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UNEP FI Pilots in Support of TNFD

Insights into deep-dive UNEP FI pilots to ensure effective uptake of the final TNFD framework

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Acknowledgments

Authors

This report was compiled and written by members of UNEP FI's Nature and Climate Risk teams:

Gabriela Hermosilla Gonçalves, Katy Baker, David Carlin, Romie Goedicke den Hertog and Liang Qian

The project was set up, managed and coordinated by UNEP FI:

David Carlin, Romie Goedicke den Hertog, Gabriela Hermosilla Gonçalves, Katy Baker, Maheen Arshad, Lea Lorkowski and Bayarlkhambayambaa

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Executive summary

The Taskforce on Nature-related Financial Disclosures (TNFD) was established with the objective of creating a comprehensive risk management and disclosure framework for organisations to address and report on emerging nature-related dependencies, impacts, risks and opportunities—or nature-related issues. A key target audience for this emerging framework is financial institutions. UNEP FI has undertaken a second round of piloting in collaboration with a diverse group of financial institutions from various sectors and regions, focusing on a deeper understanding of the TNFD framework and nature-related scenario analysis.

This report outlines the valuable insights gained and significant findings obtained from a global pilot project initiated by the United Nations Environment Programme Finance Initiative (UNEP FI) in conjunction with the private finance sector. The purpose of this pilot (May to June 2023) was to assess current needs and challenges to get started on the reporting of nature-related risks, based on the TNFD's beta framework (v0.4). A suite of reporting tools and resources already exist. This report asks which of these are at financial institutions' disposal and can be leveraged for this emerging reporting requirement.

UNEP FI is one of the founding partners and implementation collaborators to the TNFD. Following the release of the TNFD Recommendations and final framework in September 2023, UNEP FI will continue this supportive role. Through this partnership, UNEP FI is actively gauging support from the private financial sector for the advancement of the TNFD's mission—namely, to enable business and finance to integrate nature into decision making, and support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

Main findings shared by financial institutions

Through surveys and virtual discussions, financial institutions provided ongoing feedback on their current needs for sustainability reporting as well as those they anticipate in the near future. Key learnings from this pilot included:

- Participants report a moderate range comprehension of nature-related dependencies and impacts within their institutions
- Addressing nature and climate reporting are currently treated separately, with resources as separate entities
- Over two-thirds (70%) of respondents plan to start nature reporting within the next 12 months, with almost one-third (30%) already reporting internally

- Top priorities for financial institutions include: gaining clarity within their risk management frameworks on the pathway from nature-related risk to financial risk; scenario analysis for water scarcity and biodiversity loss; internal team capacity-building for nature-related risk; and translating learnings from climate risk to nature risk within institutions
- Approximately one-third of respondents are considering strategic planning as a primary use case for employing scenario analysis
- Participants are currently considering shorter time horizons for scenario analysis, focusing on five-year timeframes rather than longer-term time horizons

Key challenges for financial institutions implementing TNFD framework

- Need for improved knowledge on how linking TNFD with other global frameworks and standards and regional or national jurisdictions
- Paucity of data around specific asset classes
- Need for more clarity on how to assess large portfolios and quantify nature-related impacts through the scenario assessment
- Limited data for scenario analysis and gap identification internally
- Need for improved data granularity (e.g. for nature-related risks in supply chains)
- Need for improved quantification methodologies to assess the financial implications of biodiversity loss for institutions' clients or investees
- Need for improved internal capacity building and better understanding on which external partnerships are needed to support further developments

Key recommendations for financial institutions for TNFD reporting

Getting started on the integration of nature-related issues into current risk management processes may profit from the following initial steps:

1. **Internal capacity building:** accelerate the development of skills within the organisation with the aid of internal sponsorship from senior management and board management
2. **Data and metrics:** build the basics for a robust assessment of nature-related risks by determining what data are currently collected and clarifying how proxies for TNFD disclosures can be used to calculate location-specific data that are currently absent
3. **Nature scenario development:** understand the current state of play of nature scenarios and develop competencies for forward-looking analyses
4. **Climate-nature nexus:** create the basis for an integrated and streamlined risk management approach by ascertain how climate-related risks and nature-related risks converge (and diverge)

