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Nature in the Boardroom

Guidance for boards of financial institutions in asking the right questions to identify, manage, and report on nature-related risks and opportunities

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Disclaimers

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Acknowledgements

Authors

UNEP FI: Romie Goedicke den Hertog, Vincent Wing Shun Tang

Deloitte: Anne-Claire van den Wall Bake-Dijkstra, Florence Arke

Input and interviewees

Andrew W. Mitchell, Founder and Senior Advisor, Global Canopy, Oxford

Adrie Heinsbroek, NN Group N.V., Head of Sustainability

Esther Egeter, a.s.r., Sustainability manager

Marie-Claire Franzen-Aerts, Rabobank, Lead Nature

Reviewers

UNEP FI: Jessica Smith, Rhea Kochar, Laura Canas da Costa, Sem Houben, Verena Kraus, Carolina Mazo Castano

Deloitte: Geneva Claesson, Daniele Strippoli, Jurjen Boog, Pieter van Dusseldorp, Irene Marcic, Karen Cunningham

Acronyms and abbreviations

CBD	Convention on Biological Diversity
CDSB	Climate Disclosure Standards Board
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CHRO	Chief Human Resources Officer
COP	Conference of the Parties
CRD	Capital Requirements Directive
CRO	Chief Risk Officer
CSO	Chief Sustainability Officer
CSRD	Corporate Sustainability Reporting Directive
ESRS	European Sustainability Reporting Standards
ECB	European Central Bank
ESG	Environmental, Social, Governance
EU	European Union
FfB	Finance for Biodiversity Pledge
GARP	Global Association of Risk Professionals
GFANZ	Glasgow Financial Alliance for Net Zero
GBF	Kunming-Montreal Global Biodiversity Framework
GRI	Global Reporting Initiative
IFRS	International Financial Reporting Standards Foundation
IPLCs	Indigenous Peoples, Local Communities
ISSB	International Sustainability Standards Board
LEAP	TNFD's LEAP Approach (Locate, Evaluate, Assess, Prepare)
MAS	Monetary Authority of Singapore
MSCI ACWI	MSCI All Country World Index
NBSAPs	National Biodiversity Strategy and Action Plans
NFIZ	Net-Zero Insurance Forum
NZAOA	Net-Zero Asset Owner Alliance
NZAMI	Net-Zero Asset Managers Initiative
NGFS	Network for Greening the Financial System
PRI	Principles for Responsible Investment
PRB	Principles for Responsible Banking
SASB	Sustainability Accounting Standards Board
SBTs	Science Based Targets
SBTi	Science Based Targets Initiative
SBTN	Science Based Targets Network

SDGs	Sustainable Development Goals
SFDR	Sustainable Finance Disclosure Regulation
SGX	Singapore Exchange
TCFD	Task Force on Climate-related Financial Disclosures
TNFD	Taskforce on Nature-related Financial Disclosures
UNEP FI	United Nations Environment Programme Finance Initiative
UNEP-WCMC	United Nations Environment Programme World Conservation
WEF	World Economic Forum
WBCSD	World Business Council for Sustainable Development
WWF	World Wild Fund for Nature

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Executive summary

We value nature because it is important, yet we lose nature because it is free. The economy is a wholly owned subsidiary of nature, not the other way around. Nature is our biggest shareholder. Yet nature does not have a seat at the table in boardrooms across the globe. Recent research by S&P Global Sustainable (2023) finds that 85% of the world's largest companies have a significant dependency on nature across their direct operations. However, according to the World Benchmarking Alliance (2024), only 2% of companies have boards that can demonstrate they have relevant expertise on topics like biodiversity or climate. How can protecting nature protect your business? How might it also open new investable opportunities? What would nature tell us if a seat were be made available for her?

Nature is a strategic management issue that requires board oversight and impacts key management topics such as the future outlook of the market and the effect of legislation in the industry. Whilst climate risks and opportunities have been 'onboarded' by many organisations, increasing recognition of business and finance dependencies and impacts on services from nature is driving new developments in regulation and legislation, fiduciary duties, financial risks, and social and client expectations that have elevated the imperative for boards to understand, and engage with, nature-related issues. There is a growing recognition among some business leaders that "after climate, nature is next". But how many board members have the confidence to have informed conversations about these issues or know the right questions to ask their executive teams?

This report offers guidance to help boards of financial institutions navigate these complexities by providing a clear approach for identifying, managing, and reporting on nature-related risks and opportunities. This enables them to integrate these considerations into governance and strategic decision-making effectively within their organisations. Additionally, a helpful blueprint is included that outlines key actions and objectives aimed at integrating nature-related considerations into the core of executive leadership.

Risks from nature's collapse: Evidence of nature's collapse is mounting. According to WWF, 73% of wildlife populations have vanished since 1970. This translates into environmental risks that materialise across our economy as physical, transition and systemic risks. The degradation or collapse of ecosystems is disrupting supply chains. The US Department of Agriculture found that pollinators underpin one in every three bites of food eaten on the planet (USDA, 2024). Food producers, for example, could face higher costs as natural pollinators vanish. USD 15.5 billion has been stranded or is at risk due to the global water crisis due to changes in water regulations, high levels of pollution, and community opposition (CDP, 2024). Air pollution is estimated to cost

USD 8.1 trillion annually to our global economy (UICC, 2024). Climate change makes parts of the world uninsurable through nature-related fires, floods, droughts and storms (NYT, 2023). In this way, financial institutions are increasingly confronted with the loss of infrastructure (physical), legal and reputational costs (transition) and unforeseen other impacts (systemic) risks that challenge traditional risk management frameworks.

New opportunities are emerging: There are significant nature-related opportunities for financial institutions. These opportunities create positive outcomes for both the business and nature and can range from investments that reduce pressure on nature to creating innovative products with nature. The most obvious sectors will be those that have the most significant impact or reliance on nature—such as the global food system, extractives, construction, and utilities. UNEP's 2023 assessment of the State of Finance for Nature estimated that the scale of opportunity was a USD 7 trillion turnaround in the flow of nature negative finance from public and private sources to become nature positive. The transition opportunity this represents is likely to follow a similar trajectory to business responses to climate change, with the emergence of both stranded assets and new industries.

How this report helps: UNEP FI and partners believe that management and supervisory bodies play a key role in steering the strategic course of our members and setting them on the path towards sustainable long-term objectives. This publication provides boards of UNEP FI members and the wider financial system with a blueprint to address the critical need for financial institutions to integrate nature considerations into their governance frameworks and board-level oversight to mitigate nature-related risks and invest in opportunities to promote long-term sustainability in alignment with the CBD's Global Biodiversity Framework and the UN Sustainable Development Goals. This publication was developed with input from global experts and has additional relevance to financial institutions exposed to the world's most biodiverse countries.

Additional support UNEP FI will offer: Beyond knowledge sharing, we seek to empower board members by enhancing their capacity to identify and address the actions they should be taking effectively through capacity building, peer-learning workshops, and events to support capacity building at a board level, including from UNEP FI's existing platforms such as the PRB Academy and UNEP FI Risk Centre.

1. Introduction and context

- Emerging pressures from regulatory, legal, financial, and social stakeholders are requiring financial institutions to integrate nature in their business.
- The executive board has a key role to integrate nature-related considerations into the financial institutions' governance, strategy, risk management and disclosures, ensuring sustainable practices and compliance.
- This paper gives step-by-step guidance for board members to integrate nature-related decisions by asking the right questions.

The WEF Global Risk Report 2024 (WEF, 2024a) has ranked environmental risks as four of the top risks over a 10-year timeframe and highlights the possibility that environmental risks could reach a point of no return. Focusing solely on climate change without considering biodiversity and other nature-related risks overlooks critical environmental dependencies.

Recognising nature-related risks as financial risks, alongside recent developments in legislation, regulation, and voluntary frameworks, underscores the increasing importance of incorporating nature-related considerations into financial institutions' governance. This guidance builds on UNEP FI's broader, theme-agnostic guidance on Effective Governance, which sets out the case for sustainability governance and other key organisational enablers for banks (UNEP FI, 2024).

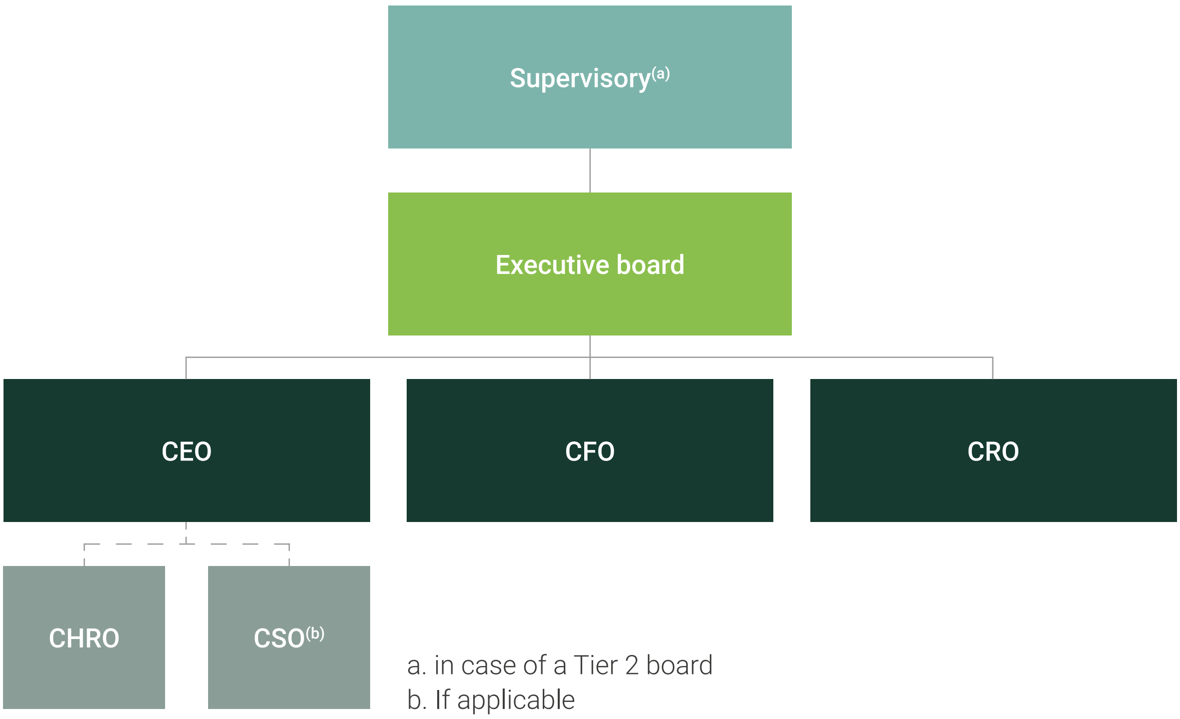
Four emerging trends are propelling the business case for nature-specific promotion and integration: **regulatory trends, legal and fiduciary duties, financial risks, and social and client climate expectations.** Before we explore how nature-related risks and opportunities affect the board's strategic mandates and responsibilities, it's useful to clarify what is meant by 'board' and to specify which mandates include nature.

Board's oversight

> **"The role of the board is to protect the future from the present"**
>
> **David Riesman, Harvard sociologist.**

Acknowledging that some regions have adopted a two-tiered board structure (or dualistic governance model) separating supervisory and management functions, references in this guidance to “board” generally refer to both supervisory and management boards, recognising their respective roles in overseeing and managing the delivery of nature-related action. Despite regional differences, a common characteristic of most corporate governance systems is board-level oversight of strategy and risks, which generally include sustainability risks, opportunities and impacts. Responsible boards demonstrate oversight of sustainability, including nature-related commitment, action plans, and progress.

This paper provides guidance on the governance and control exercised by the governing bodies of financial institutions, whether in a one-tier system or a two-tier system with a management and supervisory board (Hopt, 2021). In some regions, a ‘supervisory board’ usually includes non-executive directors who oversee the executive directors or management team. The executive board or management team, which includes the Chief Executive Officer (CEO), Chief Financial Officer (CFO), and often the Chief Risk Officer (CRO) with oversight responsibilities across the organisation, oversees management’s implementation of the organisation’s strategy, risk management policies and practices. Placement of the Chief Sustainability Officer (CSO) varies depending on the corporate structure, size, and resources; however, reporting to the CEO often promotes the integration of sustainable practices into operations and strategy. The Chief Human Resources Officer (CHRO) works closely with the CEO and other C-level executives to align HR strategies with the organisation’s goals, focusing on talent strategy and management. See Figure 1 for a full overview. The key departments and functions, typically report to the executive board or team, ensuring strategic guidance, effective monitoring, and accountability, covering areas such as business and risk strategy, organisation, financial soundness, and regulatory compliance.



a. in case of a Tier 2 board
b. If applicable

Figure 1: High-level 1 and 2-tier Board Structures of Financial Institutions

Typically, the CEO oversees the institution's overall strategy and, through their management team, direct action and resources. The CSO role varies but is most successful when directly connected to the organisation's strategic design and development process. Where a CSO manages sustainability strategies and policies, they can actively spearhead this initiative, engaging with the wider executive team, including, for example, the CRO, to conduct a comprehensive risk assessment as part of the ESG (Environmental, Social, and Governance) risk strategy within the broader Enterprise Risk Management (ERM) framework. The CFO plays a crucial role in understanding the financial implications of the risks and mitigation activities together with the CRO, evaluating the financial impacts of these efforts and reporting accurately and efficiently to both internal and external stakeholders.

Both supervisory and executive boards play a pivotal role in guiding their organisation through an increasingly complex and challenging risk landscape. They set policies and strategies in their organisation, that are essential in addressing how nature issues impact business models and profitability. Given that nature-related risks represent organisation-wide risks (and opportunities), managing them necessitates board-level sponsorship of nature initiatives (De Nederlandsche Bank—The Sustainable Finance Platform, 2020).

