

Nature in Green Finance

Bridging the gap in environmental
reporting

August 2023



Executive summary



556 FIs

disclosed
environmental
data through CDP's
climate change
questionnaire in
2022, a

67%

increase since
2020.

One-fifth of ecosystem services are at risk of collapse. Recognizing nature-related risks and opportunities has become critical, with over half of the world's total GDP highly dependent on nature and its services. Climate change and the degradation of nature are inextricably linked, and therefore must be addressed in an integrated manner.

Standards such as the Task Force on Climate-related Financial Disclosures (TCFD) have paved the way for nature-related disclosures such as the Kunming-Montreal Global Biodiversity Framework (GBF) and the forthcoming Taskforce on Nature-related Financial Disclosures (TNFD).

As nature-related disclosures are set to become a business norm, this report assesses the readiness of financial institutions to build on their climate reporting towards holistic climate and nature disclosures. The report analyzes the current state of environmental reporting by financial institutions with a focus on climate change, forests and water security.

In 2022, 556 financial institutions disclosed environmental data through CDP's climate change questionnaire, a 67% increase since 2020. In reviewing the data disclosed by these financial institutions in 2022, we categorized the findings in accordance with the four base pillars of the TCFD and TNFD: Governance, Risk and Opportunities, Strategy and Implementation, and Metrics and Targets. The findings underscore the urgent need for financial institutions to integrate nature-related risks and opportunities into financial decision-making. While climate change is now widely considered within financial institutions' strategies, disclosure and action on forests, water, and broader nature-related issues lag significantly behind. However, several trends indicate a gradual shift in financial institutions moving beyond tackling climate change in isolation, to addressing nature in tandem.

Urgent action, based on a holistic approach, is needed to avoid tipping points and ecosystem collapse, and to reach net-zero emissions by 2050.

The initial efforts of financial institutions to disclose their forests and water-related impacts demonstrate the intent of the sector to act on climate change in synchrony with nature. However, the persistent and significant gap in actions to address climate and nature-related risks and opportunities is concerning. Urgent action, based on a holistic approach, is needed to avoid tipping points and ecosystem collapse, and to reach net-zero emissions by 2050.

Financial institutions, regulatory bodies and standard setters play vital roles in facilitating a system-wide transformation to address these risks and opportunities together. The forthcoming disclosure guidelines and recommendations from the TNFD, due for release in September 2023, will significantly influence the future of nature-related financial disclosures. Financial institutions making their first cross-theme disclosures through CDP are positioning themselves to implement recommendations, proactively manage nature-related risks and capitalize on emerging opportunities.



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Summary & key findings



In 2022, CDP's portfolio-focused, TCFD-aligned questionnaire for FIs was expanded to cover nature-related issues.

Introduction

Limiting warming to 1.5°C is unachievable without protecting and restoring nature. Encouraged by the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, voluntary and mandatory climate-related disclosures have not only become mainstream, but are also helping to usher in new frameworks for financial institutions on nature-related disclosures.

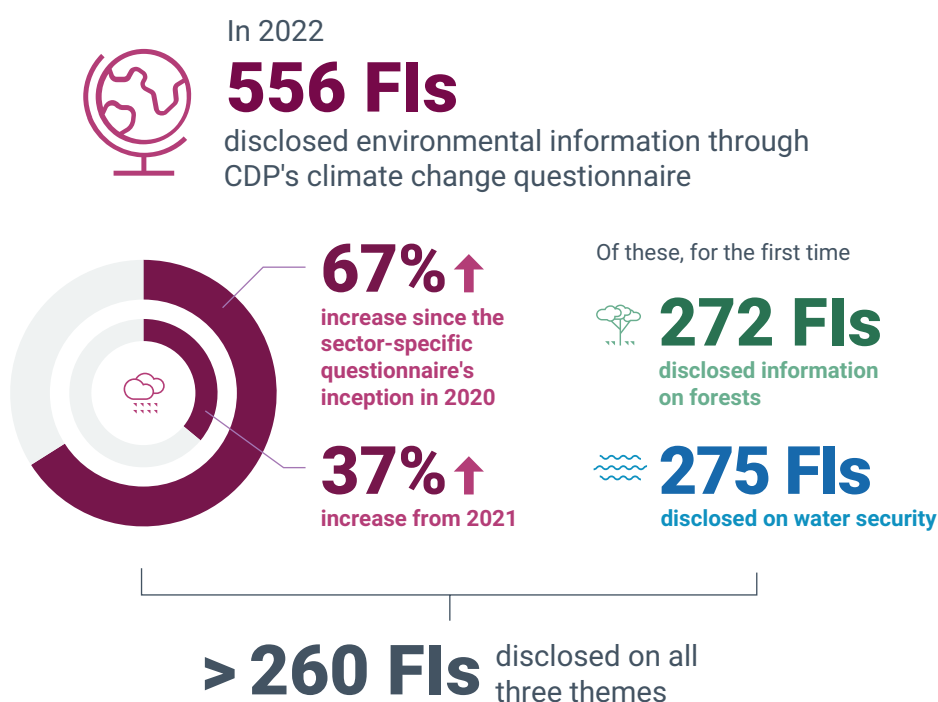
The growing desire and recognition of the need for a holistic approach to building a resilient and green financial system is most recently evident in the Kunming-Montreal Global Biodiversity Framework (GBF). An outcome of COP15, the GBF commits governments worldwide to protect 30% of the planet's land and sea; cut, phase out, and otherwise reform environmentally harmful subsidies; and increase finance flows for protecting and restoring nature.

As the definition of a 'green, resilient' financial system evolves, corporate disclosure must reflect the interconnectedness of all nature-related impacts and crises. With the World Economic Forum estimating that US\$44 trillion of economic value generation - over half of the world's total GDP - is moderately or highly dependent on nature and its services, nature-related risks and opportunities are materially significant for FIs. Recognizing this, the Global Biodiversity Framework's Target 15 commits governments to take measures to encourage and enable companies to assess and disclose their risks, impacts, and dependencies on nature by 2030.

Further, the Taskforce on Nature-related Financial Disclosures (TNFD) is preparing to roll out recommendations akin to the TCFD, setting the stage for nature-related disclosures to become a business norm. The [TNFD](#) builds on the synergies in framework design of the TCFD, with their draft disclosure recommendations using the four pillars of Governance, Strategy, Risk Management, and Metrics and Targets of the TCFD as a base. Therefore, we structure our findings of FIs' climate and nature-related disclosures in this report according to these pillars, acknowledging that once the TNFD recommendations are final, there may be some changes and adaptations to this approach.

CDP has helped FIs prepare for this imminent shift in disclosure standards and requirements. In 2022, our portfolio-focused, TCFD-aligned questionnaire for FIs was expanded to cover nature-related issues, including commodity-driven deforestation, water security, and high-level questions on biodiversity, offering FIs an opportunity to get ahead of the curve.

This report presents insights into the initial state of environmental reporting and action by FIs, based on disclosures by FIs through CDP – the first year that FIs have been asked to disclose on these environmental issues together.



CDP found that while addressing climate change is widely considered within business strategies and the asset allocation process of FIs, disclosing on forests, water security, and broader nature-related issues lags considerably behind. One of the primary reasons cited for not addressing forests or water security is that FIs see these issues as important, but not an immediate priority. Many FIs do not yet recognize that addressing climate change effectively necessitates consideration of nature-related issues.



32%

of FIs have board-level oversight of nature-related issues.



20%

of FIs are assessing their exposures to nature-related risks.

By focusing on a variety of TCFD-aligned disclosure indicators for climate change, and parallel indicators for forests and water security, a summary of our findings is as follows, presented in accordance with the TCFD four base pillars. **There are several trends that indicate an initial shift towards addressing nature impacts holistically:**

- ▼ Over 270 FIs voluntarily disclosed some information about their current level of action on forests, water security and biodiversity.
- ▼ Some leading FIs have started to implement processes to address nature-related risks and opportunities alongside climate change.
26-28% of boards have business strategies or financial planning influenced by nature-related risks and opportunities.
- ▼ Many more FIs are aware of the strategic significance of doing so, signaling their intention to address nature-related risks and opportunities within the next two years.
Board oversight and assessments of nature-related risk exposures rise to 51% and 45-47%, when including those FIs that intend to address these issues within the next two years.
- ▼ Across many disclosure metrics, the current level of action on forests and water is quite similar – where there is competence and leadership on one aspect of nature, this may be indicative of action on nature more broadly.



Key findings

1



Governance

Only a small group of leading FIs currently have the top-down leadership to oversee the integration of climate and nature in financial decision-making processes.

- ▼ 91% of FIs reporting to CDP have board-level oversight of climate-related issues, compared to 32% with oversight of forests and/or water-related issues.
- ▼ Even fewer FIs have at least one board member with competence on climate (68%) and/or nature-related issues (24%), underscoring the need to enhance board-level competence on environmental issues as a whole.
- ▼ Board-level oversight focuses significantly more on the impact that environmental risks and opportunities have on FIs' financing activities, than the impacts of their financing on the environment.
- ▼ Where climate-related management processes are in place, these mainly report directly to the board at regular intervals. In contrast, the majority of FIs that have nature-related management processes do not report directly to the board and are noticeably irregular - usually reporting "as important matters arise".

2



Risks and opportunities

At present, most FIs do not have the processes in place to adequately assess the size of nature-related risks and opportunities that their portfolios are exposed to. Critically, the majority of those FIs that are beginning to assess their portfolio exposure are identifying financially material risks and opportunities.

- ▼ 85% of FIs are assessing their portfolio exposures to climate-related risks and opportunities, compared to 20% assessing their nature-related risk exposures.
- ▼ These numbers rise to 95% assessing climate-related risks, 47% forests and 45% water security when including the number of FIs that plan to do so within the next two years.
- ▼ Whilst a subsequent 72% of FIs have identified climate-related risks in their portfolio with the potential to have a substantive financial or strategic impact on their business, 10% and 13% FIs have done so for forests and water security – meaning that over half of those that are assessing their portfolio exposures are identifying material risks.



FIs disclosed finding climate and nature-related opportunities aggregating up to

US\$5.35 trillion

A rising tide of FIs are identifying greater climate and nature-related opportunities than risks – signaling that the momentum behind green financing solutions could be a vital catalyst for FIs to take nature seriously.

- ▼ Across climate change, forests, and water security, more FIs have identified more financially substantive opportunities than risks.
- ▼ FIs estimate on average that the potential upside from opportunities is 4.5x greater than the potential downside stemming from risks they face from climate change, forests, and water, with FIs disclosing that they find opportunities aggregating up to US\$5.35 trillion in value, compared to reported risks totalling up to US\$1.20 trillion.
- ▼ Over 50% of the identified financial opportunities related to forests and water are directly tied to the development of financing products and solutions that support sustainable forest risk commodity supply chains, water security, or resilience. Examples include the facilitation of green and sustainability-linked bonds and loans, and building resilience through innovative and tailored insurance products.