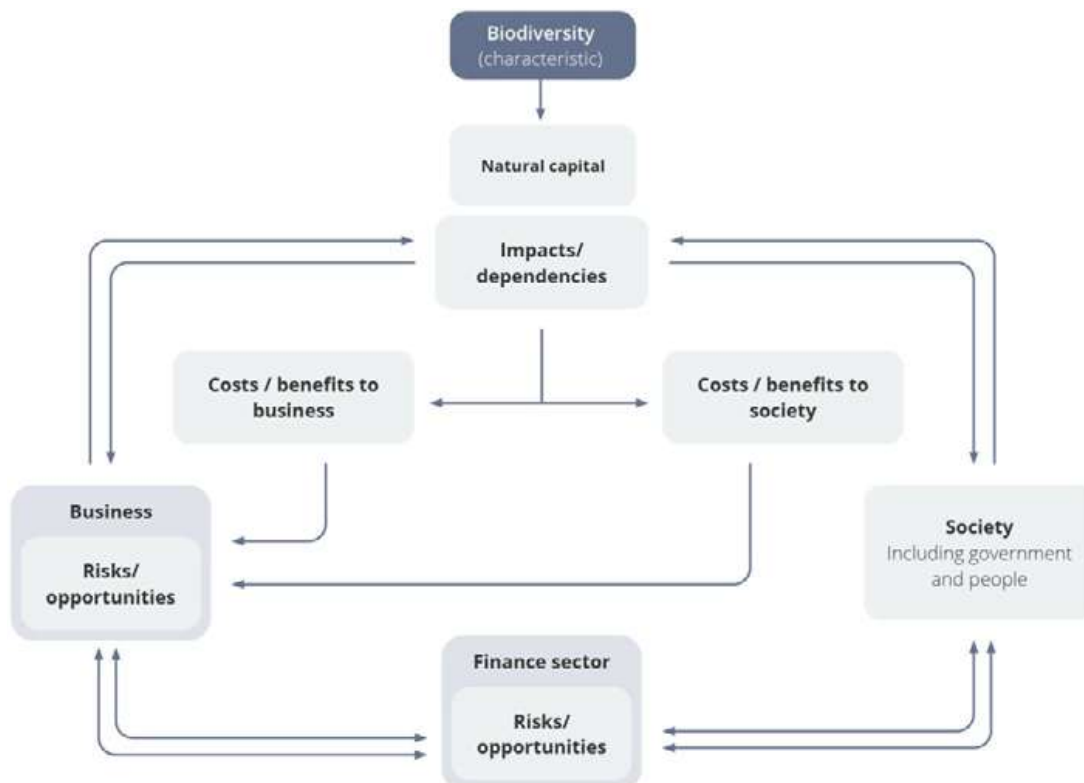
5. **Business materiality:** identify real and potential nature-related impacts and determine how these do (or could) translate into business risks
6. **Nature-related opportunities:** consider how the proactive management of nature could open the door to nature-friendly products and other commercial opportunities
7. **Risk pricing:** ensure nature-related risks are comprehensively assessed and accurately calculated as part of overall risk pricing
8. **Transparency:** prepare robust disclosures on stakeholder engagement, especially in respect of Indigenous Peoples and Local Communities (IPLCs) and affected stakeholders

1. What is the TNFD?

Our economy, financial stability, and the broader resilience of society all depend on nature. Yet the biological diversity of our planet is being lost at an unprecedented rate, exposing businesses to ever-greater explicit and material risks. Despite these growing risks, neither the dependency of business on nature nor its impact on natural ecosystems are adequately accounted for. The same is true for nature-related risks and opportunities, which are largely side-lined from corporate strategies and capital allocation decisions. This is the case for corporations as well as for investors and lenders who support them. Such oversight comprises a major risk management blind spot for all private sector actors. At a broader level, it could also prove to be a source of potential systemic risks for national economies and financial systems.

The [Taskforce on Nature-related Financial Disclosures \(TNFD\)](#) was set up in 2021 to develop and deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related dependencies, impacts, risks, and opportunities (or nature-related issues). The Taskforce's overall aim is to support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

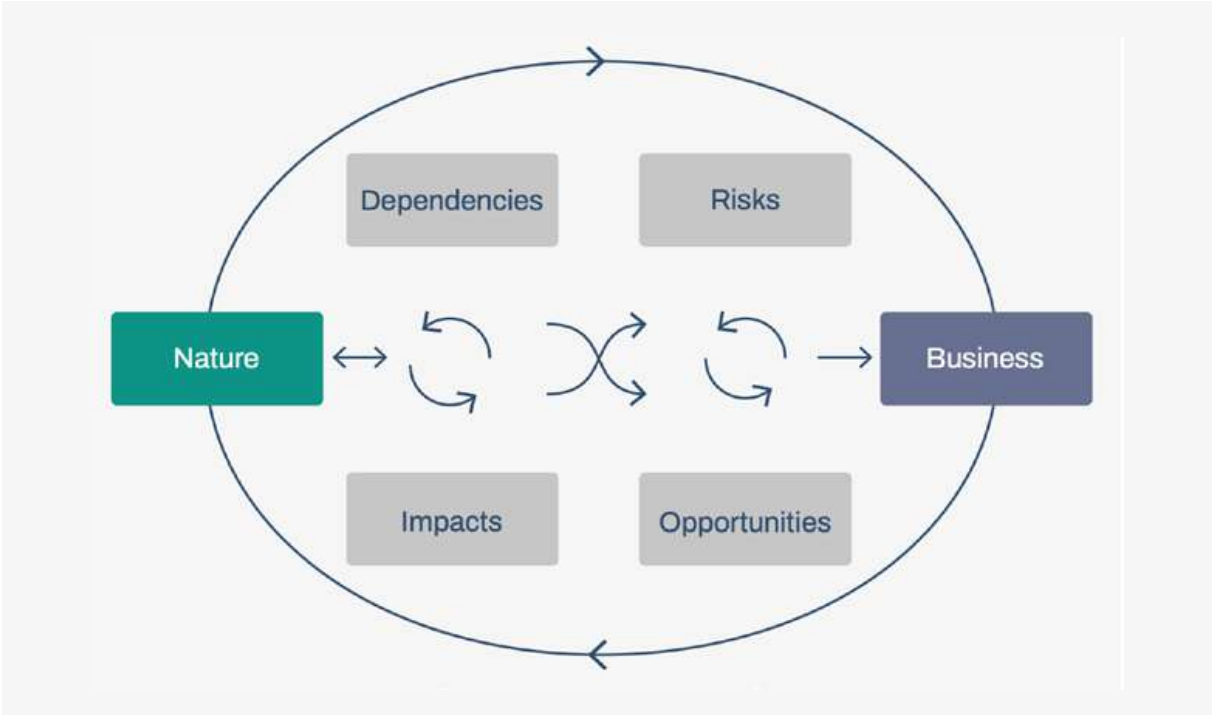
Figure 1: TNFD's core concepts for understanding nature and business: nature-related dependencies, impacts, risks and opportunities



In September 2023, the TNFD published its final risk management and disclosure framework (v1.0). The final recommendations are designed to help businesses and financial institutions anticipate upcoming regulatory shifts as a result of the adoption of the [Kunming-Montreal Global Biodiversity Framework](#) (GBF). Alongside the TNFD Recommendations, additional guidance is also available. This includes:

