Climate Disclosure Standards Board

Water-related financial reporting, a tournament with high stakes

22 March 2021

Part of the

WE VALUE NATURE
10-DAY CHALLENGE

Introduction to CDSB

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CDSB Climate Disclosure Standards Board

To provide decision-useful environmental information to markets via the mainstream corporate report

Board

CDP Disclosure Insight Action · Ceres · The Climate Group · The Climate Registry · IETA International Emissions Trading Association · SASB · wbcsd · World Economic Forum · World Resources Institute

Examples of Technical Working Group members

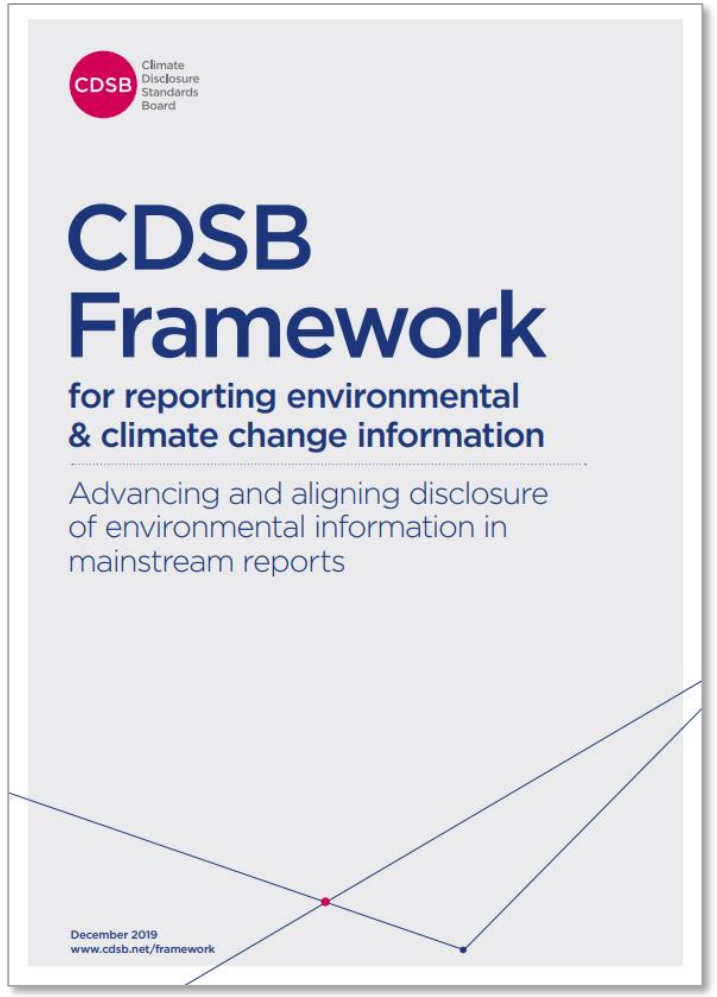
ACCA · Barclays · CFA Institute · EY · IFAC International Federation of Accountants · KPMG · PRI Principles for Responsible Investment · pwc · University of Oxford

The CDSB Framework

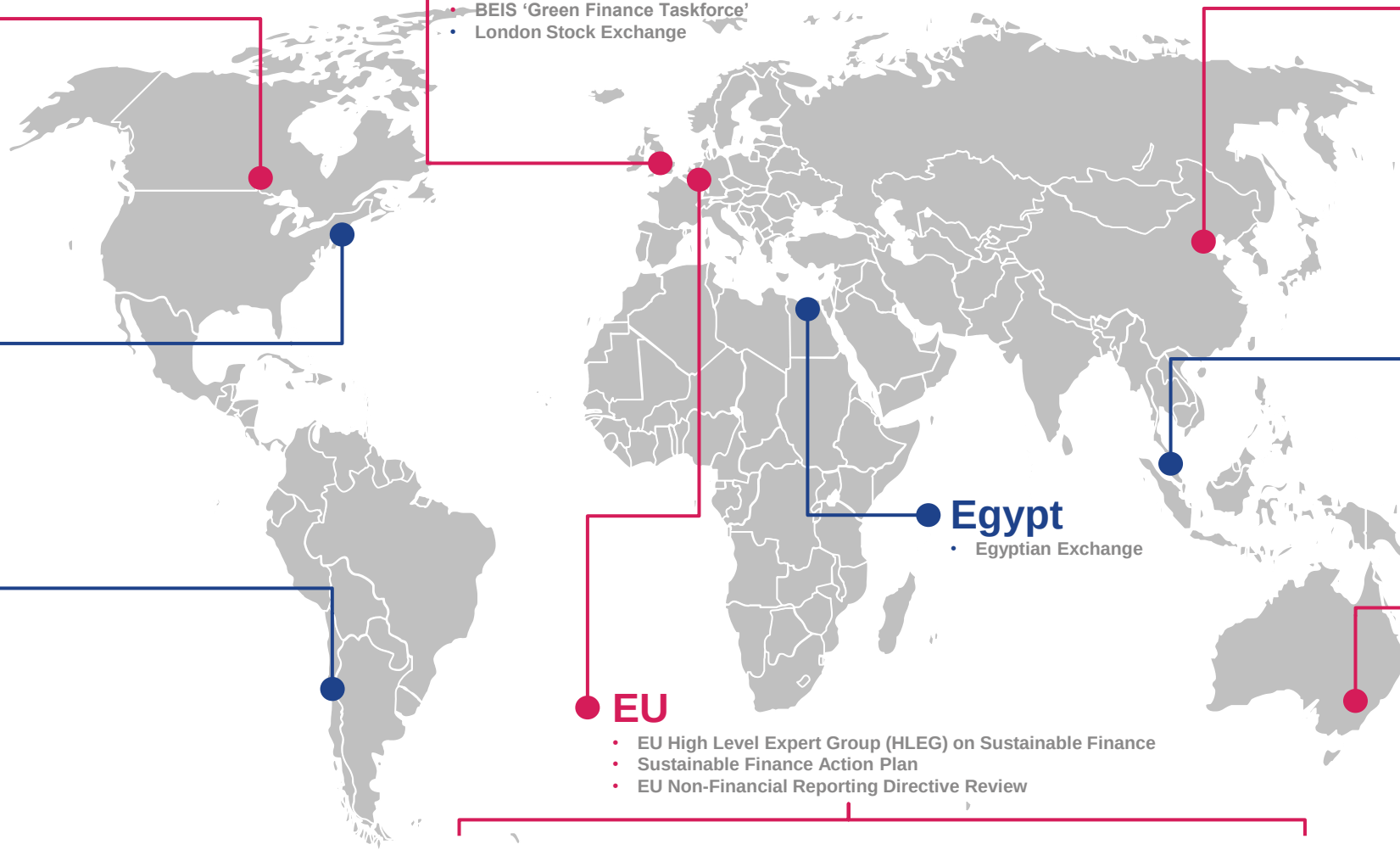
The guiding principles are designed to ensure that **environmental information** shall be:

- **P1** Prepared applying the principles of relevance and materiality
- **P2** Faithfully represented
- **P3** Connected with other information
- **P4** Consistent and comparable
- **P5** Clear and understandable
- **P6** Be verifiable
- **P7** Be forward-looking

www.cdsb.net/Framework



Reporting Requirements	
REQ-01 Governance	**REQ-07** Organisational boundary
REQ-02 Management's environmental policies, strategy and targets	**REQ-08** Reporting policies
REQ-03 Risks and opportunities	**REQ-09** Reporting period
REQ-04 Sources of environmental impact	**REQ-10** Restatements
REQ-05 Performance and comparative analysis	**REQ-11** Conformance
REQ-06 Outlook	**REQ-12** Assurance



United Kingdom
- Endorsed the TCFD recommendations
- Reviewing climate reporting regulation
- BEIS 'Green Finance Taskforce'
- London Stock Exchange

Canada
- CSA Staff Notice 51-333

China
- CSRC & People's Bank of China released climate disclosure roadmap to 2020
- CSRC announcement to pilot TCFD recommendations
- Government announced mandatory ESG disclosure policy

USA
- New York Stock Exchange
- NASDAQ

Malaysia
- Bursa Malaysia

Egypt
- Egyptian Exchange

Chile
- Santiago Stock Exchange

Australia
- Australia / Prudential Regulatory Authority demanding information
- Australian Senate Economics Committee recommended adoption of TCFD
- Australian Securities Exchange

EU
- EU High Level Expert Group (HLEG) on Sustainable Finance
- Sustainable Finance Action Plan
- EU Non-Financial Reporting Directive Review

France
- Article 173
- Pushing for mandatory implementation of TCFD

Germany
- Assessing the feasibility of regulation similar to Article 173

Luxembourg
- Luxembourg Stock Exchange

Legend
- CDSB Framework referenced in legislation
- CDSB Framework referenced in Stock Exchange

