

Navigating Troubled Waters

A briefing for directors of financial institutions

June 2024



Water underpins the whole economy. The economic effects of water insecurity across global supply chains presents material climate and nature-related financial risks. As the impact of water insecurity is growing, so is the urgency for action. Prioritisation of sustainable water use offers real financial opportunities through building climate resilience and supporting the environment on which future growth depends. As such it is a critical consideration for financial institutions. This hugely important paper provides the primer that Board Directors need to navigate through this urgent topic.

James Alexander

Chief Executive, UK Sustainable Investment & Finance Association

This paper is a critical reminder that, when fulfilling their duties of care and loyalty, company directors need to think of sustainability holistically, or risk missing vital, urgent issues that threaten the company's short and long term success. Nature-related issues are not external compliance issues but key to core strategy. Now is the time to sink or swim.

Jenni Ramos

Lawyer Corporate/Finance & Biodiversity, Commonwealth Climate & Law Initiative

Whilst climate risks are increasingly understood by Financial Institutions, nature-related financial risks are less so. Our Guide to Action on Nature, published last year, urged insurers to begin to understand their impact on and exposure to nature related risks, starting with the most understood and impacted realms of nature. This report highlights just how vital the water cycle is to the entire global economy, and why it is so important that insurers understand their own exposures to water-related risks – particularly as climate change drives drought, flooding and pollution risks.

Rebecca Lea

Investment & Climate Manager at the Association of British Insurers

This briefing provides Boards with a much-needed primer on how their financial institutions are exposed to systemic water-related risks. Recent analysis published by GFI found that the highest risks across sectors are derived from nature's provision of water and that nature-related risks are as detrimental to the economy as those from climate risks. We welcome the actions outlined in this brief as necessary steps for financial institutions to take in minimising their exposures and building resilience across the global economy.

Helen Avery

Director, Nature Programmes & GFI Hive, Green Finance Institute



Water is fundamental to life on this planet and vital to our global economy. The economic value that water provides us is vast, with direct and indirect use benefits equivalent to approximately <u>\$58 trillion</u> in 2021. Yet, our current global water system is being degraded and presents us with systemic market risk. The World Bank has suggested that in some regions water-related impacts on agriculture, heath, and incomes could cut up to 6% of their GDP by 2050. This welcome report from CDP highlights clear steps that can be taken. We must work together to protect, manage, and restore the global water system; it is central to a well-functioning global economy and a fundamental part of living in harmony with nature.

Michael Marks

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About the author



Annabel Nelson

Strategic Advisor to CDP on Financial Institutions Annabel Nelson is a finance and sustainability expert with over 25 years' experience in global financial service firms. Her mission is to support the finance sector to embed sustainability into BAU and facilitate real-world positive change to deliver a just and sustainable economic transition. She is a member of the UK Sustainable Investment & Finance Association Policy Committee.

She is a Strategic Advisor to CDP on financial institutions and author of this briefing. Previously she was Group Head of Sustainability Strategy and Policy at M&G plc where she led the collaboration with CDP on water security and holistic water transition issues, and presented the investor perspective on water security at COP26 in the Blue Zone at the World Leaders Summit in Glasgow.



Claire Elsdon

CDP's Global Director, Capital Markets

Foreword from CDP Capital Markets

CDP's Capital Markets team is dedicated to engaging with and supporting our base of over 700 financial institutions globally as they work to request and utilise the climate related disclosures made by companies through CDP's every year. One of the key use cases for this data is risk management. While the carbon emissions side is generally well understood, we see significant demand from our signatories to better navigate the broader nature considerations, chief amongst which is water. We are delighted to publish this briefing for directors that provides a roadmap of practical actions to support financial institutions as they journey through this challenging and complex space.

Executive summary

Water is the dominant nature-related financial risk and could constitute



of global GDP at risk.



At the current rate of consumption there will be a



global shortfall in freshwater supply by 2030.



Carbon emissions are the primary cause of global warming and their reduction has dominated financial institutions' response to climate change. But the impacts of a warmer planet are felt through changes in the water cycle.

Water is the dominant nature-related financial risk and could constitute 7-9% of global GDP at risk¹. Water risks arising from too much, too little or polluted water, harm nature. This undermines resilience to climate change, causing widespread impacts on biodiversity, ecosystems, human health, food security, livelihoods and infrastructure².