- [Guidance on the LEAP approach](#) (updated): the risk management framework helps organisations assess and monitor their nature-related risks, dependencies, impacts, and opportunities
- [Sector Guidance for Financial Institutions](#): this guidance provides sector-specific metrics and current examples of disclosures, including tailored advice on the TNFD Recommendations for all finance sectors
- [Getting Started Guidance](#): co-written by UNEP FI, this basic primer endeavours to assist institutions looking to take their first practical steps towards applying TNFD; learnings from our pilot programme are included
- Guidance on [Engagement of Indigenous Peoples, Local Communities and affected stakeholders](#): this publication offers an overview of key stakeholder engagement approaches in the context of due diligence standards

Figure 2: TNFD’s core concepts for understanding nature and business: nature-related dependencies, impacts, risks, and opportunities



1.1 What has been UNEP FI’s role in the TNFD?

UNEP FI is the strategic partnership between the United Nations and nearly 500 banks, insurers, and investors. For over 30 years, UNEP FI has been shaping and driving the international sustainable finance agenda, setting global standards, and growing a global network of leading financial institutions. Its main activities include subject-specific work-

streams and regional activities, peer learning, and the development of methodologies, as well as training and research. This sets up UNEP FI to carry out its mission to help the financial industry align with, and contribute to, the Sustainable Development Goals (SDGs). In doing so, financial institutions can take on the crucial role they must play in achieving a sustainable future.

TNFD pilots: Building on UNEP FI's track record for climate and nature risk

As a co-founder of the TNFD,¹ UNEP FI played a key role in the establishment, development, and finalization of the framework. Apart from providing technical support, as well as embedding and supporting high-level voices in the governance structure (such as that of TNFD's co-Chair, Elizabeth Maruma Mrema), we have been one of the implementation partners of the TNFD pilot programme for the financial sector. This allowed participating financial institutions to test the beta version of the TNFD framework and provide feedback, thereby ensuring the framework's relevancy to the wider private financial sector.

Through this piloting programme, 50 financial institutions from 25 countries have now actively contributed to the shaping of the framework. They have shared their feedback, including valuable insights and information on lessons learned, over the pilot's 12-month time frame (see more below). Thanks also to TNFD's open innovation process, stakeholders other than businesses and financial institutions (such as civil society organisations and Indigenous Peoples and Local Communities) have been widely consulted and engaged throughout the development process. While the framework is voluntary, adoption is expected from the private sector. The track record of sustainability frameworks such as the TNFD strongly indicates that greater market transparency leads to positive action by the private sector.

¹ UNEP FI is a founding partner of the TNFD alongside WWF, UNDP and Global Canopy.

2. An innovative exercise: the UNEP FI pilots in support of TNFD

UNEP FI started its innovative testing of the TNFD beta Framework with financial institutions in May 2022. The first set of pilots assembled over 40 financial institutions from more than 20 countries across the different financial industries. The pilots set out to assess high-impact sectors and biomes that represent key biodiversity areas at risk. In April 2023, [a report](#) was published with extensive feedback from this first round of pilot testing. The document also included information on lessons learned during this initial seven-month period.

Most of the financial institutions involved at this stage were new to the integration of nature into their risk management and asset allocation decisions. That said, they still strongly recommended pilot testing as a key first step to understanding nature-related issues and then integrating them into decision-making processes.

Key findings from first set of TNFD pilots from UNEP FI (August 2022 to April 2023) and integrated into the final TNFD framework (September 2023)

- 1. Internal capacity building and resource allocation:** Financial institutions need to promote internal capacity building and secure the board's buy-in on the importance of understanding and tackling nature-related risks and opportunities; equally important is the preparation and updating of internal classification and operational systems as a mean to secure reliable nature-related information and assessment data.
- 2. Interoperability/Climate-nature linkages:** Financial institutions should increase their internal understanding regarding the integration of nature-related risks into climate risk assessment and reporting; similar, in anticipation of the release of the final TNFD framework, they should consider what a staged integration with the Task Force on Climate Related Financial Disclosures (TCFD) reporting could look like.
- 3. Data and metrics challenge:** Financial institutions familiarize themselves with the recommended and publicly available tools for assessing the full scope of nature-related risks and opportunities.

4. **The LEAP approach could be further refined—more steps need to be included, especially in the scoping exercise to understand materiality exposure:** In particular, consideration needs to be provided to asset managers and insurers (e.g. specific challenges for underwriting and location).
5. **Disclosure challenges:** More guidance on supply chain traceability and advancements on corporate disclosure and engagement is sought from the TNFD and its network of knowledge partners.

Following up this extensive exercise, UNEP FI continued with a second round of pilots in support of TNFD. The preparation for this round was based on institutions' interest and observed gaps in understanding and priorities for implementation of the TNFD framework. These in-depth and short-term pilots intended to equip participating institutions with the latest scientific developments, while collecting valuable lessons learned, suggestions, and insights for the final recommendations of the TNFD launched in September 2023. Engagement through pilots has been a crucial step to advance the TNFD's mission to redirect financial flows away from outcomes that are nature-negative and towards those that are nature-positive.

3. The second cohort of TNFD pilots

The second cohort of pilots included 20 financial institutions from 11 countries across four continents. From the total number of participants, 13 institutions had previously joined the first cohort of pilot testing (September to April 2023), following an interest to deepen into specific components of the TNFD framework. Another seven institutions were new to pilot-testing the TNFD framework, most of whom were motivated by improving the integration of nature-related issues into their risk management processes. UNEP FI organised the participating institutions into two cohorts; one looking at nature scenarios, the other focused on TCFD-TNFD alignment. Institutions joined with teams across their organisations, including risk management, sustainability or data management as they are currently scanning what skills and knowledge are readily available.