Agenda

- Water and Business: understanding interactions and issues
- Water-related ‘financial’ risks and opportunities
- ‘Watering’ financial disclosure
- Tournament (aka "water quiz")

Interactions

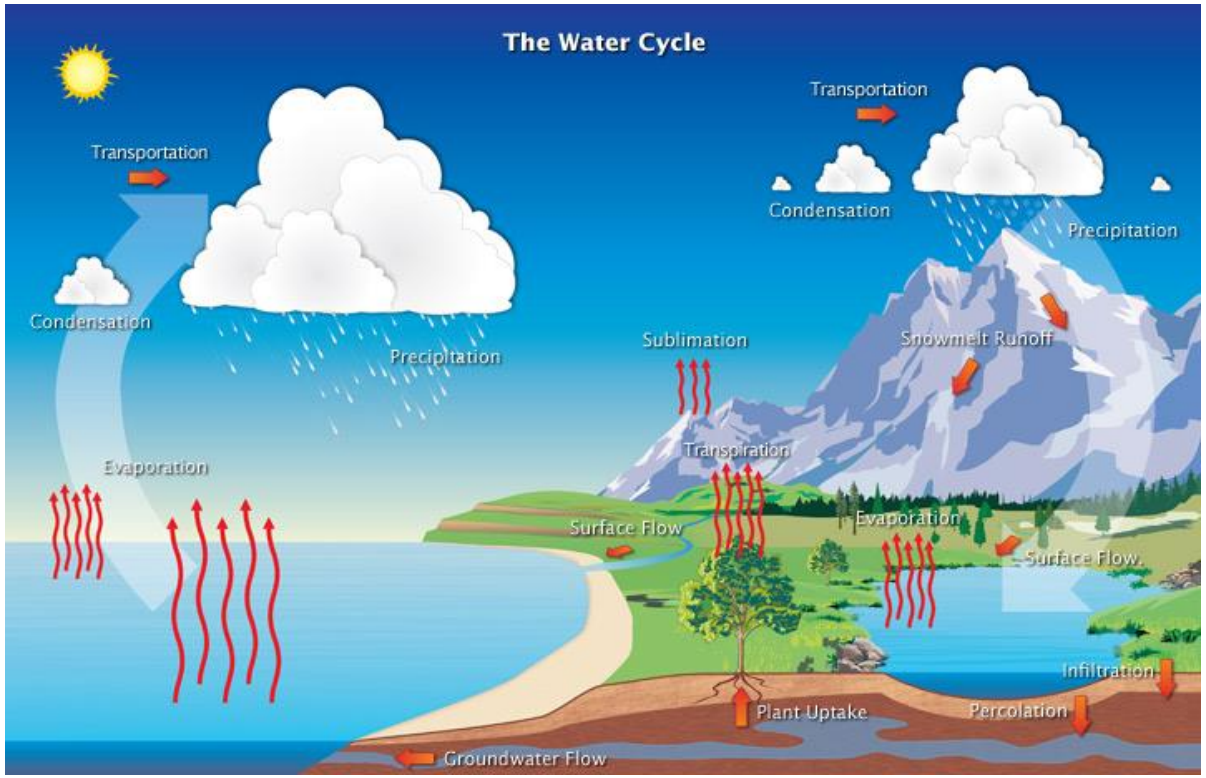
- You can use the chat function to make comments or ask questions;
- If you are not speaking, please remain on mute;
- We will run polls – a window will appear on your screen;
- **Prepare your phones for the final quiz (→ kahoot.it);**
- Slides and recording will be shared with participants after the event.

Water and Business: Understanding interactions and issues

Francesca Recanati
Environmental Specialist, CDSB

Water, water cycle and ecosystems

The water you drink and use today has been part of the global system for billions of years.



Source: NASA Earth Observatory | https://earthobservatory.nasa.gov/features/Water/page2.php

The **water cycle** describes how water moves between the land, oceans and atmosphere.

The water cycle is a **closed system**.

- Changes in the water cycle will undoubtably have an effect on social and financial systems.
- An impact in one area will have a knock-on effect throughout the cycle.

The water cycle is both dependent and impacts on environmental, social and **economic systems**.

No, this is not a science lesson!

Business and water

Human activities (including business actvities) influence the water cycle and exploit water resources and ecosystems.

Businesses depend on water

- Operational reasons, including production processes (e.g. cooling machinery);
- Agricultural production, both rainfed and irrigated systems;
- Energy production (e.g. hydropower, cooling).

Businesses impact on water

- Polluting effluents can affect the water quality;
- Over-abstraction of water sources affects water availability (for other uses);
- Climate change impacts precipitation patterns and, therefore, water supply;
- Deforestation affects groundwater recharge and availability for groundwater users.

Water-relates issues can be due to:

Too little water | **Too much water** | **Too poor-quality water**

Water specificities

When identifying, assessing and disclosing water-related matters, it is important to consider:

SITE and CONTEXT SPECIFICITY

- Water supply, demand and issues (type and magnitude) are context dependent (*water basin*)

TIME DIMENSION

- Water supply, demand and issues vary within (seasonality) and across years

MULTI-FACETED and INTERCONNECTED

- Varied water issues, water sources etc.
- Interactions with climate change, land use change, socio-economic factors

ENGAGEMENT and COOPERATION

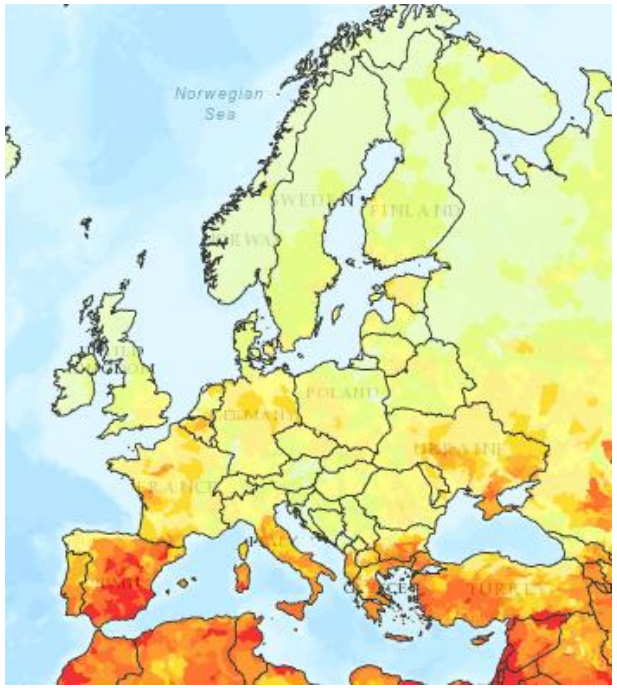
- Effective water management need cooperation of different water actors in an area (*e.g. water basin*)

Source: CDSB Framework Application Guidance for water-related disclosures

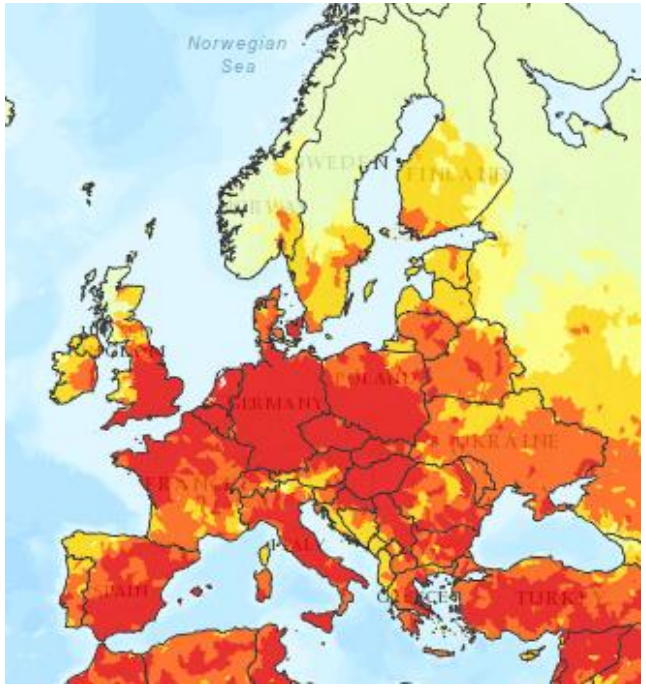
Water issues and business – examples (1)