These initial evaluations underestimate the scale of nature-related risks, especially when compared with the scale of risks recognized by real economy companies. However, this acknowledgment of the financial materiality of nature by leading FIs represents a positive first step in the industry, indicating a desire for tools, guidance, and consensus on assessing the nature-related risks and opportunities they face.

3



Strategy and implementation

Climate change now has an influence on business strategies or financial planning of nearly all FIs (95%), and an increasing minority of FIs' strategies are also influenced by broader nature-related risks and opportunities (26% and 28% for forests and water security respectively).

- ▼ Furthermore, most FIs are capitalizing on opportunities to provide products and services that enable their clients to mitigate climate change (81%). In contrast, only 23% and 26% do so for forests and water security, highlighting an untapped opportunity to support businesses to halt and reverse nature loss.

53%



of banks are starting to include climate-related covenants in financing agreements.

23%



have started including forest-related covenants, and

21%



have some covenants related to water security.

Many FIs undertake climate-related scenario analysis to effectively assess the financial impacts of climate change on risks and returns. Despite the comparative lack of mainstream guidance to include nature in scenarios analysis, some leading FIs are already expanding their climate-related scenario analysis by incorporating forest and water-related factors.

- ▼ 65% of FIs conducted climate-related scenario analysis in 2022, up from 57% in 2020, whilst 7% and 10% did so for forests and water security in 2022 respectively. Most of these nature-related scenario analyses are being conducted as part of climate-related scenario analysis, indicating that FIs are taking an integrated approach. This is promising, as market leaders are aligned with the TNFD's [goal](#) to work towards using scenarios that fully integrate considerations of climate and nature.

Nature-related financing policies and engagement strategies are yet to be established and comprehensively implemented.

- ▼ For climate change, 59% of FIs have a policy framework which includes climate-related requirements that their clients/investees need to meet. For forests and water security, this drops to 26% and 19% respectively, or 46% and 40% when including FIs that intend to introduce a relevant policy framework within the next two years.
- ▼ A growing number of banks (53%) are starting to include climate-related covenants in some of their financing agreements. An emerging 23% of banks have started including forest-related covenants and 21% have some covenants related to water security. The majority of their associated credit and lending policies are focused on the direct operations of their clients.

4



Metrics and targets

Disclosure of climate-related portfolio impact metrics has become increasingly mainstream, in part driven by clear guidance from the Partnership for Carbon Accounting Financials (PCAF).

- ▼ 66% of FIs measured their portfolio impacts in 2022, up from 51% in 2020. Similarly, 219 FIs (39%) disclosed a figure for their absolute financed emissions in 2022, up from 84 FIs (25%) in 2020.
- ▼ 79% of FIs that are disclosing financed emissions through CDP (173 of 219 FIs) referenced PCAF and/or PCAF's Global GHG Accounting and Reporting Standard for the Financial Industry as their chosen methodology for calculating financed emissions.



Disclosure of nature-related portfolio impact metrics for FIs remains nascent in the absence of clear guidance on tools and methodologies to use. 10% of FIs currently measure their portfolio impact for forests and water security and, encouragingly, an additional 30% plan to do so within the next two years.

- ▼ Presently, most FIs are reporting dependency and risk-based portfolio exposure metrics on nature instead of portfolio impact metrics. Planned developments by the Partnership for Biodiversity Accounting Financials (PBAF) and guidance from the TNFD will be critical to support FIs to report their portfolio impacts on nature.
- ▼ Some leading FIs are using bespoke methodologies – for example, calculating their financed water withdrawal footprints or assessing the total land under sustainable management. In other instances, regulation is driving the calculation of water and biodiversity-related impacts, such as the EU SFDR regulation to disclose against relevant Principle Adverse Impact indicators.

Financed emissions – those associated with FIs' investments and lending activities – are 750x larger than reported operational emissions on average, underscoring the need for FIs to prioritize driving real-economy emissions reductions across their portfolios. This figure varies significantly across regions, from 250x in Europe, to 270x in the Asia-Pacific region, to 11,000x in North America.

- ▼ The quality of financed emissions reporting is still in its infancy – key sectors and asset classes are often excluded from calculations, and the methodological assumptions and underlying data quality are seldom disclosed.

Setting meaningful targets remains a serious hurdle for many FIs. Only 29% (159 FIs) have set portfolio targets for climate change. The remaining majority focus solely on reducing their operational emissions (46%, 258 FIs). Only 11% (59 FIs) of those setting portfolio climate targets are committed to or have secured validation from the Science-based Targets Initiative (SBTi).

- ▼ Science-based targets for nature have launched for corporates. FIs should encourage portfolio companies to work towards setting Nature SBTs.
- ▼ To further enable the disclosure of their environmental targets beyond climate change, CDP has introduced a question in 2023 allowing FIs to disclose targets for deforestation-free and/or water-secure financing.

►► Calls to action

Financial institutions (FIs) are acknowledging the importance of climate-related considerations and the interconnectedness of forests and water security in overall climate resilience.

However, the current gap in actions on addressing climate and nature-related risks and opportunities must urgently be addressed in order to achieve the target of reaching net-zero emissions by 2050, whilst also preventing ecosystem collapse.

CDP calls on the following actors to facilitate a system-wide transformation to address these together.



►► **Call to action for financial institutions (asset managers, asset owners, insurers and banks)**

- 1** Disclose detailed portfolio impact metrics (in line with the PCAF Standard and emerging PBAF standards).
- 2** Integrate nature-related considerations into their strategies and financial planning and establish governance processes to oversee environmental issues and impacts holistically.
- 3** Prepare for likely mandatory disclosure requirements by implementing the forthcoming recommendations from the TNFD, including sector-specific guidance for FIs and continue using CDP's questionnaire to comprehensively report across environmental issues.
- 4** Proactively identify and manage portfolio exposure to nature-related risks and opportunities through qualitative and quantitative risk management processes.
- 5** Engage with real economy companies and industry initiatives, signaling demand for nature-related disclosures and data to be able to assess their portfolio risk exposures.
- 6** Set portfolio emissions reduction targets in line with the latest climate science, and disclose commitments and targets on environmental issues more generally, going beyond climate change.
- 7** Influence and engage their clients and support them on their journey to a net-zero, nature-positive future, futureproofing their clients' businesses as well as their own profit and loss statements (P&Ls).

►► **Call to action for governments, central banks, regulators, supervisors and stock exchanges**

- 1 Introduce [High Quality Mandatory Disclosure](#) requirements for corporates and FIs¹.
 - 2 Create an enabling environment to encourage all corporates and FIs to assess and disclose their risks, dependencies, and impacts on nature.
 - 3 Align financial and fiscal policies with a broader set of environmental sustainability objectives.
-

►► **Call to action for standard setters**

- 1 Ensure standards are in place to streamline reporting, enable comparable data to inform capital allocation decision-making, and to maximize global alignment for meeting global environmental goals.
 - 2 Work towards incorporating full environmental impacts across sustainability reporting standards to improve transparency, accountability, and meaningful action toward a nature-positive world.
 - 3 Coordinate efforts to ensure harmonization and interoperability of standards to avoid market confusion.
-

In summary, this report underscores the urgency and opportunity in redefining holistic environmental action, incorporating all nature related impacts. While challenges persist, initial efforts are promising and indicative of a paradigm shift in the financial sector towards a sustainable, nature-inclusive approach. The rest of this report provides a more detailed analysis of financial institutions' current environmental disclosures, along with practical insights and recommendations for all stakeholders.

¹ In 2021, CDP published [five main recommendations](#) for high-quality mandatory climate disclosure. Given the evolving landscape of disclosure regulation into more than climate and encompassing biodiversity and nature across the realms of land, freshwater, ocean and atmosphere, CDP is now updating the principles by drawing from the new policies and voluntary initiatives. The revised principles are currently under consultation and will be published by Q3 2023, together with an analysis of jurisdictional progress on implementing environmental disclosure regulations.

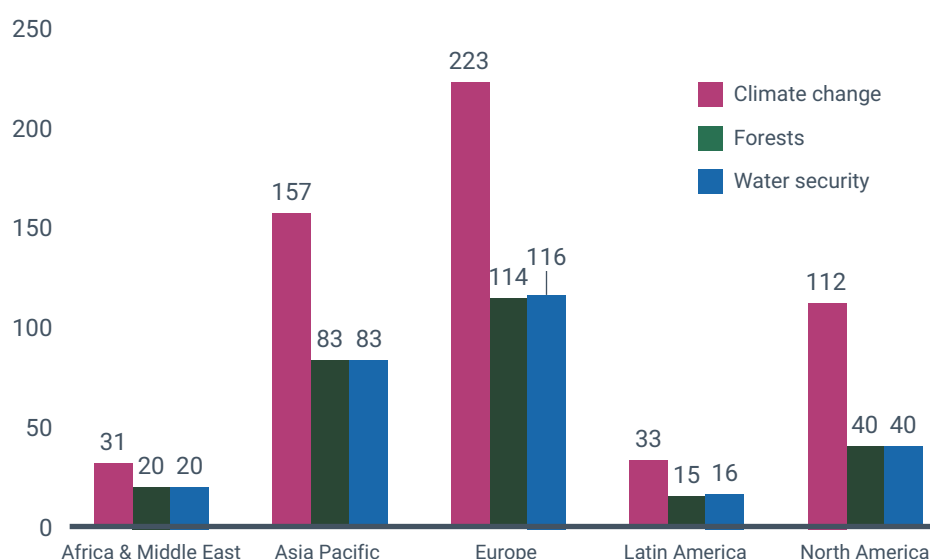
Sample overview and detailed findings disclosing financial institutions

The sample of FIs that we base these findings on, disclosed through CDP between April and August 2022. In 2022, 556 FIs disclosed through CDP's climate change questionnaire for Financial Services (FS) companies.

This represents a 37% increase from 2021, and a 67% increase from 2020, when the sector-specific questionnaire was launched. Of the 556 disclosers, 272 FIs disclosed information on deforestation, whilst 275 disclosed on water security².

Over 75% of these disclosing FIs are publicly listed companies, including some of the world's largest banks, asset managers, asset owners and insurers, representing over US\$8 trillion in market capitalization.

Figure 1: Regional breakdown of responders



² For Forests and Water, the number of companies that saw the questions depended on how they answered C-FS0.7, indicating the exposure of their financing towards certain sectors. If they have sufficient exposure (>20%) to sectors with a critical impact on deforestation or water security (defined in alignment with CDP's materiality matrices), then they were requested to disclose on the associated forests and/or water questions. Of the 556 disclosers CDP's FS questionnaire, 556 disclosed to climate change, of which 368 saw Forests questions, and 372 saw Water Security questions.



FIs from

52+ countries

disclosed in 2022, and between them, they undertake multiple financial activities.

270
Fls

undertake
banking



148
Fls

conduct
insurance
underwriting



208
FIs

invest as
asset
owners



259
Fls

invest as
asset
managers



Financial institutions, including investors, banks and insurers are all at different stages of action on nature, with different drivers and tools available to meet their requirements. This report does not aim to compare these sub-sectors with one another.