The information in the remainder of this paper is suitable for both the board and other actors (reporting to and interacting with the board). Included are several in-depth focus areas tailored to certain C-level (executive) roles whilst recognising the specific composition will differ per organisation:

- CEO—who oversees the overall strategy and performance of the financial institution
- CFO—who manages financial planning, accounting, and reporting
- CRO—who ensures the financial institution manages risks effectively, including compliance with regulations and risk management strategies
- CSO—focuses on integrating sustainable practices based on the sustainability policies into the financial institution operations and strategy.
- CHRO—who oversees human resources management, focusing on acquiring, developing, and retaining talent, and aligning HR strategies with the financial institution's regulatory and operational goals.

1.1 An evolving regulatory landscape and compliance trends

Emerging trends highlight the regulatory pressures on financial institutions to manage nature-related risks. The Kunming-Montreal Global Biodiversity Framework (GBF) adopted at COP15 supports the achievement of the Sustainable Development Goals and sets out an ambitious pathway to reach the global vision of a world living in harmony with nature by 2050. Among the Framework's key elements are 4 goals for 2050 and 23 targets for 2030. At COP16, the focus will be on implementing the Global Biodiversity Framework, aligning financial portfolios with biodiversity targets, and promoting innovative financial instruments. Therefore, clarifying boards' responsibilities is essential for ensuring effective oversight of nature-related risks, as evolving regulations require boards to assess their businesses' reliance on and impact on nature, mitigating unforeseen risks. Frameworks like the Taskforce on Nature-related Financial Disclosures (TNFD) are shaping global expectations by providing a structured approach to evaluating and managing nature-related risks alongside other financial risks.

The EU's Corporate Sustainability Reporting Directive (CSRD) and associated European Sustainability Reporting Standards (ESRS) emphasise that biodiversity and ecosystems (ESRS E4) should be addressed when they are deemed material to the organisation, similar to how climate change (ESRS E1) is treated as a material issue (European Central Bank, 2021). While ESRS E1 specifically outlines climate change as a mandatory reporting area, ESRS E4 interacts with other standards and requires organisations to assess the relevance of biodiversity in connection with other sustainability topics. At the same time, various countries, including France, are instituting requirements and punitive measures for non-compliance with sustainability disclosures; there is a growing emphasis on holding board members and senior management accountable for such disclosures (Foley, 2023).

This movement builds upon existing legal frameworks such as the Corporations Act (Cox, 2023), highlighting the imperative for board members to ensure alignment between organisational intentions and operational strategies, aimed at mitigating risks that could expose companies, directors, and officers to risks of 'greenwash' and potential liability for misleading disclosures. Breaching these duties under the Corporations Act could result in severe penalties, including fines, loss of directorships, or legal actions from affected parties, which brings the discussion to the forefront for board members. New opinions state that nature-related risks are relevant to directors' duties under sections 172 and 174 of the Companies Act 2006, and directors that are unable to demonstrate compliance and consideration could be exposed to increased shareholder scrutiny and legal consequences (Pollination Group, 2024). A 2024 study of 48 institutions also showed that 31% of institutions report that their regulators have either already published formal expectations for nature-related risk management, with another 13% expecting such developments (GARP, 2024).

Ultimately, companies that integrate nature-related risks into their governance early on, may benefit from both regulatory compliance and competitive advantage in the evolving market landscape.

1.2 Legal and fiduciary duties

The second emerging trend, legal and fiduciary duties, is gaining prominence through a series of independent legal opinions. These opinions issued between 2016 and 2023 highlight that directors could face legal consequences for failing to adequately address nature-related risks, as demonstrated by rulings in countries like Australia, New Zealand and Singapore. Furthermore, in November 2023, The European Council formally adopted a new environmental crime Directive, which includes provisions to criminalise cases 'comparable to ecocide' (Directive 2021/0422/EC). These legal and fiduciary developments are supported by stakeholders, as shown in a survey by the Global Commons Alliance (2024). The survey found that 72% of respondents believe it should be a criminal offense for leaders of large businesses to knowingly approve actions likely to cause widespread, long-term, or irreversible damage to nature.

These opinions highlight that company directors who fail to properly consider the implications of climate and/or nature-related risks could be held liable for breaching their duties under company law, further reinforcing the necessity of nature's integration at the highest levels of governance (Commonwealth Climate and Law Initiative, 2023). UNEP FI's report on Fiduciary Duty in the 21st Century offers valuable guidance on these issues (UNEP FI, 2019).

The Monetary Authority of Singapore (MAS) introduced Guidelines on Environmental Risk Management for Banks, which emphasise the need for board oversight of environmental risks. The MAS guidelines direct boards to integrate environmental risk management into their governance frameworks, making nature-related risks a board-level responsibility (Monetary Authority of Singapore, 2020). Similarly, in Brazil, the Central Bank of Brazil has implemented ESG risk regulations that explicitly mention the role of the board in overseeing environmental and social risks. This regulatory framework requires Brazilian financial institutions to ensure that their board members are equipped to understand and manage the environmental risks that may impact their organisations' long-term sustainability (Central Bank of Brazil, 2021).

For financial institutions, these fiduciary duties extend to the management of environmental and nature-related risks, with a growing body of litigation pushing for accountability. Within the European Union, the Fit & Proper Assessment Framework, articulated in Article 91 of the Capital Requirements Directive (CRD), is a critical process for determining whether board members are suitable for their roles. As of 2021, this assessment explicitly includes references to environmental risks. The European Central Bank's (ECB) Guide on Fit & Proper highlights the importance of ensuring that board members possess the skills and knowledge necessary to oversee the environmental risk profile of their institutions, including risks linked to nature and biodiversity (ECB, 2021). This creates a direct obligation for financial institutions within the EU to ensure that their board members are not only competent but are also capable of managing the nature-related risks that could affect their organisations.

These legal and regulatory developments make it clear that managing nature-related risks is no longer a voluntary or supplementary effort for financial institutions. Instead, it has become a central element of corporate governance, with board members and senior executives held accountable under evolving legal frameworks. Failure to consider these risks may result in penalties, shareholder scrutiny, and reputational damage, further reinforcing the necessity of integrating nature considerations into financial institutions' governance structures.

1.3 Identification of nature-related risks as financial risks

Nature-related risks are financial risks, and as such, they are becoming significant sources of disruption for financial markets. The heightened focus on environmental sustainability has led to growing investor expectations for boards to also govern nature-related issues actively. For example, BlackRock's 2023 stewardship expectations emphasise the importance of biodiversity and natural capital in long-term value creation, urging companies to demonstrate how they are mitigating nature-related risks in their operations and strategies (Blackrock, 2023). Financial institutions are increasingly exposed to nature-related risks through their investment portfolios, supply chains, and lending practices. Incorporating nature-related considerations into risk management enables institutions to anticipate and mitigate financial shocks resulting from the degradation of natural capital. This will be further explained in this reports Chapter 5 on Risk Management.

1.4 Social and client expectations

Social and client environmental expectations are driving a shift in how companies manage their environmental responsibilities, including nature. However, a recent study by GARP (2024) revealed that only nearly half of the financial institutions surveyed have implemented or are planning to implement board-level oversight of nature-related risks. Meanwhile, clients and other stakeholders are increasingly aware of the importance of nature and biodiversity and what it entails (WWF, 2022). These stakeholders are demanding more transparency and information on the biodiversity impact of products (UEBT, 2022). Companies' own employees are among these key stakeholders, and taking action on biodiversity loss, can even increase employee morale (Deloitte, 2024). Stakeholders believe that boards should include the assessment of nature-related risks as part of their legal obligations (CCIL, 2024). This includes boards of financial institutions. Failing to respond to the growing social pressure for environmental governance and accountability, can damage financial institution's reputation. For example, financial institutions financing companies that have a negative impact on nature face reputational risks (De Nederlandsche Bank, 2020). Boards can respond to this shifting landscape by embedding nature-related considerations into their ambition.

Overall objective of this paper

This publication provides insights and proposed actions regarding the oversight role and responsibility of the board in relation to nature—considering sectoral and regional specific context. It aims to achieve this through its offering of role-specific, targeted insights and knowledge pertinent to the responsibilities of board members, as a bespoke offering to understand the impact, dependencies on nature and nature-related risk and opportunities. This way financial institutions could seek to embed nature into business considerations, which is particularly timely and is framed as regulatory compliance and nature-related risk as part of fiduciary risk management.

This publication is aimed at providing an overview for board members on nature-related risks and opportunities to responsibly steward their businesses through the nature transition towards a more sustainable future. Through a detailed analysis of current trends, legal implications, and best practices, this publication seeks to empower board members to proactively identify, assess, and manage nature-related risks, thereby promoting sustainability and resilience within their organisations. Specifically for this publication, three interviews were conducted with financial institutions in the Netherlands—NN Group, a.s.r., and Rabobank. Their use cases are detailed throughout this report, providing insights into their approaches to integrating nature-related considerations into their decision making.

Through this step-by-step introduction of integrating nature-related decisions for board members in this publication, toolkits, peer-to-peer learning platforms, and training modules, it is expected to lead to the following outcomes:

- Board of participating financial institutions have a well-established definition of their responsibilities in relation to nature-related issues.
- Boards of participating financial institutions discuss and act on nature-related issues and arising regulatory and emerging topics on a regular basis in board meetings.
- Financial flows and business models are encouraged to move away from activities causing nature loss, towards activities that are nature positive.

How to read this report

This report begins with setting the context by examining the board's oversight responsibilities, the evolving regulatory landscape, legal and fiduciary duties, and the identification of nature-related risks as financial risks, alongside social and client expectations. The core content is organised around four key pillars: Governance & strategy, Risk Management, Portfolio Management, and Disclosures and Regulatory Guidance, aligned on a high-level with frameworks such as the TNFD. For each pillar, the report delves into the "why" and "how," providing board members with key guiding questions to assess their organisation's maturity and progress in integrating nature-related considerations. These questions serve as a tool for understanding current practices and identifying areas for improvement. The report concludes with a comprehensive Blueprint section, bringing together the pillars, key trends, and questions, providing insights for each C-level executive.

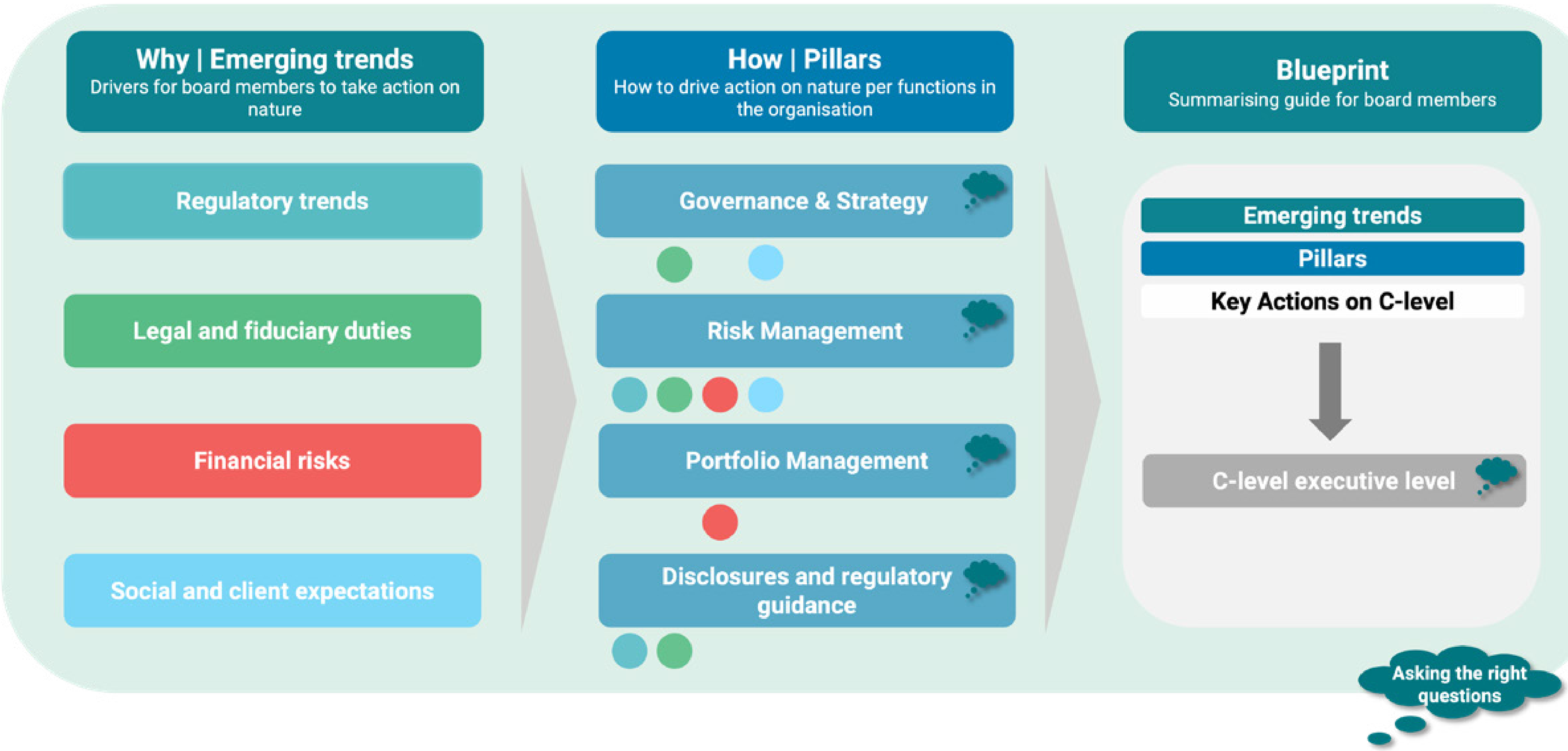


Figure 2: How to read this report?

2. Finance and nature

> **"We can't get to net zero without nature. Businesses and financial institutions of all sizes across all sectors and geographies need to start managing their interface with nature as their most important supply chain and value creation partner".**
>
> **Razan Al Mubarak, President IUCN[1]**

- The triple planetary crisis of climate change, nature loss, and pollution are interconnected, necessitating integrated efforts to address these challenges simultaneously.
- With evolving regulatory frameworks and standards, boards must integrate nature into their governance to avoid legal repercussions and ensure a resilient business model.
- This chapter defines and explains the importance of nature considerations for boards, as well as the relevant regulatory and legal considerations.