Varied water issues, geographic specificity and time variability

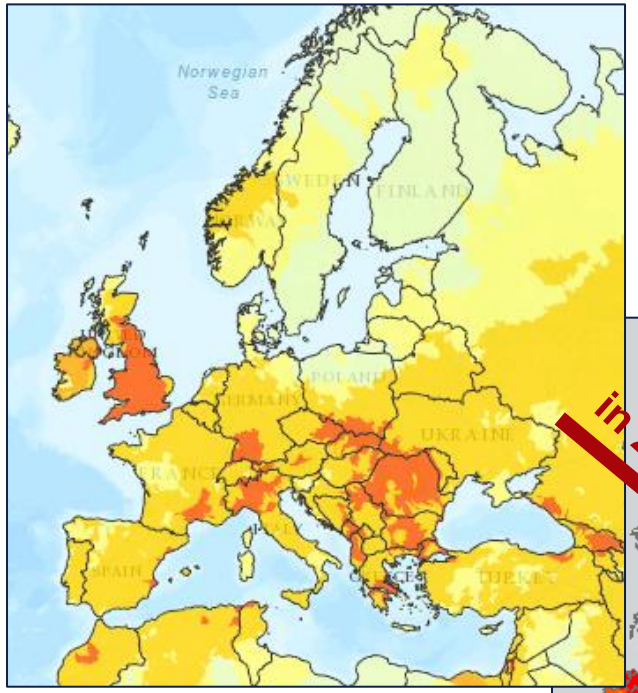
Varied water issues/risks



Water scarcity



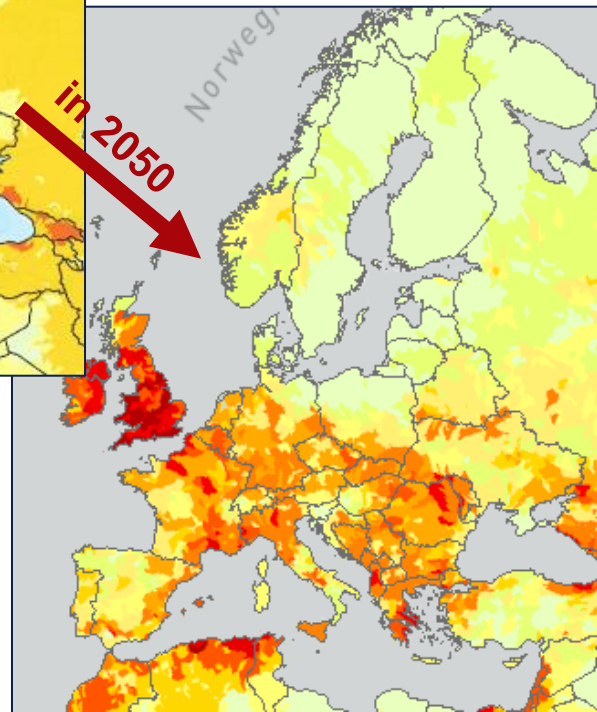
Water quality



Flood

Water Risk Filter

WWF

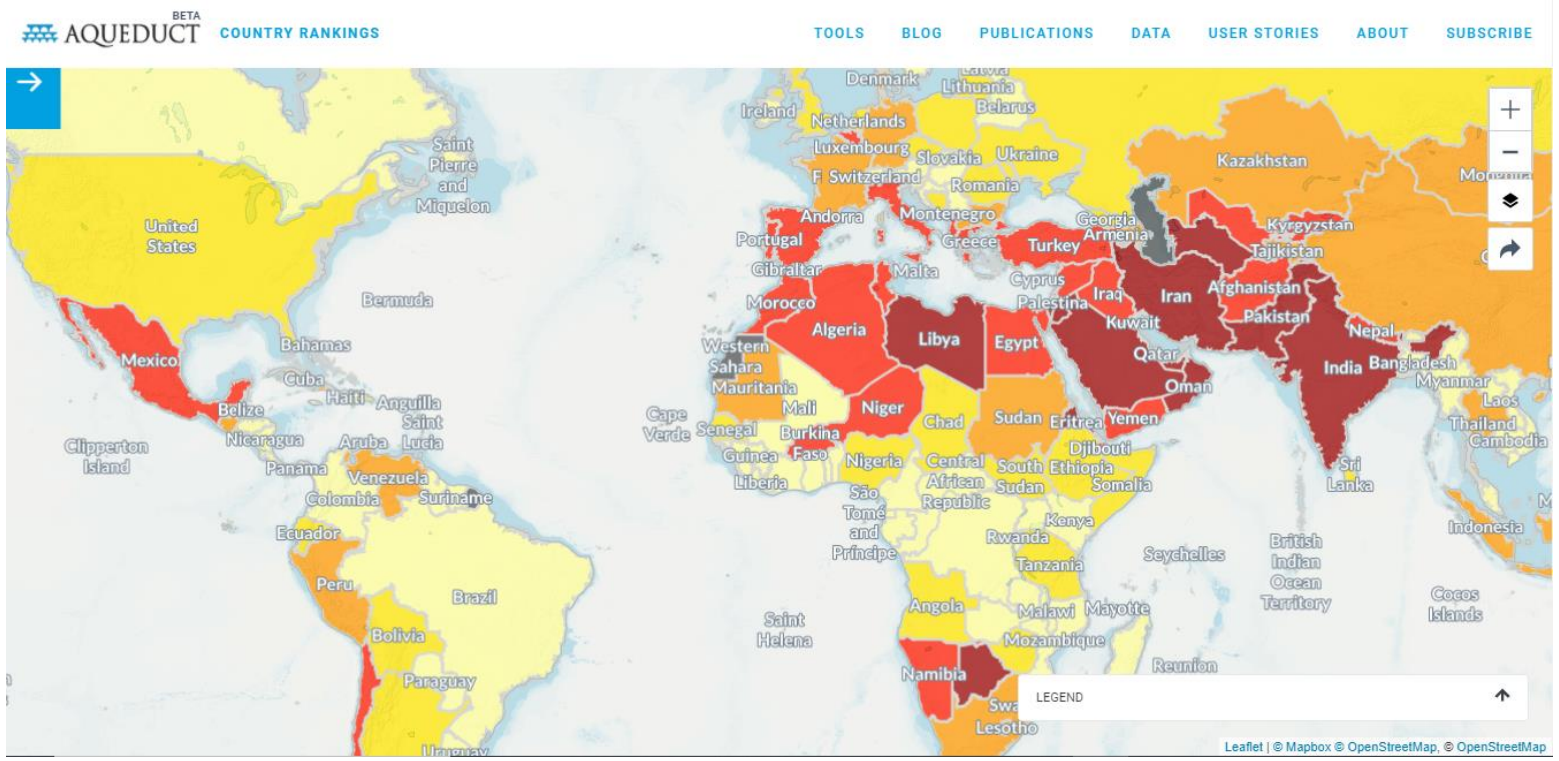


Risk legend

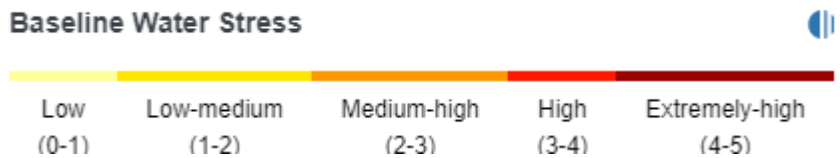
Very low — *Extreme*

Source: WWF Water Risk Filter tool - https://waterriskfilter.panda.org/

Water issues and business – examples (2)



17 countries are classified as "*extremely-high*"



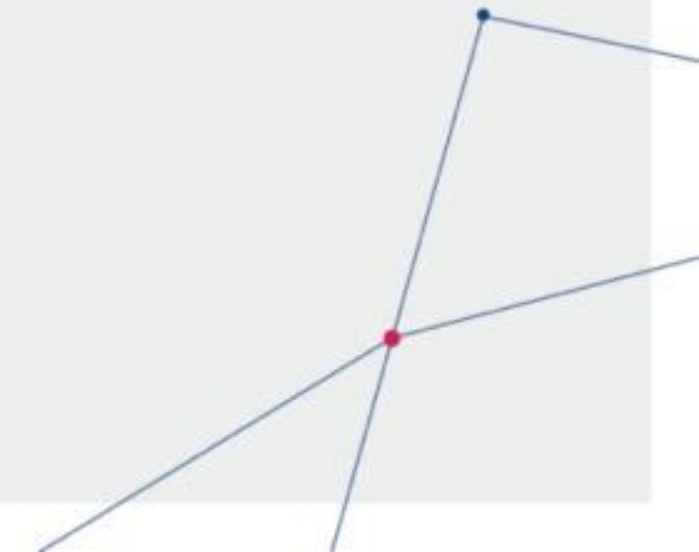
COUNTRY RANKING

(bottom 10 of baseline water stress)

1. Qatar
2. Lebanon
3. Israel
4. Iran
5. Jordan
6. Libya
7. Kuwait
8. Saudi Arabia
9. Eritrea
10. United Arab Emirates

Source: WRI Aqueduct tool - https://www.wri.org/aqueduct

Water-related ‘financial’ risks and opportunities



Water-related risks

Water risk exposure
(for businesses)

Operational

(i.e., the nature of your business & your operational practices – water dependencies and impacts)

+

Water basin (context)

(i.e., status of water context & other users – water supply and demand)