Yet despite the size and scale of the issue, water risk is not fully priced into financial markets³. It exposes the financial system to systemic risks, contributing to the misalignment of capital flows and driving climate change, nature loss and social inequality.

This is an immediate, not a future problem. Our global economy depends upon freshwater. It is critical for agriculture, energy, industry, technology and transport as well as for consumption and sanitation. But at the current rate of consumption, there will be a 40% global shortfall in freshwater supply by 2030⁴.

This is a foreseeable material systemic risk for financial institutions. They must broaden their focus beyond carbon emissions to manage their exposure to other nature-related aspects of climate change. Directors of financial institutions have a duty to carefully consider water as part of their strategic⁵ planning and risk management, and to disclose material risks⁶.

Access to freshwater can be contentious given its importance for economic prosperity and social wellbeing. Restrictions to water access can disrupt business, provoke protests, and lead to human rights issues that necessitate government intervention. As the impacts of water use are location-specific and location-sensitive, it can be easier to trace who's responsible for harm caused to affected communities and ecosystems, including funding sources. In addition to physical

¹ The Green Scorpion: the Macro-Criticality of Nature for Finance. Foundations for scenario-based analysis of complex and cascading physical nature-related financial risks. NGFS December 2023

IPCC (2023), AR6 Synthesis Report: Climate Change 2023, <u>https://www.ipcc.ch/report/sixth-assessment-report-cycle/.</u>
 Watered down? Investigating the financial materiality of water-related risks in the financial system, Lylah Davies, Mireille Martini. OECD Environment Working Papers No.224 September 2023

⁴ UN Water, 2016: https://press.un.org/en/2016/sgsm18114.doc.htm

⁵ Improving governance on nature-related risks and opportunities. Board briefing, March 2024 - Climate Governance Initiative,

 ⁶ Biodiversity Risk: Legal Implications for Companies and their Directors; Commonwealth Climate and Law Initiative. World Benchmarking Alliance.
 6 Biodiversity Risk: Legal Implications for Companies and their Directors; Commonwealth Climate and Law Initiative. Jennifer

⁶ Biodiversity Risk: Legal Implications for Companies and their Directors; Commonwealth Climate and Law Initiative. Jennifer Ramos and Zaneta Sedilekova, December 2022

and transition risks, the mismanagement of water exposes financial institutions to litigation risk, reputational damage, and loss of social license.

Human-induced climate change is causing more frequent and intense heat waves, droughts and floods which combined with the over-abstraction and misuse of water is driving water insecurity. This is destabilizing environmental ecosystems and is a threat to people, local communities and the global economy.



Call to action

A clear focus on water issues is now necessary. Boards must take the following steps to guide businesses to look beyond carbon and navigate the troubled waters ahead, holding management accountable for:

- Adopting a systems approach: Understanding how climate change and water are interrelated, aligning internal governance to embed consideration of water into strategy and business decision-making.
- 2. Assessing risks and opportunities: Identifying and evaluating your business' impacts, dependencies, risks and opportunities on water.
- 3. **Using change levers**: Using your influence to support sustainable water usage and management.
- 4. **Documenting and disclosing**: Transparency drives accountability, supports trust and helps to mitigate risk.

These guided steps will not only support communities and protect the environment but underpin business resilience and profitability over the long term.

Section 1: Stormy weather ahead

In 2023, globally

67%

of FIs are not assessing their portfolio exposure to water risks⁷.

Though water usage is local, its economic impact is felt globally through the supply chains it feeds.

All goods and services have a water footprint reflecting the amount of freshwater consumed over the whole supply chain. 50% of the water footprint of high-income developed economies is unsustainable⁸ originating from areas of high-water stress. At the current rate of consumption there will be a 40% global shortfall in water supply by 2030⁹.

This systemic financial risk is hiding in plain sight. In 2023, globally 67% (235/350) of financial institutions are not assessing their portfolio exposure to water risks, yet the financial costs of water risk are being realized today as business interruption and stranded assets – four infrastructure projects alone accounting for over US\$13.5 billion in stranded assets¹⁰.