Detailed findings

1



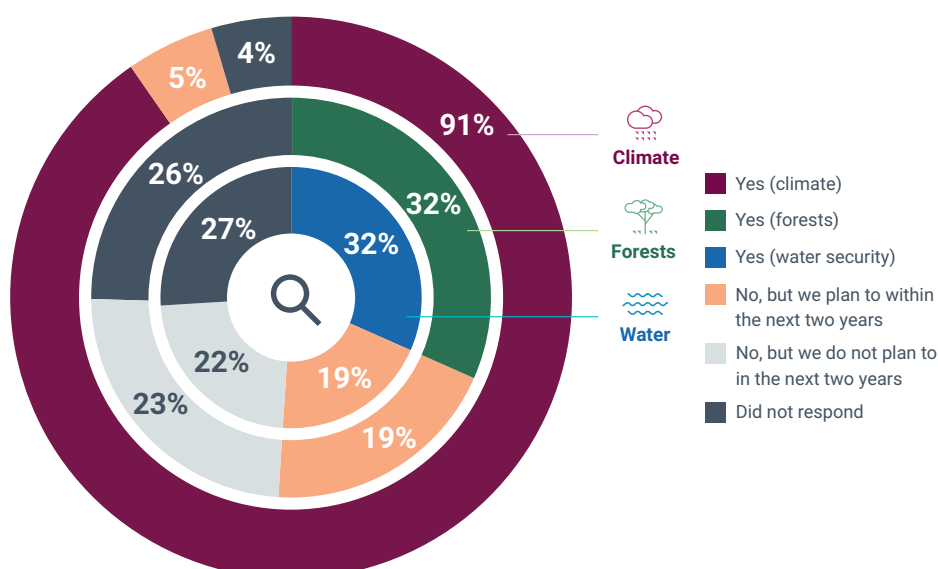
Governance

Establishing nature-related oversight in organization-wide governance processes is critical to the systematic integration of nature-related issues across FIs. Only a small group of leading FIs currently have the top-down leadership to oversee this integration. Disclosures underscore the need for the sector to enhance board-level expertise and governance mechanisms that consider nature-related risks and opportunities, alongside climate change.

Board-level oversight

Board oversight is a key indicator of how seriously a business is taking environmental concerns as part of their oversight of risk and performance management. Almost all (91%) financial institutions reporting through CDP have board-level oversight of climate-related issues. However, only 32% of financial institutions disclose that they have oversight of forests and/or water-related issues, and an additional 19% do not, but are currently planning to have this oversight within the next two years.

Figure 2: Is there board-level oversight of the issues within your organization?



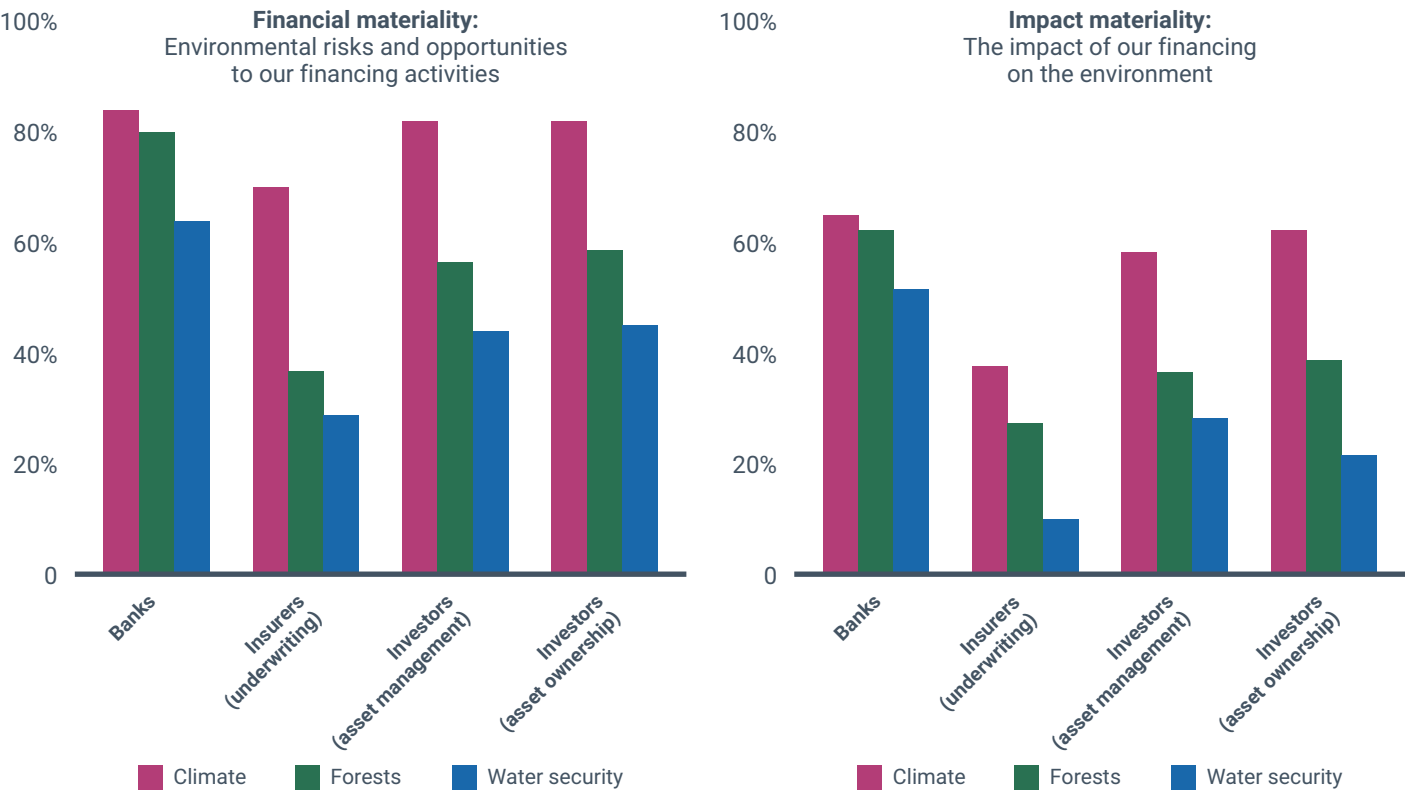
Board-level oversight: Competence

Another key indicator of the strength of governance processes is the skills and competence of the board to assess climate and nature-related risks and opportunities. When asked if their organizations have board members with competence on environmental issues, 68% disclose having at least one board member with competence for climate-related issues. That number drops significantly to 24% for forests and water security. The majority of FIs that do not have this competence on their board indicate that they see the issue as important, but not an immediate priority.

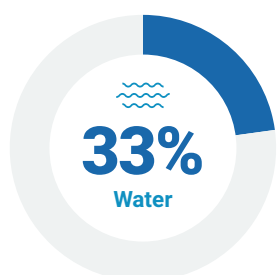
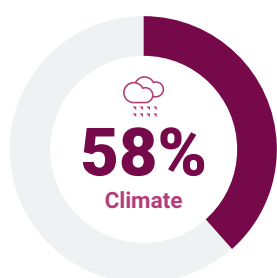
Board-level oversight: Materiality

The scope of board oversight varies significantly. We find that where there is board-level oversight, 81% of FIs have oversight of climate-related risks and opportunities that pertain to their financing activities (financial materiality), whilst 63% have the same for forests, and only 50% for water security. There are significant differences across those that have activities spanning banking, insurance, and/or investing (either as an asset manager and/or an asset owner), and across environmental themes.

Figure 3: Scope of board-level oversight (where applicable)



Percentage of FIs currently considering the environmental impacts of their financing environments, by scope:



We see a significant drop in the number of FIs that currently consider the impacts of their financing activities on the environment (impact materiality) – across all portfolios the scope is 58% (climate), 45% (forests), and 33% (water security). The EU's sustainable finance legislation (including the European Sustainability Reporting Standards (ESRS), and Principle Adverse Impact Indicators included as part of the Sustainable Finance Disclosure Regulation (SFDR)) requires that companies report on impact materiality, as part of an assessment of double materiality. In their draft [guidelines](#) for standard setting, the European Financial Reporting Advisory Group (EFRAG) notes that:

Impact materiality and financial materiality assessments are intertwined and interdependencies between the two dimensions should be considered.

The evidence of this interconnectedness to broader environmental issues at a macro-scale is clear – with over half the world's total GDP being moderately or highly dependent on nature and its [services](#).

CDP data shows that banks are leading the way, with the majority of banks disclosing through CDP demonstrating board-level oversight of climate and nature-related issues, whilst also considering both financial materiality and their own environmental impacts. There is a noticeable decline in considering the impact materiality of nature across underwriting and investing activities. As the understanding of the financial implications of nature loss evolves, especially with respect to the compounding relationship between climate change and nature, and as disclosure of environmental impacts becomes normalized, we can anticipate increasing pressure on boards to take stock of their impacts.

93%

of FIs have an individual or committee with responsibility for climate-related issues,

while

49%

have the same for forests and/or water-related issues.

Management processes

In addition to board-level oversight, robust management processes are necessary to effectively assess and manage climate-related risks and opportunities. 93% of FIs disclosed that they have an individual or committee with responsibility for climate-related issues, whilst 49% have the same for forests and/or water-related issues.

Over half of management-level positions or committees with responsibility for climate change report directly to the board (61%) or to the CEO (54%), but this reporting line drops to less than 30% for forests and water-related management processes (30% to the board, 25% to the CEO). Furthermore, while the reporting of climate change through these management processes occurs at regular intervals (at least annually, if not more frequently), most report nature-related issues infrequently, “as important matters arise”.

As we find in the subsequent section on risk and opportunity management, there is currently a gap in the number of FIs that have nature-related risk management and due diligence processes in place. This means that **there is likely an under-representation of nature-related risks coming to the attention of most boards.**



2



Risk and opportunities

Financial institutions must incorporate nature-related risk and opportunity assessments into their strategies and financial planning. At present, most FIs do not have the processes in place to adequately assess the nature-related risks and opportunities to which their portfolios are exposed. This gap in awareness means that most FIs remain vulnerable to unanticipated financial impacts. Critically, the majority of those that are beginning to assess their portfolio exposure to nature-related risks and opportunities are identifying financially material risks and opportunities.

As summarized by the [Cambridge Institute for Sustainability Leadership](#), ecosystem collapse and nature loss increases risk exposure for all financial institutions across their portfolio and operations. Growing awareness and action by central banks on nature-related risks, largely steered by the Network for Greening the Financial System (NGFS), is mainstreaming this topic as part of recent efforts to improve environmental risk management practices across banks and insurers.

For example, many banks face significant credit and reputational risks stemming from nature-related exposures eg through project finance in high-risk industries, and/or lending to SMEs in locations that are exposed to a greater level of risk³. Similarly, insurers are impacted by increased insurance claims following intensifying environmental disasters that lead to business disruptions, and pose other physical, transition and liability risks⁴. While there is increased acknowledgment of the materiality of nature-related risks, most insurers are not assessing these risks in their underwriting, according to a [global survey](#) and an [NGFS-INSPIRE](#) report.