Source: WWF Water Risk Filter tool

Water-related financial risks

Category	Examples
Physical risks	**Acute:** Increased severity of extreme weather. **Chronic:** Changes in precipitation patterns; Water scarcity; Rising sea level
Policy and Legal	• Tighter regulation on water rights to alleviate pressure on water resources; • Enhanced reporting obligations
Market	**Volatility of water prices**; Higher raw materials' costs due to water scarcity
Technological	Transition to more water efficient technologies
Reputational	Shifts in consumer sentiment (e.g. lack of water stewardship)

same categories as climate change (TCFD)

+

Contextual (water basin)	•Water **infrastructures** managed by third party; •Socio-economic conditions (nearby companies/cities affecting water quality); •Water conflicts (e.g. in transboundary water basins with no cooperation)

Source: CDSB Framework Application Guidance for water-related disclosures

Water-related financial risks – examples

Supply chain interruption	In 2018 low water levels in river Rhein disrupted of raw materials supply of German chemical industries (transportation).	**BASF**
Plant relocation	Production site has been ordered to close in northern India after local farmers blamed it for using too much water	**Coca Cola**
From local to global	Taiwan's worst drought in decades is affecting manufacturing of tech components used globally.	**AU Optronics (Apple and Tesla supplier)**
Cooling data centres	Data centres require water for cooling and cooling capacity is threaten by increasing water scarcity, e.g. in Texas.	**Microsoft**

Water-related risks - financial system

- For the last 6 years water/natural resources were in the top 5 risks in terms of impact. Four out of the five worst risk in terms of impact can be linked to water (WEF).
- **US$ 4.2 tln** is the annual economic activity of major world cities at risk due to water-stress (World Bank);
- **US$ 301 bln** is the total potential financial risks reported by companies reporting to CDP in 2020; and
- **25%** of investments by Dutch financial institutions is dependent on freshwater ecosystems (~€ 350bln; DNB)

Water-related financial opportunities

Category	Examples
Resource efficiency	• Transition to more water efficient products; • Reduced water consumption;
Product and service, and market	• Development of less water-intense products and services; • Development of water-climate adaptation and insurance risk solutions;
Financial incentives	• Access to sustainability index loans;
Resilience	• Diversification of water resources and business activities; • Improved water-related monitoring activities and data availability; • Adopting a landscape approach to water management;
Reputation and relationship with stakeholders	• Improved reputation among stakeholders sharing the same water resources; • Improved water resources and ecosystems the company relies on;

Source: CDSB Framework Application Guidance for water-related disclosures

Financial implications – examples

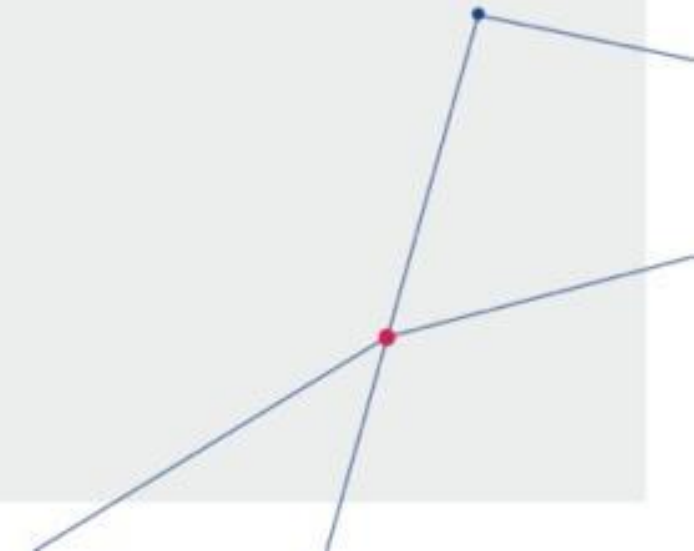
Physical risks	Impaired assets; increased insurance premium; supply chain interruption
Policy and legal	Reduced revenue from decreased production capacity due to limited access to water; fines due to violation of regulation;
Market	Reduced demand for products;
Technological	R&D expenditures in new and alternative technologies
Reputational	Loss of license to operate (e.g. after community protest);
Contextual	Interruption of operations relying of water from the network;

Resource efficiency	Reduced operation costs and exposure to water price volatility
Product and service, and market	• Business diversification; • Access to new markets thanks to less water-intense products;
Financial incentives	Increased access to funds and loans;

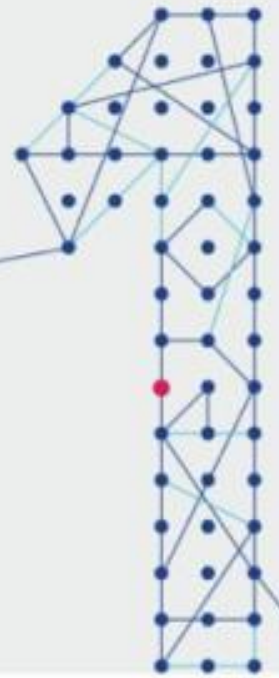
Source: CDSB Framework Application Guidance for water-related disclosures

Climate Disclosure Standards Board

‘Watering’ financial disclosure



Poll 1:
Does your company disclose climate-related and environmental information?



Disclosing environmental (and water) information

- Standards and frameworks for the environmental and integrated reporting;
- Different scopes and audience;

- TCFD recommendations

The CDSB Framework

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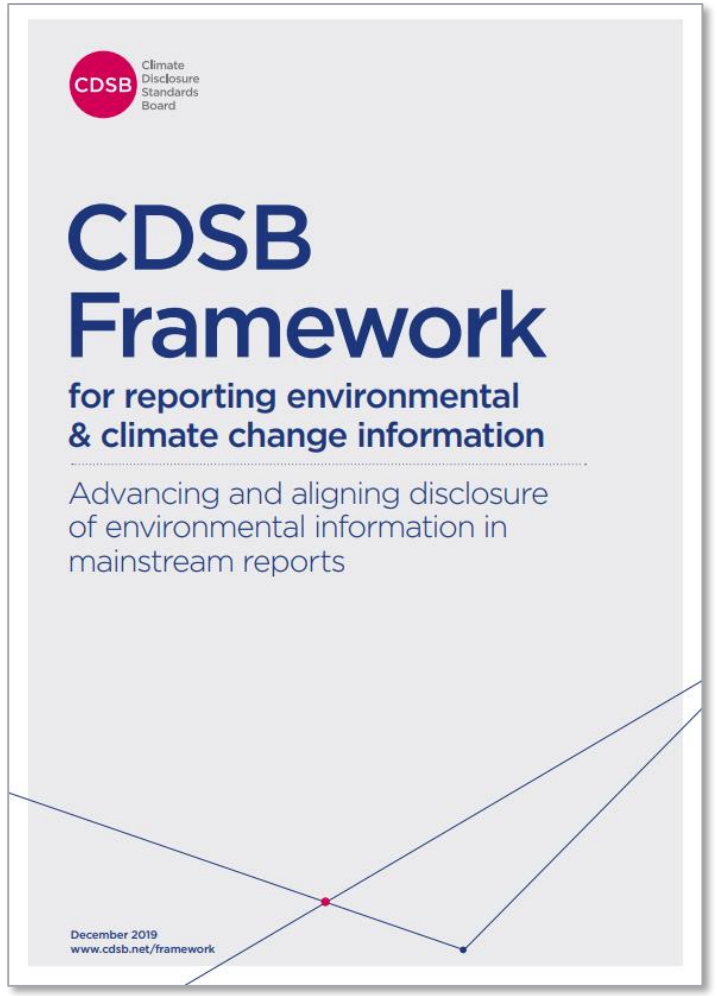
www.cdsb.net/Framework



CDSB and TCFD

CDSB Principles (2015)

P1 Environmental information shall be prepared applying the principles of **relevance** and materiality

P2 Disclosures shall be faithfully represented

P3 Disclosures shall be connected with other information in the mainstream report

