River, Copper River, Coppermine River, Eastmain, Ellice River, Ferguson River, Feuilles (Riviere Aux), Fraser River, George River, Grande Riviere, Grande Riviere De La Baleine, Hayes River (Trib. Arctic Ocean) - Back River, Hayes River (Trib. Hudson Bay), Hornaday River, Horton River, Little Mecatina River, Mackenzie River, Manicouagan (Riviere), Mississippi River, Moose River (Trib. Hudson Bay), Nass River, Natashquan (Riviere), Nelson River, Nottaway, Penobscot River, Quoich River, Rupert River, Saguenay (Riviere), Saint John River, Seal River, Severn River (Trib. Hudson Bay), Skeena River, St.Croix River, St.Lawrence, Stikine River, Taku River, Thelon River, Thlewiaza River, Winisk River, Yukon River
Central African Republic	Congo, Lake Chad, Nile, Sanaga
Chad	Lake Chad, Niger
Chile	Baker, Biobio, Chubut, Colorado (Argentina), Gallegos-Chico, Huasco, Lake Titicaca, Limari, Loa, Negro (Argentina), Palena, Rapel, Rio Grande, Santa Cruz
China	Amu Darya, Amur, Balkhash, Dalinghe, Dong Jiang, Fuchun Jiang, Ganges - Brahmaputra, Han Jiang, Hong(Red River), Huang He (Yellow River), Indus, Irrawaddy, Liao He, Luan He, Mekong, Min Jiang, Ob, Salween, Syr Darya, Tarim, Xi Jiang - Bei Jiang, Yalu Jiang, Yangtze River (Chang Jiang), Yongding He
Colombia	Amazonas, Atrato, Magdalena, Mira, Orinoco, Patia, San Juan (Columbia - Pacific)
Congo	Congo, Kouilou, Nyanga, Ogooue
Costa Rica	San Juan
Côte D'ivoire	Bandama, Cavally, Cestos, Comoe, Niger, Sassandra - Davo, St John, Tano, Volta

Croatia	Danube
Czechia	Danube, Elbe river, Oder river
Democratic People's Republic of Korea	Amur, Han-Gang (Han River), Yalu Jiang
Democratic Republic of the Congo	Congo, Kouilo, Nile, Zambezi
Denmark	Gudena, Skjern A
Djibouti	Awash
Ecuador	Amazonas, Chira, Daule & Vinces, Esmeraldas, Mira, Patia, Tumbes, Zarumilla
Egypt	Dead Sea, Nile
El Salvador	Lempa
Equatorial Guinea	Ntem, Ogooue
Eritrea	Baraka, Nile
Estonia	Narva, Western Dvina (Daugava)
Ethiopia	Awash, Lake Turkana, Nile, Shebelle
Finland	Iijoki, Kem, Kemijoki, Kokemaenjoki, Kymijoki, Muonio, Oulujoki, Tana (No, Fi), Tuloma, Vuoksi - Neva
France	Amazonas, Ebro, Garonne, Loire, Maroni, Meuse, Muga, Oyapock, Po, Rhine, Rhone, Roia, Seine
Gabon	Congo, Kouilou, Ntem, Nyanga, Ogooue
Gambia	Gambia
Georgia	Coruh, Kuban, Kura - Ozero Sevan, Terek
Germany	Danube, Elbe River, Meuse, Oder River, Rhine, Weser
Ghana	Comoe, Pra, Tano, Volta
Greece	Maritsa, Struma, Vardar, Vijoce
Guatemala	Grisalva, Lempa, Motagua
Guinea	Cavally, Cestos, Corubal, Gambia, Geba, Great Scarcies, Little Scarcies, Lofa, Mano-Morro, Moa, Niger, Sassandra - Davo, Senegal, St John, St Paul
Guinea-Bissau	Corubal, Geba
Guyana	Amazonas, Barima, Corantijn, Cuyuni - Essequibo, Orinoco
Honduras	Coco, Lempa, Motagua, Patacua, Ulua
Hungary	Danube
Iceland	Joekulsa A Fjoellum, Lagarfljot, Oelfusa, Svarta, Skagafjroi