There is substantial room for wider adoption and robust risk assessment processes. Encouragingly, an increasing number of FIs are identifying opportunities linked to forests, water security and biodiversity, signaling an exciting frontier of sustainability-driven innovation in the sector.

³ UNEP-FI, 2023, <https://www.unepfi.org/publications/tbfd-financial-market-readiness-report/>

⁴ https://www.cisl.cam.ac.uk/files/why_nature_matters.pdf

>50%

of FIs do not currently assess their forests and/or water-related risks, nor do they plan to do so within the next two years.

Risk and opportunity management and due diligence processes

Investors bear a fiduciary duty towards their beneficiaries, requiring that they identify and evaluate relevant and material risks to their investments while implementing measures to control these risks. This responsibility is judiciously upheld by financial institutions, who employ a multitude of risk management strategies to bolster the robustness of their financing and to secure the associated returns.

The decline of nature damages ecosystem services that companies rely upon, making nature loss a financial risk to companies and governments, financial markets, and even the physical assets of financial institutions:

- ▼ **Physical risks** to investors, lenders, insurers, governments will lead to financial instability, credit, market, liquidity, and business risks⁵.
- ▼ **Transition and liability risks** emerging from current and future regulation aimed at protecting nature loss might economically impact certain companies and related financial institutions.
- ▼ Nature loss materializes as a **financial risk** when these risks affect companies and governments, financial markets, and even the physical assets of financial institutions, leading to credit, market, liquidity, and business risks⁶.
- ▼ Climate change, in addition to posing its own physical and transition risks, is a key driver for nature loss and exacerbates the risks stemming from issues such as deforestation and water insecurity.

It is therefore critical that financial institutions have processes in place, such as portfolio risk assessments or transactional due diligence, to identify, assess, and manage all forms of risks across their financing portfolios.

Disclosures indicate a noticeable gap in risk assessment practices among FIs. 85% are assessing their portfolio exposures to climate-related risks and opportunities, compared to 20% assessing their forests and/or water-related risk exposures. These numbers rise to 95%, 47% and 45% (on climate change, forests and water security respectively) when including the number of FIs that plan to assess their portfolio exposures within the next two years.

⁵ <https://www.cisl.cam.ac.uk/system/files/documents/handbook-for-nature-related-financial.pdf>

⁶ See B.6.3 - https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_SPM.pdf

This breaks down by sub-sector as follows:

Figure 4: Are FIs assessing their portfolio's exposure to climate-, forest- and/or water-related risks and opportunities?



85%
of FIs are assessing their portfolio exposures to climate-related risks and opportunities.

Only **20%**
are assessing for forests and/or water-related risk exposures.

In total, over 90% of these portfolio assessments for climate change are at least in part, quantitative. In comparison, 60% of the assessments for forests and water involve quantitative aspects, with a much greater reliance on the use of qualitative-only assessments. This is partly due to the maturity of the landscape of tools and data available to FIs to assess climate and nature-related risks. Moreover, the nature of risk assessments is predominantly qualitative due to the challenge of obtaining relevant quantitative data. Although this brings complexity to nature-related risk assessments, it also emphasizes the value of qualitative analyses. These analyses, while not yet widespread, can offer vital insights into potential nature-related risks and serve as a strong foundation for the development of quantitative metrics in the future.

Risk assessment processes are often focused on high-emitting and/or high-risk sectors and companies. In cases of best practice, risk assessment processes are being guided by robust materiality



assessments to identify relevant companies and sectors within their portfolios. Most commonly, environmental considerations are integrated into a multi-disciplinary company-wide risk management process (climate change, 72%; forests, 63%; and water, 66%). Leading FIs tend to have a specific climate or ESG-related risk management process to address the unique characteristics of climate-related risks.

Of those FIs that are conducting due diligence assessments:

- ▶ The most common source of this information is directly from clients/investees, indicating the importance of these companies themselves collecting relevant environmental data and the significance of taking action. The next most frequent source is public data sources, highlighting the value of public disclosures to their stakeholders.
- ▶ FIs are most frequently focused on the following types of information per theme (see table below). **These are therefore key areas for real economy companies to advance the quality and quantity of the data they collect and disclose.** It indicates the growing demand by financiers of their clients/investees to have climate transition plans in place, as well as having forests and water-related policies.

Table 2: The most frequently considered types of information during the due diligence and risk assessment processes of FIs

	Climate change	Forests	Water security
1	Emissions data	Scope and content of forests policy	Scope and content of water policy
2	Emissions reduction targets	Commitment to eliminate deforestation/ conversion of other natural ecosystems	Water withdrawal and/or consumption volumes
3	Climate transition plans	Certification of forests risk commodities	Breaches to local water regulations
4	Energy usage data	Other	Other
5	Other	Origin of forest risk commodities	Water withdrawn from water stressed areas

Risk management case studies*

Upon analysis of the descriptions of these portfolio exposure assessments and due diligence processes, we see some examples of leading practice:



Banco Santander – Water stress calculator

Banco Santander acknowledges water is becoming scarcer for some of its clients and it must consider monitoring their vulnerability to this issue, especially in those regions where this concern is of relevance, such as in Brazil. Santander Brasil incorporates water stress into its Environmental, Social and Climate Change rating system for companies that it reviews. This model includes assessments of supply chain practices, fines, land degradation exposures, and a profile of the companies' environmental and social management processes. Water stress is explicitly included in the calculator used by Santander Brasil, factoring in the economic activities being undertaken, the river basin(s) that a company is exposed to, and the measures that those companies are adopting to save water.



Aegon – Responsible investment policy

Aegon⁷ includes biodiversity in their Responsible Investment Policy, which drills down to the individual investment policies of their subsidiary firms. In practice, they expect investee companies to assess and manage various risk drivers that could threaten biodiversity or drive deforestation in their direct operations as well as their supply chains. Aegon also engages directly with companies identified as being in high-risk sectors.



WHEB Asset Management – Thematic investing in water

Proprietary ESG screens and scorecards are used by some FIs, to identify vulnerable sectors and operating regions that may be designated as high risk or high impact to specific climate, forests and water security issues. These then have a broad range of implications for portfolio management, ranging from exclusion policies, to tilting of portfolio exposures, or in some cases a thematic, opportunistic approach such as that of WHEB Asset Management, who have a specific water management theme to some of their investments, investing in companies that derive at least 50% of their revenues from solutions to water pollution and water scarcity.

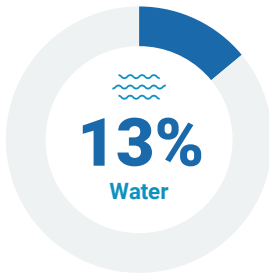
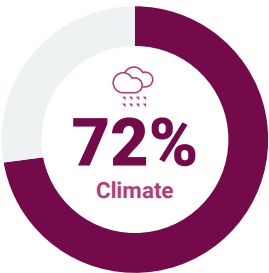
⁷ The case study above encompasses activities within the 2021/22 period and may not reflect recent or future evolutions of Aegon's Responsible Investment Policy.

* Please note that the case studies above and throughout this report encompass activities within the 2021/22 period, and they may not reflect recent or future developments of these activities.



10% and 13%

of FIs, respectively, have identified forests- and water-related risks in their portfolio.



FIs have identified related risks in their portfolios with financial or strategic impact

Risks and opportunities identified

Whilst 398 (72%) of FIs have identified climate-related risks in their portfolio with the potential to have a substantive financial or strategic impact on their business, only 35 (10%) and 48 (13%) have done so for forests and water respectively. It is a similar picture for opportunities, though a greater number are finding opportunities. Given that only 20% of portfolios are being assessed for their exposure to any nature-related risks or opportunities, this indicates that a majority of FIs that have conducted these assessments are already beginning to identify financially material risks and opportunities.

Table 3: Have you identified any inherent climate-, forests- and/or water-related risks/opportunities in your portfolio with the potential to have a substantive financial or strategic impact on your business?

	Risks identified			Opportunities identified		
	Climate	Forests	Water security	Climate	Forests	Water security
Yes	72%	10%	13%	82%	13%	15%
No (or left blank)	28%	90%	87%	18%	87%	85%

260 FIs

disclosed that they face a total of

US\$1.17 trillion 

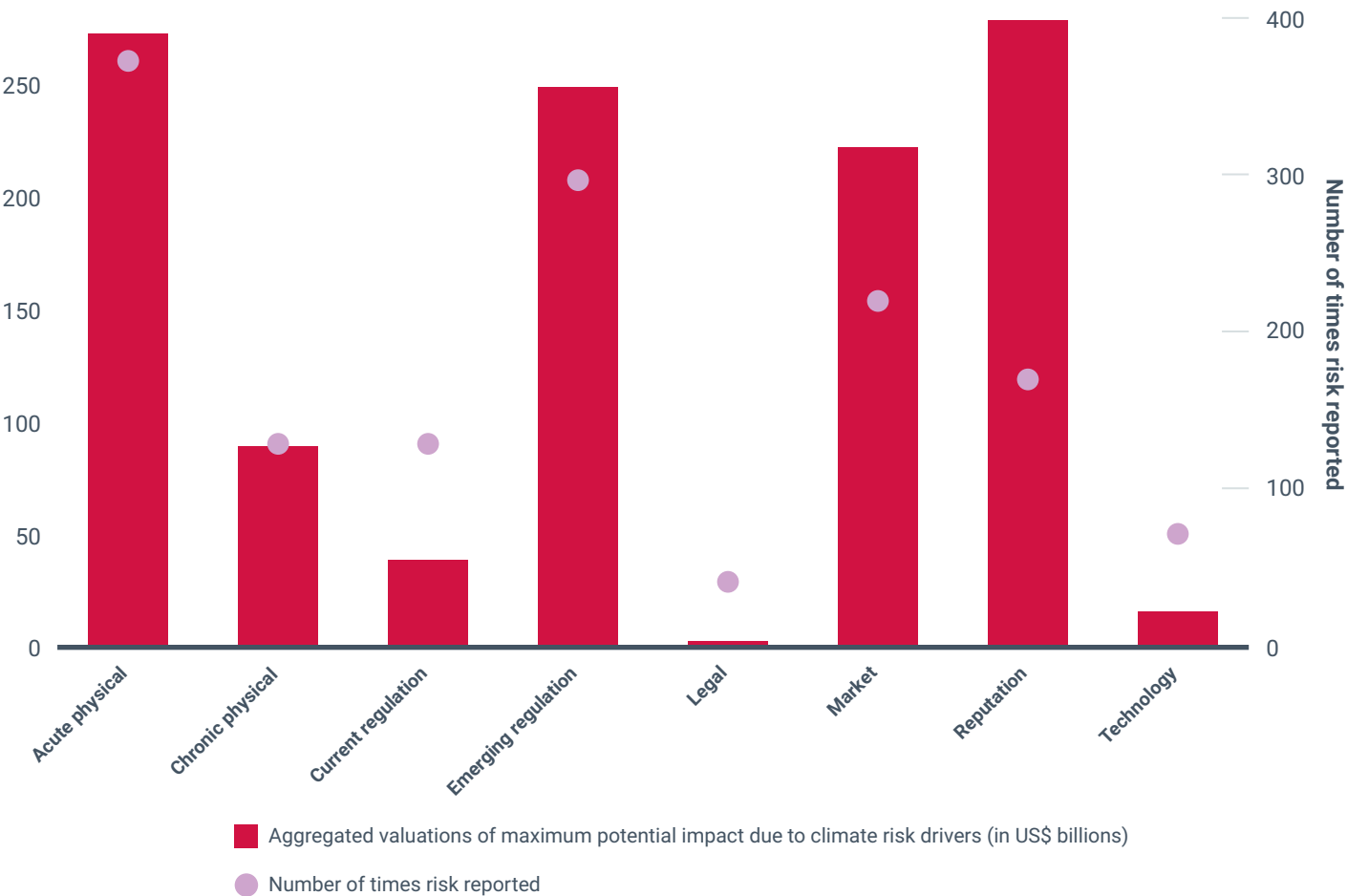
in potential risks due to climate change.