The financial risks of limited water availability can aggregate across portfolios due to the interconnected nature of water use and supply chains. The Cambridge Institute for Sustainability Leadership and HSBC conducted analysis on the implications for the credit ratings of a portfolio of fixed-income investments in approximately 50 East Asia-based industrial corporates if access to water was curtailed for just three months – the results showed a significant deterioration in the average portfolio credit risk rating with more than one third of companies moving from Investment Grade to Speculative¹¹.

The combined influence of climate change, nature loss and water insecurity exacerbate social inequality – posing systemic financial risks to financial institutions. How financial institutions address water risks offers their stakeholders insights into their strategy, risk management, climate statements, and governance effectiveness.

⁷ CDP Financial Sector Water Action Platform, May 2024. See: https://www.cdp.net/en/water/financial-institutions-commitments. 235 companies out of 350

⁸ The Glasgow Declaration for Fair Water Footprints – Towards Fair Water Footprints: Understanding the water footprints of the Global North and dependency on water use in the Global South; Water Witness International, March 2023

⁹ UN, Global Commission on the Economics of Water, March 2023
10 High and Dry: How Water Issues are Stranding Assets, CDP 2022

¹¹ Nature-related financial risk: use case. Impact of water curtailment on the credit rating of heavy industry companies in East Asia, CISL & HSBC

The storm is building in three key areas:

Water risk compounds climate change and nature loss.

The environment is regulated by inter-connected planetary systems which include both climate change and the water cycle. Research shows climate and ecosystem tipping points may occur at lower temperatures than we thought¹².



Amazonian drought – is this a tipping point? Research demonstrates that climate change is the main driver of the prolonged drought¹³ which by mid-2023 had reduced river levels across the Amazon basin to their lowest levels in over a century. The extreme drought has affected around 30 million people across Brazil, Peru, Colombia, Venezuela, Ecuador and Bolivia. It has resulted in significant adverse social and economic impacts, including drinking water shortages, crop failures and power cuts from reduced hydoelectric power generation across the region. The drought has wiped out river life in large numbers and increased wildfires in one of the world's largest carbon sinks and most biodiverse regions. The level of widespread damage raises concerns that the rainforest is close to a tipping point¹⁴.

The Amazon water cycling is a global ecosystem service that operates across continents with the potential to impact large parts of South America, important farming zones in the United States' Midwest, and as far as the Tibetan Plateau and West Antarctic ice sheet. A reduction in rainfall within and beyond the Amazon basin is projected to produce double-digit yield losses of key crops in South America. This will potentially reduce hydroelectric capacity by up to 75% and severely impact long haul inland shipping routes, such as the Panama Canal, which alone accounts for US\$270 billion of global shipping traffic¹⁵.

13 <u>https://www.worldweatherattribution.org/climate-change-not-el-nino-main-driver-of-exceptional-drought-in-highly-vulnera-ble-amazon-river-basin/</u>

¹² Global Tipping Points Report 2023, Prof T Lenton et al Global Systems Institute, University of Exeter

¹⁴ Pronounced loss of Amazon rainforest resilience since the early 2000s; C Boulton, T Lenton, N Boers, 7 March 2022 https:// www.nature.com/articles/s41558-022-01287-8

¹⁵ Ecosystem tipping points: Understanding the risks to the economy and financial system; L Marsden, J Ryan-Collins, J Abrams, T Lenton; April 2024



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Water-related financial risks span the whole economy.

Water risk, as one of the nature-related risks, influences both domestic and external economic stability, by impacting trade flows, fiscal positions, asset prices and exchange rates¹⁶. Financial institutions are vulnerable to the broader macroeconomic deterioration from impacts on inflation and investment due to large scale nature-loss¹⁷.

The Network for Greening the Financial System, the network of 138 Central Banks and Supervisors¹⁸, is concerned that water risks (physical or transition) are not sufficiently reflected in market prices or climate models. Financial institutions are likely underestimating the actual financial risks and increasing nature-related financial risks through the economic activities the sector finances and insures¹⁹.

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Disjointed policy and mis-pricing lead to water mismanagement.

Policy through legislation, regulation and taxation determines how businesses operate and where funds are directed. Local governments typically control water use, often separated from other priorities. Yet water is generally undervalued with the price failing to capture the real cost of water use, its transportation and pollution — incentivizing mismanagement.