India	Brahmani River (Bhahmani), Cauvery River, Damodar River, Ganges - Brahmaputra, Godavari, Indus, Irrawaddy, Kaladan, Krishna, Mahanadi River (Mahahadi), Mahi River, Narmada, Penner River, Tapti River
Indonesia	Batang Hari, Batang Kuantan, Brantas, Eilanden, Fly, Lorentz, Mamberamo, Rajang, Sembakung, Sepik, Solo (Bengawan Solo), Sungai Kajan, Sungai Kapuas, Sungai Mahakam, Uwimbu
Iran (Islamic Republic of)	Atrek, Daryacheh-Ye Orumieh, Dasht, Helmand, Kura - Ozero Sevan, Murghab - Hari Rud, Tigris & Euphrates, Van Golu
Iraq	Daryacheh-Ye Orumieh, Dead Sea, Tigris & Euphrates
Ireland	Bann, Fane, Foyle
Israel	Dead Sea
Italy	Danube, Po, Rhine, Rhone, Roia
Japan	Gono (Go), Ishikari, Kiso, Kitakami, Mogami, Shinano, Chikuma, Tenryu, Tone, Yodo
Jordan	Dead Sea, Tigris & Euphrates
Kazakhstan	Amu Darya, Aral Drainage, Balkhash, Issyk-Kul, Ob, Syr Darya, Tarim, Ural, Volga
Kenya	Galana, Lake Natron, Lake Turkana, Nile, Pangani, Shebelle, Tana
Kuwait	Tigris & Euphrates
Kyrgyzstan	Amu Darya, Balkhash, Issyk-Kul, Syr Darya, Tarim
Lao People's Democratic Republic	Ca, Chao Phraya, Hong (Red River), Ma, Mekong, Tranh (Nr Thu Bon)
Latvia	Narva, Neman, Western Dvina (Daugava)
Lebanon	Asi (Orontes), Dead Sea
Lesotho	Orange, Tugela
Liberia	Cavally, Cestos, Lofa, Mano-Morro, Moa, St John, St Paul
Libya	Lake Chad
Liechtenstein	Rhine
Lithuania	Neman, Western Dvina (Daugava)
Luxemburg	Meuse, Rhine
Madagascar	Betisboka, Mangoky, Tsiribihina
Malawi	Congo, Rovuma, Zambezi
Malaysia	Kelantan, Kinabatangan, Pahang, Perak, Rajang, Sembakung, Sungai Kajan, Sungai Kapuas, Sungai Mahakam
Mali	Bandama, Comoe, Niger, Senegal, Volta
Mauritania	Niger, Senegal
Mexico	Armeria, Balsas, Bravo, Colorado River (Pacific Ocean), Conception, Fuerte, Grisalva, Panuco, Papaloapan, San Pedro, Santiago, Verde, Yaqui