Risks

FIs identified climate-related risks with the potential to be financially substantive, totaled up to a maximum of US\$1.17 trillion, or on average (across the 260 FIs disclosing financial impact figures), US\$4.5 billion per FI.

There is growing understanding across FIs as to how both physical and transition climate risk can be assessed across portfolios. Transition risks drive the majority (70%) of risks valued, with 30% driven by physical risks.

Figure 5: Aggregated valuations of maximum potential impact due to climate risk drivers



11 FIs

disclosed that they
face a total of

**US\$3.57
billion** 

in potential risks due
to deforestation.

22 FIs

disclosed that they
face a total of

**US\$5.90
billion** 

in potential risks due
to water security.

In comparison to climate change, of the 10-13% of FIs detecting forests and water-related risks with the potential to be financially substantive, even fewer are able to calculate and disclose a figure indicating the size of those risks.

- ▼ 11 FIs disclosed that they face an average of US\$325 million of potential risks each, due to deforestation*. Some of these relate to the increased insurance claims liabilities and increased operating costs for their portfolio companies, whilst another common concern is the reduced demand and/or profitability of their products and services due to reputational damage associated with deforestation.
- ▼ 22 FIs disclosed an average of US\$268 million in potential risks each, due to water insecurity. These predominantly focus on acute and chronic physical risk drivers (flooding, drought, and water scarcity) that could increase operating costs, reduce production capacities, increase insurance claims liabilities, and lead to stranded assets.

Reputational climate-related risk drivers are on average the most costly risks perceived by FIs. Primarily, this is related to decreased revenues due to access to capital along with reduced demand for products and services, and it is driven by the increased concern from stakeholders. There is an increasing appreciation among FIs that forest-related reputational risks are also material. However, there is currently a significant gap between the perception of climate and nature-related reputational risks by FIs. As public understanding between climate change and nature loss grows, stakeholder concern may drive up nature-related reputational risks.

* Excluding outlier values.



BNP Paribas – Forest risk assessment*

Notably, one financial institution is leading the way. **BNP Paribas** disclosed that through the increasing awareness of deforestation, critical feedback from NGOs and civil society, and increasing risk of litigation as a financier of industries that may contribute to deforestation, they face sizeable potential financial risks driven by reputational concerns – in the order of 25% of their market value. This follows on from a detailed natural capital assessment that they have been running since 2017.

* Please note that the case studies above and throughout this report encompass activities within the 2021/22 period, and they may not reflect recent or future developments of these activities.

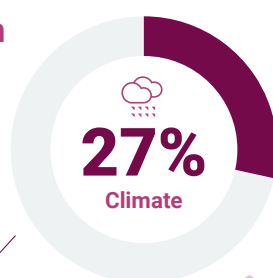
Climate and nature-related risk drivers

The gap in FIs' current level of risk assessment is further outlined when compared with the scale of risks reported by real economy companies in their disclosures through CDP. The following graphs highlight the most frequently reported risk drivers of financially material climate risks, as a proportion of the number of FIs that identified any material climate, forests, or water-related risks.

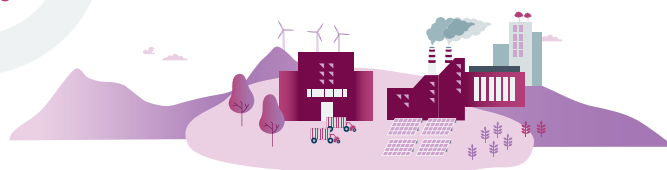
Climate change: Emerging regulation

Carbon pricing mechanisms, a form of emerging regulation, were the most frequently reported climate-related risk driver of financially material risks, identified by:

27% of FIs (108 of the 398 that identified financially material climate-related risks).



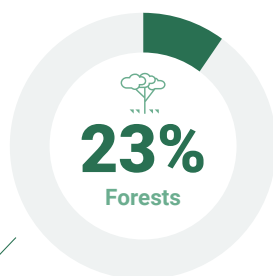
Climate change is only one driver of nature-related risks – to manage their exposures, FIs need to view forest and water-related risk more holistically.



Forests: Reputational risk

Reputational risk driven by negative media coverage (related to financing/insuring of projects or activities with negative impacts on forests) were the most frequently reported forest-related risk driver of financially material risks, identified by:

23% of FIs (8 of the 35 that identified forests-related risks).



CDP's 2022 Global Forests Report shows that companies identified forest-related risks of **US\$300 million** each on average. Worryingly, these might be underestimates, as there are blind spots in companies' assessments and management practices of forest-related risks:

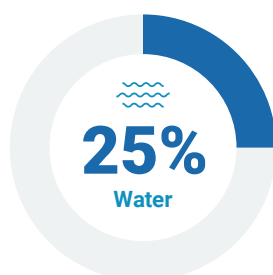
- ▶ Only **3%** of disclosing companies have conducted a comprehensive forest-related risk assessment, mapping their entire value chains and reporting locations of their operations and suppliers.
- ▶ Only one-third of companies (**31%**) have oversight and competence of forest-related issues, with management-level responsibility for both assessing and managing forests-related risks and opportunities.



Water: Acute physical risk

Flooding, an acute physical risk, was the most frequently reported water-related risk driver of financially material risks, identified by:

25% of FIs (12 of the 53 FIs that identified water-related risks).



- ▶ Flooding and drought, the next most common risk driver reported by 10 FIs, are both intrinsically linked to climate change. With flooding also being one of the most reported risk drivers for FIs on climate change, this highlights that risks in the climate-nature nexus are being identified by FIs.

- ▶ **US\$15.5 billion** has been stranded, or is at risk, based on [several case studies](#) from key sectors with high levels of water usage – changes in water regulation, high levels of pollution, and community opposition are all driving stranded assets.





Opportunities

An increasing number of FIs are identifying greater opportunities than risks across climate change, forests and water security, demonstrating that acceleration of green financing solutions could bolster FIs ability to prioritize nature as a factor in financial decision-making.

In total, FIs reported that they find opportunities aggregating up to US\$5.35 trillion in value across climate change, forests, and water*. Over 50% of the identified financial opportunities related to forests and water are directly tied to the development of financing products and solutions that support sustainable supply chains for forest risk commodities, and water security or resilience. Examples include the facilitation of green and sustainability-linked bonds and loans, and building resilience through innovative and tailored insurance products. This is similar for climate change, where over 80% of the opportunities are seen to be the creation of products and services. These opportunities are diverse, spanning various sectors and categories such as the creation of innovative environmental products and services.

FIs reported that they find opportunities aggregating up to US\$5.35 trillion in value across climate change, forests, and water.

**US\$5.28
trillion**



**in climate-related
opportunities
disclosed by**

264 FIs.

**US\$24
billion**



**in forest-related
opportunities
disclosed by**

16 FIs.

**US\$35
billion**



**in water-related
opportunities
disclosed by**

23 FIs.

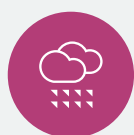
* Where possible, duplicated and unsubstantiated values in the top 5th percentile were removed before summing the maximum reported values of opportunities disclosed by financial institutions.

Opportunities case studies*



Garanti BBVA – Water footprint loan

BBVA has created a new sustainable loan that focuses on reducing companies' water footprint, a key priority in many companies' sustainability policies. The water footprint loan considers specific water indicators and CDP's Water score.



Citi – Supplier finance programme

Banks are able to play a role in helping their clients decarbonize their supply chains by incentivizing emissions disclosures, which may help to facilitate improving transparency in Scope 3 emissions and supply chain resilience.

Citi supported Vodafone's initiative to add environmental data reported via CDP as an additional factor to access preferential financing rates through [Vodafone's Supply Chain Finance](#) Programme (SCF). Eligible suppliers to Vodafone may now be able to access preferential SCF rates from Citi by disclosing environmental data through CDP and demonstrating improvements to their performance. This helps Vodafone meet its Scope 3 emissions targets, whilst rewarding suppliers that take environmental action.

* Please note that the case studies above and throughout this report encompass activities within the 2021/22 period, and they may not reflect recent or future developments of these activities.

The acknowledgement of the financial materiality of nature by leading FIs represents an important first step in the industry, indicating a desire to start using available tools and guidance to assess and properly value nature-related risks and opportunities. Even though the relative capacity and awareness of FIs to assess the different transmission channels and the extent of nature-related risks is still lagging in comparison to climate-related risks, there are green shoots in the sector. FIs that identify nature-related financial risks are better positioned to seize opportunities to develop products and solutions to halt and reverse nature loss. As the difficulties associated with valuing nature and ecosystem services are being resolved in time, FIs will be able to identify precise valuations of new available opportunities.

3



Strategy and implementation

Climate change now influences the business strategies or financial planning of nearly all disclosing FIs (95%), and an emerging minority of FIs' strategies are also influenced by broader nature-related risks and opportunities (26% and 28% for forests and water security respectively).

Climate strategies are essential for future-proofing portfolios and operations. A robust and well-informed strategy can be the difference between FIs that are aware of and able to address potential risks stemming from climate change and nature loss, and those that are not. A robust strategy can enable FIs to benefit from opportunities arising from the transition to a net-zero, nature-positive global economy.

To effectively assess the financial impacts on climate-related risks and opportunities and plan ahead, many FIs undertake climate-related scenario analysis. This is often employed alongside traditional bottom-up due diligence of companies as part of the portfolio construction process.

Scenario analysis

Scenario analysis uses various climate scenarios to stress test how potential risks and opportunities could evolve and impact a business. The models that underpin commonly used scenarios are tied to nature-related outcomes. However, most of the IPCC's global modelled mitigation pathways that reach net-zero are predicated on the assumption that forestry and land use change, reach net-zero emissions earlier (via reduced deforestation and reforestation) than sectors such as buildings, industry, and transport⁸. There is therefore a need to develop and implement tools and methodologies that adequately account for nature when conducting scenario analysis.