P4 Disclosures shall be **consistent** and **comparable**

P5 Disclosures shall be clear and **understandable**

P6 Disclosures shall be **verifiable**

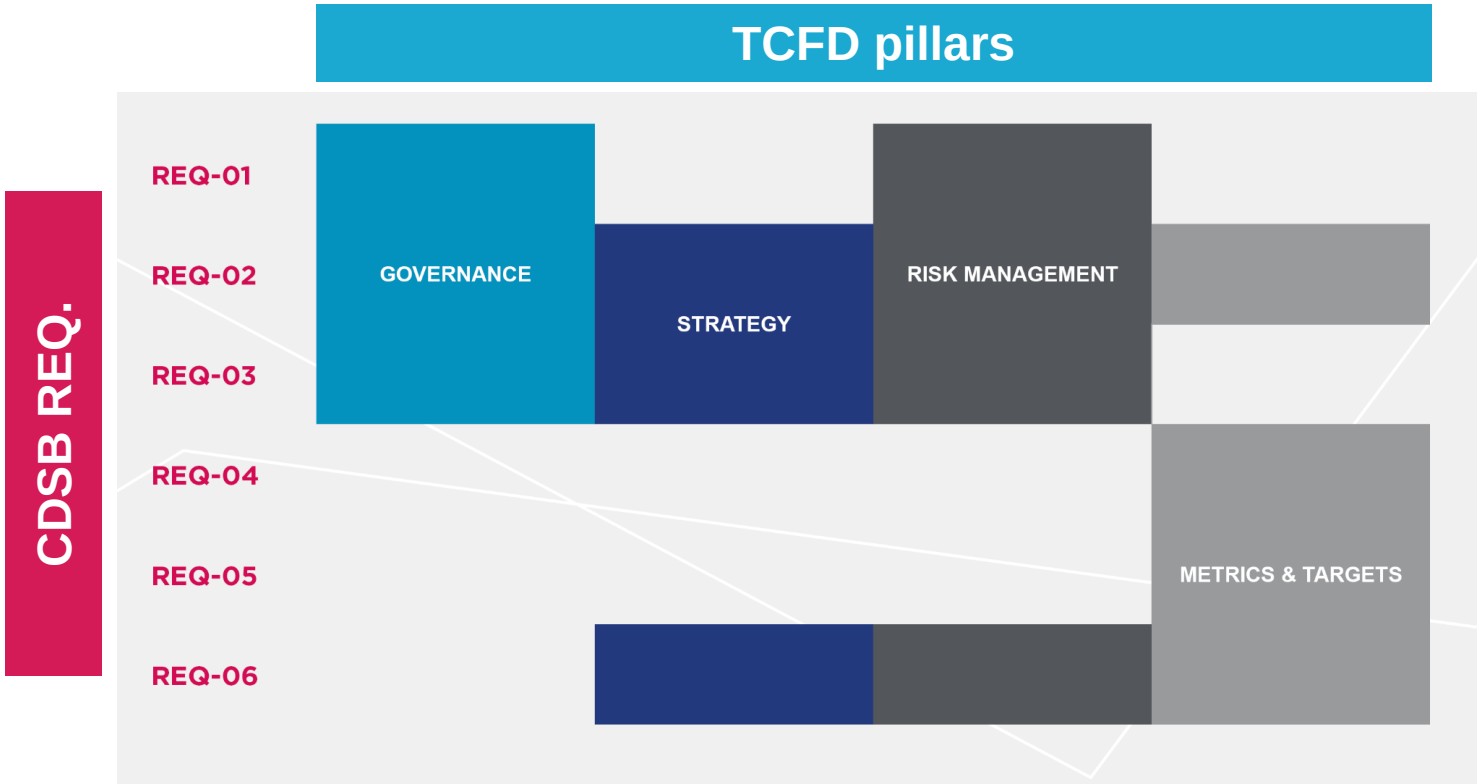
P7 Disclosures shall be forward looking

TCFD Principles (2017)

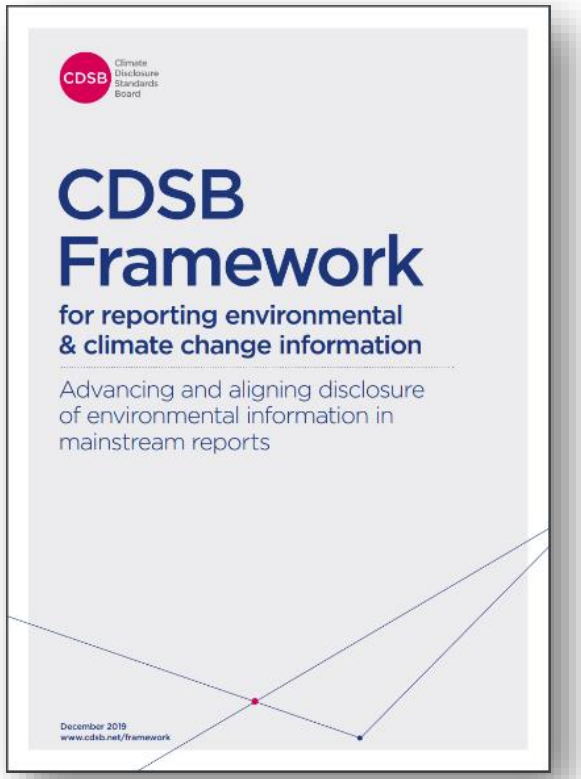
1. Present **relevant** information,
2. Be specific and complete,
3. Be clear, balanced, and **understandable**,
4. Be **consistent** over time,
5. Be **comparable** among organizations within a sector, industry, or portfolio,
6. Be reliable, **verifiable**, and objective
7. Be provided on a timely basis.

Task Force on Climate-related Financial Disclosure

Mapping of the CDSB Framework to the TCFD recommendations



Application guidance resources: TCFD principles for nature



Future guidance

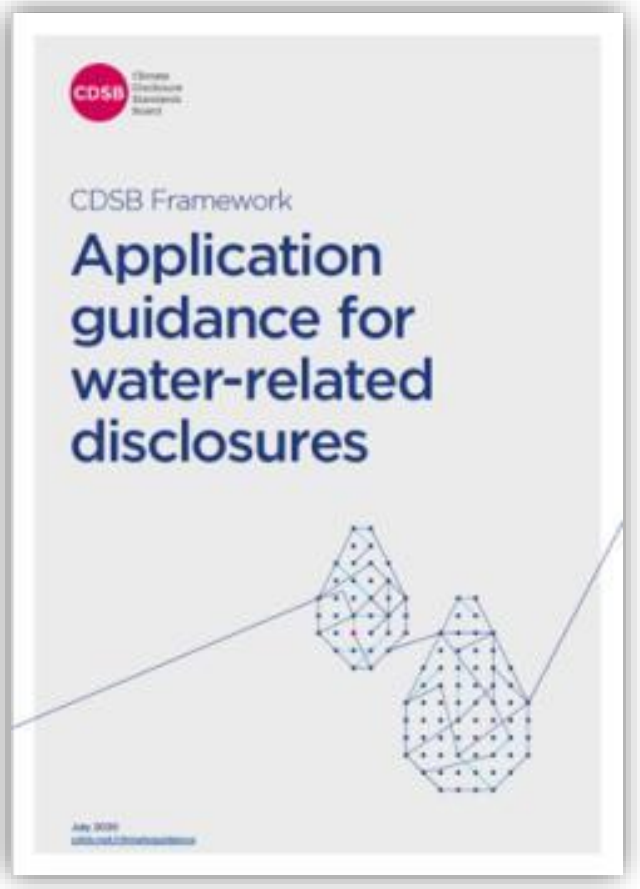
cdsb.net/publications

The CDSB Water Guidance

- Supports companies in:
  1. reporting **material** water-related information in the mainstream report;
  2. providing decision-useful water-related information for **investors;**

- Adds a layer of practical detail to the CDSB Framework by drawing **water-specific** challenges and **reporting elements** from existing water-specific reporting standards and frameworks; and

- Is **aligned with TCFD** recommendations and other global standards



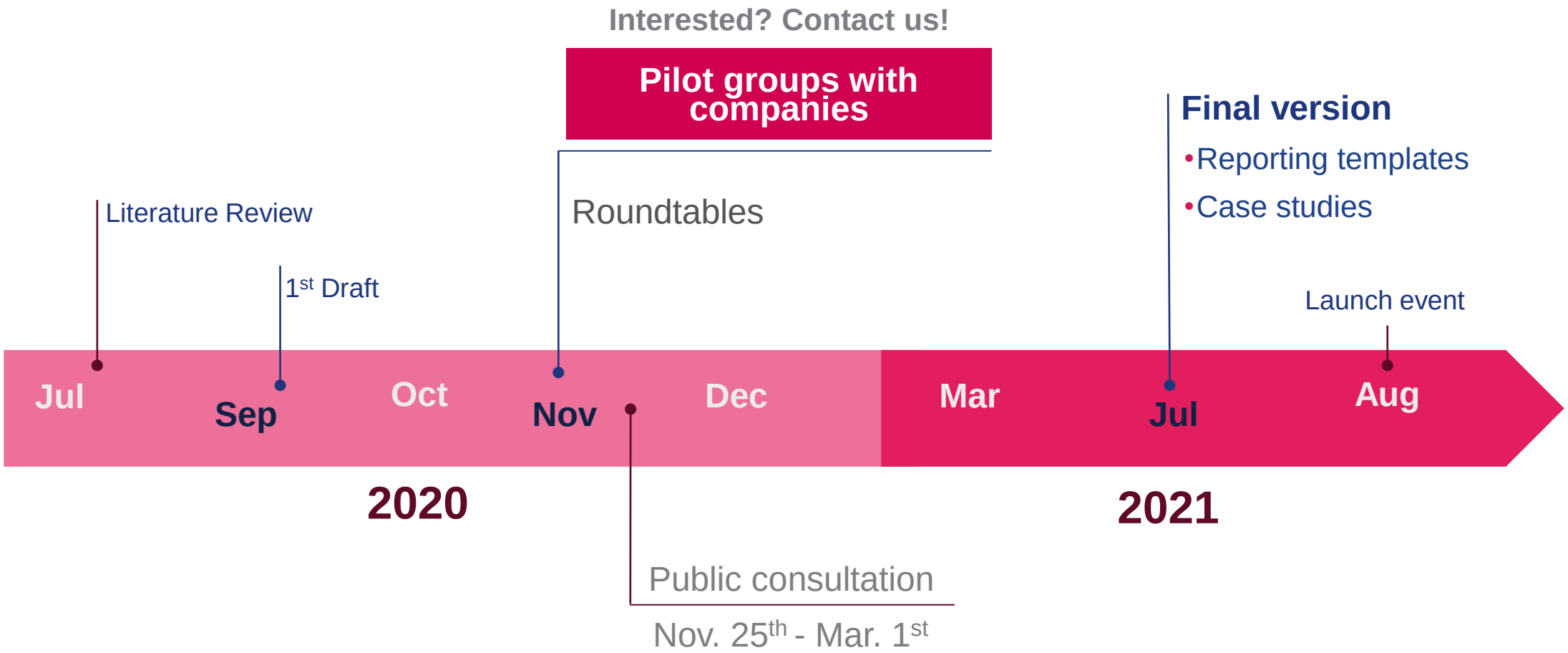
The development of the guidance is supported by the over 60 members of the Technical Working sub-Group on water-related disclosures.