Republic of Moldova	Danube, Dniestr
Mongolia	Amur, Lake Ubsa, Ob, Yenisei
Montenegro	Danube, Drin
Morocco	Dra, Sebou, Tafna
Mozambique	Buzi, Incomati, Limpopo, Lurio, Maputo, Messalo, Rovuma, Save, Zambezi
Myanmar	Chao Phraya, Ganges - Brahmaputra, Irrawaddy, Kaladan, Mae Klong, Mekong, Salween, Sittang River
Namibia	Cunene, Okavango, Orange, Zambezi
Nepal	Ganges - Brahmaputra, Indus
Netherlands	Meuse, Rhine
New Zealand	Clutha, Waikato River
Nicaragua	Coco, Grande De Matagalpa, Patacua, San Juan
Niger	Lake Chad, Niger
Nigeria	Cross, Lake Chad, Niger, Oueme, Sanaga
Norway	Angerman, Dalalven, Dramselv, Gloma, Kemijoki, Lule, Muonio, Tana (No, Fi), Vaenern-Goeta
Pakistan	Amu Darya, Dasht, Helmand, Indus, Tarim
Panama	Atrato
Papua New Guinea	Fly, Mamberamo, Purari, Sepik, Uwimbu
Paraguay	Parana
Peru	Amazonas, Canete, Chira, Lake Titicaca, Majes, Ocona, Santa, Tumbes, Zarumilla
Poland	Danube, Dniestr, Elbe River, Neman, Oder River, Wisla
Portugal	Douro, Guadiana, Lima, Mino, Tejo
Serbia	Danube, Drin, Struma, Vardar
Republic of Korea	Han-Gang (Han River), Nakdong
Romania	Danube
Russian Federation	Alazeya, Amur, Anabar, Anadyr, Dniepr, Don, Indigirka, Kamchatka, Kem, Kemijoki, Khatanga, Kolyma, Kovda, Kuban, Kura - Ozero Sevan, Lake Taymur, Lake Ubsa, Lena, Mezen, Nadym, Narva, Neman, Nizhny Vyg (Soroka), Northern Dvina (Severnaya Dvina), Ob, Olenek, Omoloy, Onega, Oulujoki, Palyavaam, Pechora, Ponoy, Popigay, Pur, Pyasina, Taz, Terek, Tuloma, Ural, Varzuga, Volga, Vuoksi - Neva, Western Dvina (Daugava), Yana, Yenisei
Rwanda	Congo, Nile
Saudi Arabia	Dead Sea, Tigris & Euphrates
Senegal	Gambia, Geba, Senegal

Sierra Leone	Great Scarcies, Little Scarcies, Mano-Morro, Moa, Niger
Slovakia	Danube, Oder River, Wisla
Slovenia	Danube
Somalia	Shebelle
South Africa	Doring, Gamka, Groot, Groot-Kei, Groot-Vis, Incomati, Limpopo, Maputo, Orange, Tugela, Limpopo, Olifants, Inkomati-Usuthu, Pongola-Uzimkulu, Vaal, Orange, Mzimvubu-Tsitsikamma, Breede-Gouritz, Berg-Olifants
South Sudan	Congo, Lake Turkana
Spain	Douro, Ebro, Garonne, Guadalquivir, Guadiana, Lima, Mino, Muga, Tejo
Sudan	Baraka, Congo, Lake Chad, Nile
Suriname	Amazonas, Coppename, Corantijn, Maroni, Suriname
Swaziland	Incomati, Maputo
Sweden	Angerman, Dalälven, Gloma, Kalixälven, Lake Vattern, Lule, Muonio, Vaernern-Goeta
Switzerland	Danube, Po, Rhine, Rhone
Syrian Arab Republic	Asi (Orontes), Dead Sea, Tigris & Euphrates
Tajikistan	Amu Darya, Syr Darya, Tarim
Thailand	Chao Phraya, Kelantan, Mae Klong, Mekong, Perak, Salween
The Former Yugoslav Republic of Macedonia	Danube, Drin, Struma, Vardar
Togo	Mono, Oueme, Volta
Tunisia	Medjerda
Turkey	Asi (Orontes), Coruh, Daryacheh-Ye Orumieh, Kel Kit, Kizilirmak, Kura - Ozero Sevan, Maritsa, Rezvaya, Sakarya, Tigris & Euphrates, Van Golu, Veleka
Turkmenistan	Amu Darya, Atrek, Murghab - Hari Rud
Uganda	Congo, Lake Turkana, Nile
Ukraine	Danube, Dniepr, Dniestr, Don, Southern Bug, Wisla
United Kingdom of Great Britain And Northern Ireland	Bann, Fane, Foyle, Spey, Thames, Trent, Tweed
United States of America	Alabama River & Tombigbee, Alsek River, Altamaha River, Apalachicola River, Bravo, Brazos River, Cape Fear River, Colorado River (Caribbean Sea), Colorado River (Pacific Ocean), Columbia River, Colville River, Conception, Connecticut River, Copper River, Delaware River, Eel River (Calif.), Fraser River, Great Salt Lake, Hudson River, James River, Klamath River, Kobuk River, Kuskokwim River, Merrimack River, Mississippi River, Nelson River, Noatak River, Nueces River, Nushagak River, Pearl River, Pee Dee River, Penobscot River, Potomac River, Roanoke River, Rogue River, Sabine River, Sacramento River - San Joaquin River, Saint John River, Salinas, San Antonio River, Santee River, Savannah River, St. Croix River, St. Johns River, St. Lawrence, Stikine River, Susitna River, Susquehanna River, Suwannee River, Taku River, Trinity River (Texas), Yaqui, Yukon River
United Republic of Tanzania	Congo, Galana, Lake Natron, Nile, Pangani, Rovuma, Rufiji, Ruvu