⁸ See B.6.3 - https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_SPM.pdf



65%

of FIs (336)
conducted
climate-related
scenario analysis
in 2022.

7%

of FIs (25) did so
for forests.

10%

of FIs (38) did so
for water.

Despite the comparative lack of mainstream guidance to include nature in scenario analysis, **some leading FIs are already expanding their climate-related scenario analysis by incorporating forests- and water-related factors.**

- ▼ 65% of FIs (336 out of 516 FIs) conducted climate-related scenario analysis in 2022, up from 57% in 2020, whilst 7% (25 out of 368 FIs) and 10% (38 out of 370 FIs) did so for forests and water, respectively.
- ▼ Most of these forests- and water-related scenario analyses are being conducted as part of climate-related scenario analysis, indicating that FIs are taking an integrated approach. This is promising, as market leaders are in alignment with the TNFD's **goal** to work towards the use of scenarios that fully integrate considerations of climate and nature.

The TNFD framework, set to be released in September 2023, will include guidance for corporates conducting nature-related scenario analysis. Pilot tests conducted by asset owners of the TNFD's draft methods indicate that there are ways in which the guidance could be used and adapted for FIs. This will be accompanied by efforts from the NGFS to develop a framework for identifying and assessing nature-related risks and nature loss scenarios, building on their climate scenarios, which are the most used by FIs disclosing through CDP (46%, or 155 out of 336 FIs currently conducting climate-related scenario analysis using NGFS scenarios). The influence of the work of the NGFS and the increasing prevalence of climate change within central banks' considerations is backed by the data – the sub-sectors conducting the most climate-related scenario analysis are banks and insurers (69% and 71% respectively).

Client and investee requirements and engagement

Engagement is a key lever that FIs can employ to preserve and enhance the value of assets on behalf of their clients and beneficiaries, which includes investees and clients addressing climate- and nature-related risks. To mitigate these risks from the real economy, FIs are including climate and nature-related requirements for their clients and investees across various internal and external-facing policy frameworks.

Nature-related financing policies and engagement strategies are yet to be established and comprehensively implemented.

- ▼ For climate change, 59% of FIs have a policy framework which includes climate-related requirements that their clients/investees need to meet. For forests and water, this drops to 26% and 19% respectively, or 46% and 40% when including FIs that intend to introduce a relevant policy framework within the next two years.

FIs include climate-, forests- or water-related requirements of their clients/investees across a variety of policies – some of these are included as part of general investment, lending and risk policies, whilst others are dedicated ESG or responsible investment policies. In many cases, these policies focus on sectors with higher exposures to material environmental risks.

- ▼ Asset managers and asset owners most commonly include these requirements in sustainable or responsible investment policies, or in their general investment policies/strategies.
- ▼ Banks generally include these requirements in their credit/lending policies, or their risk policies.
- ▼ Of the insurers disclosing through CDP, only one disclosed having a forests-related policy, whilst no insurers disclosed any water-related information – on climate change, 70% of responding insurers include such requirements in their insurance underwriting policy.





59%

of FIs have a policy framework which includes climate-related requirements that their clients/investees need to meet.

This drops to

26%

for forests, and

19%

for water.

Table 4: Most commonly disclosed policies which include climate-, forests- and/or water-related requirements that clients/investees need to meet.

Policy	CC	F	W
Banking			
Credit/lending policy	82%	86%	55%
Risk policy	39%	36%	13%
Investing (asset owner)			
Sustainable/Responsible investment policy	70%	83%	55%
Investment policy/strategy	40%	42%	27%
Investing (asset manager)			
Sustainable/Responsible investment policy	84%	69%	42%
Investment policy/strategy	33%	38%	26%
Proxy voting	39%	0%	0%
Engagement policy	42%	0%	0%
Insurance			
Insurance underwriting policy	70%	0%	0

Strategy & implementation case studies*



Société Générale – Forest policy

Société Générale disclosed details about their 2022 industrial agriculture and forestry sector [policy](#), outlining how it planned to engage companies in the palm oil and South American soy and cattle sectors to decouple the production of soft commodities from deforestation:

The main driver of deforestation and forest degradation is the expansion of agricultural land. Admitting the inadequacy of previous initiatives to fight deforestation, individual and collective efforts must be pursued to accelerate the decoupling of soft commodities production from deforestation. The Group is committed to progress on this path. Targeting full traceability is part of the solution. The Group recognizes that not all its clients have 100% traceability over their supply chains at the date of publication of this policy, but it requires that all of them work towards this goal. As such, from publication of this policy until the end of 2022, the Group will engage with its existing corporate clients that are active in the most sensitive sectors, as regards deforestation (palm oil and South American soy and cattle sectors), to assess their strategies to tackle deforestation. After this date, the Group will only provide financial products and services to clients:

- ▼ Committed to deforestation- and conversion-free activities (own operations and supply chain).
- ▼ Committed to establish and systematize traceability in their value chain and able to report progress in terms of scope of implementation and/or percentage of achievement on an annual basis.

In addition, and from the publication date of this policy, the Group will refrain from onboarding prospect companies active in palm oil or South American soy and cattle sectors that are not committed to deforestation- and conversion-free activities (own operations and supply chain) nor committed to establish and systematize traceability in their value chain.

* Please note that the case studies above and throughout this report encompass activities within the 2021/22 period, and they may not reflect recent or future developments of these activities.



53%

of banks are starting to include climate-related covenants in some of their financing agreements.

23%

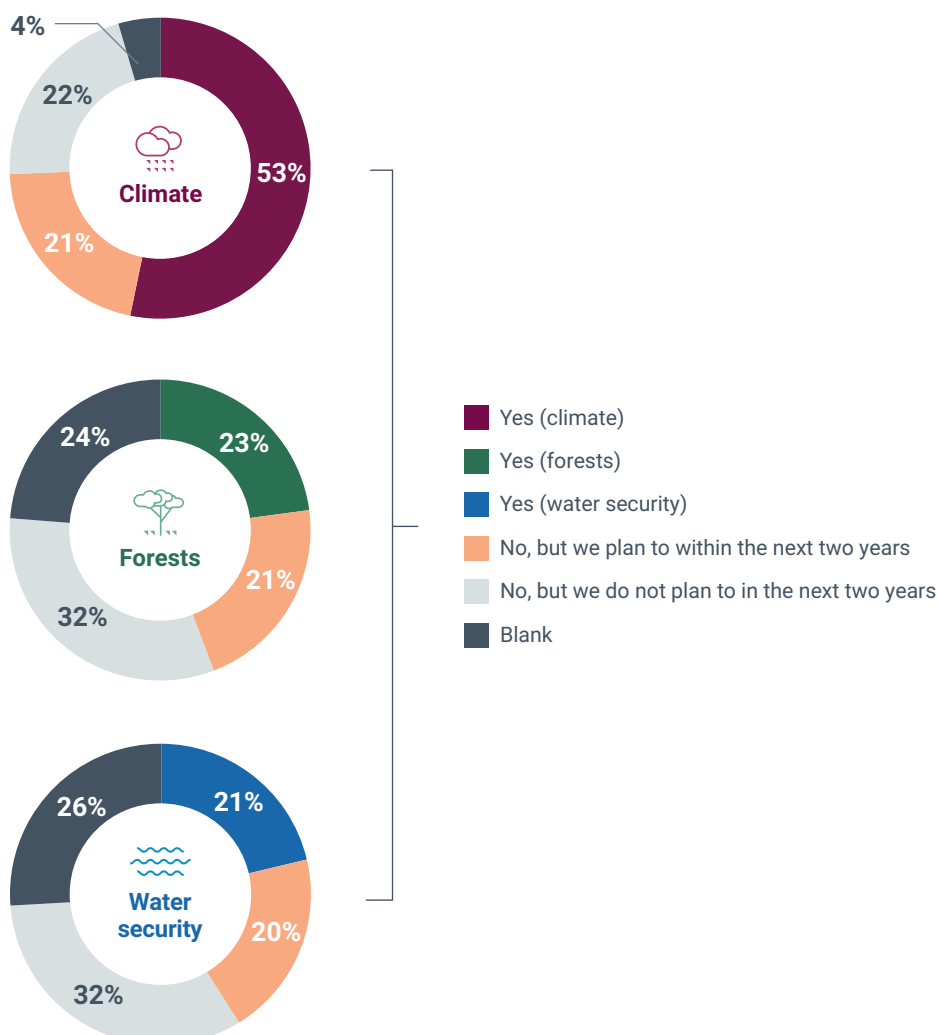
of banks have started including forest-related covenants.

21%

of banks have some covenants related to water.

A growing number of banks (53%) are starting to include climate-related covenants in some of their financing agreements. An emerging 23% of banks have started including forest-related covenants and 21% have some covenants related to water. Most of their associated credit and lending policies are focused on the climate-related implications on the direct operations of their clients.

Figure 6: Covenants implemented by banks



Examples of these range from covenants for syndicate loans in co-operation with other financiers, to utilizing the Green Bond Principles or Green Loan Principles to identify standardized requirements on a borrower/issuer's sustainability performance, for the margin/coupon on a sustainability-linked loan or bond. These are usually tailored on a case-by-case basis.

Shareholders are yet to fully exercise their voting rights on environmental issues outside of climate.

Engagement

FIs are focusing their engagements on clients exposed to greater climate, forests, and/or water-related risks, or non-targeted engagements which implement the policy frameworks detailed above. We see that the aim of these policies generally being to educate clients, enabling and incentivising changes to their client behavior. This reinforces the importance of FIs in catalyzing real economy change, in this case by creating capacity in the real economy to understand and address material environmental risks and opportunities.