3.1 TCFD-TNFD alignment cohort

In line with the TNFD's open innovation approach and broad consultation, market participants signalled in their feedback that consistency of approach, structure and language with the TCFD would be essential to support early market adoption of corporate reporting for nature-related issues. To ensure close alignment, the TNFD retained the four pillars of the TCFD recommendations—namely, Governance, Strategy, Risk Management and Metrics and Targets. In addition, Impact Management was incorporated into Risk Management. All 11 TCFD-recommended disclosures were thus carried over into the TNFD-recommended disclosures. This allowed users to start reporting on nature-related issues alongside, or integrated with, climate-related issues. Notwithstanding its reliance on the TCFD structure, the TNFD goes beyond its climate-focused predecessor in incorporating nature-related issues across a wider set of realms: i.e. ocean, freshwater, land, and atmosphere. It also includes non-climate-related drivers of nature change, as identified by the UN-backed Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). This provides a comprehensive approach to environmental corporate reporting aligned to both the Paris Agreement and the GBF.

The inclusion of three new recommendations has been made to capture the complexity of nature, with additional disclosures on:

- **Value chain impacts:** the approach taken to incorporate value chain impacts (i.e. Scope 3 climate reporting) has been adapted to the nature context; impacts are consequently defined as 'direct operations', 'upstream', 'downstream', or 'financed'.

- **Location specificity:** assets and activities are linked to their specific geography.
- **Stakeholder engagement:** processes to listen and respond to relevant external groups, particularly Indigenous Peoples and Local Communities and affected stakeholders.

TNFD recommended disclosures

Governance	Strategy	Risk & impact management	Metrics & targets
Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.	Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.	Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.	Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.
Recommended disclosures	Recommended disclosures	Recommended disclosures	Recommended disclosures
<p>A. Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.</p> <p>B. Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.</p> <p>C. Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.</p>	<p>A. Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.</p> <p>B. Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.</p> <p>C. Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.</p> <p>D. Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.</p>	<p>A(i) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.</p> <p>A(ii) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).</p> <p>B. Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.</p> <p>C. Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.</p>	<p>A. Disclose the metrics used by the organisation to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process.</p> <p>B. Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.</p> <p>C. Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.</p>

Expectations from participants and pilot's approach

Strong alignment across sustainability reporting frameworks will be key in helping financial institutions make more informed decisions related to investment, credit, and insurance underwriting. In this sense, the TCFD–TNFD alignment cohort assessed the current practicalities and opportunities arising from this integrated assessment and reporting. Specific points covered include:

- **The comparability between TCFD and TNFD disclosure recommendations:** Participants in this cohort were interested in building knowledge and understanding the current alignment between the integrated approach for the disclosure of climate and nature risks, highlighting differences between both TCFD–TNFD frameworks. Institutions mentioned that going forward, it is necessary to better understand data and metrics or specific guidance for the integration of climate and nature-related risk assessments for different asset classes.

- **Ways to leverage climate-related reporting and risk management for nature and new areas that need to be developed for nature:** Although this cohort did not focus on emerging nature scenarios, institutions also mentioned their interest in understanding comprehensive scenario analysis for robust approaches to risk management in the future. This would include close consideration of the impacts of evolving policy trends and industry shifts on both climate and nature-related risks. It would also incorporate an analysis of the knock-on effect of changes across domains as well as the interconnectedness of climate and nature-related risks.

Content of sessions

- The first session gave an overview of the similarities and differences between the TCFD and TNFD recommendations. Information on where TCFD can be leveraged for nature was also provided. The main focus of this opening session was the ‘Governance’ pillar of TNFD, with attention given to the importance of establishing a clear governance structure, involving senior committees, and fostering effective communication to manage climate and nature-related disclosures.
- The second session discussed how climate strategies are being put into practice, focusing on effective climate strategy disclosures and how they connect to nature, the important differences between climate and nature strategies, and the TNFD’s location-specific disclosure (Strategy disclosure D). The session also underscored the critical role of data and tools for the successful implementation of disclosures.
- The third session explored risk management examples from TCFD disclosures. The topics covered included risk identification in operations and value chains (in particular, the LEAP approach). The session also facilitated a breakout exercise exploring stakeholders and managing risk for financial institutions.
- The final session discussed the challenges faced by financial institutions in integrating nature-related metrics and targets, especially in comparison to the more established field of climate-related metrics. It provided examples of risk-related metrics applicable to climate and nature and new nature metrics that go beyond climate. This pilot series concluded with a high-level roadmap for an upcoming TNFD-TCFD pilot.

3.2 Nature scenarios cohort

The assessment of nature-related financial risks requires models and scenarios that capture the complex interlinkages between nature, the economy, and the financial sector. Scenario analysis is an essential tool that helps organisations develop and test the resilience of their firm’s strategy in light of complex uncertainties such as nature loss and climate change. Exploring the consequences of unexpected events and assessing the ways in which key actors might respond serve to improve financial institutions’ understanding of how these uncertainties might affect business strategy and financial planning.

Recent years have seen the steady development of guidance for financial institutions on how to apply climate scenarios. However, the same has not been the case with nature scenarios. As such, existing global nature scenarios are fragmented. In particular, knowledge gaps persist with regards to the application of current generations of nature-economy models for nature-related financial risk assessment (INSPIRE, 2023). These gaps partly arise from key differences in the way in which climate-related risks and nature-related risks manifest. Most notably, nature loss tends to be much more localised and context-specific than climate change (INSPIRE, 2023). Still, developments to set a common framework for nature scenarios are expected soon following the leadership from the Network for Greening the Financial System (NGFS), which is convening a taskforce with global knowledge partners. It is anticipated that these developments from central banks and financial regulators will result in new protocols for the modelling of specific parameters, such as location specificity and the tipping points of distinct biomes. This will strengthen the understanding of the financial system's stability and stress testing considerably.