Uruguay	Lagoon Mirim, Negro (Uruguay), Uruguay
Uzbekistan	Amu Darya, Aral Drainage, Issyk-Kul, Syr Darya
Venezuela (Bolivarian Republic of)	Amazonas, Barima, Cuyuni - Essequibo, Magdalena, Orinoco
Viet Nam	Ca, Chao Phraya, Hong(Red River), Ma, Mekong, Saigon, Tranh (Nr Thu Bon), Xi Jiang - Bei Jiang
Zambia	Congo, Zambezi
Zimbabwe	Buzi, Limpopo, Okavango, Save, Zambezi

Glossary - Water

- **Baseline water stress:** The ratio of total annual water withdrawals to total available annual renewable supply.
- **Board:** The board, or board of directors, refers to a body of elected or appointed members who jointly oversee the activities of a company or organization. Some countries use a two-tiered system where “board” refers to the “supervisory board” while “key executives” refers to the “management board” (adapted from the [Recommendations of the Task Force for Climate-related Financial Disclosures](#)).
- **Boundaries of your organization:** For CDP disclosure this is a management boundary, rather than a physical boundary or a legal entity. Water is considered to have crossed the boundary of your organization, at either the corporate or site level, when your organization in any way uses it, comes into contact with it, is required to manage it or when it becomes incorporated into your products. It therefore includes any water use and management by your organization outside of its physical corporate fence.
- **Company:** Throughout this information request, “your company” refers collectively to all the companies, businesses, organizations, other entities or groups that fall within you’re the definition of your reporting boundary. It is used interchangeably with “your organization”.
- **C-suite:** A term used to collectively refer to the most senior executive team.
- **Direct operations:** An organization’s operations include anything it does itself for the purpose of producing goods and services and maintaining the functionality of the business. This covers any internal supply chains between the organization’s business units. For example, a business unit within a company that supplies components to another business unit within the company would be considered part of the organization’s direct operations.
- **Direct water use:** includes all water that is used for activities within your organization (as defined by your ‘reporting boundary’).
- **Downstream (value chain):** Part of the value chain, beyond direct operations, where finished materials, products and services flow from the organisation to users/customers/consumers via distributors/retailers etc.
- **Ecosystem services:** The direct and indirect contributions of ecosystems to human well-being (synonymous with ‘ecosystem goods and services’) [The Economics of Ecosystems and Biodiversity](#).
- **Employee incentives:** Payments, benefits or concessions additional to the employee’s usual benefits that depend on the achievement of a performance goal.
- **Facility:** “Facilities” may be used throughout this questionnaire as a broad term and not restricted to a particular site or grouping of fixed buildings and factories. For example, if your organization is in the extractive industries you might normally collate business information for assets or business units, and so you may wish to define ‘facility’ information in this way.
- **Facility boundary:** This is a management boundary, rather than a physical boundary or a legal entity. Water is considered to have crossed the boundary of your facility when your organization in any way uses it, comes into contact with it, is required to manage it or when it becomes incorporated into your products. It therefore includes any water use and management by your organization outside of the physical fence of a facility; for example, to provide a street cleaning service or when used in fields that are remote from a processing plant.
- **Facility reference number:** The facility reference number is used to track information related to a facility that is disclosed in different questions. The number is not specific to an organization, but simply avoids an organization having to repeat contextual information such as river basin and facility name.
- **Financial planning:** Refers to an organization’s consideration of how it will achieve and fund its objectives and strategic goals. The process of financial planning allows organizations to assess future financial positions and determine how resources can be utilized in pursuit of short- and long-term objectives. Organizations often create “financial plans” that outline the specific actions, assets, and resources (including capital) necessary to achieve its objectives over a 1-5 year period. However, ‘financial planning’ is broader as it includes long-term capital allocation and other considerations that may extend beyond the 5 year period (e.g., investment, research and development, manufacturing, and markets) (adapted from the [Recommendations of the Task Force for Climate-related Financial Disclosures](#)).
- **Fresh surface water, including rainwater, water from wetlands, rivers and lakes:** Water that is naturally occurring water on the Earth’s surface in ice sheets, ice caps, glaciers, icebergs, bogs, ponds, lakes, rivers and streams, and has a low concentration of dissolved solids. For the purposes of reporting water accounting data to CDP, this surface water source includes water of a quality generally acceptable for, or requiring minimal