Table 5: Primary types of client-related engagements

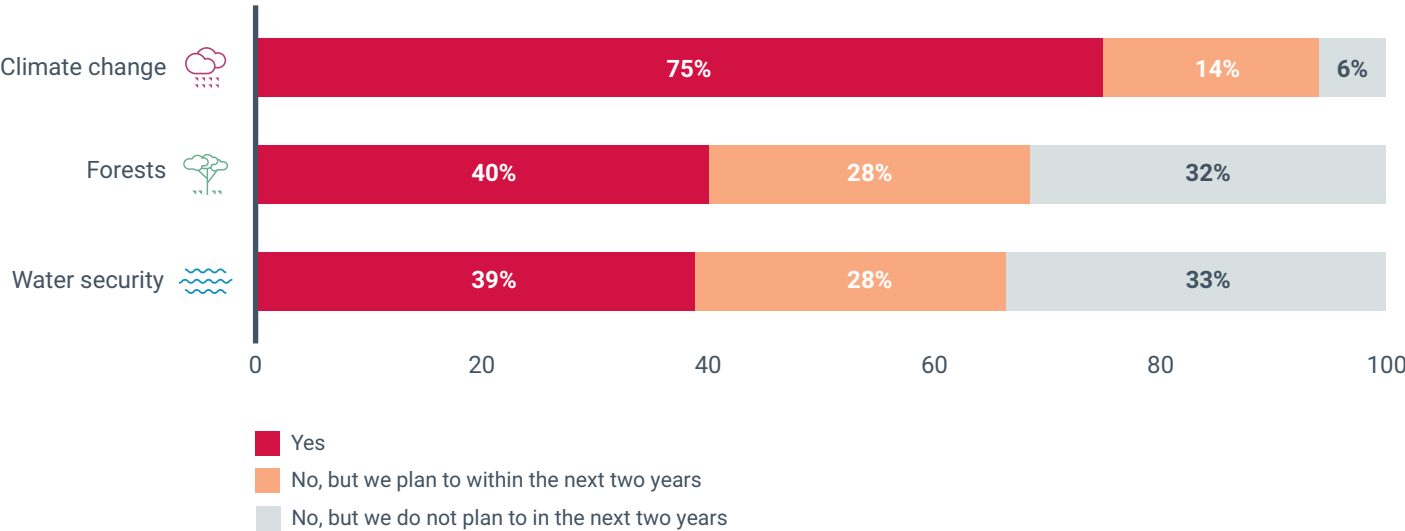
Types of engagement	CC	F	W
Education/information sharing	56%	42%	35%
Engagement & incentivization (changing client behavior)	33%	37%	46%
Collaboration & innovation	20%	10%	13%
Information collection (understanding client behavior)	16%		
Compliance & onboarding	10%		
Other	6%	11%	10%

Shareholders’ voting rights at Annual General Meetings (AGMs) can send clear signals of their priorities on climate and nature-related issues, including proposals for setting emissions reduction targets, enhancing climate risk disclosure, or integrating nature-related considerations into corporate strategies.

These rights are particularly impactful as they would serve both as a clear signal and as a harmonizing force given the broad scope and reach of most financial institutions.

Voting practices should be complementary to the policies noted above and, as a best practice, FIs will outline their intentions and expectations of companies in advance. However, at present, a gap exists as shareholders are yet to fully exercise their voting rights on environmental issues outside of climate.

Figure 7: Organizations exercising voting rights as shareholders on climate, forests, and/or water-related issues



This gap represents a missed opportunity for FIs to outline their expectations of companies, and influence and advocate for greater action from companies on climate and nature.





81%

of FIs engaging with policymakers on climate change.

But only

26%

do so, respectively, on forest-related issues, and

23%

related to water.

Policy engagement

Oftentimes, FIs cite the need for policies by regulators and governments to support them in integrating environmental issues or to enable real economy companies to competitively mitigate environmental risk and realize opportunities. Despite this, not all FIs engage with policymakers, with 81% of FIs engaging with policymakers on climate change, whilst 26% and 23% do so on forest and water-related issues, respectively.

Table 6: most common forms of engagement in activities that could directly or indirectly influence policy, law, or regulation that may affect climate change, forests, and water security

	Climate	Forests	Water security
Yes, we engage directly with policymakers	242	30	29
Yes, we engage indirectly through trade associations	334	58	52
Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate/this issue area	138	28	27
No or left blank	96	274	284
Total presented with Q (excl QNA)	516	368	371

Many FIs that do not currently engage on forests and/or water cited that the primary reason for this was that they see these issues to be important, but not an immediate priority. This is in contrast with the high levels of engagement on climate change and underscores the capacity gap within FIs to understand and address the interconnected challenges of climate change and nature loss.

Mandatory climate-related reporting regulation was in the top three focus areas for FIs’ direct engagements with policymakers (along with adaptation and resilience, and sustainable finance policies), while a much smaller number of FIs directly engage on reporting regulations concerning forests and water. However, some FIs (231) are engaging in activities that can indirectly influence policies, laws or regulations (e.g., through alliances, trade associations or funding organizations/individuals) beyond climate change, that may impact forests and water security.

Engagement case studies



Water crisis - Policy engagement

In 2022, investors with over US\$3 trillion in assets signed an [open letter to governments from CDP](#), to enable robust action on water and step up their collective response to the water crisis. This included calls to action on water targets and pathways, as well as mandatory water disclosure requirements and the implementation of suitable domestic policies.



As FIs make strides toward incorporating climate-related risks into their strategies, efforts are underway to do the same for forests and water security. The implementation of effective strategies will support FIs to make climate and nature-informed strategic decisions, thereby bolstering their priority to maintain financial performance.

4



Metrics and targets

Disclosure of climate-related portfolio impact metrics has rapidly mainstreamed, including forward-looking metrics used for risk management. This is in part driven by associated reporting requirements, from the TCFD and clear guidance from the Partnership for Carbon Accounting Financials (PCAF).



Financed emissions are on average over

750x

greater than operational emissions.

Climate-related disclosure metrics – financed emissions

FIs are increasingly measuring their portfolio impacts and financed emissions in particular.

- ▼ 66% of FIs measured their portfolio impacts in 2022, up from 51% in 2020. Similarly, 219 FIs (39%) disclosed a figure for their absolute financed emissions in 2022, up from 84 FIs (25%) in 2020.

Of the 219 FIs (39%) that disclosed absolute financed emissions statistics, when comparing those figures to their reported operational emissions (the sum of their scopes 1, 2, and categories 1-14 of scope 3), the data presents a striking comparison: **financed emissions are on average over 750x greater than operational emissions.** This divergence between financed and operational emissions highlights the profound environmental impact of FIs' financing activities.

This data point varies significantly by region. For FIs headquartered in Europe (109 FIs), financed emissions are more than 250x greater than operational emissions, rising to over 270x for Asia Pacific (66 FIs), whilst for North America (26 FIs) it is over 11,000x greater. Although the size of the disclosing financial institutions in these regions plays some part in explaining this, **there is generally a disparity in the quality of reported financed emissions that needs to be addressed:**

- ▼ Reported emissions figures are often not accompanied by explanations of the extent to which requirements and recommendations of methodologies influenced their calculations.



79%

**of the FIs disclosing
financed emissions
through CDP
referenced PCAF
as their chosen
methodology.**

- ▼ Key sectors and asset classes are sometimes excluded from financed emissions calculations.
- ▼ The quality and assumptions of the underlying data are not always disclosed.

This increase in the 700:1 ratio reported in 2021 is largely due to improvements in the underlying calculations, both in terms of enhanced data quality and wider use of the robust PCAF developed methodology. PCAF is made up of over 380 FI signatories representing over US\$89 trillion in combined assets that have committed to assessing and disclosing their portfolio impacts, including financed emissions. Of the FIs disclosing financed emissions through CDP, 79% (173 of 219) referenced PCAF or its Global GHG Accounting and Reporting Standard for the Financial Industry as their chosen methodology, indicating the significant uptake of PCAF's Standard across the industry.

Delving further into the question of data quality, 12% of FIs (66 out of 556) disclosed that they had some level of verification for their portfolio impact metrics or financed emissions calculations. In almost all cases, this was limited assurance of the statistics with 37 of these FIs being assured in line with the ISAE3000 standard series. Other standards were also used, such as ISO14064 (9 FIs), AA1000AS (5 FIs) and ASA3000 (5 FIs). In future, greater scrutiny from auditors into the quality of these reported figures will be critical in establishing a comparable baseline across institutions. Additionally, there will be increasingly stringent requirements of key assurance standard setters, if these are to be used to determine whether FIs are on track to meet their portfolio targets.





32%

of FIs plan to measure their portfolio impact for forests or water security within the next two years.

Nature-related disclosure metrics

Disclosure of nature-related portfolio impact metrics for FIs remains nascent in the absence of clear guidance on tools and methodologies to use. 11% of FIs currently measure their portfolio impact for forests or water security and, encouragingly, an additional 32% plan to do so within the next two years.

Of those that are calculating their portfolio impact metrics, we see that some leading FIs are using bespoke methodologies – for example, calculating their financed water footprints (including water withdrawals, treatments, or water avoided as in the case of WHEB Asset Management and Impact Asset Management) or assessing the total land under sustainable management.

In other cases, regulation is beginning to drive the calculation of water and biodiversity-related impacts, such as EU SFDR regulation to disclose against relevant Principle Adverse Impact indicators. In other instances, impact-oriented investments are being disclosed, such as the Forest Resilience Bond managed by Blue Forest, which deploys private capital to finance forest restoration projects for wildfire prevention. CSAA Insurance Group was one of the first investors in the Forest Resilience Bond.





At present, some FIs that disclose nature-related portfolio impacts are conflating them with dependency and risk metrics i.e., their exposure to sectors with dependencies or risks stemming from nature.

Disclosing FIs often disclose dependency-related exposure metrics. However, the focus should be on indicating a precise amount of financing towards companies with positive or negative impacts on nature (a revenue-based impact metric), or a nature-based footprint metric (the types of impact metrics suggested by the TNFD in their third beta release⁹ per the table below).

This indicates a need for capacity building, particularly in the move towards disclosure metrics that go beyond risks and opportunities, to comprehensively assess nature-related dependencies and impacts.

⁹ https://framework.tnfd.global/wp-content/uploads/2022/11/TNFD_Framework_Annex_3-4_v0-3_A.pdf

Table 7: Overview - Categories of illustrative assessment and disclosure metrics for financial institutions

Metric type	Category	Sub-category
 Dependency	Potential dependency	Exposure to sectors or firms with material dependencies on nature
 Impact	Potential impact	Footprint based
		Revenue based
 Risk	Physical risk	Exposure to physical risks
	Transition risk	Exposure to transition risks
	Risk measures	Impacts on specific risk parameters (e.g. expected loss)
	Value at risk	Value at risk (VaR)
 Opportunity	Exposure to nature-related opportunities	Volume of financial flow (investment, lending, insurance) with companies or sectors where activities are deemed to have material exposure to nature-related opportunity
	Mitigation of nature-related risk	Volume of financial flow (investment, lending, insurance) with evidence of material mitigation of nature-related risk (e.g. engagement, due diligence, sustainability linked KPIs)
	Nature positive solutions	Volume of financial flow (investment, lending, insurance) with demonstrated positive impacts on nature

Source: TNFD Beta v0.3, Categories of illustrative assessment and disclosure metrics for financial institutions



Of those FIs that provided reasons for not currently disclosing forests or water-related impact metrics, a significant number cited the lack of available tools or methodologies.

Primary reason	Forests	Water security
Important but not an immediate priority	127 FIs (52%)	128 FIs (55%)
Lack of tools or methodologies available	52 FIs (21%)	52 FIs (22%)
Other	65 FIs (27%)	54 FIs (23%)
Total	244 FIs	234 FIs

PBAF

Planned developments by PBAF and guidance from the TNFD will be critical to support and enable FIs to assess their impacts, and to provide guidance that lends itself to comparability and harmonization across the approaches taken by FIs. The PBAF Standard has been updated in 2023 to provide guidance on portfolio assessments of dependencies on ecosystem services, including recommendations for financial institutions and data providers. An update on the other parts of the PBAF Standard will follow.