www.cdsb.net/Water

Poll 2:
Does your company disclose water-related information?

(e.g. policy, risks and opportunities, KPIs)

The timeline



The CDSB Water Guidance

Mapping CDSB to TCFD and other reporting standards

Content overview (1)

Water specificities

CDSB reporting requirements

REQ-01 Governance
REQ-02 Management's environmental policies, strategy and targets
REQ-03 Risks and opportunities
REQ-04 Sources of environmental impact
REQ-05 Performance and comparative analysis
REQ-06 Outlook

Source: CDSB Framework Application Guidance for water-related disclosures

Content overview (2a) – key aspects

REQ-01 *Governance*

- **Board and Management** (details **hotspot areas; no list of all names**)
- Accountability and incentivisation

REQ-02 *Management*

- Dependencies and impacts
- Water within overall strategy
- **Stakeholder engagement**
- Targets (**contextual**)
- Resourcing

REQ-03 *Risks and opportunities*

- Material water-related risks and opportunities (**different categories**)
- Details: **financial impacts, locations, value chain, and time horizons**
- Systems and processes (integration in overall system)

Geographic location

Engagement
(internal and external)

Time
(historical data, horizons)

Connectivity

Source: CDSB Framework Application Guidance for water-related disclosures

Content overview (2b) – key aspects

REQ-01 *Governance*

- **Board and Management** (details **hotspot areas; no list of all names**)
- Accountability and incentivisation

REQ-02 *Management*

- Dependencies and impacts
- Water within overall strategy
- Stakeholder engagement
- Targets
- Resourcing

REQ-03 *Risks and opportunities*

- Material water-related risks and opportunities
- Details: financial impacts, locations, value chain, and time horizons
- Systems and processes (integration in overall system)

REQ-04 *Sources of impacts*

- Water metrics
- Explain and **contextualise** metrics (also methodology)
- Categorise and disaggregate (e.g. **water risk areas**)

REQ-05 *Performance*

- Historical data
- Context - baselines and targets
- **Explain trends and drivers of change**

REQ-06 *Outlook*

- Likely effects of **future** water-related elements on company performance and resilience
- **Time horizons** used in the outlook
- Techniques (e.g. scenario analysis)

Geographic location

Engagement
(internal and external)

Time
(historical data, horizons)

Connectivity

Source: CDSB Framework Application Guidance for water-related disclosures

Content overview (3)

1. Disclosure checklists

REQ-02 Management's environmental policies, strategy and targets

Does the disclosure:

- ✓ Explain the water-related dependencies company also in the context of other na capital?
- ✓ Summarise the water policies and strategies and how they support or link to the company's overall strategies?
- ✓ When applicable, explain how water strategies, policies, and management are established through stakeholder engagement?

2. Detailed reporting suggestions and guidance to compliment the CDSB Framework requirements

1. Detailing risks and opportunities

When disclosing material water-re and opportunities in the mainstrea thoroughly describing and detailin specifying their key characteristics explaining their relevance to the c offers useful information. In terms

2. Quantification and financial impact

Decision-useful disclosures will further set out the business implications of materi related risks and opportunities anc possible, quantify them over appro timeframes. When valuing the risk

3. Connecting information

In addition, while the CDSB Framework does not set out specific reporting requirements, Principle 3 encourages companies to explain whether and to what extent water-related issues are connected with other information and results in the mainstream report, with

3. References to useful external resources

Useful resources

1. The report "Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation" provides a list of basic water-related metrics (use and pollution) and the definitions of water variables considered in the metrics, and explains the rationale behind the selection of metrics.

2. Many of the world's largest companies

3 SASB materiality matrix and industry-specific standards identify a base set of material water issues for each industry, providing metrics for reporting on them in a consistent and comparable manner.

4. GRI 303 disclosure standards on water and effluents describes basic water metrics and means of disaggregation (e.g. different water sources).

5. Sector-specific guidance can be provided by

4. Examples of good practice from corporate mainstream reports

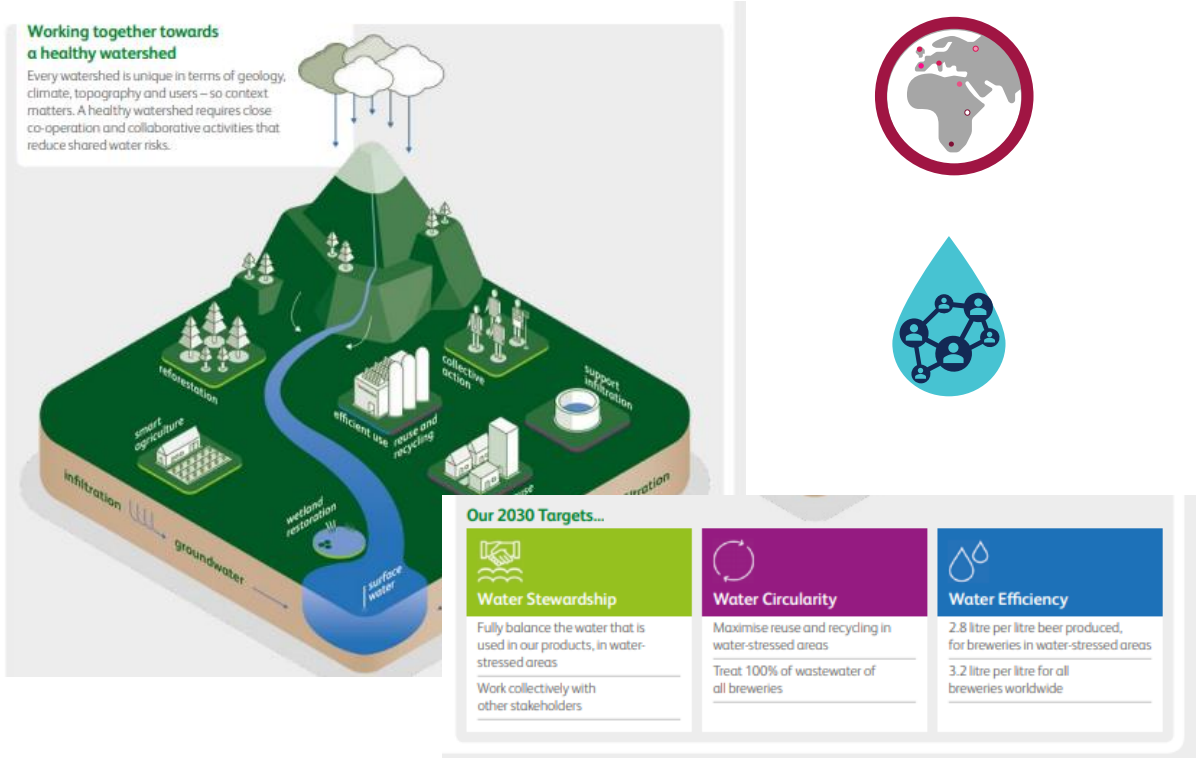
Examples of good practices

1. Heineken N.V. Annual Report 2019 describe its Every Drop 2030 Strategy (pg. 124) and explains the importance of water for its business, its global commitment implemented through local actions (in water-scarce and stressed areas), and the importance of stakeholder engagement and cooperation to maintain basin health. The report graphically illustrates the main actions and targets.