Defining nature

The Convention on Biological Diversity (CBD) defines biodiversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems", while Nature is all the existing systems created at the same time as the Earth, all the features, forces and processes, such as the weather, the sea and mountains. In other words, nature is all life on Earth, together with the geology, water, climate and all other inanimate components that comprise our planet. Furthermore, nature provides ecosystem services, which are "the benefits people obtain from ecosystems" (IPBES, 2021). These ecosystem services include for example, pollination, climate stabilisation and water purification, and are vital for companies working directly and indirectly with natural resources.

Nature Positive as an overarching societal goal is defined as a global societal goal defined as 'Halt and Reverse Nature Loss by 2030 on a 2020 baseline, and achieve full

1 Razan Al Mubarak commenting on her appointment as TNFD Co-Chair, London, 21 June 2024. Accessed via: tnfd.global/wp-content/uploads/2024/06/240621-TNFD-Co-Chair-appointment.pdf

recovery by 2050' (Nature Positive Initiative, 2023). Delving further into how this relates to financial institutions and businesses, the Taskforce on Nature-related Financial Disclosures (TNFD) (2022) defines nature-related risks as "potential threats posed to an organisation linked to its and other organisations' dependencies on nature and nature impacts". And UNEP FI and Finance for Biodiversity Foundation (2024) have released a discussion paper 'The New Finance for Nature Positive Working Model' that provides practical guidance on how finance can operationalise the Nature Positive concept, to halt and reverse biodiversity loss by 2030 towards the recovery of nature by 2050. It emphasises driving economic transformation and achieving measurable positive outcomes in areas such as the sustainable use, conservation, and restoration of nature, as well as enabling solutions.

Nature's connection with other themes

The triple planetary crisis refers to the three interconnected problems of climate change, biodiversity loss, and pollution. While all three are to some extent separate in their cause and effect, they all converge and are interlinked with each other. Biodiversity loss refers to the decline or disappearance of biological diversity, which includes animals, plants and ecosystems, and is to a large extent caused by the other two crises through for example overexploitation of resources and changes in land use. When focusing on climate change and biodiversity loss, the so-called 'Climate-nature nexus', highlights how climate change can exacerbate natural ecosystem imbalances, leading to compounded risks. As a result, financial institutions can face significant challenges as these environmental factors can impact asset values, disrupt supply chains, and increase liability risks (Nature Finance, 2021). Therefore, while nature loss is a crucial avenue to address, it cannot be focused on in isolation, and should be considered in tandem with efforts on addressing climate change and pollution.

Status Quo on board level nature knowledge

The World Benchmarking Alliance (2024) which assessed 350 companies from across the food and agriculture value chain and 30 companies from the paper and forest industry, showed that only 2% of companies have boards that can demonstrate they have the relevant expertise on topics like biodiversity or climate. The report by Climate Governance Initiative (2024) analyses this benchmark, titled 'Improving Governance on Nature-Related Risks and Opportunities' showcased a mixed picture regarding the integration of nature considerations into corporate strategies at a high-level. A stark finding was that just 1% of companies assessed showed evidence that their highest governance body had expertise with respect to the company's most material sustainability topics. Companies that demonstrate robust corporate governance score significantly better on other sustainability issues. Therefore, to enable impact, companies should prioritise developing a sustainability strategy that covers nature, supported by concrete high-level responsibility and accountability for delivering the strategy. This mirrors the finding from the Theme study "Unravelling Biodiversity" by the Dutch Association of Investors for Sustainable Development (2023), that showed that the majority of boards in The Netherlands, do not prioritise biodiversity.

3. Governance and strategy

> **"There's now recognition that the long term must be taken into consideration over short term profitability. Society is asking banks to be more conscious about what they are financing."**
>
> **Diana Baron, Banco de Bogotá (interviewed by Global Canopy)**

- Boards must establish strong governance frameworks to integrate nature into strategic planning.
- To develop a comprehensive understanding of nature, it is best to start with targeted training and engaging with experts.
- A multi-year roadmap, including resource allocations and incentive structures, can support embedding nature-related considerations into the business strategy.

This chapter emphasises the need to establish a robust governance framework, integrate nature into strategic planning, and prioritise understanding the institution's interaction with nature through continuous education to effectively manage nature-related risks and opportunities. Such steps are advocated within **Principle 3 of the UN Principles for Responsible Banking—Governance & Culture** (UNEP, 2019), where signatories agree to implement their commitment through effective governance and a culture of responsible banking. The theme of Governance and strategy is mostly aligned with the emerging trends of an evolving regulatory landscape compliance trends and social and client expectations.

Boards face increasingly high demands as geopolitical instability, economic uncertainty, evolving stakeholder expectations, and rapid technological advances intensify, all while they strive to balance these challenges with other critical strategic priorities such as risks arising from climate change and nature decline (Deloitte, 2024a). The integration of nature-related considerations into corporate governance has become a critical requirement for organisations globally (Boston Consulting Group, 2023). This shift is driven by the growing recognition that nature-related risks—such as biodiversity loss, ecosystem collapse, and natural resource depletion—pose significant threats to financial stability and long-term business sustainability (Kapnick & JP Morgan Asset Management, 2022).

By setting up an adequate, effective and sound governance framework, board members can help to strengthen business resilience and amplify stakeholder value. Such robust governance is also required from prudential regulations[2] and voluntary Principles of Corporate Governance.[3]

As climate change is increasingly becoming a crucial topic of discussion in the boardroom, it demonstrates that boards can maintain a long-term focus while balancing short-term financial pressures. However, governance related to nature considerations still lags significantly behind that of climate change. As per 2023, 91% of financial institutions have board-level supervision concerning climate-related matters, but only 32% exercise oversight on issues related to forests and/or water. (CDP, 2023b). This disparity is primarily attributed to the challenge of translating global nature targets into actionable corporate-level strategies, unlike the more straightforward application of climate emissions reductions targets. Nature should receive a similar attention. It is now imperative to recognise that nature directly impacts business operations and, consequently, financial activities. Executives, non-executive directors, shareholders, and/or other stakeholders can (or should) initiate the conversations to highlight the importance of nature to board members. They can raise their concerns through meetings or written communications. On the other hand, board members also have a responsibility to understand that nature affects their business activities and vice versa, and hence should take initiative to prioritise this by asking the right questions. This report provides guidance for these initial and subsequent conversations. By aligning with the 'Chairperson's guidance to value nature' by WEF (2023a) and the 'CEO's briefing on Financing the nature positive transition' (WEF, 2024b), this report will equip financial institution board members to start the conversation and integrate nature into their business strategy.

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2 Article 74(1) CRD requires credit institutions to have robust governance arrangements, which include a clear organisational structure with well-defined, transparent and consistent lines of responsibility, effective processes to identify, manage, monitor and report the risks they are or might be exposed to, adequate internal control mechanisms, including sound administration and accounting procedures, and remuneration policies and practices that are consistent with and promote sound and effective risk management. (Directive 2013/36/EU); Article 26(1) IFD requires investment firms to have robust governance arrangements, including effective processes to identify, manage, monitor and report the risks that investment firms are or might be exposed to, or the risks that they pose or might pose to others (Directive (EU) 2019/2034); Article 40 Solvency II Directive Insurance and reinsurance undertakings shall have in place an effective system of governance which provides for sound and prudent management of the business (Directive 2009/138/EC)..

3 Such as OECD Principles of Corporate Governance

Learning and understanding

> **"To make the topic of nature more accessible, incorporate external and diverse perspectives and insights to enhance its relevance and connect to reality".**
>
> **Adrie Heinsbroek, NN Group N.V.**

Understanding the interface is crucial for enabling the financial institution to understand the significance of nature-related issues. Board members should play a pivotal role in ensuring a firm-wide understanding and alignment on sustainability priorities (International Federation of Accountants, 2022).

In the first place, it is essential that board members receive a **comprehensive introduction to nature**. By fostering an understanding of nature-related issues board members are better equipped to make forward-looking and well-founded judgments. In general, to prioritise various objectives and actions to ensure sustainable success, boards must decide how to allocate their investments assessing long-term environmental benefits against immediate business performance. Within the business case for nature, the question is which part their investments will need to be allocated to nature preservation and restoration. Furthermore, to identify, assess and manager nature-related risks and opportunities, board members should require certain knowledge and capabilities.

Achieving this expertise requires upskilling through targeted **training programs** (FfBF, 2024a) either internally organised or through external, validated providers. Given the complexity of nature, this training must go beyond high-level overviews. The PRB Academy (2024) already provides an overview of the Principles for Responsible Banking (PRB) and the UN Sustainable Development Goals (SDGs) for board members and executives. Engaging with expert stakeholders through knowledge-sharing sessions offers valuable insights and could serve as a form of validation for the institution's approaches. These sessions can include contributions from external advisors, and internal or external scientific experts.

Due to the complexity of nature, a deeper understanding of nature could be required, then is needed for climate. The dynamics of different domains, land, oceans, atmosphere, freshwater, and living organisms each with unique interactions, combined with location-specific characteristics such as climate, geography, and human influences, require tailored approaches for effective management. The training could be tailored specifically to the sectors in which the organisation operates, such as the agriculture or shipping industry.

Furthermore, engaging with **expert stakeholders** through knowledge-sharing sessions offers valuable insights and could serve as a form of validation for the institution's approaches. These sessions can include contributions from local and indigenous communities, as well as external advisors, and internal or external scientific experts mentioned above. Once an initial high-level understanding is developed, this knowledge can be disseminated more broadly within the institution, thereby engaging and inspiring employees on this learning journey.

Lastly, as nature-related issues are not a one-off issue, as nature degradation is an ongoing challenge that has not yet been resolved, it is a topic that requires **ongoing attention and commitment**. Hence it is important to bring nature onto the board's agenda list of regularly addressed topics. To achieve this, the board should discuss the practical processes, context and frequency, ensuring that the board remains up to date with the latest developments and challenges from outside and within the organisation. Nature is connected within multiple areas of the business such as strategy, risk management, financial soundness, and regulatory compliance. Dedicated nature committees or existing committees with nature embedded into them can assist the board in the above and can be given the responsibilities to design and implement the institution's strategy and risk management (ECB, 2022) and report to the board. Financial institutions have varied committee structures within their governance frameworks, with terms of reference differing across organisations. Typically, senior committees receive broader, less detailed information, while junior committees handle more granular details.

By ensuring continuous education and prioritising nature on the agenda, board members can enhance their ability to oversee and manage nature-related issues more effectively. Furthermore, by committing to their own learning and development, boards can help in establishing a knowledge-based culture across the organisation where employees understand their own contributions to nature action and, crucially, how they will be supported in delivering against organisational goals.

Asking the right questions

- How is nature embedded into our corporate governance?
- Which board member is ultimately responsible for nature-related matters?
- Does the board (and broader organisation) have an accurate and institution-specific understanding of how our institution interfaces with nature?

Follow-up question

- Does the board possess the necessary skills and expertise to evaluate the information it receives on nature-related matters?

Development of roadmap and integration into strategy

> **"To elevate nature on the banking agenda, you must unite the key domains of business, risk, finance and sustainability."**
>
> **Marie-Claire Franzen-Aerts, Rabobank, Lead Nature**

As nature-related financial risks may directly impact the effectiveness of institutions' existing and future strategies (ECB, 2020), boards should review their business strategy. Developing a multi-year roadmap supports the integration of nature into the core business strategy ensuring that nature-related considerations are embedded within the organisation's overall strategic framework. This roadmap should outline the guiding strategy, major plans of action on short- and long-term, risk management policies and procedures, business plans including how the financial institution will manage and disclose nature-related material dependencies, impacts, risks, and opportunities (DIROs). These elements will help to ensure that the appropriate functions involved in identifying dependencies and impacts and managing nature-related risks and opportunities have the required resources (ECB, 2022). Initial high-level risk assessments can direct pilot programs for specific products or operations, providing valuable insights. These pilot programs enable the institution to gain a robust and concrete understanding of how the institution interacts with nature and to learn from initial implementations, to then apply those learnings to the broader business. Collaboration and engagement with key clients, particularly those in sectors or locations contributing significantly to nature loss, is crucial for identifying and executing these pilot programs effectively. Considering timelines for completing internal risk assessments and external reporting compliance, the roadmap can be further refined.

To bring the strategy into execution the roadmap should outline the allocation of specific resources and responsibilities for nature-related issues, integrating it into the incentive structure for board members, executives, and staff (FfBF, 2024a).

What follows are three practical examples of incentivising the execution of the nature roadmap.

Cross-departmental collaboration for nature integration

To ensure nature-related risks and opportunities are viewed as cross-functional priorities, quarterly cross-departmental meetings involving departments such as risk management, finance, legal, and human resources can ensure that nature-related risks are consistently integrated into decision-making processes. For instance, NatWest has adopted cross-functional teams that regularly assess the environmental risks associated with their lending portfolios, ensuring alignment with biodiversity targets (NatWest, 2023). Financial institutions could implement similar practices by involving departments in discussions about how nature-related impacts affect both the organisation and its clients, also aligning these efforts with the organisation's broader sustainability goals.

Appointing a nature representative on the board

Financial institutions can benefit from appointing a "Nature Representative" on the board, a practice inspired by the growing trend of assigning a dedicated member to represent long-term sustainability goals and through an uptake of CSOs (PwC, 2024). This role ensures that nature-related risks and opportunities are not overlooked in strategic decision-making processes. The Nature Representative, either someone from within the existing leadership team or an external advisor with expertise in biodiversity and ecosystem services, would be responsible for guiding the board on nature-related issues. Their responsibilities would include ensuring compliance with internal milestones and commitments as well as frameworks such as the TNFD and providing insights on how the institution's activities impact biodiversity. A relevant case study is the work of CDL, a Singapore-based real estate firm that was the first in the country to publish TNFD-aligned disclosures and appoint sustainability champions at the executive level (CDL, 2024b).