Expectations from participants and pilot's approach

Given the current gaps for financial institutions, this cohort identified current quick learnings from the comprehensive work already carried out on climate scenarios. Top of mind was the development of possible future pathways for advancement within the TNFD framework. Among the specific points covered were:

- **Scenario design:** with particular focus on the key elements of current nature-focused scenarios, as well as the role of nature in climate scenarios.
- **Scenario use:** with specific attention on the landscape of current nature scenarios, plus the challenges associated with their creation and implementation.

Participants for this cohort, including banks, investors, and insurers, were mostly interested in understanding how to leverage the current work their institutions are already conducting with climate scenarios analysis. This was seen as an interim measure as they wait for nature scenarios to become more robust and developed. The cohort brought complementary perspectives for the use of nature scenarios. Specific interests highlighted included: the use of these scenarios for risk management activities; an appraisal of the current landscape of climate-nature scenarios and their use by financial institutions; and use scenarios for the purposes of analysis at the portfolio- or firm-level.

Participants expressed a strong desire to actively participate in discussions covering a wide array of scenario analysis aspects. These aspects encompassed the drivers and potential impacts of nature-based risks, as well as approaches for their mitigation and their possible transformation into business opportunities.

Furthermore, participants took into account regional considerations while engaging in discussions. They underscored the importance of finding a balance between considering regions where the scenario consequences carry the most weight and acknowledging instances where unique exposures arise due to clients' specific characteristics and locations.

Participants also conveyed their interest in fostering collaboration and establishing a mechanism for sharing knowledge. This platform would facilitate the exchange of insights regarding current organisational practices. The sharing of best practices would in turn enable organisations to refine their scenario analysis methodologies effectively.

Content of sessions

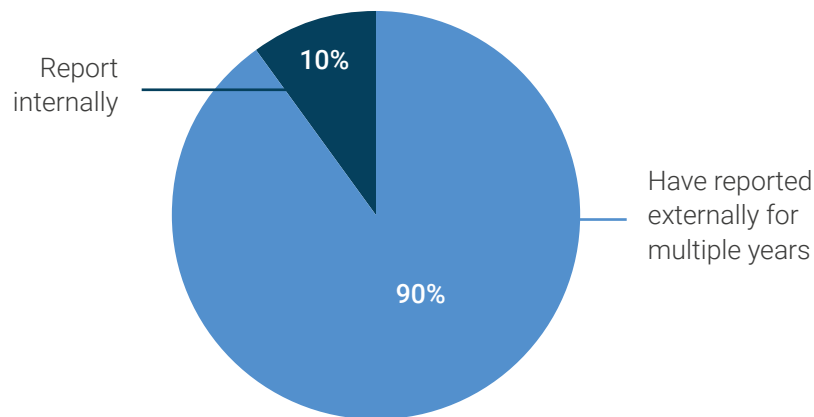
- The first session focused on the overview of nature scenarios and the various ways in which they can be used, starting by exploring the various types of nature scenarios, from exploratory to goal-oriented, emphasizing their value in understanding nature-related risks.
- The second session featured practical examples of nature scenarios, such as the impact of extreme weather events on different elements of the value chain and policy-driven transitions. These examples illustrated the integration of scientific assumptions into financial modelling, showcasing how financial institutions are beginning to quantify the potential risks associated with nature-related events.
- The third session provided an extensive assessment and comparison of scenarios (including the integrated assessment models (IAMs) and those scenarios from the NGFS) and their supporting narratives. The session focused on scenario analysis in the TNFD's LEAP approach and the scenario design objectives of the TNFD. Approaches to the practice and application of scenario analysis (both qualitative and quantitative) were also considered. An interactive exercise was performed with pilot members to build capacity for using nature scenarios to identify potential risks and identify next steps for assessing nature risks at their institution. The final session involved the review of scenario analysis' readiness and a gap analysis for financial institutions.
- This pilot series also concluded with a high-level roadmap for the next scenarios pilot. This included an in-depth discussion about the main elements of the next pilot, such as data collection methodologies and scenario development frameworks. Also covered were the resources for participants to continue their learning about the disclosure of nature-related risk, with a view to them participating proactively in this evolving field as well as making more informed decisions in their respective firms.

4. Where do financial institutions currently stand in respect to nature reporting?

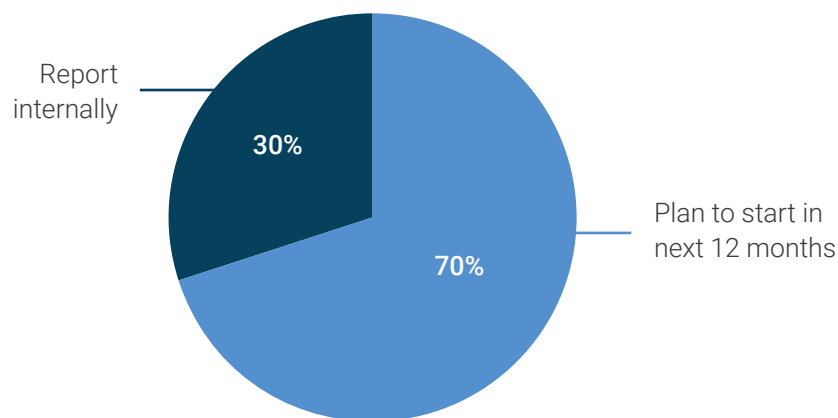
The urgency of addressing the challenges posed by the natural world's crises means that the sustainability reporting space is having to evolve fast. This gives rise to a priority among financial institutions for greater alignment between different disclosure standards and frameworks. Other key actors are of the same opinion, including the TNFD, the UN-backed Global Reporting Initiative (GRI) or other regional and national regulators (see box 1). To better understand the current needs and expectations from financial institutions for sustainability reporting going forward, anonymous surveys were conducted during the piloting sessions. These in-pilot surveys revealed the following main findings:

- **Key points of difference between climate and nature reporting:** Pilot members were asked to cite the main ways in which nature reporting differed from their current climate reporting processes. Respondents highlighted the greater complexity of the former, plus the learning path ahead. They also noted the limited sector scope they currently have for nature reporting. Other ways in which nature reporting were seen to diverge from climate reporting included: the former's reliance on location-specific data; the problem of data uncertainty; the inclusion of new dependencies and impacts; and the need for unique metrics that are specific to nature.
- **Integrating climate and nature and beyond:** The results of the survey indicate that participants in the pilot programme are currently addressing nature and climate reporting resources as separate issues. In some cases, participants do not have nature-focused colleagues at this stage. Among those organisations now looking to integrate the reporting of nature and climate risks, a minority have done so under the banner of Environmental, Social, and Risk Management (ESRM). Other organisations are planning to introduce nature experts into their existing climate teams.

What is the state of climate reporting?



What is the state of nature reporting?



- **Capacity building needs:** Participants' comprehension of nature-related dependencies and impacts within their institutions falls within a moderate range. No participants so far report having developed a strategy for conducting location-based assessments for assets and operations in differing nature scenarios. This understanding is justified as capacity building on nature-related issues is highlighted as a priority within financial institutions. Despite a growing and emerging interest for the integration of nature risk within the climate risk work conducted by these institutions, constrained resources and the novelty of the nature agenda help understand limitations in outputs created to date on nature-related assessments along with priorities moving ahead.
- **Potential use of nature scenarios:** Approximately one-third of the respondents in the scenario pilot are considering strategic planning as a primary use case for employing such analysis. Other use cases include conducting internal stress tests on their business models. Less common were the applications of internal stress tests on the balance sheet and medium-term business planning. In terms of the time horizons under consideration, the majority of participants are primarily focused on a five-year timeframe. The next prioritized time horizon is the shorter term of one to three years. Results showed that less than 25% of the participants are considering a longer time horizon of ten years when developing their scenarios, highlighting a key gap in their risk assessments.

Key tools currently used to identify nature-related issues

The tools and assessments employed by participants include:

ENCORE

ENCORE sets out how the economy—sectors, subsectors, and production processes—depend on and impact nature. Financial institutions, in particular, can use data from ENCORE to identify nature-related risks they are exposed to through lending, underwriting, and investment in high-risk industries and sub-industries.

WWF's Biodiversity Risk Filter

WWF's Biodiversity Risk Filter is a robust corporate and portfolio-level screening tool to help companies and investors prioritize action on what and where it matters most to address biodiversity risks, enhancing business resilience and contributing to a sustainable future.

IBAT

IBAT is a comprehensive platform that aggregates global biodiversity geospatial data to identify where operations or supplier locations sit in areas of interest, such as Key Biodiversity Areas.

BioScope

BioScope determines the impact of a company's supply chain on biodiversity, visualized on a world map. BioScope was developed for the assessment of supply chains and financial products, providing clear, actionable information.

Among internal assessments and analyses used by pilot participants, the following were mentioned:

GIS mapping

Assessments using Geographic Information Systems (GIS) and remote sensing technologies to map nature-related issues.

Internal analysis including through client disclosures

This refers to an internal review process within organisations that includes the examination of environmental and social risks, involving the analysis of data and information provided by clients or stakeholders.

IPBES nature-economy scenarios

The IPBES Nature-Economy Scenarios are forward-looking narratives and models envisioning positive future interactions between humanity and nature, emphasizing sustainability and biodiversity conservation. These scenarios aim to guide decision-making by considering the interconnectedness of nature and people, incorporating diverse values, and involving stakeholder consultations.

Sectoral Environmental, Social, and Governance (ESG) analysis

Sectoral ESG analysis involves evaluating the potential ESG impacts and risks within a specific industry or sector.

5. Key lessons learnt and challenges

Key challenges for financial institutions in nature-related risks and disclosures

5.1 TCFD-TNFD alignment cohort

The integrated approach to climate and nature reporting may represent a challenge to financial institutions as organisations encounter knowledge gaps as they navigate the diverse international, national, and regional frameworks, standards and regulations. Ensuring compliance can pose challenges especially for organisations that operate across various jurisdictions. However, the early incorporation of nature-related assessments into existing financial processes, strategies, and climate risk practices also represents an opportunity as countries and regions signal towards more holistic and potentially mandatory sustainability reporting practices (see box 1).

In this scope, key challenges shared by participants include:

- **Understanding internal gaps:** Need for internal understanding of existing location data, data gaps, and areas where data can be improved. Obtaining a high-level picture of these internal gaps was also highlighted as of great importance to allow institutions to building a long-term roadmap for progressive development towards robust climate and nature-related disclosures.
- **Data granularity:** Data relating to the supply chain and other impact areas are too unspecific.
- **Stakeholder engagement:** Mechanisms for engaging communities with a high dependency on nature require strengthening, as do due diligence processes.
- **Capacity building:** In-house skills and knowledge in regard to nature-related risks need to be improved, as are the requisite external partnerships for supporting further developments.
- **Classification systems:** Core legacy banking platforms require updating, among other improvements to existing classification systems and operations.
- **Nature and climate discrepancies:** The additional dependencies and impacts of nature (in comparison to climate) are not fully visible, giving rise to an aforementioned need for a more comprehensive and granular dataset.