2. BHP Annual Report 2020 clearly and concisely summarises its water stewardship (pgs. 59-60). The report describes the main water dependencies and company steps in the managing water resources (at the operational level, in engaging with stakeholders and in contributing to

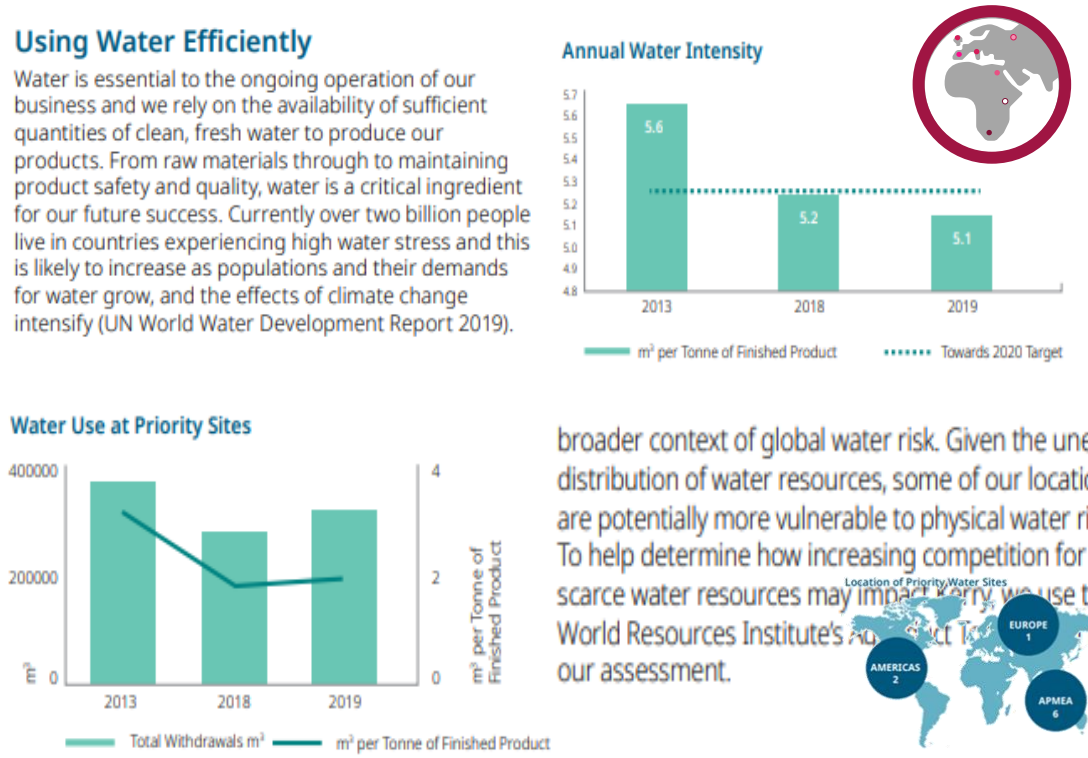
Examples of good practices

Heineken water strategy and targets includes (REQ.02):
- areas with significant water risk
- cooperation with stakeholders



Refer to page 124 of Heineken Annual Report 2019

KERRY GROUP KPIs description includes (REQ. 04 and 05):
- details on water priority sites
- useful methodological details
- Link to targets and presentation of historical data



Refer to pg. 56 of Kerry Group's Annual Report 2019

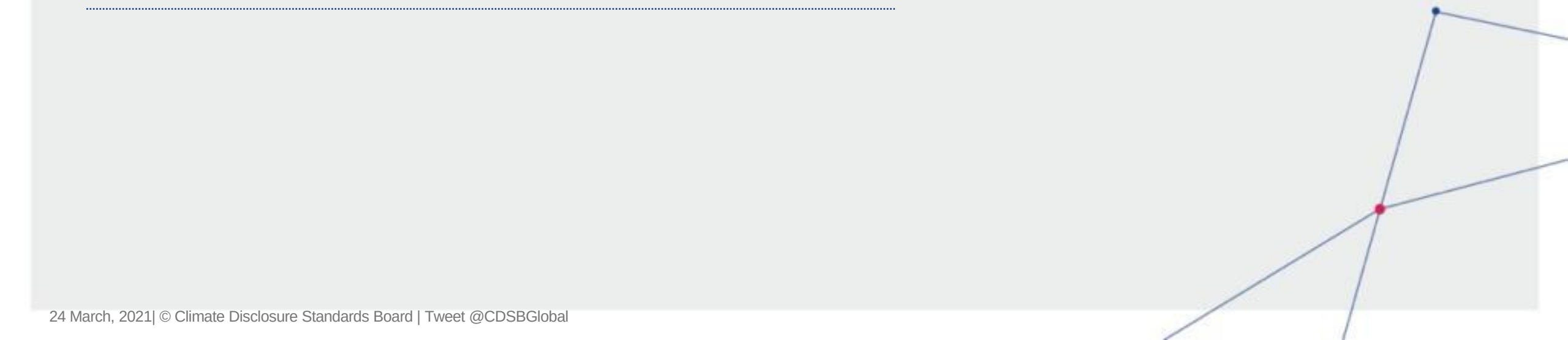
Content overview (4) - alignment

	CDSB Framework					
	REQ-01	**REQ-02**	**REQ-03**	**REQ-04**	**REQ-05**	**REQ-06**
TCFD	- Governance (a, b) - Risk Management (a, b, c)	- Governance (b) - Strategy (b) - Risk Management (a, b, c) - Metrics and Targets (a, c)	- Governance (b) - Strategy (a, b c) - Risk Management (a, b, c)	- Metrics and Targets (a, b)	- Metrics and Targets (a, b)	- Strategy (a, b, c) - Risk Management (c) - Metrics and Targets (a)
CDP Water Security Questionnaire	- W1.4; -W3.3a; W3.3e; -W6.2; W6.2a; W6.2b; W6.2c; W6.3; W6.4; W6.4a; W6.5; W6.5a;	- W1.1; W1.2; W1.2b; W1.4a; W1.4c;W1.4d; - module W.2; - W3.3b; W3.3c; W3.3d; - W4.2; W4.2a; W4.2b; W4.2c; W4.3a; - W5.1a; - W6.1; W6.1a; - W7.1; W7.4; - W8.1; W8.1a; W8.1b; W8.1c; - module W9	- W1.2d; - module W.2; - W3.3a; W3.3b; W3.3c; W3.3d; W3.3e; - W4.1; W4.1a; W4.1b; W4.1c; W4.2; W4.2a; W4.3; W4.3a; W4.3b; - W7.2;	- W1.2b; W1.2d; W1.2h; W1.2i; - W5.1;	- W5.1; -W8.1a; W8.1b;	- W.4.3a; -W7.3; W7.3a; W7.3b;
GRI 303 - water and effluents	- REQ. 303-1 (c, d)	- REQ. 303-1 (a, b, c, d) - REQ. 303-2	REQ. 303-1 (a)	- REQ. 303-1 (a, b) - REQ. 303-3 - REQ. 303-4 - REQ. 303-5	REQ. 303-1 (a)	REQ. 303-1 (b)
SASB[42] (FB: Food and	- Standard Application Guidance - 5.0	- Standard Application Guidance - 5.0	Standard Application Guidance - 5.0	- FB-AG-140a.1 - FB-AG-140a.3 - FM-FR-140a.2	FB-AG-140a.2	



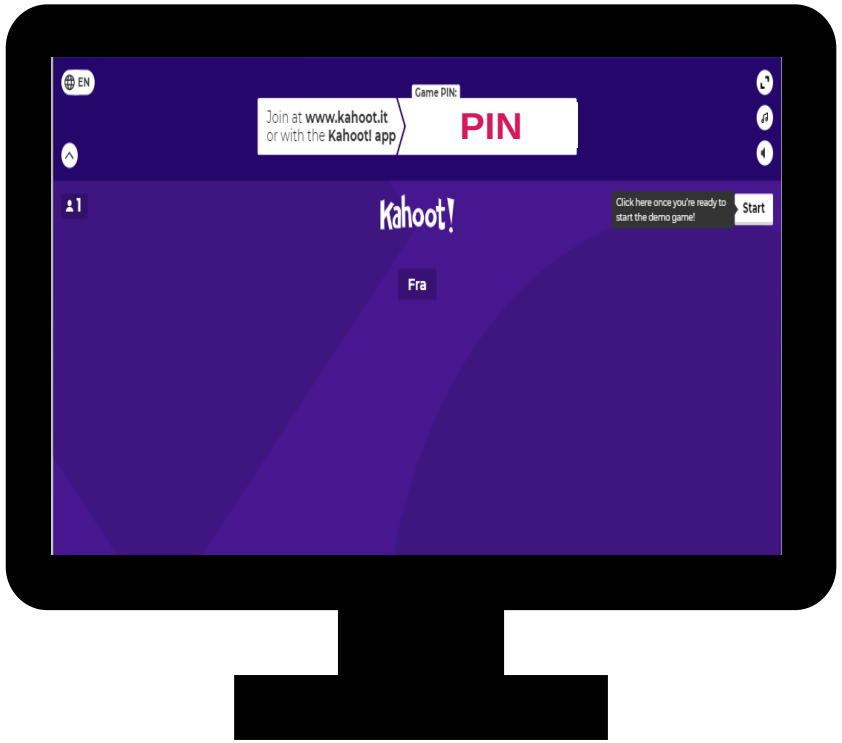
Poll 3:
What are the most challenging topic/requirements?
(select max 3)