Nature positive incentives for executive compensation

To truly embed nature into governance and incentivise action, financial institutions could tie nature-positive performance metrics to executive compensation packages. Executives, including the CEO, CFO, and CRO, could have a portion of their bonuses linked to achieving specific sustainability goals with specific nature-related targets, such as biodiversity conservation or enhancing the institution's overall environmental footprint. This aligns with best practices from companies like Kering, which links biodiversity and sustainability goals to executive compensation to ensure accountability at the highest levels (Kering, 2023). For financial institutions, these incentives could include reducing the biodiversity impact of portfolios, meeting regulatory nature-related reporting requirements, or actively promoting nature-positive lending and investment strategies.

By adopting the above practices, boards can ensure a more robust oversight of nature-related issues, aligning the organisation's strategic priorities with sustainability and long-term resilience.

How NN Group N.V. aims to integrate nature into their governance and strategy

NN Group N.V. an international financial services company and institutional asset owner, who is a recognizes the financial significance of climate and biodiversity risks, integrating them into its risk and investment decision-making process. Committed to embedding nature-related considerations into its strategic risk and investment framework and related policies, NN Group N.V. aims to bring nature to the forefront of the board's agenda.

By integrating nature into their core decision-making matrix for board discussions, this allows nature considerations to be part of periodic strategic considerations. This gains better understanding and priority by linking nature-related initiatives to existing agenda items, such as financial performance and risk management. The board will be informed with clear, actionable items to maintain ongoing engagement and the relation to strong governance and board engagement is emphasized. Further, by encouraging commitments, such as signing the biodiversity pledge, keeps nature's theme active, supported by regular updates and progress reports.

By adopting this practical approach, NN Group N.V. aspires to take first steps in integrating nature into its operations, focusing currently on risk management and proprietary investments.

Asking the right questions

- How can we balance the necessary investment, lending and/or insurance activities that have a lower impact and/or dependency on nature with the pressures for achieving short-term results?
- How are we integrating insights from our nature-related risk assessments into our overall business strategy and decision-making processes, and what role does the board play in this integration?
- Do we have the right in-house capabilities and expertise within our institution to understand, assess, manage, and disclose nature related DIRO's (including at the sector level)?

Follow-up questions

- Are nature-related performance metrics part of talent development and retention strategies?
- How can we most effectively integrate the nature agenda into our business strategy and create a roadmap for action?

4. Risk management

> **"Nature isn't just the teacher of the arts; it is also the teacher of finance. (…) In fact, nature makes finance thrive."**
>
> **Frank Elderson, Member of the Executive Board of the ECB[4]**

- Financial institutions can integrate nature-related risks into their risk management frameworks, by focusing on scoping their current efforts, identifying exposures, and assessing financial impacts.
- Understanding dependencies, impacts, and opportunities in value chains is crucial for comprehensive risk management.
- A step-by-step approach, involving locating, evaluating, assessing, and preparing for nature-related risks is recommended.

This chapter will emphasise the critical need for financial institutions to identify and manage nature-related risks by integrating them into their risk management frameworks, detailing a step-by-step approach that includes (1) scoping current efforts, (2) identifying exposure to nature-related risks, and (3) assessing their transmission into financial risks. Risk management is aligned with all emerging trends described in this report: an evolving regulatory landscape and compliance trends, legal and fiduciary duties, identification of nature-related risks as financial risks, and social and client expectations.

Together with supervisors, regulators highlight the critical need for financial institutions to identify and manage nature-related risks (ECB, 2020 European Insurance and Occupational Pensions Authority—EIOPA, 2023). Besides the compliance perspective, integrating nature into risk management and financial analysis is generally proven to result in a better long-term financial performance (Whelan, T *et. al.*, 2021).

At a minimum, board members should ensure they oversee an effective risk assessment process and evaluate the long-term effects of unaddressed risks, including nature-related risks on the business (Bank of International Settlements, 2015; IFD, 2019). Specifically the board is expected to consider climate-related and environmental risks when developing the institution's overall business strategy, business objectives and risk management framework and to exercise effective oversight of climate-related and envi-

4 Natura finis magistra—acknowledging nature-related risks to make finance thrive, Amsterdam 29 September 2022. Accessed on 27 August 2024 via: ecb.europa.eu/press/key/date/2022/html/ecb.sp220929_2~d6497c36da.en.html

ronmental risks (ECB, 2020; International Association of Insurance Supervisors, 2022) As financial institutions' risks and opportunities on nature directly depends on the companies they engage with, they must understand the nature-related DIRO's of these clients and their value chain.

The pioneering work conducted by the NGFS[5] Taskforce on Biodiversity Loss and Nature-related Risks (2024) provides understanding of the steps that financial institutions can already take to identify and assess nature-related financial risks following the fundamentals of climate risk management recommendations. The following approach gives the full high-level spectrum of activities for a nature-related risk assessment, based on NGFS's first phase of identifying sources of nature-related risks and the TNFD risk assessment framework, "LEAP", that stands for Locate, Evaluate, Assess and Prepare (TNFD, 2023a). Case studies and risk assessments published by peers can provide insights for the early stages of nature-related risk assessment (UNEP FI, 2023a).

Step 1: Scoping

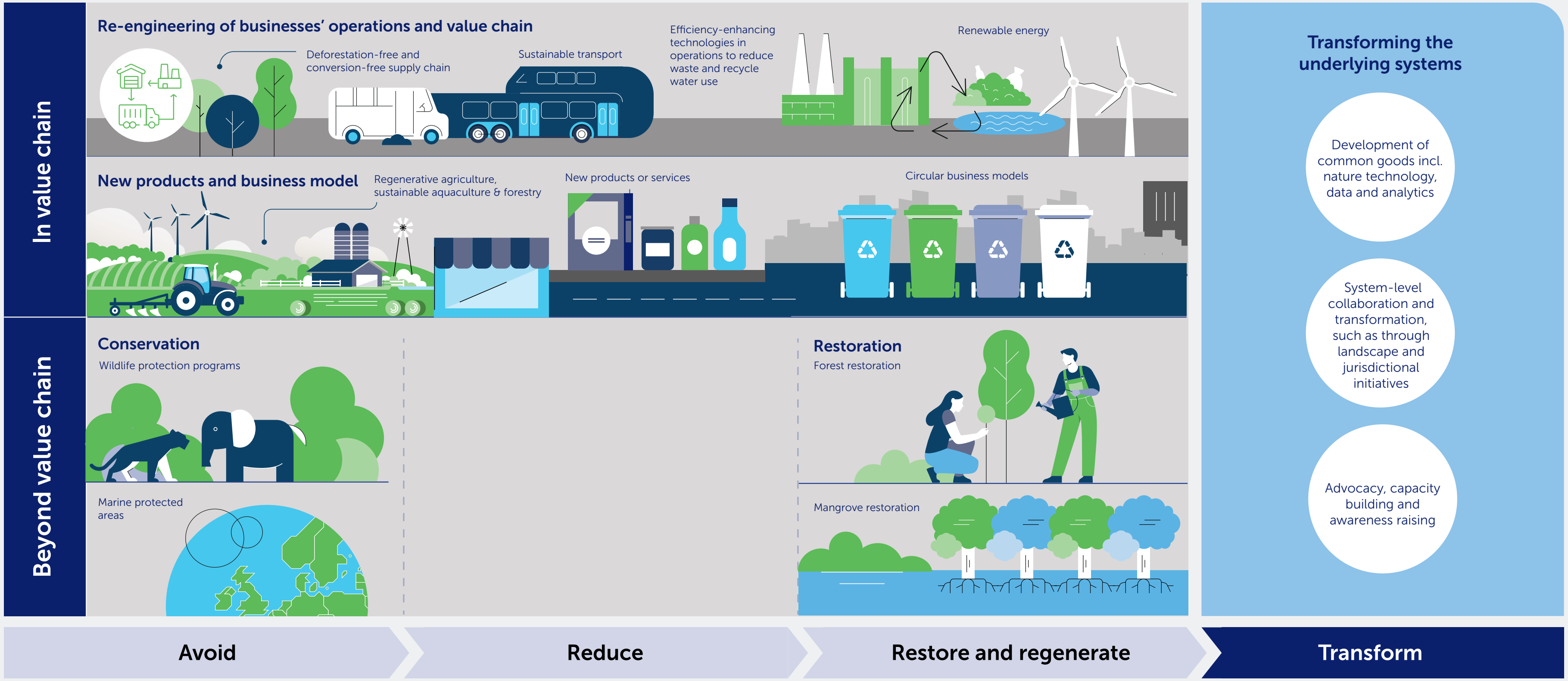
It is important to first identify the status quo of the financial institution's current efforts to lower its impact on nature loss. This involves reviewing their existing pledges and commitments related to environmental or social initiatives. A study shows that signatories of the Principles for Responsible Investment (PRI) are more likely to disclose biodiversity initiatives than non-signatories (Velte, 2023). By performing a review on pre-existing efforts on integrated themes such as climate, safety, and community these risk assessments, policies, data and activities can be leveraged for evaluating and managing nature-related risks and opportunities as well. For example, existing climate physical risk data can also be informative for nature-related risks assessment and environmental criteria in impact investing or standardised due diligence assessments can be supplemented with nature criteria.

How should the institution identify the interface of assets and liabilities with nature? This involves understanding the interactions of its clients with nature within specific locations. In a more mature phase, establishing systems to monitor these touchpoints on an ongoing basis is critical for effective management and mitigation of nature-related risks. An essential approach in this process is first defining the span of the activities, to determine which of the institution's investment, lending and/or insurance activities are included in the analysis. As a financial institution's interface depends on the companies they engage with, the sectors they finance or provide insurance and services should be determined, together with the location of these financed or insured activities, forming the starting point for Step 2.

5 The Network for Greening the Financial System (NGFS), convening central banks and supervisors, are working on understanding and assessing nature-related financial risks.

Production and consumption activities that contribute to nature-positive outcomes

Examples, not exhaustive



Applies to different drivers of biodiversity loss,* depending on the most material nature-related impacts and dependencies in sectors companies operate in

***Note:** Drivers of biodiversity loss include climate change, land-, freshwater- and sea-use change, direct exploitation, invasive alien species, pollution; please note the chart depicts examples rather than a prescriptive definition.

Source: World Economic Forum and Oliver Wyman

Figure 4: Financing the nature-positive transition—examples of what to finance (financing solutions)

The Development Bank of South Africa (DBSA) and FirstRand use ENCORE to understand and contextualise potential nature-related risks across their investment portfolios, and integrate nature into existing risk management processes.

South Africa is among the top ten most biodiverse countries on Earth, and Southern Africa harbours exceptional levels of biodiversity. South Africa (and Southern Africa more broadly) have high-profile examples of organisations affected by biodiversity loss. This results in physical and transition risks. Direct physical risks arise due to organisations' high dependence on nature. Transition risks include reputational and regulatory repercussions as organisations are increasingly held accountable for their negative impacts on nature.

FirstRand and DBSA have recognised the close integration of nature and climate-related physical risks and the implications nature loss can have on the financial system. For both organisations, the integration of nature-related risk into the risk assessment process is a natural extension of existing climate work. It is also a means for building resilience of investments against biodiversity loss. At the same time, FirstRand and DBSA are showing leadership in using ENCORE to make nature-related risks visible in financial language and helping to mainstream understandings of natural capital across the South and Southern African financial system.

The ENCORE tool has helped DBSA to screen portfolios for nature-related impacts and dependencies at the sector and sub-sector level using a range of additional nature-based tools. This includes identifying high-risk sectors and mapping the most material dependencies and impacts across these, enabling the identification of priorities for further analysis. FirstRand uses the ENCORE tool to raise awareness of nature-related risks for clients and internal risk assessment teams. ENCORE acts as an easy-to-access tool for translating impacts and dependencies on nature into exposure to potentially material risks for business and finance. FirstRand uses ENCORE data to develop guidance notes for clients and identify key issues for engagement. This helps businesses understand the importance of nature and healthy ecosystems to business activities and financial viability.

Both DBSA and FirstRand use the ENCORE tool as a first step for understanding and contextualising potential nature-related risks across their investment portfolios and integrating nature into existing risk management processes. In doing so, they act as leading examples for making nature risk visible to financial institutions and business in a South African context.

Asking the right questions

- How are nature-related factors included in financial planning and analysis?
- What are our institution's existing efforts and commitments on environmental and social themes?
- Which investment, lending or insurance activities are in scope for nature-related risk assessment?
- In which (sub)sectors and locations do we invest, lend or provide insurance?

Step 2: Identification of exposure to nature-related risks

2.A: Impact and dependencies identification

In this step, financial institutions should concentrate on identifying the sources of risk by first understanding their current exposures to nature. By identifying the types and magnitude of (i) negative impacts on nature by these clients and (ii) dependencies its clients have on the ecosystem services nature provides (such as water purification and natural flood barriers). Various guidelines provide recommendations on utilising relevant toolsets. Tools and frameworks such as SBTN, the TNFD LEAP process, and ENCORE can be used by companies to identify their most material sectorial environmental impacts and dependencies. It is important to note that unlike climate change, where emissions can flow around the world, nature dependencies and impacts are highly spatially specific. This requires an understanding of the location of assets or where the destination of loans made, actually has effect. By encompassing these analyses into a heatmap, practical focus is achieved on both sector and location sensitivity, enabling prioritisation (UNEP FI, 2023a). A study by FfBF on +2,300 companies from the MSCI ACWI, show that these companies' main impacts are on climate change, pollution, land use and water use. Additionally, they show a strong dependence on ground and surface water (FfBF, 2024c).