Under-investment in water infrastructure leads to inefficient technology and waste: about 30% of freshwater is lost through leaks²¹, and around 80% of wastewater is released untreated²², harming our water sources. Financial institutions should recognize that merely following existing policies and regulations may not eliminate their exposure to water-related financial risks or avoid harming water resources.

Today, **nature risks are not priced into financial markets and are not accounted for in the scenarios** used by financial institutions, Central Banks and supervisors to date, **leaving the financial system exposed to potential systemic risks, as well as contributing to the misalignment of capital flows with societal goals**²⁰.

NGFS, December 2023



¹⁶ IMF, 2015 & https://www.ecb.europa.eu/pub/pdf/scopops/ecb.op309~4a449b41bc.en.pdf, and The Green Scorpion: the Macro-Criticality of Nature for Finance. Foundations for scenario-based analysis of complex and cascading physical nature-related financial risks. NGFS December 2023

18 NGFS as at 7th March 2024

21 Investing in a water-secure future – Value creation strategies in a changing world, White Paper by Global Water Intelligence and XPV Water Partners, February 2024

¹⁷ Ecosystem tipping points: Understanding the risks to the economy and financial system; L Marsden, J Ryan-Collins, J Abrams, T Lenton; April 2024

¹⁹ Nature-related Financial Risks: a Conceptual Framework to guide Action by Central Banks and Supervisors, NGFS September 2023

²⁰ The Green Scorpion: The Macro-Criticality of Nature for Finance. Foundations for scenario-based analysis of complex and cascading physical nature-related financial risks. NGFS December

²² UN 2018, The What, Why and How of the World Water Crisis: Global Commission on the Economics of Water

Section 2: The supply chain problem

Our globalized economy means we are more connected and interdependent than ever on the goods and services we produce and consume.

Global supply chains support unsustainable water use, as water that is embedded in the production of food, clothes and goods consumed is exported from severely water stressed areas. The full economic value of freshwater is location specific. It depends on water availability, quality and the opportunity cost of alternative uses and associated externalities. However, the actual price of water rarely reflects this fact. Together with disjointed policy and a siloed approach to managing sustainability risks, mispricing incentivizes unsustainable water use in supply chains.

Water risk rises not only for the regions exporting goods but also for the businesses reliant on these exports along with the financial institutions providing capital and underwriting risk for those firms.

The digital revolution depends on water



The manufacture of semiconductors — the ubiquitous microchips that power the modern economy — is highly water intensive and production is geographically concentrated. The financial risks of water scarcity became clear in 2021 when Taiwan, which produces more than 90% of the world's most advanced chip²³, suffered its worst drought in more than 50 years. Water was prioritized to the semiconductor industry, it increased production costs and affected other industries domestically by reducing their access to water. The knock-on impacts were global, for example, it caused supply shortages within the automotive sector, materially reducing vehicle production over 2021-2022²⁴ with an estimated global sales shortfall of US\$210 billion in 2021 alone²⁵.

Artificial intelligence is transforming the global economy and will be crucial to the sustainable transition. But the large language models use very dense chips which are more water intensive to make, and consume a lot of energy to process complex computations²⁶. Electricity generation accounts for 10% of freshwater withdrawals because 90% of energy generation requires water for thermo and nuclear cooling and for hydoelectricity. The IEA expects electricity consumption from data centers, AI, and the cryptocurrency sector to potentially double over the next two years. Data centers' water use is expected to nearly double over the decade to 2030²⁷. Unlike manufacturing, where water can be recycled back into the local supply, cooling water evaporates and falls as rain elsewhere.

26 Generative AI is guzzling water and energy; K Crawford 2024, Nature Vol 626 22 February 2024

²³ BCG and SIA, Strengthening the Global Semiconductor supply chain in an uncertain era, April 2021. US Exposure to the Taiwanese Semiconductor Industry, US International Trade Commission, November 2023.