Box 1: Extracted from the TNFD's [‘Getting started with adoption of the TNFD recommendations’](#) publication

The evolving landscape of nature-related corporate reporting

- In June 2023, the International Sustainability Standards Board (ISSB) [issued](#) its first two IFRS Sustainability Disclosure Standards: IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and IFRS S2 *Climate-related Disclosures*. It has also begun work on a range of nature-related issues as extensions of its inaugural standards, and [signalled](#) an intention to draw on the work of the TNFD as part of its future standards development.
- In July 2023, the European Commission adopted the European Sustainability Reporting Standards ([ESRS](#)) for use by all companies subject to the Corporate Sustainability Reporting Directive ([CSRD](#)). This is in addition to other related EU regulation, including the Sustainable Finance Disclosure Regulation (SFDR). Under these requirements, companies and financial institutions with substantial activity in the EU must now make nature-related disclosures.
- Other regulators, such as those in [India](#) and [Brazil](#), already require nature-related corporate disclosures or have signalled their intention to introduce nature-related disclosure requirements following the embedding of TCFD-aligned climate-related disclosures into regulations.

5.2 Nature scenarios cohort

Pilot participants discussed how the identification, assessment, and reporting of nature-related risks pose significant challenges for financial institutions as well as for their clients and investees. Engaging with clients effectively in light of these challenges involves addressing a range of issues. Primary concerns include: regulatory and policy uncertainties, transition and technological costs; and lack of understanding regarding nature's economic value. Facilitating client engagement is further complicated by the intricate nature of these challenges. Avenues for meaningful engagement exist, however, including guiding clients towards fostering positive environmental impacts through the adoption of green products and directing investments towards nature-based solutions. Other highlighted challenges include the need to better understand: how the tipping points of specific biomes can impact the resilience of the financial system; how these tipping points can influence pricing risk or insurance net premiums written; and what the correlation is between nature-related risk and financial risks.

Integrating nature scenarios into climate risk assessments and transition plans were a main point of discussion. Several institutions mentioned how they are already able to identify nature-related impacts and dependencies for specific portfolios or sectors. Yet they were less clear on how to assess large portfolios or quantify these impacts through the scenario assessment. This lack of clarity is exacerbated by the evolving nature of guidance from key knowledge partners. When completed, initiatives such as NGFS's efforts to build IPBES' nature-economy models into a global framework for nature scenarios should help eliminate much of the current confusion. The translation of nature loss risk

into financial impact stood out as a paramount concern. Participants emphasised the essential need to gauge the extent of economic repercussions on companies' equity and debt in the case of forward-looking scenarios.

In contrast to well-established climate goals, such as achieving net-zero emissions by 2050, determining short-term and long-term objectives for nature and biodiversity can be a challenging task. It requires thoughtful deliberation to establish suitable time frames for scenario analysis. Not only do short-term and long-term goals need to be clarified, but so too does the quantification of short-term versus long-term impacts. Time frames for regulatory shifts represent another key issue for consideration.

The integration of nature-related scenarios into existing financial and risk management processes emerged as a challenge, but was also deemed an essential step. Participants recognised the importance of aligning nature scenarios with established practices to ensure effective risk management. This includes materiality assessment and the integration of differing data systems and methodologies.

Participants brought attention to a data gap inhibiting scenario analysis. A particular weakness of the current data relates to the mapping of territorial ecosystems and the subsequent assessment of the vulnerability of specific sites and forest areas. Financial institutions often rely at present on narratives and sporadic data points that indicate sensitivity and exposure to biodiversity and nature. Moreover, the availability of data concerning nature loss transition pathways for sectors with significant impacts could be valuable. This is similar to the approach taken for climate-related disclosures. The following specific points emerged:

- The need for data on hotspots for water stress and biodiversity loss.
- The lack of quantification methodologies to assess the financial implications of biodiversity loss for institutions' clients or investees.

6. Recommendations

Getting started on the integration of nature-related issues into current risk management processes may profit from the following initial steps:

6.1 Internal capacity building—aided by internal sponsorship from senior management and board management

- Invest in building internal capacity to assess nature-related risks and dependencies by hiring experts, developing training programmes, and investing in tools and technology to facilitate data collection and analysis.
- Make the business case for nature internally with board and management. This step is key to ensuring senior buy-in and ownership to drive action.
- Adequate resourcing should be integrated into firms' organisational structures and processes, accompanied by robust governance and oversight, in order to effectively disclose nature-related risks.

6.2 Data and metrics: capturing nature-related issues for a robust assessment of risk management processes

- Apply the TNFD framework—especially the LEAP approach—to assess nature-related dependencies, impacts, risks, and opportunities across the portfolio of financial products and services. This can involve developing standardised metrics and methodologies to assess nature-related issues associated with different sectors and geographies.
- Engage with clients and investees to raise awareness of nature-related issues and provide guidance on how to collect and report relevant data. This can involve partnering with industry associations and other stakeholders to develop best practices and guidelines for reporting on nature-related issues.
- Develop policies and practices that support improved data collection and make considerations for communities of operation not just in a firm's direct footprint, but across its supply chain. Examples include the adoption of formal policies on critical issues such as deforestation and human rights.

Understand what data is already collected

Financial institutions may be already collecting data that are relevant for identifying nature-related issues. Institutions that have piloted the TNFD framework mentioned how this data was collected either for climate risk assessment (e.g. satellite data collected on infrastructure and corporate facilities data) or for specific priority sectors or direct impact drivers of biodiversity loss². This preliminary understanding of internal resources can be done through the TNFD's LEAP approach in the 'Scoping' phase.