How Rabobank measures impact and dependencies on nature

Rabobank, together with stakeholders, developed the Biodiversity Monitor for Dairy Farming and for Arable Farming in The Netherlands. This innovative tool uses Key Performance Indicators (KPIs) to measure and monitor the impact of individual farms on biodiversity, both on the farm and beyond. It provides farmers with valuable insights into how sustainable practices can benefit their operations. By adopting these practices, farmers can reduce operating costs, improve the health of their livestock and crops, and potentially secure better market prices and more favourable loan conditions. Additionally, they can provide insights in new farmer revenue models. Diversified revenue models could help convince and motivate farmers to manage their farms by protecting and enhancing natural capital, including biodiversity. The development of the dairy focused monitor started with Rabobank, WWF-NL, Louis Bolk Institute and FrieslandCampina in 2016.

Asking the right questions

- Which of our institution's investment, lending and/or insurance portfolio has an impact and/or dependency on nature?
- Which direct and indirect dependencies does our institution's activities have on ecosystem services and what is the magnitude?
- Which direct and indirect negative impacts does our institution's activities have on nature and what is the magnitude?
- Do our institution's sector-level experts have sufficient nature knowledge and location knowledge for their sector(s)?

2.B: Prioritisation on sector and/or location level

Prioritisation is crucial to identify the clients that are most vulnerable or impactful to nature. Prioritisation in large portfolios can be done within a priority sector on key companies or activities, taking into account specifications such as management efforts undertaken by these companies and the sensitivity of locations. Location-specific data and, with it, the prioritisation, play an increasingly central role within nature-related risk assessment. The TNFD defines sensitive locations as locations[6] of importance for biodiversity; high ecosystem integrity; importance for ecosystem service provision, including benefits to Indigenous Peoples and Local Communities (IP&LCs) and stakeholders rapid decline in ecosystem integrity or with high physical water risks. The TNFD recognises that financial institutions may only be able to identify the geographic locations of their clients or financed activities for the areas flagged as potentially important by the heatmapping exercise at a relatively high level, such as by country (TNFD, 2024a) However, even irrespective of whether biodiversity is considered material under the CSRD, financial institutions are expected to know whether their financed activities are located near biodiversity-sensitive areas in their identification and assessment of material impacts, risks and opportunities[7].

Asking the right questions

- What is the scope and coverage of the nature-related risk analyses on portfolio level, sector and/or location level?

Follow-up question

- Does our institution have sufficient and reliable databases to obtain accurate information on the sector and location of our clients?

Follow-up question

- Are there robust processes in place to ensure we acquire this data both internally and externally?

6 Where the assets and/or activities in its direct operations—and, where possible, upstream and downstream value chain(s)—interface with nature.

7 ESRS 2, Appendix C refers to ESRS E4 par. 19: The undertaking shall specifically disclose:
(a) whether or not it has **sites** located in or near **biodiversity-sensitive areas** and whether activities related to these sites negatively affect these areas by leading to the deterioration of natural **habitats** and the habitats of species and to the disturbance of the species for which a **protected area** has been designated; and
(b) whether it has been concluded that it is necessary to implement biodiversity mitigation measures, such as those identified in: Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds; Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora; an Environmental Impact Assessment (EIA) as defined in Article 1(2), point (g), of Directive 2011/92/EU of the European Parliament and of the Council83 on the assessment of the effects of certain public and private projects on the environment; and for activities located in third countries, in accordance with equivalent national provisions or international standards, such as the International Finance Corporation (IFC) Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

CIMB sets 2030 targets for palm oil and power, advancing its sustainability journey towards net zero by 2050

CIMB Group Holdings Berhad ("CIMB" or "the Group") has taken a significant step within the global banking industry by formalising its 2030 climate target for its palm oil sector portfolio focusing on sustainable palm oil production. To encourage the growth of sustainable palm oil, CIMB has set a goal to reduce the emissions intensity of its entire palm oil portfolio by 16%, from 1.81 in 2022 to 1.52 $tCO_2e/tCPO$ by 2030—equivalent to a 2% annual reduction on average. The decarbonisation target is set based on the Science-Based Targets Initiative ("SBTi") and Forest, Land and Agriculture ("FLAG") guidance. These include Scope 1 and 2 emissions, originating from plantation and milling clients, along with Scope 3 upstream emissions associated with clients' sourcing of fresh fruit bunches from suppliers. To that end, CIMB will engage with its clients to shift their production towards certified sustainable palm oil to minimise environmental impacts, adopt better agricultural practices to increase yields and reduce operational greenhouse gas ("GHG") emissions as well as improve the quality and coverage of emissions reporting. CIMB's Net-zero targets for this sector serve to complement its No Deforestation, No Peat, and No Exploitation ("NDPE") commitment which was rolled out in 2022, where clients with new plantations are required to conduct a High Conservation Value ("HCV") assessment and commit to the conservation of HCV and peat areas prior to land clearing. In addition, clients are also responsible for ensuring that the rights of communities, smallholders, and workers are safeguarded. CIMB is the first bank globally to have announced a science-based Net-zero decarbonisation pathway for the Palm Oil sector. As part of the process, CIMB actively engaged with key industry stakeholders to ensure its plans are reflective of the collective need to move forward in this area.

2.C: Identifying material nature-related financial risks

Following the prioritisation in Step 2B, the clients' impacts and dependencies translating to nature-related financial risks, pinpointing material sources of either physical or transition risks.

Overall, three types of nature-related risks are distinguished: physical, transition and systemic risks:

- **Physical risks:** These risks arise from potential financial losses caused by changes in the functioning of ecosystems on which an organisation relies and in some cases the organisation negatively impacts. This can include damage to assets, direct disruption of production processes, and indirect disruption of supply chains. Nature loss exacerbates these physical risks, which can be event-driven (acute), result from long-term shifts (chronic), or both.

- **Transition risks:** These risks stem from potential financial losses due to a misalignment between an organisation's activities and the evolving landscape in which it operates. Regulatory risks increase with new and stricter biodiversity-related regulations anticipated, (Suttor-Sorel, 2019). This includes developments in existing and announced nature-related policy, legal frameworks. This also requires including a forward-looking dimension. For example, the Global Biodiversity Framework that announced the "30 x 30 target", protecting 30% of land and water by 2030. Additionally, under transition risk fall market dynamics, and reputation aimed at halting or reversing nature loss. Generally, the more abruptly or disorderly these changes occur, the greater the transition risk (Cambridge Institute for Sustainability Leadership—CISL, 2021).
- **Systemic risks:** The interconnectedness of financial institutions and concentrated exposures to high-risk sectors can amplify these risks, potentially leading to systemic issues within the financial sector. It's important to highlight the concept of endogenous risk, where the financial sector's role in financing high-impact activities contributes to the very risks it must manage. This includes financing activities that degrade nature, such as deforestation, which can exacerbate physical risks (NGFS, 2024). Systemic risks are excluded for the remaining of this paper, as these specific nature-related financial risks for the financial sector, are so far mainly discussed by central banks and supervisors.

The above types of risks should be identified from the impacts and dependencies identified in Step 2B). The general perspective is that physical risk stem from dependencies and transition risks from impacts. To identify the risks from a client's dependency perspective involves understanding its vulnerability to nature degradation and nature loss, which depends on its ability to adapt and find substitutes for lost ecosystem services. Generally, high dependency means high exposure to physical nature-related risks. While technological and geographical substitution possibilities exist, they are often limited, especially for essential services like freshwater provision. Additionally, it is essential to recognise the interconnection between climate change and broader nature-related risks, as efforts to mitigate climate change can sometimes enhance or exacerbate nature-related risks.

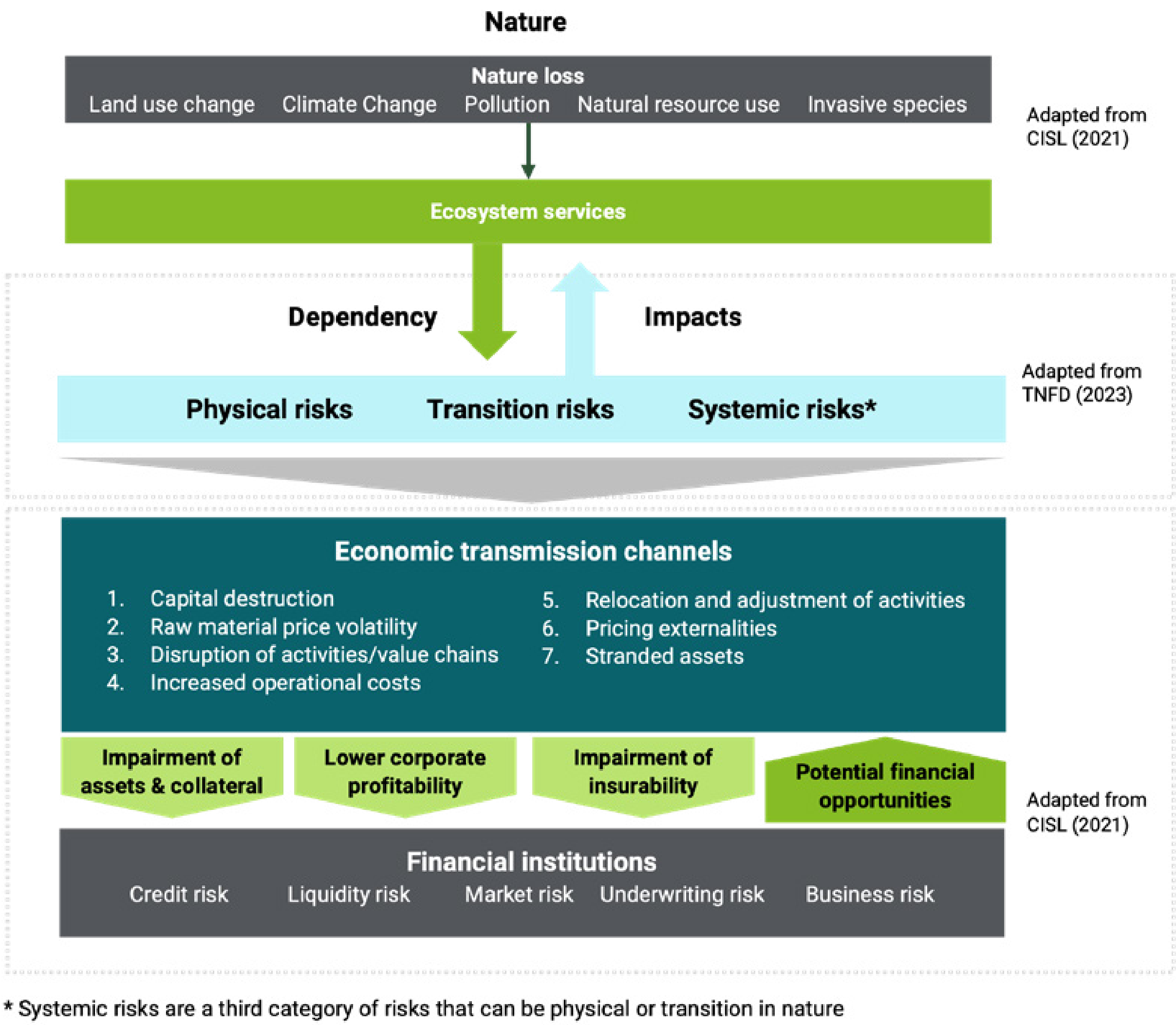


Figure 3: How nature-related risk via transmission channels translated to financial risks.

From a client's impact perspective, higher-impact activities are generally at risk of facing increased measures for conservation and restoration. These transition risks include recognising how changes in regulations, market dynamics, and stakeholder expectations can affect business operations and financial performance. It also involves understanding how clients develop strategies to mitigate these risks, ensuring they remain competitive and compliant in a rapidly changing landscape.

In addition to risks arising from their clients, financial institutions can face direct nature-related financial risks. In terms of the first two risk types this evolves as follows:

- **Physical risks** could include physical damage to the financial institution's own properties (e.g., company offices) located in areas affected by nature loss, like increased flooding due to deforestation, or dependencies on nature for their own operations such as water supply.
- **Transition risks** include several compliance-related and reputational risks. As sustainability rules and standards evolve, institutions may increasingly encounter compliance-related risks, including liability, litigation, and reputational damage (ECB, 2022). The NGFS (2024b) has identified 37 complaints against financial institutions related to their corporate due diligence, specifically addressing adverse impacts on the environment and climate.

Asking the right questions

- Are we planning to perform nature-related risk identification assessment periodically?

Follow-up questions

- Which of the prioritised dependencies and negative impacts could be material sources of physical and transition risk?

Step 3: Transmission to financial risks and risk appetite

Analysing exposures in Step 2 and identifying an initial indication of potential physical and transition risks in Step 2 does not yet constitute a comprehensive risk assessment. Therefore, as a subsequent step, financial institutions should assess the financial risks stemming from the identified sources. This involves examining how the nature-related physical and transition risks can cascade through transmission channels into traditional financial risk categories credit risk, market risk, liquidity, underwriting and business risk. Potential economic impacts these nature-related financial risks can have on their clients and macroeconomy include capital destruction, raw material price volatility, disruption of activities/value chains, increased operational costs, relocation and adjustment of activities, pricing externalities and stranded assets (**See table X**). These micro- and macro-impacts function as transmission channels to significant financial risks, e.g. credit risks, arising from the institution's exposure to these, as follows:

- **Credit risk** encompassing both issuer and counterparty risk, arises when an issuer or borrower is unable to fulfil obligations due to default. For instance, Agricultural runoff, like fertilisers, can pollute freshwater, increasing water treatment costs and risking public health. This pollution is especially concerning in mountain areas, which supply 60–80% of freshwater (Xu *et al.,* 2019). These negative impacts in the form of pollution, by agricultural clients can translate to counterparty risks such as the increase of the likelihood of loan defaults, due to operational expenditures if significant investment is needed to adjust operations or lower revenues.

- **Market risk** involves the limit access to capital markets. An example is breaking environmental regulations. For example, the China Securities Regulatory Commission has blocked companies from carrying out an initial public offering if they have broken environmental protection laws (Reuters, 2016)

- **Liquidity risk** occurs when an institution cannot efficiently meet financial obligations in the short term. For example, in times of natural hazards, such as wildfires and floods, short term cash is needed to pay for repairs and basic needs while relief payments and insurance payouts typically takes weeks or months to reach counterparties.