²⁴ S&P Global Mobility estimates this resulted in more than 9.5 million units of global light-vehicle production lost in 2021 and 3.5 million units lost in 2022. <u>https://www.spglobal.com/mobility/en/research-analysis/the-semiconductor-shortage-is-mostly-over-for-the-auto-industry.html#.~text=Another%203%20million%20units%20were.volumes%20during%20the%20same%20 timeframes.)</u>

²⁵ https://www.reuters.com/business/autos-transportation/automakers-chip-firms-differ-when-semiconductor-shortage-will-abate-2022-02-04/

²⁷ Source - Bluefield Research, 'Why thirsty data centres risk plunging the world into crisis' by Szu Ping Chan The Telegraph 29 December 2023

Section 3: Directors' duties – steering through troubled waters

Only **1%** of European FIs reporting through

reporting through CDP have set water security targets, despite its critical role in industrial processes.



As water is generally recognized as a systemic risk, directors have a duty to carefully consider water as part of their strategic planning and risk management²⁸. Financial institutions will face greater scrutiny of the exposure of their financing and insurance activities to water risk and for their impact on the availability and quality of water – their 'double materiality'²⁹.

However to date, most firms have prioritized their focus on reducing carbon emissions, even though the impact of climate change will primarily be felt through changes in the water cycle and estimated to be around 69% of insurable losses over the next decade³⁰. Only 1% of European financial institutions reporting through CDP have set water security targets, despite its critical role in industrial processes³¹.

We have exceeded the safe operating limits of six of the nine inter-connected Earth system processes — including freshwater use³² which regulate our environment, increasing the likelihood of reaching a tipping point of cascading and compounding, irreversible, environmental change, with devastating social and economic consequences. This means that carrying on with business-as-usual financing activity without actively managing both firms' exposures and contribution to water-related risks will increase risk at both an asset and portfolio level. Firms do not have the luxury of prioritizing carbon emissions reduction first before taking action on freshwater.

An institution's approach to finance and insurance activities with water-related impacts and dependencies highlights the quality of its governance, balancing stakeholder interests, and commitment to the triple bottom line. It demonstrates their:



Understanding of water-related financial risks – particularly the impacts on profitability and financial stability.



Environmental footprint – the effects of their financing activities on the environment. ዮ

Social impact – how water availability and quality affect communities now and in the future.

²⁸ Improving governance on nature-related risks and opportunities. Board briefing, March 2024 - Climate Governance Initiative, Commonwealth Climate and Law Initiative, World Benchmarking Alliance.

²⁹ https://www.cisl.cam.ac.uk/news/blog/double-materiality-corporate-sustainability-reporting-encompass-societal-and-environmental-impacts

^{30 &#}x27;Investing in a water-secure future -Value creation strategies in a changing world', Global Water Intelligence, XPV Water Partners, February 2024

 ^{31 &#}x27;Get the money moving – Meeting the European corporate transition challenge' CDP Europe Report March 2024
 32 Planetary boundaries framework Johan Rockstrom and Will Steffen, 2009

Directors' duties and nature-related risks

Increasingly there has been growing pressure for directors to look beyond shareholder value as part of their directors' duties – as the Commonwealth Climate and Law Initiative notes, social, regulatory and legal context may influence the standard required to fulfill directors' duties. Companies impact nature, including water and directors have a duty to act with care and loyalty, considering risks to nature as foreseeable and material risks³³. This is part of strategic planning, risk management and disclosure.

Key legal frameworks and standards:

- International agreements: 196 countries back the Paris Agreement and Kunming-Montreal Global Biodiversity Framework (GBF).
- Sustainability disclosures: Becoming market standard and mandatory through the International Sustainability Standard Board's (ISSB) reporting standards on sustainability, and climate and other requirements such as the European Commission's Corporate Sustainability Reporting Directive, which enacts the European Sustainability Reporting Standards (including standard E3 on "water and marine resources").
- Nature-related financial disclosures: Nature is a priority theme for the ISSB which is drawing on the Taskforce on Nature-related Financial Disclosures' recommendations that align with global reporting baselines and the GBF.

Legal risks for directors:

- Under English law, ignoring nature-related risks can lead to liability³⁴. Mismanagement of risks can lead to legal action against directors who mislead investors³⁵.
- To mitigate liability and support global sustainability efforts directors should prioritize risk management and transparency in company reporting.