treatment to be acceptable for, domestic, municipal or agricultural uses (at least <10,000 mg/l TDS, though a range of additional quality properties may also be considered). 'High quality' fresh water sources considered acceptable for potable use are typically characterized as having concentrations of dissolved solids less than 1,000 mg/l.

● **Freshwater:** The generally accepted definition of high quality freshwater is water with concentration of dissolved solids equal to or below 1,000 mg/l TDS (World Health Organization, Guidelines for Drinking-water Quality, 2017). For the purposes of CDP's questionnaire, 'freshwater' is used to refer to a broader category that includes water of a standard generally acceptable for, or requiring minimal treatment to be acceptable for, domestic, municipal or agricultural uses (at least <10,000 mg/l TDS, though a range of additional quality properties may also be considered).

● **Goal:** A long term qualitative outcome or a specific change in behavior or circumstances.

● **Good quality freshwater:** Any water used for your organization's activities that must be of a quality requiring only minimal treatment to be acceptable for domestic, municipal or agricultural uses or safe for freshwater ecosystems. A company is considered dependent on this if it is not possible to use a lower quality water instead. Water quality can refer to physical, chemical, biological, and organoleptic properties of water. 'High quality' fresh water sources, of potable standard, are typically characterized as having concentrations of dissolved solids less than 1,000 mg/l.

● **Governance:** A system whereby an organization is influenced and controlled based on the interests of shareholders and stakeholders. This involves relationships and communication between management, the board, the shareholders and stakeholders. Governance provides a framework for an organization to set objectives, monitor performance, and evaluate results (adapted from the [Recommendations of the Task Force for Climate-related Financial Disclosures](#)).

● **Groundwater (non-renewable):** Water which is being held in, and can be recovered from, an underground formation. Non-renewable groundwater has a negligible rate of natural recharge on the human time-scale (more than 50 years), and is generally located at deeper depths than renewable groundwater. This is sometimes referred to as "fossil" water.

● **Groundwater (renewable):** Water which is being held in, and can be recovered from, an underground formation. Renewable groundwater sources can be replenished within 50 years and are usually located at shallow depths.

● **Impact driver:** The factor/ driving force causing the impact being reported. Impact drivers are typically physical (e.g. weather extreme events), regulatory, reputational and markets related, or technological.

● **Indirect water use:** includes all water use that takes place anywhere within your value chain outside your direct operations and direct control. This includes water use upstream of your direct operations, use such as by your suppliers, and downstream, for example water needed for the use of your products.