- **Underwriting risk** refers to the potential for loss experienced by insurers due to discrepancies between the assumed risk and the actual risks associated with the underwritten insurance policies. Physical risks, such as extreme weather events and natural disasters, can lead to increased claims frequency and severity, directly affecting the insurer's loss ratios and underwriting profitability. Transition risks, including regulatory changes, shifts in market preferences, and advancements in technology geared towards sustainability, can alter risk profiles and lead to changes in client behaviour, impacting demand for certain insurance products.
- **Business risk** includes risks to a financial institution's operations or business model due to changes in circumstances. Being associated with major negative environmental events, such as oil spills or deforestation, can lead to reputational damage and actions by creditors, policyholders or investors, affecting share value. (CISL, 2021).

The long-list of nature-related risks, as outcome of the risk identification process (Step 2C), describes the transmission channels to the traditional financial risks. The risk assessment phase evaluates the impact of these nature-related risks, with the outcome of an overview of the material risks, for short-, medium, and long-term. This analysis should consider future developments, including emerging policies and potential sudden collapses of ecosystem services, and how these may influence the time horizon of materialisation of the risks. Subsequently, institutions should determine relevant Key Risk Indicators (KRI) to measure material risks and set risk appetite thresholds based on the level of risk they are willing to assume, aligned with their business model (ECB, 2020). The board should be informed of these nature-related financial risks, by presenting them alongside the other traditional financial risks in the risk dashboards, similar to what financial institutions do for climate related risks (GARP, 2022).

By following the above-interconnected steps, financial institutions can start managing their nature-related risks and opportunities by setting targets. It might be useful to ask for the creation of a simple 'dashboard' to better illustrate these factors and how they are being managed. While models and methodologies are still evolving, taking initial steps is crucial for building knowledge and refining assessment techniques over time. This approach not only mitigates risks but also unlocks new opportunities, reinforcing the institution's resilience and long-term success.

Asking the right questions

- Are nature-related physical and transition risks embedded into the existing (financial) risk management processes?

Follow-up questions

- Of the identified nature-related physical and transition risks, to what nature-related (financial) risks, such as reputational and credit risks, can these be translated?
- What is the risk appetite of the identified nature-related financial risks?

Step 4: Nature-related opportunities

In addition to nature-related risks, interaction with nature can lead to significant nature-related opportunities. For a financial institution, these are the positive outcomes for both the business and the environment that result from activities benefiting nature, such as halting or reversing nature loss, or contributing to restoration efforts. In addition, nature-related business opportunities are emerging well beyond the realm of traditional nature-based solutions (NbS) in the form of forestry, restoration and regenerative agriculture. The World Economic Forum estimates that USD 10 trillion worth of annual business opportunities and 395 million potential jobs can be created by 2030 through 15 systemic transitions. These nature-positive solutions include diversifying diets, refurbishing or upcycling of clothing, and improvements in waste management. These transitions would require up to USD 2.7 trillion in annual investment, opening significant lending and investment opportunities for financial institutions.

Private finance flows into innovative nature financing mechanisms, including biodiversity credits, impact investments, or blended finance mechanisms, grew elevenfold in four years. Natural capital is emerging as a viable asset class, given its financial and sustainability benefits. Over 40% of surveyed investors are investing in private debt or equity to protect or enhance nature.

In the food system, examples might include disruptive technologies such as alternate proteins, bio-fermentation or vertical farming. In construction examples might include cladding buildings with biodiversity walls or the design of 'sponge cities' to soak up excessive flood water driven by climate change impacts. In healthcare, examples are emerging of new approaches to combatting disease, such as using viral 'phages' that attack bacteria unresponsive to antibiotics. E-DNA sampling in air and water has the potential to revolutionise environmental impact assessments. Bioplastics are replacing fossil fuel-derived plastics in packaging. The aviation industry is testing biological feedstocks to fuel the aircraft of the future.

Other fields include carbon markets that may employ nature-based solutions (NBS) to deliver carbon credits with the added value of biodiversity enhancements. Biodiversity credit markets are in their infancy but are likely to grow in size. Subsidy reform remains a huge and largely unachieved opportunity globally to realign USD Billions to support nature-positive outcomes rather than nature-negative activities. In some markets, especially in the UK and Europe, realigning subsidies in this way is leading to new opportunities in the farming sector for sustainability-linked loans and investments (Lloyds Banking Group, 2024).

Despite the growing importance of nature, few firms address these opportunities in their annual reports. Those that do highlight nature often focus on the negative implications rather than exploring the potential opportunities of nature-friendly practices (Giglio *et al.,* 2023). Research indicates that firms headquartered in communities with strong social capital tend to perceive nature-related challenges more often as opportunities for sustainable innovation and improved governance (Pretty, 2004) Financial institutions can harness nature-related opportunities by influencing businesses, households, and governments they engage with to address their impacts and dependencies, potentially benefiting nature.

This report identifies that nature-related opportunities for financial institutions exist across three dimensions:

- **Risk-related opportunities:** By mitigating nature-related risks associated with natural capital and ecosystem services loss, nature-related opportunities can arise. By reducing their impact on nature or decreasing their dependency on ecosystem services, organisations can become more resilient. For example, investing in soil quality enhancement can provide financial benefits. These opportunities can be identified during the risk analysis.
- **Products and Services:** Opportunities emerge from discovering new ways to serve existing and new counterparties in various markets. These may include green finance instruments (such as green bonds and sustainability-linked loans), project financing for nature conservation, and co-created solutions with counterparties to reduce environmental impacts.
- **Strategy:** Opportunities developed from actions that align with an organisation's strategic goals, such as achieving sustainability objectives, enhancing market positioning, and gaining competitive advantage. This alignment helps to meet stakeholder expectations and strengthens the organisation's ability to serve its counterparties. Identifying such strategies at their clients, can create investment and insurance opportunities for the financial institution.

Caution is needed in board reviews of opportunities, because not all nature-based opportunities may necessarily deliver benefits for nature. Boards should also be mindful of ensuring a just transition when considering either investment or lending into nature-based opportunities. Sustainable aviation fuels offer an example. The potential demand from the aviation sector for vegetable derived fuels to replace fossil fuel derived fuels will require large areas of land to be devoted to growing them. This might result in mono-culture crops where biodiversity is effectively excluded, using agrochemicals designed to supress diversity to maximise crop productivity. Worse, demand for land for biofuels might result in the conversion of biodiversity rich landscapes, such as forests, to provide farmland. Actions such as these could also lead to competition for land that is needed to grow food and raised land prices. This could have impacts on access to land to grow crops for poor communities. Alternatives might be to grow these crops using nature friendly methods, such as agroforestry, or through regenerative agricultural practices. The production of sustainable aviation fuels from biological or other waste materials provides another potential alternative.

Asking the right questions

- Does our organisation include the opportunities perspective in our nature analysis?
- Has our organisation identified material nature-related opportunities as part of our broader sustainability transition or as stand-alone opportunities?

5. Portfolio management

> **"Unless we fundamentally change the movement of money, we will finance ourselves into extinction."**
>
> **Andrew W. Mitchell, co-founder of the Taskforce on Nature-related Financial Disclosure and Senior Adviser to Global Canopy**

- Financial institutions can enhance risk management and long-term financial performance by aligning portfolios with sustainability goals, such as emissions reduction and broader environmental considerations.
- Setting targets can increase positive impacts and decrease the negative impacts of financial institutions on nature, aligning with international frameworks like the Global Biodiversity Framework and industry-specific initiatives.
- Financial institutions can lower their impact on nature loss by supporting value chain transformations, advocating for policy changes, and engaging in conservation projects.

Integrating sustainability into portfolio management is becoming a crucial aspect for financial institutions, following the emerging trend of the identification of nature-related risks as financial risks. It not only aligns with regulatory requirements and market trends but also enhances risk management, operational efficiency, and long-term financial performance. Sustainable portfolio management will also fundamentally make the world a safer place for future generations. Few Gen X or Gen Z pension fund holders will want their pensions to pay out into a highly degraded future world and to know that their pension may have contributed to that outcome. This chapter will showcase the business case for including nature-related considerations in financial institutions' portfolio management and, by setting targets, how this can be done.

Why? Drivers for portfolio management

Portfolio alignment includes actions taken to align a portfolio of loans or assets under management with the objectives of the Paris Agreement and broader sustainability goals, encompassing not only emissions reduction but also other environmental and social considerations. The strategic portfolio allocation follows from the financial institution's transition planning.

1. **Strategic direction:** Portfolios, including investments that are facing material nature-related risks, should be managed in alignment with the institutions' sustainability strategy and the nature transition plan.

2. **Long-term financial performance:** Managing nature-related risks can significantly impact an institution's long-term financial performance. Chapter 3 provides more details on how to integrate risk management practices to enhance financial performance.

3. **Commitments:** Specific commitment to nature is exemplified in the Nature Positive Initiative, which sets a global goal for nature that involves businesses, governments, and other stakeholders, providing the tools and guidance necessary for all to contribute. The initiative also advocates for the full implementation of the GBF by governments and other entities (Nature Positive Initiative, 2024). Net-zero or portfolio alignment is the second most frequently discussed topic by boards of financial institutions (GARP &UNEP FI, 2021). Nature can provide opportunities to meet these commitments by aligning portfolios with emissions pathways through investments in NbS (UNEP FI, 2021). NbS are solutions such as reforestation, wetland restoration, and urban greening vital in our ongoing battle against climate change (Nagrath, Dooley & Teske, 2022). Additionally, several financial institutions also committed to the Finance for Biodiversity pledge (FfBP), whereby setting targets is one of the five commitments under the Pledge.

4. **Market trends:** Understanding and adapting to market trends is essential for financial institutions to stay competitive and align with broader sustainability goals. Chapter 2 discusses more details on the current market trends influencing nature-related strategies.

5. **Operational efficiency:** Leading net-zero frameworks, such as the NZIF, UN-convened NZAOA, NZAMI, GFANZ, and SBTi, also emphasise the importance of aligning nature targets with net-zero goals. Integrating nature considerations into net-zero transition plans leverages the "climate-nature nexus" in investment policies and processes, promoting interoperability (FfBF, 2024a). Realigning the climate strategy with nature will also better align portfolios with sectors expected to play a significant role in the future from a combined climate-nature perspective transition, ultimately leading to better returns (NatureFinance, 2021). However, it's important to recognise potential trade-offs between climate and nature targets and address them to make informed investment decisions.

6. **Regulatory compliance:** Adhering to regulatory frameworks is crucial for maintaining compliance and avoiding legal repercussions. This involves aligning existing disclosures with mandatory requirements and voluntary frameworks like TNFD. Chapter 5 provides more detailed guidance on regulatory compliance.

On the one hand, existing portfolio activities related to environment and social ambitions, such as investment strategies, product offerings, or client engagement (TNFD, 2024a), can also serve as a starting point for managing the identified nature-related financial risks and opportunities (WEF, 2023a). On the other hand, the remaining portfolios should not be overlooked, as these can also face significant nature-related DIROs.

Portfolio targets setting

Financial institutions should set targets to increase their positive impacts and decrease their negative impacts in the most significant impact areas based on the nature, content, and location of their portfolios. Aligned with the Global Biodiversity Framework (GBF) and supported by other organisations and initiatives, such as the EU Biodiversity Strategy and FfBP, these targets should be established based on the best available science (CBD, 2021).

The GBF is often referred to as the starting point for implementing nature targets. In 2023, UNEP FI, with the support of Principles for Responsible Banking (PRB) signatories, released nature target-setting guidance that aims to help the banking industry act on nature loss and set targets to align with the objectives of the GBF. The GBF is being translated into national-level policy through the National Biodiversity Strategy and Action Plan (NBSAP) and Biodiversity Finance Plans (BFPs). While all targets are relevant to financial institutions, those directly targeting financial institutions are mainstreaming nature in decision-making (Target 14 in the GBF), assessing and disclosing (Target 15), repurposing and reforming subsidies (Target 18) and innovative financial solutions (Target 19) (WEF, 2023a). Countries like Australia, Brazil, China, and the European Union are offering significant funding and incentives to drive private sector innovation and investment in green transition plans, nature markets, and bioeconomy strategies (TNFD, 2024a). Global policy decisions on nature affect financial institutions. As an illustration for this specific case, the abovementioned governance strategies increase transition opportunities for those businesses that are advancing their nature journey. The remaining GBF targets also affect financial institutions, such as Target 3, which requires supporting the conservation of at least 30% of terrestrial and marine areas by 2030. Clients with activities that impact key biodiversity areas or who are planning to extend activities to these areas could face higher transition risks, impacting financial institutions, too.

Portfolio targets formalise the financial institution's ambitions to reduce the potential negative impact of its portfolio and/or increase its positive impact, setting targets on the evolution of their KPIs towards specific DIRO thresholds towards specific DIRO thresholds. It is essential that targets are set for all material environmental themes and the relevant sectors. As an illustration, a financial institution could set a portfolio target to have a certain percentage of clients by 2030 in relevant sectors that will implement policies to reduce their virgin plastic use (FfBF, 2024a), aligning with GBF Target 7 that requires reducing excess plastic waste by 2030.

Asking the right questions

- What progress is the institution making on meeting its net-zero portfolio alignment targets?
- Are we ensuring portfolio alignment on existing environmental and social ambitions is supported with nature solutions?

- How are we integrating our nature strategy and insights from our nature-related risk assessments into our current environmental and social activities for portfolio alignment?
- How are we planning to integrate our nature strategy and insights from nature-related risk assessments into the segments of our portfolio that are currently not in scope for existing environmental or social portfolio activities?

How to steer your portfolio?