Target setting

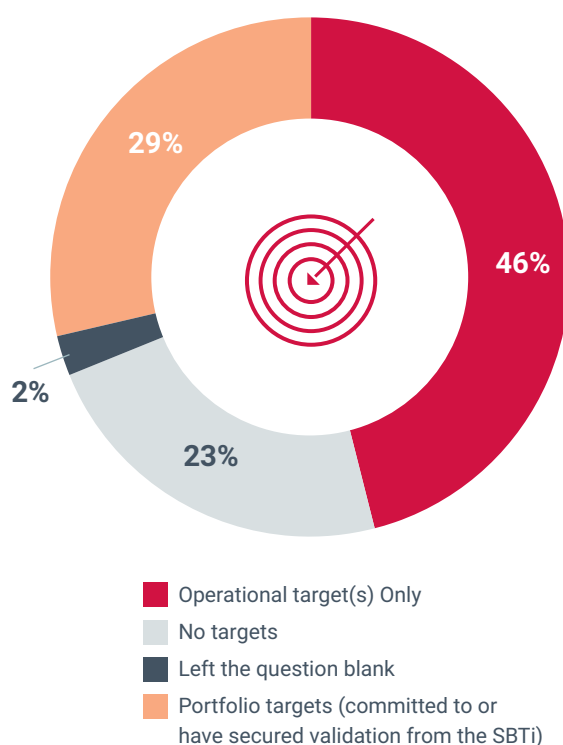
Target setting is a critical aspect of the transition to net-zero. The most important targets for FIs are those that cover their portfolios, as this is the largest source of their emissions and environmental impact.

However, setting targets remains a serious hurdle for many FIs. Only 29% (159 FIs) have set portfolio targets for climate change, while the remaining majority focus solely on reducing their operational emissions. Among those setting targets, only 11% (59 FIs) of those setting portfolio targets are committed to or have secured validation from the Science Based Targets Initiative (SBTi).

The use of various methodologies and frameworks for target setting, such as SBTi-FI, the Net Zero Investment Framework, the Paris Agreement Capital Transition Assessment (PACTA), and the protocols of the Net Zero Asset Owner Alliance and Net Zero Banking Alliance, has led to fragmentation and difficulties in comparing ambition and progress across institutions.

Analysis of the data indicates noticeable improvements in FIs' reporting on their financed emissions. However, there is still considerable ground to cover as only a minority of FIs have set portfolio targets addressing climate change.

Figure 8: Did you have an emissions target that was active in the reporting year?



Measuring and disclosing emissions associated with financial activities is an important first step for FIs in managing risks and identifying opportunities in the transition.

Science Based Targets initiative – FI Net Zero Standard

The SBTi Finance Sector framework, which is being updated through 2023 and beyond, along with their Near-Term target setting framework and a new FI Net Zero Standard, acknowledges some of these challenges, while their upcoming frameworks reference the GFANZ net-zero initiatives to enable interoperability¹⁰.

The key topics addressed by the SBTi in their updates include:



Defining what it means for an FI to reach a state of **net-zero** at the portfolio level, and the conceptual framework to establish both near and long-term targets.



An expanded approach to coverage, introducing materiality and climate relevance principles to better define how different financial asset classes should be addressed over time. **Target ambition** is expected to be defined across all asset classes within a portfolio-wide target boundary, rather than on an asset-by-asset basis, and FIs will have the flexibility within this boundary to focus on key portfolios that have the greatest impact on greenhouse gas (GHG) emissions, incorporating key milestones that are clearly set out on the road to net-zero.



Establishing **neutralization** criteria to define how an FI can eliminate residual portfolio emissions and under what conditions an FI can make a net-zero claim.



A “**maturity scale**” approach is introduced, to reflect the different approaches to assessing alignment of an FI’s portfolio over time.



The introduction of compulsory criteria related to an FI’s **fossil fuel finance** activity, the key high GHG-emitting sector.

The SBTi’s FI Net Zero Standard draft criteria on portfolio target boundaries also requires inclusion of **scope 3 emissions** for Forest, Land and Agriculture (FLAG) sector portfolio companies, thereby aiming to address emissions stemming from land use degradation and deforestation.

¹⁰ <https://sciencebasedtargets.org/blog/evolution-of-the-sbti-finance-sector-framework>

SBTN and science-based targets for nature

CDP is a founding partner of the Science Based Targets Network (SBTN), the organization managing development of science-based targets for nature for companies.

To build upon the increasing commitments of FIs to not only disclose nature-related impacts and dependencies, but also set targets, the SBTN is also developing a SBT for Nature-focused finance sector engagement strategy.

The SBTN are also a core knowledge partner of the TNFD, and the two initiatives have worked together to publish [joint guidance](#) for corporates setting science-based targets for nature.

In the meantime, on nature-related target setting, CDP recommends that FIs:

- ▼ Encourage portfolio companies to set science-based targets for nature and/or complete a TNFD LEAP assessment.
- ▼ Refer to the [Finance for Biodiversity report](#), reviewing sectors that are highly impactful sectors on biodiversity.
- ▼ Refer to the [World Economic Forum's report](#), reviewing sectors that are highly dependent on biodiversity.
- ▼ Use the [ENCORE tool](#) from Capital Coalition to support initial portfolio evaluations of impacts and dependencies.

To further enable the disclosure of environmental targets beyond climate change, CDP has introduced question FW-FS3.3a in 2023, allowing FIs to disclose targets for deforestation-free and/or water-secure financing. This development represents a crucial opportunity for FIs to demonstrate their commitment to sustainability in their financing activities.

There is also a need for increased data quality, data availability, and target-setting methodologies, across all asset classes and sectors. This task will require cross-sector collaboration led by leading initiatives and data providers, with input from financial institutions, to avoid fragmentation in approaches and learn from the processes that have taken place so far in the climate metrics and targets space.



Moving forward

For over 20 years, CDP has brought together FIs to facilitate engagement with companies on an industrial scale.

How CDP is driving progress for nature

CDP is feeding into the system from various angles, in order to support the system-wide changes needed for disclosure and action on environmental issues, by:

- ▼ Developing principles of high-quality mandatory disclosure to guide policymakers in designing comprehensive, high-quality, and coherent environmental disclosure policies, going beyond climate to cover wider environmental impacts.
 - ▶▶ This supports global efforts to make corporate reporting on nature-related issues a standard business norm and enshrined in policy.
- ▼ Continuing to support the development of standards and frameworks pertaining to the nature disclosure ecosystem, in order to work towards interoperability across initiatives and support corporates to develop the capacity to disclose in line with leading practice.
 - ▶▶ CDP is proud to be supporting the TNFD as a Knowledge Partner, putting our wealth of insights, data and expertise at its disposal. CDP is already playing an active role in using its data to inform TNFD development and when the TNFD is finalized CDP's global disclosure framework is ideally positioned to mainstream the widespread adoption of TNFD recommendations in a structured, comparable format, as CDP did for the TCFD.

Engaging with [CDP's Capital Markets Signatory Program](#) allows FIs to find out more about how to:

- ▼ Report in line with the PCAF standard and utilize CDP's Full GHG Emissions Dataset which incorporates PCAF Data Quality Scores.
 - a. CDP and PCAF [will continue](#) to explore opportunities to streamline the reporting of portfolio impact metrics through CDP's Financial Services questionnaire.

- ▼ Use disclosure data from real economy companies on forests and water through CDP, to begin assessing portfolio's exposure to risks and assessments.
 - a. CDP will continue to work with our disclosers to support them to transparently disclose on biodiversity and nature more broadly, as we have done on climate, forests, and water.
 - b. CDP conducts forest-related portfolio assessments for FIs using our disclosure data, supporting them to understand the current strengths and area for improvement for companies in their portfolios.

For over 20 years, CDP has brought together FIs to facilitate engagement with companies on an industrial scale. CDP engages with FIs in a variety of ways, including through the CDP Financial Services questionnaire. To engage with companies, reduce risks, and identify opportunities, FIs can access data from companies on climate change, forests and water security, through CDP's investor signatory program. To find out more about the program, please contact your Capital Markets account manager or get in touch with our [Capital Markets team](#) via investor@cdp.net, if you are not yet a CDP Capital Markets signatory.



Conclusion

The environmental reporting landscape has seen significant shifts over the years, driven by factors including current standards like the TCFD and emerging regulations.

This gradual transformation demonstrates appetite from financial institutions and other actors within capital markets to build a green and resilient financial system. However, achieving these goals and limiting warming to 1.5°C requires, as a first step, a recognition that climate and nature in entirety are intrinsically linked, and as such halting and reversing nature loss must occur alongside corporate efforts to mitigate climate change.


This report assesses the initial level of action on climate change and nature by the global finance sector, drawing insights from climate change, forests, and water security data reported by financial institutions through CDP in 2022. While nearly 95% of FIs' business strategies or financial planning are now influenced by climate change, less than 30% are influenced by forest issues and water security – an indication that consideration of nature is not yet a priority for most. However, some FIs are beginning to consider nature-related issues. While financial institutions remain largely blind to the risks, they acutely focus on the opportunities associated with green financing solutions on both climate change and nature.

Yet, momentum is building to protect nature and address environmental issues holistically. Efforts are underway to translate the goals of the Global Biodiversity Framework into policy and regulatory changes worldwide. This will include introducing reporting requirements on nature for financial institutions, likely in line with the Taskforce on Nature-related Financial Disclosures (TNFD) recommendations. Financial institutions that are taking steps to identify and assess material risks and are disclosing their impact, dependencies, risks and opportunities related to climate and nature, will be better positioned to get ahead of upcoming reporting requirements.


To accelerate progress, action is required of all stakeholders across the financial ecosystem. Financial institutions must first recognize that their responsibility to demand credible, comprehensive, and timely data is a key component in determining the direction of change within the financial system. To drive the transformation, it is necessary that FIs adopt an integrated approach that weaves nature across governance,

risk management, strategy implementation, metrics, and science-based target setting, in addition to engagement efforts. Governments, regulators, supervisors, and standard setters also play a crucial role in catalyzing change, through streamlining integrated disclosure requirements, enhancing transparency and accountability, in addition to harmonizing standards. For its part, among other contributions, CDP's expanded questionnaire, which includes nature-related issues, is preparing FIs for forthcoming disclosure standards and empowers them to take steps to understand and manage their corporate impacts, risks and opportunities associated with land use, forestry, water security, and biodiversity.

Financial institutions must prioritize assessment of nature-related risks, opportunities and impacts, and integrate them into decision-making processes alongside climate change considerations. Only through strong leadership by FIs, enabled by action from governments, regulators and standard setters, can the sector transition toward achieving a sustainable and nature-inclusive financial system that safeguards our planet's future.



Through unwavering commitment and concerted efforts, financial institutions can catalyze capital reallocation in a way that protects and restores nature, and boost their own resilience along the way.



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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 more than 740 financial institutions with over \$130 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. Nearly 20,000 organizations around the world disclosed data through CDP in 2022, including more than 18,700 companies worth half of 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.