● **Inherent risk:** The risk that exists in the absence of controls, i.e. not taking into account any potential mitigation or management measures that could be implemented.

● **Internal water price:** A metric reflecting the economic value of water to an organization in monetary terms - beyond the market price paid to water utilities or other direct costs of supply. This value may account for internal and/or external costs associated with water use as well as benefits to the company derived from water (e.g. regulatory costs, water-related capital expenditure, river basin water scarcity impacts, services provided by water ecosystems, social benefits, link to share price). This may be current and/or forward looking, and reflect various levels of time-scales, uncertainty, and geographies. An internal water price may be used in strategic, operational or financial planning.

● **Linkage:** A relationship where your management of water has a positive impact on another environmental issue. For example, extracting, processing, and treating water requires energy, which means that as a company increases their water efficiency, they may also increase their energy efficiency.

● **Measurement:** The collection of quantified data for a water aspect - either as a single volume/quality figure or an aggregation of volumes/ quality figures.

● **Monitoring:** This is the tracking of measurements over time, i.e. a trend or indication of change in measured figures.

● **Onboarding:** The process used to support and facilitate working with a new supplier.

● **Organization:** This refers collectively to all the companies, businesses, other entities or groups that fall within the definition of the reporting boundary. This term is used interchangeably with "company", as CDP recognizes that some disclosing organizations may not consider themselves to be, or be formally classified, as "companies".

● **Physical risk:** Risk driven by water stress or scarcity (too little water), flooding (too much water) or pollution (lower water quality).

● **Potential water pollutants:** Organic, inorganic or heavy metal substances that have the direct or indirect potential to negatively modify/contaminate water bodies, water ecosystems or affect human health.

● **Produced water (Metals & mining sector only):** In the metals & mining sector produced water refers to the volumes of water in the raw material.

● **Produced water (Oil & gas sector only):** Water that is brought to the surface during the production of hydrocarbons including formation water, flow-back water and condensation water (adapted from [PIECA's Oil and gas industry guidance on voluntary sustainability reporting 3rd edition, 2016](#)).

● **Produced water:** Water which enters the organization's boundary as a result of the extraction, processing, or use of any raw material, so that it must be managed by the organization.

● **Recycled/reused water:** Water and wastewater (treated or untreated) that has been used more than once before being discharged from the organization's boundary, so that water demand is reduced. This may be in the

same process (recycled), or used in a different process within the same facility or another of the organization's facilities (reused).