Financial institutions can lower their impact on nature loss most effectively by supporting the transformation **within their client's value chain**. Such transformative actions support the adoption of low-carbon technologies, implementing recycling programs, or promoting business models like regenerative agriculture. By facilitating these client's internal changes through financial activities, financial institutions help companies shift their production and consumption practices to lessen their negative impact on nature (WEF, 2024b). Focusing on a select group of companies and industries can already greatly reduce negative portfolio impacts. Approximately 67% of biodiversity impacts in the MSCI ACWI are concentrated among the top 250 companies (FfBF, 2024b). Managing the portfolio can be done in several ways, including stewardship, engagements, voting policies and sector-specific KPIs (FfBF, 2024a). For example, via engagement insurers can require their underwriting clients to set science-based nature targets, in line with the sector that they are in. These are supportive of the portfolio targets. For example, 'by 2030 x% of companies from relevant sectors will have committed to implement an SBTN validated Target on Freshwater starting from y%' (Finance for Biodiversity Foundation, 2024a).

Secondly, financial institutions can **engage in transforming the broader systems** in which their clients and even other corporations operate. This can be done through landscape and jurisdictional initiatives, advocating for policy changes and subsidy initiatives, and raising public awareness. By influencing these underlying systems, they help create a more sustainable and supportive environment for companies to operate in ways that are less harmful to nature (WEF, 2024b). This can be done in a collective effort with other financial institutions and by joining initiatives and communities such as FfBP whereby knowledge and data are shared amongst peers (WWF , 2023).

Thirdly, the financial industry is data-driven. It collects a wealth of data on physical hazards, providing valuable insights for tackling climate change and nature loss. Financial institutions can support global progress against climate change and nature loss by **sharing their data and supporting research** with scientists, NGOs, governments, and society.

Moreover, **sustainable product design and claims management** (for insurers specifically) contribute to environmental objectives throughout the purchasing and product lifecycle. Effective design of products can promote more sustainable behaviour of the financial institution's clients. Examples include requiring clients to prevent and mitigate nature loss. Claims management is an area where specifically insurers can lower their impact on nature loss. Adopting policies that prioritise repair rather than replacement and promoting more environmentally friendly and resilient solutions in case of reconstruction can substantially reduce the adverse effects of claims management on nature.

Finally, financial institutions can extend their support beyond the company's value chain by facilitating **conservation and restoration projects**. This could include protecting wildlife habitats, cleaning up coastal and marine areas, or restoring vital ecosystems like mangroves. By investing in, lending to, or insuring in these initiatives, financial institutions help to preserve and restore natural environments that are crucial for biodiversity.

Financial institutions' specifications on target setting and portfolio management

Banks

Signatories to the Principles for Responsible Banking (PRB) are required to develop at least two robust targets that address the most significant impacts they have identified and publicly report on its progress. A guidance document, developed with UNEP-WCMC, SBTN, and other experts, supports this effort. To fulfil PRB commitments, financial institutions must report on the implementation of the Principles, including biodiversity targets (CBD, 2021).

Investors

FfBF designed a Nature Target Setting Framework specifically for asset owners and asset managers, to start setting targets on nature. In terms of sectoral, engagement, and portfolio coverage targets, there are differences in scope. For **asset owners**, targets can encompass all assets under management and on the balance sheet. However, targets exclude capital managed by group-owned asset managers for third-party clients. It is recommended to engage third-party investment partners in biodiversity target discussions. For **asset managers** specialising in nature-related or sustainable investments, targets can be set over the entire portfolio, while for other managed funds to the greatest extent possible.

Insurers

Insurance can give incentives to fund nature restoration and conservation projects. Nature-based solutions and ecosystem-based risk reduction, such as mangroves, coral reefs, or ecological forestry, allow for loss prevention from natural disasters, and ultimately lead to reduced premiums, keeping assets insurable. Insuring natural assets and nature-based solutions can lead to the de-risking of investments in nature restoration and conservation projects. It also enables communities to restore nature's protection mechanism after natural disasters impair the ecosystem. For example, the first-ever reef insurance policy by Swiss Ree of USD 3.8 million was purchased by the government of Quintana Roo, Mexico, utilising tourism tax revenues, to insure 160 km of coastline. Following Hurricane Delta in 2020, the first payout was used for reef restoration (The Nature Conservancy, 2024).

These insurance incentives are a unique way to increase financial flows to nature. Insurance companies are also encouraged to set targets for significantly increasing their underwriting for specific nature-positive sectors. These sectors contribute to nature-positive outcomes and support the transition through product design that enables clients to opt for choices that reduce their environmental footprint, e.g., repair over replace renewable energy generation (WWF, 2023).

In summary, following the initial and future steps in governance, strategy, and risk management, financial institutions are expected to monitor and report on their targets (FfBP, 2023). The next chapter will delve into the intricacies of reporting and disclosures, outlining the key practices and standards that boards should adopt to ensure transparency and accountability in their interface with nature and subsequent actions.

Asking the right questions

- What specific measures have we put in place to align our portfolio targets with the Global Biodiversity Framework (GBF) targets, and how are we tracking progress in achieving these targets?

6. Disclosures and regulatory guidance

> **We need this kind of transparency to underwrite the changes the planet needs, both in the short- and long-term".[8]**

- Regulatory developments such as the EU's CSRD, emphasize integrating biodiversity considerations into governance and operations, reflecting the increasing global momentum for nature-related transparency.
- Financial institutions play a critical role in communicating nature initiatives, navigating regulatory frameworks, and adopting reporting standards like ESRS and GRI to ensure transparency and foster stakeholder trust.
- Nature disclosures can be more complex than climate disclosures due to intricate ecosystem interactions and the need for diverse KPIs to capture various ecosystem aspects.

This chapter emphasises the vital role of financial institutions in communicating their nature initiatives, navigating regulatory frameworks, and adopting comprehensive reporting standards such as ESRS and GRI, while detailing key frameworks such as TNFD to guide effective nature-related disclosures. The Pillar Disclosures and Regulatory Guidance is mostly aligned with the emerging trends of an evolving regulatory landscape, compliance trends and legal and fiduciary duties.

Communication by financial institutions is vital. Financial institutions must inform stakeholders about the status and the next steps they are taking regarding sustainability initiatives. Effective communication structures help maintain stakeholders' trust and support, fostering a collaborative environment for sustainable practices. Additionally, stakeholders have high expectations of the financial sector to demonstrate their activities related to nature (NatureFinance, 2022).

In Asia, the Singapore Exchange (SGX) has also taken steps toward mandatory biodiversity disclosures, recently announcing plans to include nature-related risks in sustainability reporting (City Developments Limited—CDL, 2024a). These evolving standards will require listed companies to provide detailed information on their biodiversity impacts and mitigation measures, aligning SGX with the global push for greater transparency and accountability in environmental, social, and governance (ESG) practices. The European

8 Carlos Manuel Rodriguez, Global Environment Facility CEO and Chairperson

Union's CSRD is another critical development. The CSRD, effective in 2024, mandates companies to disclose their impacts on biodiversity and ecosystems as part of their sustainability reports (Syla-Beqiri, 2023). This Directive aims to bring greater transparency to corporate nature-related risks and opportunities, encouraging businesses to integrate biodiversity considerations into their governance and operational frameworks. These examples reflect the growing global momentum behind nature-related disclosures. Regulatory and disclosure developments like the CSRD and SGX's enhanced reporting requirements signal a shift in expectations for boards and corporate leaders to proactively address nature-related risks.

What is more, depending on the relevant regulatory framework, financial institutions may face direct legal risks for failing to disclose sustainability-related disclosures,[9] ultimately impacting stakeholder value (EIOPA, 2023). Besides efforts of (voluntary) reporting frameworks, governments are acting through policy and fiscal measures. In December 2022, nearly 200 governments committed to the GBF to halt and reverse nature loss by 2030. The GBF emphasises the crucial role that businesses and financial institutions must play. Specifically, by adopting Target 15 of the GBF that urges businesses, including in particular large financial institutions to monitor, assess, and transparently disclose their biodiversity impacts. Although some regions currently have fewer regulations in development, adopting a "wait-and-see" approach is discouraged (Deloitte, 2024a). Companies organised or headquartered in regions where nature-related disclosures are not yet mandated are not necessarily exempt from reporting obligations. Certain regulations have an extraterritorial reach, suchuch as the CSRD that imposes reporting requirements on non–European Union entities that have a significant activity in the EU.

Navigating the landscape of nature frameworks and standards

> **"Starting early even before the required reporting (e.g. CSRD) helped with making the board aware of the financial risks associated with nature".**
>
> **Esther Egeter, a.s.r. Sustainability manager**

Existing and upcoming reporting frameworks provide guidance and examples on how financial institutions can report their relation to nature (CBD, 2021). Nature frameworks are increasingly seeking alignment in key concepts and methodologies, striving for a globally consistent baseline of nature reporting. These efforts include cross-referencing definitions and guidance, as well as enhanced alignment of disclosure requirements and recommendations (UNEP FI, 2024a). Such frameworks can inform the development of standards and other regulations (GRI, 2022). The landscape of disclosure on nature will continue to evolve, but the primary existing frameworks include the following:

9 Such as failing to disclose adverse impacts following the Sustainability-related disclosures in the financial services sector (SFDR), Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019.

1. **Taskforce on Nature-related Financial Disclosures (TNFD) framework:** Following the footsteps of the TCFD, the TNFD's recommended disclosures are divided under four pillars I. Governance, II. Strategy, III. Risk Management and IV. Metrics & Targets, encompassing a total of 14 recommendations. Next to their disclosure recommendations TNFD provides specific financial sector guidance, risk assessment ("LEAP approach"), engagement and scenario analysis guidance. The TNFD is increasingly collaborating and seeking alignment with other frameworks and existing and future disclosure standards, such as the International Financial Reporting Standards (IFRS) Sustainability Board (ISSB) (TNFD, 2024d) and ESRS (TNFD, 2024c).[10] For example, the commonalities exercise between TNFD and ESRS, shows that all 14 TNFD recommended disclosures are addressed by the ESRS, mainly on the environmental topics (EFRAG,). 2024).

2. **European Sustainability Reporting Standards (ESRS):**[11] The ESRS provide the detailed guidelines for companies to comply with the CSRD, which mandates comprehensive sustainability reporting in the EU. These disclosure requirements include topics on the environment, such as water and pollution, social and governance topics.

3. **The Global Reporting Initiative (GRI) Standards:** GRI drives broader environmental disclosure and developed the GRI 101:[12] Biodiversity, enabling organisations to publicly disclose their most significant impacts on biodiversity and how they manage them (GRI, 2024).

4. **CDP disclosure system:** CDP's nature-related disclosures focus on areas such as deforestation, water security, and biodiversity, aiming to drive transparency, accountability, and actionable insights to protect and restore natural ecosystems (CDP, 2023a).

5. **Science Based Targets Network (SBTN) target setting:** SBTN published a framework to assess and prioritise organisations and cities' impacts on freshwater, land, ocean, biodiversity, and climate so they can then take on-the-ground action accordingly through targets, beginning with freshwater and land (and climate through SBTi) (SBTN, 2024). Financial institutions can leverage this guidance to encourage, support and incentivise clients to set SBTs for nature, especially in high-risk sectors and locations, and where their financial institution has high exposure and/or sphere of influence (& share lessons) (FfBF, 2024a). SBTN is working with partners on more specific guidance for the financial sector (FfBF, 2023b).

6. **International Sustainability Standards Board (ISSB) Standards:** The ISSB aims to provide a consistent and comparable framework that companies can use to report on their environmental impacts, dependencies, and management strategies, including areas such as biodiversity and natural resource use. S1 on sustainability and S2 on climate, are the first two global standards ISSB has released. The organisation has indicated that in preparation for its next standard, S3, it is embarking on a period of research on nature in collaboration with a number of the parties above, including TNFD.

10 The European Sustainability Reporting Standards (ESRS) is drafted by EFRAG in its role as Technical Advisor to the European Commission. Adoption of ESRS by Delegated Act is mandated by the co-legislators in the Corporate Sustainability Reporting Directive (CSRD) – Directive (EU) 2022/2464) adopted in December 2022.

11 Annex I to the Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards.

12 Adjustment to GRI 304.

The analysis 'Accountability for Nature: Comparison of Nature-related Assessment and Disclosure Frameworks and Standards' published by UNEP FI (2024b) on these seven leading standards, frameworks and systems for assessment and disclosure on nature-related issues, with plans to update this on an annual basis to provide easier transparency and interoperability among these frameworks.

These reporting standards and frameworks encourage nature reporting processes, including risk management processes and the use of internal and external audit and assurance resources. Reporting should encompass a comprehensive approach, covering key elements such as governance, strategy, risk management, and metrics and targets, to ensure that all critical aspects of nature-related dependencies and impacts are addressed. The successful implementation of sustainability reporting generally starts with a well-crafted plan and requires a comprehensive understanding of the institution's ESG reporting context, along with any new requirements that may impact it (Deloitte, 2024b). Specifically, the CFOs and finance functions play a vital role in reporting, by first identifying the current sustainability reporting. With the increasingly integrated attribute of these reporting standards, it's more efficient to build further on current efforts for nature reporting. Further, by breaking down organisational silos and promoting an integrated mindset, enables the entire board to adopt more cohesive thinking in measuring, managing, and reporting processes (International Federation of Accountants, 2022).

Related to **governance**, reporting standards and frameworks encourage boards to perform their oversight by implementing several key practices. Reporting should include the board's oversight of nature-related DIRO's (TNFD, 2024a). Besides disclosing board oversight, TNFD also suggests reporting indicators such as the number and proportion of board members with competence in nature-related issues, the use of external expert advisers to support board deliberations, and the frequency of discussions on nature-related issues during board meetings. Regarding the reporting standards on **risk management**, the outcome of an institution's (double) materiality assessments performed to disclose under GRI Standards or ESRS, can be used as input for the nature-related risk assessment (TNFD, 2024b). The interoperability between frameworks and standards indicates two main benefits. Firstly, it facilitates easier implementation of nature-related frameworks. Secondly, it allows financial institutions that are already making progress on nature-related reporting to leverage their head start to be compliant with other sustainability reporting regulations.