³³ Biodiversity Risk: Legal Implications for Companies and their Directors; Commonwealth Climate and Law Initiative. Jennifer Ramos and Zaneta Sedilekova, December 2022

³⁴ https://commonwealthclimatelaw.org/wp-content/uploads/2024/03/Nature-related-risks-and-directors-duties-ur

³⁵ NGFS Technical Document – Nature-related Financial Risks: a Conceptual Framework to guide Action by Central Banks and Supervisors, September 2023

Section 4: Key recommendations for boards



Adopt a systems approach

Understand how climate change and water are connected

Broaden sustainability focus beyond carbon.

Water availability is being impacted by climate change, and water is a key driver of nature-related risks in finance. The sector must look beyond carbon. Risks do not occur alone³⁶. To understand water-related financial risk, financial institutions must use a systems approach to explore the inter-connectivity of environmental and social risks and responses.

Complex problems need teamwork.

To implement systems thinking, directors must ensure their firms work with stakeholders, both internal and external, to evaluate impacts and dependencies; identify water-related risks and opportunities; and collect insights and co-create solutions for system complexities. Diverse perspectives build engagement, fuel innovation and promote creative problem-solving environments³⁷.

Integrate water considerations into strategy and business decision making.

Financial institutions should include consideration of water risks and opportunities in due diligence, investment analysis, contracts, portfolio planning, scenario analysis, strategic planning, risk management, and performance incentives with board oversight. Shareholder voting, new products and services, and target setting should also be considered, and a named responsible board director should have oversight.

36 This concept is explored in detail in the Institute & Faculty Of Acturies and University of Exeter paper: "Climate Scorpion – the sting is in the tail. Introducing planetary solvency" by S Trust et al, March 2024

7 https://www.forbes.com/sites/forbesbusinesscouncil/2023/08/16/the-power-of-diversity-and-inclusion-driving-innovation-and-success/





Assess risks and opportunities

Identify and evaluate how water impacts your business and stakeholders

Map your portfolio exposures and impacts.

Water risks are location-specific, but affect the global economy. Some sectors and areas have higher water needs and stress. Availability of corporate water-related data is improving, with nearly 5,000 corporates reporting against CDP's water questionnaire — providing granular water data at a facility and river basin level. Start by assessing water risks across your financing and insurance activities by sector. CDP's <u>Water</u> <u>Watch index</u> is a good place to start.

Develop narrative climate scenarios.

Narrative climate scenarios can help boards to explore how the 'real world' physical risks of water stress could impact government policy, consumer preferences and technological development and nature-related risks. This is alongside understanding the potential market reaction to these risks and identifying key triggers that may create cascading risks.

Invest in water efficiency.

Limiting over abstraction in rivers and lakes and depletion of aquifers by reducing water wastage and using water more efficiently boosts security and productivity. Desalination can supplement water supply but isn't a universal solution as it depends on being near to the sea, costly capital intensive infrastructure and high energy use – which is why most plants are located in higher income countries³⁸. Furthermore it can cause harm to marine life due to waste discharge.

The finance sector can help by incentivizing the circular economy. This can be done by investing in technologies for better water use and treatment, reducing pollution and recovering valuable materials from waste discharge — which can also realize new revenue streams — and upgrading infrastructure for improved water management. However, firms should ensure their financing addresses the root causes of water stress, and they're not supporting 'big-ticket' infrastructure projects that could 'derail' essential actions by diverting political focus and resources, reducing the motivation for efficient water use.

³⁸ The state of desalination and brine production: A global outlook By E Jones et al <u>https://idadesal.org/wp-content/uploads/2019/04/The-state-of-desalination-2019.pdf</u>

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Use change levers

Use your influence to support sustainable water usage and management.

Engagement drives systemic change.

We are at a crucial time for climate action. Positive tipping points such as the 1987 Montreal Protocol – a global agreement to protect the ozone layer by phasing out ozone depleting substances – can propel society forward. Financiers adopting an inclusive and collaborative approach with stakeholders can improve the collective understanding of water and climate-related financial risks. Moving these risks from niche to well-known is crucial for business engagement, and will create the right conditions for action to mitigate risks and seize opportunities³⁹. Firms' disclosures through CDP provide financiers with relevant insights into the management of water and climate risk management, enabling direct C-suite engagement for both investment and relationship managers. Financial institutions have shifted the climate conversation by advocating for climate disclosures and engaging upon the substance. Now, they must encourage water disclosure from their stakeholders.