- **Regulatory risk:** Risks driven by an expected or unexpected change or uncertainty, in law or regulation that may have direct or indirect impacts on a company.
- **Reporting boundary:** This determines which organizational entities, such as groups, businesses and companies, are included in or excluded from your disclosure. These may be included according to your financial control, operational control, equity share, or another measure.
- **Reputational risk:** Risk driven by litigation, product risks due to changes in consumer behavior, and risks that may impact decisions made by investors, consumers and current/potential employees concerning a company.
- **Requesting CDP supply chain member:** Companies working with CDP's supply chain program to manage climate change impacts, deforestation risks, and/or water security in their supply chain. If you are responding to CDP because of a request from your customer(s), you will need to answer the relevant (SC, SF, and/or SW) Supply chain module in addition to the main questionnaire.
- **Residual risk:** The risk remaining after a specific action has been taken to manage the risk.
- **Risk driver:** The factor/ driving force that could cause the potential impact. Risk drivers are typically physical (e.g. weather extreme events), regulatory, reputational and markets related, or technological.
- **Safely managed WASH services:** The universal provision of safely managed water, sanitation, and hygiene services has dedicated targets within the Sustainable Development Goals (SDG 6.1 and 6.2). As a minimum, this disclosure refers to a company's tracking of its provision of drinking water for all workers, available when needed and from sources compliant with faecal and chemical standards, as well as sanitation facilities where excreta are safely disposed in situ or transported and treated offsite.
- **Scenario analysis:** A strategic planning process/tool to help an organization understand how it might perform in a range of probable, possible or preferred futures.
- **Strategy:** A plan of action to achieve your organization's long-term objectives/anticipated future state.
- **Substantive impact:** An impact that has a considerable or relatively significant effect on an organization at the corporate level. This could include operational, financial or strategic effects that undermine the entire business or part of a business.
- **Sustainable development goals (SDGs):** The UN Sustainable Development Goals are a set of 17 goals for 2030 that look to balance the three dimensions of sustainable development: the economic, social and environmental.
- **Target:** A specific measurable output to be achieved within a specific timeline. Targets often act as steps towards a wider and long-term corporate goal.
- **Technological risk:** Risk driven by technological improvements or innovations; for example, those that support water security or the transition to a lower-carbon, energy-efficient economic system.
- **Total water use:** The sum of water used for all activities in direct operations in the reporting year. This volume can be calculated as the sum of water drawn into the organisation's boundary (water withdrawals put into storage should be subtracted where this is more than 5% of withdrawals), plus water taken from storage for use prior to discharge, plus water that is recycled/reused within your operations.
- **Tradeoff:** A relationship where your management of water has a negative impact on another environmental issue. For example, mitigating water scarcity by desalination may significantly increase greenhouse gas emissions, which negatively impact climate-related goals, as desalination is traditionally energy intensive.
- **Upstream (value chain)** Part of the value chain, beyond direct operations, where the materials used as inputs for manufactured products are produced, extracted, processed, and/or traded.
- **Value chain (beyond direct operations):** The sequence of activities or partners, either upstream or downstream of direct operations, that provide value to or receive value from an organization's products and services; for example, suppliers, product users and franchisees.
- **Value chain partner:** A value chain partner includes any organization/individual a company that provides or receives value from the organisation's products and services, up or downstream of its direct activities; for example, a customer, a franchisee or contractor the company engages with on water stewardship strategies.
- **Value chain:** The entire sequence of activities or partners that provide value to or receive value from an organization's products and services, either within, upstream or downstream of direct operations.
- **Verification (external):** Procedure carried out by an independent third party for checking that a product, process, service or system meets the requirements specified by a recognized and relevant standard.
- **Water availability:** The natural runoff (through groundwater and rivers) minus the flow of water that is required to sustain freshwater and estuarine ecosystems and the human livelihoods and well-being that depend on these ecosystems. Water availability typically varies within the year and also from year to year. Water availability might be reduced by decreases in both the water quantity and quality of water resources (adapted from the [CEO Water Mandate's "Corporate Water Disclosure Guidelines"](#)).
- **Water balance:** an account of the volumes of water flowing into and leaving an organization across its boundary. When the two volumes are equal, the net water balance will be zero.
- **Water consumption:** The amount of water that is drawn into the boundaries of the organization and not discharged back to the water environment or a third party over the course of the reporting year.