For board members, especially CROs, it is important to collaborate closely with other board members to foster an integrated approach between governance, strategy, risk management and **metrics and targets**. This collaborative effort allows for a thorough understanding of risk assessment outcomes and the development of business **strategies** that are informed by each board member's unique responsibilities and insights. Institutions are expected to explain how they will adjust their strategy and business model with the publication of a credible transition plan to enhance alignment with relevant local, national, and global public policy goals and targets, and ultimately achieve them. Several frameworks provide **metrics** and guidance on how to set **targets**, often specifically in line with the GBF targets.

How a.s.r. is leveraging the TNFD for nature reporting

The use case of a.s.r. shows how regulatory developments and social and client expectations have driven increased disclosure on nature-related DIRO's. a.s.r., a leading Dutch insurance company, has started their nature journey by first understanding its nature-related interactions by applying the Taskforce on Nature-related Financial Disclosures (TNFD) framework. Using TNFD's risk assessment guidance, the LEAP (Locate, Evaluate, Assess, Prepare) approach, a.s.r. has identified and addressed its interactions with nature.

Combatting nature loss is a strategic priority for a.s.r., driven by intrinsic belief, new CSRD legislation and stakeholder demands. The CSRD has played a crucial role in involving diverse teams, such as compliance, legal, and financial reporting, fostering a more integrated approach to sustainability across all departments. A.s.r. focuses on biodiversity, ecosystems, and natural resources, to prevent environmental degradation and promote restoration. Through iterative analyses, a.s.r. has assessed its business activities' dependencies, impacts, risks, and opportunities related to nature. This comprehensive understanding has informed the a.s.r.'s strategic and operational action planning, providing valuable insights for its reporting as well.

By embracing the TNFD framework, a.s.r. positions itself to minimize negative impacts and enhance positive contributions to nature. The initiative also sets a precedent for other financial institutions, on how to start with first steps to address nature-related risks and opportunities.

Asking the right questions

- How are we ensuring alignment with existing and emerging nature-related reporting frameworks, such as TNFD, ESRS, and GRI, to provide comprehensive and transparent disclosures?

Follow-up question

- Is the institution prepared for existing and future legislation on nature-related (mandatory) reporting?

Follow-up question

- Is our nature reporting aligned with our existing financial reporting?
- What processes are in place to regularly review and update our nature-related disclosures to reflect changes in regulatory requirements and industry best practices?
- How do we ensure that all business areas are aligned and integrated into our nature-related reporting processes, and what mechanisms are in place to facilitate this coordination?

What's new? Climate disclosures versus nature disclosures

Whereas it's acclaimed that nature can follow the climate playbook, there are some significant differences in reporting on nature.

The most significant additions to nature management and reporting are:

- **Complexity:** Nature is inherently more multifaceted than climate due to the varied interactions within ecosystems. Firstly, nature encompasses a wide array of interdependent components, including biodiversity, ecosystem services, water resources, and land use, making it more intricate to assess and manage. Secondly, the potential irreversibility of nature loss, unlike many climate impacts, means that once certain thresholds are crossed, recovery may be impossible. Thirdly, nature-related issues require a multitude of key performance indicators (KPIs) to capture the diverse aspects of ecosystems, ranging from species diversity to soil health.
- **Language and concepts:** As nature is more multifaceted and diverse than climate change, and the wide array of concepts introduced by different frameworks and reports (UNEP FI, 2024a), it is important to outline the concepts and their definitions used in the reporting. So far public reporting by financial institutions uses different concepts such as 'nature' and 'biodiversity and ecosystems.
- **Impacts & Dependencies:** Many standards require disclosures on ESG-related Impacts, Risks, and Opportunities (IROs). Incorporating Dependencies into this framework—creating Dependencies, Impacts, Risks, and Opportunities (DIROs)—adds an extra layer into nature reporting, as it involves understanding both how business activities affect nature and how they rely on ecosystem services. E.g., the CSRD introduces this to sustainability reporting with the double materiality concept. For financial institutions, this means understanding not only how clients impact nature but also how they depend on natural resources, leading to a more comprehensive assessment and monitoring of their sustainability and risk management strategies.
- **Location-specific:** Disclosure on nature is increasingly being mandated from companies and legislators. Some approaches call for spatially explicit disclosures, with varying levels of detail for direct operations as well as upstream and downstream activities. This disclosure can allow financial institutions to better understand the locations of their clients operations and where their dependencies are located. It is acknowledged that financial institutions often do not have these (granular) data. However, estimates can be made, as long as the underlying methodologies behind these assumptions are based on the best information available (TNFD, 2024b)

In conclusion, emerging reporting standards advocate for boards to enhance their oversight of reporting and disclosure on nature, through key practices such as managing sustainability reporting processes and utilising internal and external audit resources. By fostering collaboration and an integrated mindset, boards can ensure a more cohesive and effective approach to measuring, managing, and reporting.

7. Blueprint

- This blueprint guides boards in integrating nature-related considerations into core strategies, ensuring alignment with global sustainability standards.
- The key actions for incorporating nature are based on the four TNFD Pillars: Governance, Strategy, Risk & Impact Management, and Metrics & Targets.
- Case studies suggest that appointing a "Nature Representative", linking executive compensation to nature positive outcomes, and cross-departmental collaboration can enhance accountability and embed nature into strategic decision-making.

This blueprint provides a strategic guide specifically designed for the executive board and C-suite level executives. It outlines key actions and objectives aimed at integrating nature-related considerations into the core of executive leadership. The goal is to ensure that these executive leaders are equipped to drive meaningful transformation within their organisations, aligning with global sustainability standards and goals, including the targets set by the GBF, and further addressing the risks and opportunities related to nature.

By taking these steps, financial institutions can not only meet emerging regulatory requirements but also position themselves as leaders in sustainability, securing long-term resilience and competitive advantage. Ultimately, this blueprint is the first step towards embedding nature into governance and decision-making at the highest levels of leadership.

Key actions and practical suggestions per executive level

While many assume that nature-related issues are primarily the responsibility of the CSO, effective governance of nature requires a complex interconnection between all the executive leaders (Harvard Business Review, 2023). The entire executive board, from the CEO driving overall strategy, to the CFO managing financial implications, to the CRO overseeing risk—plays a pivotal role in ensuring nature is embedded into decision-making in financial institutions. The following table illustrates how these responsibilities can be distributed among the executive board. Though it is not a definitive list, it serves as a valuable starting point for aligning accountability within the organisation.

Table 1: Outline of responsibilities and key questions to ask for respective executive board members

Functions	Key actions	Objective	Executive responsibility
Governance	Implement continuous education & capacity building	Ensure board members and senior leadership remain updated on nature-related risks and opportunities by engaging with expert stakeholders and ongoing training programs.	CEO, CSO
	Develop a roadmap for nature integration	Outline a multi-year strategic plan for incorporating nature-related risks, impacts, and opportunities into business operations, aligning with corporate governance objectives.	CEO, CSO
Strategy	Integrate nature into corporate strategy	Embed nature-related goals into strategic planning and daily operations to drive sustainable growth and environmental stewardship.	CEO, CFO
	Workforce	Ensure the right workforce strategy, by enabling building in-house capabilities and expertise to understand, assess, manage, and disclose nature-related DIRO's (including at the sector level).	CEO, CHRO
	Engage stakeholders	Foster collaboration with relevant stakeholders. Internal and external such as suppliers, clients, and local communities to ensure shared responsibility for achieving nature-related goals.	CEO, CSO
Risk & impact management	Assess risks and opportunities	Integrate nature-related risks into broader risk management frameworks, leveraging tools like IBAT and WWF's Risk Filter Suite to identify critical risks and opportunities.	CRO
	Avoid and reduce negative impacts	Prioritise actions that prevent or minimise environmental harm across the value chain, such as eliminating harmful practices and investing in sustainable technologies.	CRO, CSO
	Restore and regenerate ecosystems	Champion initiatives that restore and regenerate ecosystems, using frameworks like the IUCN Global Standard for Nature-Based Solutions.	CSO, CEO

Functions	Key actions	Objective	Executive responsibility
Metrics & targets	Natural capital assessment	Measure and evaluate organisational dependencies on nature using the Natural Capital Protocol and related toolkits. Develop targeted strategies to mitigate these impacts.	CSO, CFO
	Shift business models for a nature positive future	Promote innovations that lead to circular economy practices and landscape-level collaboration, guided by frameworks like WBCSD's Roadmap to Nature Positive.	CEO, CFO
	Seek independent validation	Enhance credibility by obtaining independent validation and verification of nature-related actions, aligning with sector-specific initiatives and certifications.	CFO, CSO

Key questions and practical suggestions per executive level

In addition to outlining roles and responsibilities, it is fundamental that the executive board members ask the right questions to ensure nature-related considerations are fully integrated into the decision-making process. The following table provides the questions that boards could ask per c-level board member, facilitating a holistic approach to embedding nature into corporate governance. These questions are introduced in the How-to chapters in the rest of this document.

Table 2: Table with all key questions for respective executive board members to ask.

Executive level	Key questions	Pillar
CEO	How is nature embedded into our corporate governance? Which board member is ultimately responsible for nature matters? Does the board (and broader organisation) have an accurate and institution-specific understanding of how our institution interfaces with nature? **Follow-up:** Does the board possess the necessary skills and expertise to evaluate the information it receives on nature-related matters? How are we integrating insights from our nature-related risk assessments into our overall business strategy and decision-making processes, and what role does the board play in this integration? How can we most effectively integrate the nature agenda into our business strategy and create a roadmap?	Governance & strategy

Executive level	Key questions	Pillar
CFO	How can we balance the necessary investment, lending and/or insurance activities that have a lower impact and/or dependency on nature with the pressures for achieving short-term results?	Governance & Strategy
	How are nature-related factors included in financial planning and analysis? In which (sub)sectors and locations do we invest, lend, or provide insurance? **Follow-up:** What is the risk appetite of the identified nature-related financial risks?	Risk Management
	What progress is the institution making on meeting its net-zero portfolio alignment targets? How are we integrating our nature strategy and insights from our nature-related risk assessments into our current environmental and social activities for portfolio alignment? How are we planning to integrate our nature strategy and insights from nature-related risk assessments into the segments of our portfolio that are currently not in scope for existing environmental or social portfolio activities?	Portfolio Management
	How are we ensuring alignment with existing and emerging nature-related reporting frameworks, such as TNFD, ESRS, and GRI, to provide comprehensive and transparent disclosures? **Follow-up:** Is our institution prepared for existing and future legislation on nature-related (mandatory) reporting? **Follow-up:** Is our nature reporting aligned with our existing financial reporting? What processes are in place to regularly review and update our nature-related disclosures to reflect changes in regulatory requirements and industry best practices? How do we ensure that all business areas are aligned and integrated in our nature-related reporting processes, and what mechanisms are in place to facilitate this coordination?	Disclosures and Regulatory Guidance

<table>
<tr><th>Executive level</th><th>Key questions</th><th>Pillar</th></tr>
<tr><td>CRO</td><td>Which investment, lending or insurance activities are in scope for nature risk assessment?
Which of our institution's investment, lending and/or insurance portfolio has an impact and/or dependency on nature?
What is the scope and coverage of the nature-related risk analyses on portfolio level, sector and/or location level?
Follow-up: Does our institution have sufficient and reliable databases to obtain accurate information on the sector and location of our clients?
Follow-up: Are there robust processes in place to ensure we acquire this data both internally and externally?
Are we planning to perform nature-related risk identification assessment periodically?
Follow-up: Which of the prioritised dependencies and negative impacts could be material sources of physical and transition risk?
Are nature-related physical and transition risks embedded into the existing (financial) risk management processes?
Follow-up: Of the identified nature-related physical and transition risks, to what nature-related (financial) risks, such as reputational and credit risks, can these be translated?</td><td>Risk Management</td></tr>
<tr><td rowspan="2">CSO</td><td>What are our institution's existing efforts and commitments on environmental and social themes?
Which direct and indirect dependencies do our institution's activities have on ecosystem services and what is the magnitude?
Which direct and indirect negative impacts do our institution's activities have on nature and what is the magnitude?
Does our organisation include the opportunities perspective in our nature analysis?
Has our organisation identified material nature-related opportunities as part of our broader sustainability transition or as stand-alone opportunities?</td><td>Risk Management</td></tr>
<tr><td>Are we ensuring portfolio alignment on existing environmental and social ambitions is supported with nature solutions?
What specific measures have we put in place to align our portfolio targets with the Global Biodiversity Framework (GBF) targets, and how are we tracking progress in achieving these targets?</td><td>Portfolio Management</td></tr>
<tr><td rowspan="2">CHRO</td><td>Do we have the right in-house capabilities and expertise within our institution to understand, assess, manage, and disclose nature-related DIRO's (including at the sector level)?
Follow-up: Are nature-related performance metrics part of talent development and retention strategies?</td><td>Governance & Strategy</td></tr>
<tr><td>Do our institution's sector-level experts have sufficient nature knowledge and location knowledge for their sector(s)?</td><td>Risk Management</td></tr>
</table>

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UN environment programme

finance initiative

UNEP Finance Initiative (UNEP FI) brings together a large network of banks, insurers and investors that catalyses action across the financial system to deliver more sustainable global economies.

For more than 30 years the Initiative has been connecting the UN with financial institutions from around the world to shape the sustainable finance agenda establishing the world's foremost sustainability frameworks that help the finance industry address global environmental, social and governance challenges.

Convened by a Geneva, Switzerland-based secretariat, more than 500 banks and insurers with assets exceeding USD 100 trillion are individually implementing UNEP FI's Principles for Responsible Banking and Principles for Sustainable Insurance. Financial institutions work with UNEP FI on a voluntary basis to apply the sustainability frameworks within their industries using practical guidance and tools to position their businesses for the transition to a sustainable and inclusive economy.

Founded in 1992, UNEP FI was the first organisation to engage the finance sector on sustainability. Today, the Initiative cultivates leadership and advances sustainable market practice while supporting the implementation of global programmes at a regional level across Africa & the Middle East, Asia Pacific, Europe, Latin America & the Caribbean and North America.

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