Tournament (aka "water quiz")



Instructions

1. On your computer screen you will see:

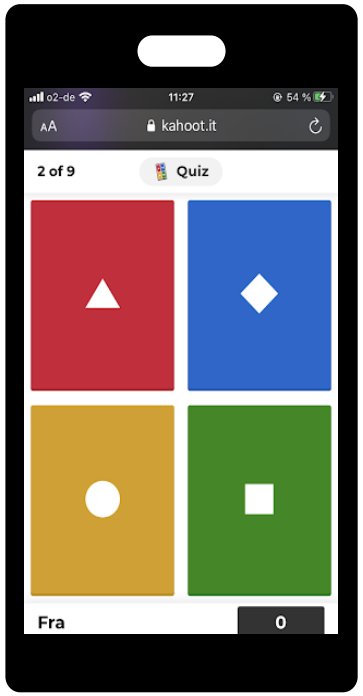


2. Take your phone

3. Go to: Kahoot.it

4. Insert the PIN and nickname

5. Answer the questions



AWARDS

1. SMART METER 1:

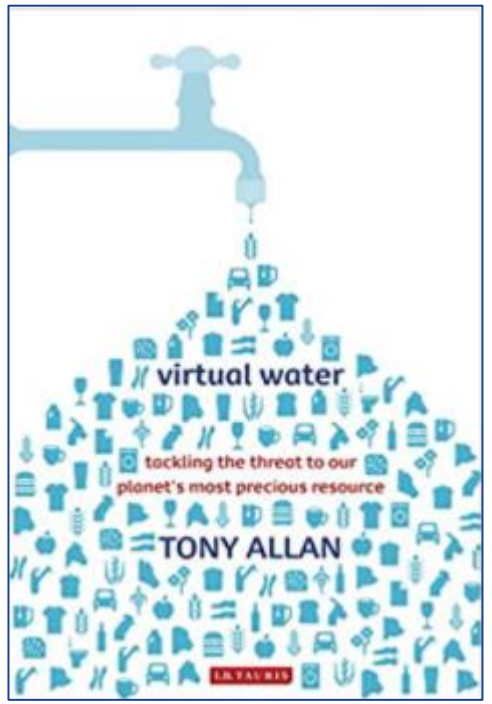
amphiro b1 connect

2. SMART METER 2:

Pani Smart Water Monitor

3. BOOK:

e.g. “Virtual Water: Tackling the Threat to Our Planet's Most Precious Resource”



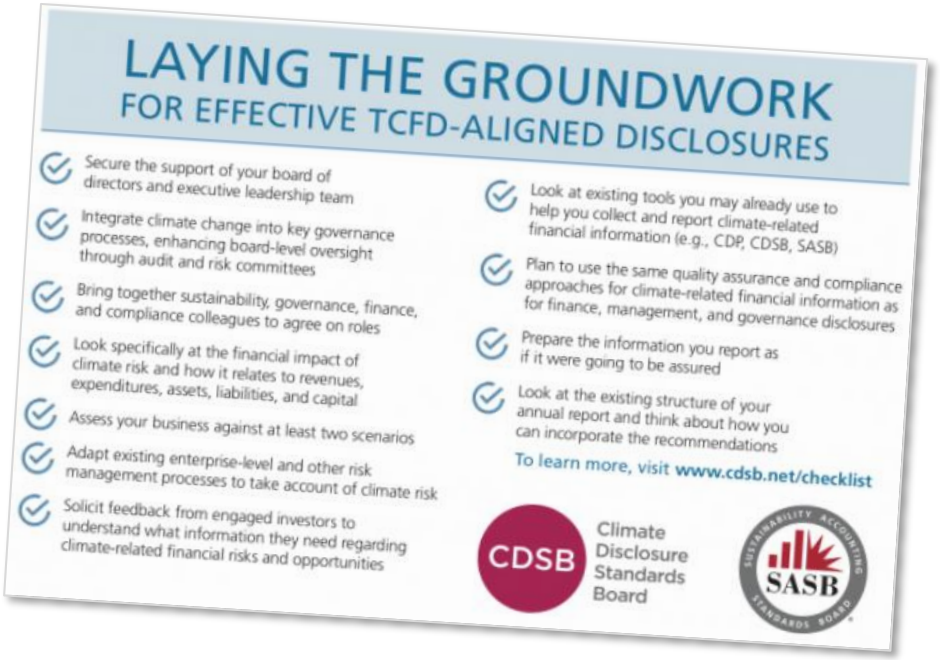
This is a proposal. We will make final choice with the winners

Tips for mainstreaming water

- Site-specificity:
  - identify (water) **hotspot areas** affected by critical levels of water-related risks where company's sites, suppliers or markets are located (existing tools); and
  - disclose about goals, targets, and management mechanisms specific for hotspot areas;
- Consider and assess different types of water dependencies, impacts, risks and opportunities

- Disclose about **engagement** and cooperation with stakeholder explaining related benefits for the business (e.g. risk mitigation)
- Clarify water terms and methods used (e.g. water consumption)
- If water is not material – explain why?

- **Connectivity** – e.g. disclosing KPIs in mainstream report makes sense if linked to water goals/targets;
- Clear **roadmap** detailing actionable steps with measurable targets

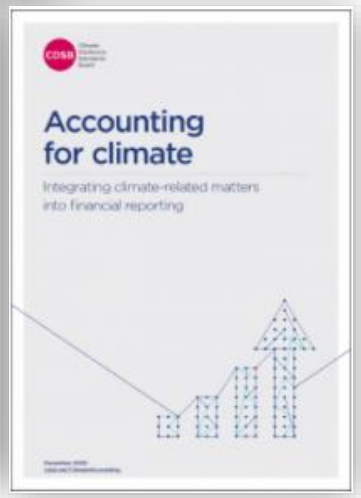


CDSB resources

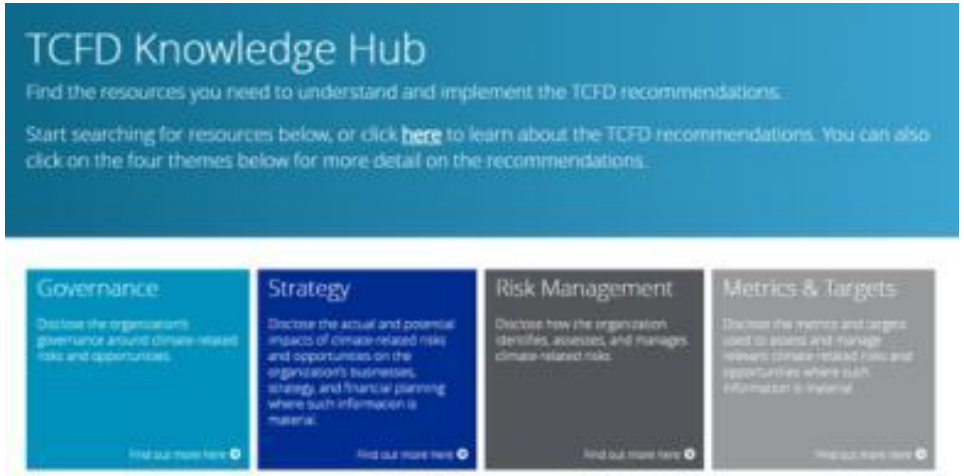
cdsb.net/publications

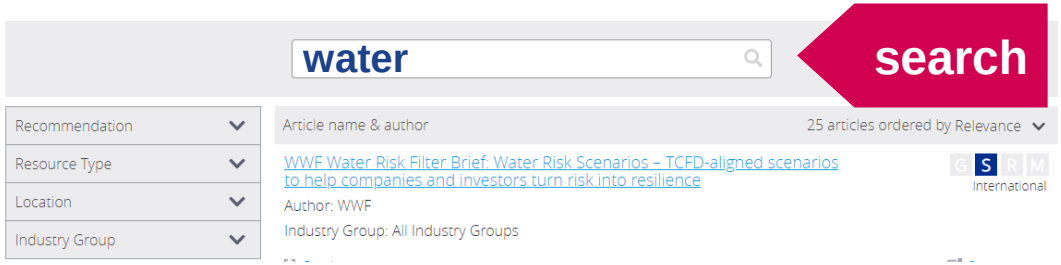
Good practice examples and practical tips

Optimise disclosure process



tcfdhub.org → water e-learning – in August!





1-to-1 support to companies:

- Disclosure feedback
- Access to experts

How to get involved?

- Working groups:
  - Biodiversity and Land-use
  - Accounting for Climate
- Test water guidance

Questions or comments?

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