Make access to capital contingent on effective and efficient water management.

The first step for a financial institution seeking to understand the water-related risk in its portfolios is to engage on the water footprint of the goods and services that it is financing to ensure that it is fair and sustainable. The water footprint looks at how much water is consumed — when and where, and measured over the whole supply chain of the product or service. To ensure fairness it must demonstrate zero pollution; sustainable withdrawal; universal access to safe water, sanitation and hygiene (WASH); protection of nature; and resilience to droughts and floods⁴⁰.

Funding actions to enhance water fairness positively impacts the environment and community, making supply chains more resilient. This is crucial for reducing risks like water scarcity, loss of operational license, and legal issues, ensuring better financial returns in the future.

Communicating these benefits — such as cost savings, reliable and quality water supply, and positive environmental impact — to stakeholders encourages their support for sustainable practices. This supports advocacy for policies and capital alignment with sustainable outcomes.

³⁹ Global Tipping Points Report 2023, led by University of Exeter Global Systems Institute

⁴⁰ The Glasgow Declaration for fair water footprints. "Towards Fair Water Footprints: Understanding the water footprints of the Global North and dependency on water use in the Global South"

In assessing how to manage your risks and opportunities, boards should consider:

- The levers of change you as a financial institution can directly control – such as product offerings, terms and conditions, capital allocation and stewardship, and industry collaboration to build knowledge and innovate solutions. A key first step is to ask stakeholders to complete CDP's full questionnaire which guides companies to provide structured relevant information on their freshwater use, dependency and management, helping users to determine their exposure to water-related financial risks.
- What you can shape and influence but not control such as industry advocacy with policymakers to prioritise sustainable water use and build resilience to climate change and protect nature; client and investee engagement to change behavior, build capacity and improve data; and enable the conditions for positive tipping points.
- Factors outside of your control such as geo-political events, pandemics and environmental change – and the measures you can instigate to improve your institution's level of resilience.

Social norms are changing. Financial institutions are expected to behave 'responsibly' and will be held accountable for their actions. They not only face the potential for reputational harm, but increasingly face the prospect of litigation.

Boards must manage their businesses while considering the interests and impacts for their shareholders and other stakeholders, including employees, communities, and more. Since the science, available data, technology and policy environment are evolving rapidly, current actions may not be the best course when reviewed with the benefit of hindsight. The social and environmental implications of water scarcity mean it is imperative that you have oversight of the process to identify and assess the double materiality of your institution's financing activities and provide the rationale for decisions made by disclosing its priorities, processes and actions.



Document and disclose

Transparency drives accountability, supports trust and helps to mitigate risk. As financial institutions are dependent upon corporate water-related disclosures, they should encourage transparency. By example, CDP's questionnaire partially <u>aligns</u> with the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD). It provides a framework enabling Boards to meet existing climate disclosure requirements and the evolving nature and social disclosures of firms covering their business and supply chains.

Conclusion

The water crisis presents foreseeable, material and systemic risks. Financial institutions must broaden their climate focus beyond carbon emissions and adopt a systems approach to holistically address the impact of climate change and nature loss. By building their capability to identify, assess and evaluate water-related impacts and dependencies, and deploying the levers of change available to manage the risks and opportunities, boards can steward their business, driving long term profitability, benefiting the environment and enabling the communities they serve and the global economy to thrive.





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About CDP

CDP is a global non-profit that runs the world's environmental disclosure system for companies, cities, states, and regions. Founded in 2000 and working with over 700 financial institutions representing more than US\$142 trillion in assets. CDP pioneered using capital markets and corporate procurement to motivate companies to disclose their environmental impacts, and to reduce greenhouse gas emissions, safeguard water resources and protect forests. Over 24,000 organizations around the world disclosed data through CDP in 2023, including more than 23,000 companies worth two thirds global market capitalization, and over 1,100 cities, states, and regions. Fully TCFD aligned, CDP holds the largest environmental database in the world, and CDP scores are widely used to drive investment and procurement decisions towards a zero carbon, sustainable and resilient economy. CDP is a founding member of the Science Based Targets initiative, We Mean Business Coalition, The Investor Agenda, and the Net Zero Asset Managers initiative. Visit cdp.net or follow us @CDP to find out more.

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