- **Water depletion:** A metric based on the percentage of consumptive use to renewable available water in a water shed.
- **Water discharge:** The sum of effluents and other water leaving the boundaries of the organization and released to surface water, groundwater, or third parties over the course of the reporting period (adapted from GRI Standard 306-1, 2016).
- **Water intensity** A metric providing the relationship between a volumetric aspect of water and a unit of production.
- **Water policy:** A statement of an organization's water-related commitments, and the actions that will achieve them, that applies to all its activities.
- **Water quality:** Refers to the physical, chemical, biological and organoleptic (taste-related) properties of water (see CDP's definition for "Good quality freshwater") (adapted from the [CEO Water Mandate's "Corporate Water Disclosure Guidelines"](#)).
- **Water scarcity:** Refers to the volumetric lack of freshwater resources. It is a human-driven concept; it is a function of the volume of human water consumption relative to the volume of water resources in a given area. A region with very little water, but no human water consumption would not be considered "scarce," but rather "arid." (adapted from the [CEO Water Mandate's "Understanding Key Water Stewardship Terms"](#)).
- **Water stress:** The ability, or lack thereof, to meet human and ecological demand for fresh water. Compared to scarcity, "water stress" is more inclusive, considering physical scarcity, water quality, and the accessibility of water (adapted from the [CEO Water Mandate's "Understanding Key Water Stewardship Terms"](#)).
- **Water stressed area:** There is no universally accepted methodology for classifying an area as water stressed, nor for identifying whether facilities are located in a water stressed area. CDP's reporting guidance for W1.2d suggests some publicly available and credible tools for identifying water stressed areas based on physical scarcity. As good practice, a water stressed area should be at the catchment level as a minimum.
- **Water valuation:** Method for arriving at a water price or any other type of metric associated with the value of water to the organization.
- **Water withdrawal:** The sum of all water drawn into the boundaries of the organization from all sources for any use over the course of the reporting period.
- **Water-related impact:** The effects on an organisation of a physical, regulatory, reputational or technological challenge, event or action related directly or indirectly to water. Note that the CEO Water Mandate's Corporate Water Disclosure Guidelines, and the GRI standards, generally refer to "impacts" as the effects of the business on ecosystems and communities.
- **Water-related outcomes (scenario analysis):** Scenario analysis enables decision makers to identify and evaluate potential outcomes for different scenarios and their effects on their organization, based on a variety of assumptions/input variables. The consequences may be water-related themselves, or have implications for the water management and governance of the organization, or for its wider business strategy.
- **Water-related risk:** The possibility of an organization experiencing a water-related challenge (e.g., water scarcity, water stress, flooding, infrastructure decay, drought (adapted from the [CEO Water Mandate's "Understanding Key Water Stewardship Terms"](#))).

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 \(2018 Water Security\)](#)

These terms apply if you are submitting a response to the CDP Water Security Questionnaire 2018 to Investors. If you are also submitting a response to Supply Chain Members the Terms for responding to Supply Chain Members (2018 Water Security), 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 Water Security 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.

Sharing responses with the CEO Water Mandate. If, by ticking 'Yes' in response to question W10.2 of the Questionnaire, you agree to us sharing your response to questions W2.1a (response to impacts), W4.2 and W4.2a (response to risks) with the CEO Water Mandate for publication of suitable projects on its Water Action Hub website, you agree that we may also share the e-mail address of your registered CDP user with the CEO Water Mandate. This is so that the Hub administrator can alert your company that its data includes a project of potential interest to other parties sharing water resources in the geographies in which you operate. The Hub will publish the project and the associated contact details after providing your company with secure log-in information which enables amendments to the project profile and contact details.

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 Water Security 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**

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 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 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:

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 Water Security).

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 Water Security)

These terms apply if you are submitting a response to the CDP Water Security Questionnaire 2018 to Supply Chain Members. If you are also submitting a response to Investors the Terms for responding to Investors (2018 Water Security), 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 by such data, such as a person's name and job title.

Questionnaire: means the Full Version and the Minimum Version CDP Water Security 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 water security) 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 water security). Information you submit in response to the Supply Chain module (2018 water security) (questions SW0, SW1, SW2, and SW3 of the Questionnaire) will be treated as non-public even if you choose to make your response public. Questions SW1.1, SW2.1, and SW2.2a 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 water security) 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 water security) 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.

Sharing responses with the CEO Water Mandate. If, by ticking 'Yes' in response to question W10.2 of the Questionnaire, you agree to us sharing your response to questions W2.1a (response to impacts), W4.2 and W4.2a (response to risks) with the CEO Water Mandate for publication of suitable projects on its Water Action Hub website, you agree that we may also share the e-mail address of your registered CDP user with the CEO Water Mandate. This is so that the Hub administrator can alert your company that its data includes a project of potential interest to other parties sharing water resources in the geographies in which you operate. The Hub will publish the project and the associated contact details after providing your company with secure log-in information which enables amendments to the project profile and contact details.

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 Water Security).

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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