When location-specific data is not available, proxy approaches can be used to help fill this gap while sector- or asset-specific data is being improved. Finding the best proxy approach will depend on the specific commodity or sector under analysis. The following actions or considerations should be taken into account when using proxies:

- An assessment of quality of data used
- The provenance of the data in question (i.e. was it obtained directly from suppliers or customers?)
- The methodology used for estimates
- The strategy to increase data quality over time

Following the TNFD's 'comply or explain' approach, the use of proxies can help inform TNFD disclosures while improving data quality.

UNEP FI recommends that financial institutions follow the resources produced by the Partnership on Biodiversity Accounting Financials (PBAF), including detailed analysis on the methodologies such as biodiversity footprinting. The results of footprinting exercises can allow institutions to zoom in on potential impact hotspots in a portfolio. They can also help inform biodiversity policies and shape engagement approaches with clients and investees. However, biodiversity footprint should be handled with care, particularly in respect to which methodologies have been chosen and how the data are used (PBAF, 2022).

2 Direct impact drivers of biodiversity loss are defined according to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). IPBES defines direct drivers as the natural and anthropogenic drivers that unequivocally influence biodiversity and ecosystem processes (also referred to as 'pressures'). The five main direct drivers of biodiversity loss are land-use change, climate change, pollution, natural resource use and exploitation, and invasive species.

6.3 Understanding the climate-nature nexus for an integrated and streamlined risk management approach

- The integration of nature-related issues into climate risk approaches will be essential for financial institutions to ensure that future risks assessments are robust.
- Institutions may already be integrating a set of nature-related issues in their risk assessment, including deforestation risks and water risks. As such, working on specific sectors marks a good starting point to build on work already carried out regarding climate risk. In this sense, considering either single-factor models or integrated models (coupled with other available resources) will be helpful for financial institutions when looking to strike a balance between comprehensiveness and simplicity in specific sector assessments.

Table 1: The NGFS' considerations for the climate-nature nexus

In the newly released [Conceptual Framework for Nature-related Financial Risks](#), the NGFS highlighted the relevance of broader nature dimensions beyond climate-related risks for central banks and supervisors—described as environmental risks. Table 1 describes some of the key interlinkages between climate and broader nature-related financial risks that could be considered according to the NGFS when taking first steps towards a more integrated approach (NGFS, 2023).

Connection	Description
Climate change as a driver of nature risk	Climate change, and the resulting rising global temperatures, is one of the direct drivers of nature degradation. For example, climate-induced flooding, wildfires, ocean acidification and cyclones can disrupt the water cycle, alter soil temperatures and accelerate habitat and wildlife loss. Consequently, combating climate change can slow the climate-driven deterioration of ecosystems.
Nature degradation as a driver of climate risk	Loss of key ecosystems increases the pace of climate change through adverse changes in the carbon, nitrogen, and water cycles. Additionally, the destruction of forests, peatlands, and other carbon-sequestering ecosystems may accelerate climate change through the release of long-stored carbon into the atmosphere alongside a reduced ability to sequester future carbon. The destruction of ecosystems such as wetlands or mangroves may also alter natural infrastructure that is important for climate resilience.
Climate change mitigation and adaptation as a potential driver of nature risk	Certain strategies for climate change mitigation/adaptation and achieving net-zero goals have the potential to cause inadvertent negative effects on ecosystems. For example, biodiversity can be harmed by poorly planned tree planting to capture carbon dioxide emissions (e.g., of non-native species and monocultures), mining of materials for battery storage technology, destruction of natural areas to install solar installations, or land use changes to fulfil bioenergy needs (e.g., deforestation for wood or planting biofuel crops).

Nature as a solution to decrease climate risk (i.e. nature-based solutions)	Conservation of ecosystems contributes substantively to mitigating climate change. As suggested above, combatting deforestation and peatland destruction can prevent the release of stored carbon and facilitate future carbon sequestration. Conservation or extension of natural systems can also help to adapt to the effects of climate change. For example, ecosystems such as wetlands, forests, mangroves and dune habitat increase resilience to physical shocks (e.g., storms, wildfires, landslides or floods) by providing protective barriers or buffers.
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6.4 Understanding the business materiality of nature risks

- Institutions mentioned how they might face challenges translating the understanding of the drivers of nature-related risks to their own business value chains (i.e. non-life insurance). Clarity here is important when to ensure that final targets and goals are relevant to their business operation.
- Given how differently nature-based risks are perceived for banks, insurers, and investors, respectively, guidance on translating nature-related risks internally should be specially tailored for different financial actors.

6.5 Nature-related commercial opportunities

- Fostering a robust market for green products is instrumental to driving positive change.
- Just as quantifying the risks associated with nature helps develop a comprehensive understanding of the overall risk, so too can it assist in identifying potential commercial opportunities. The same is true for assessing the interplay of nature-related risks with climate-related risks.

Implementation tips

Steps to guarantee robust disclosures on stakeholder engagement, specifically regarding Indigenous Peoples & Local Communities, and affected stakeholders, include:

- A statement of an organisation's efforts to comply with international standards of responsible business conduct as well as with other relevant policies, guidance, and declarations on human rights and stakeholder engagement.
- A clear approach for the identification and (if necessary) resolution of an organisation's potential and actual impacts on nature.
- Transparency as to whether and how senior management and the board are informed about stakeholder engagement processes and their results.

Understanding nature and nature-related issues from the perspectives of affected stakeholders provides the following important outcomes and benefits to an organisation:

- More effective management.
- Support for companies to better manage and respond to nature-related issues; this leads to decisions that improve nature protection and community wellbeing, while also mitigating nature-related risks to the business.
- Inclusive stakeholder collaboration.
- Creation of more inclusive and open collaboration with stakeholders that, in turn, open up business-led opportunities for restoring and protecting nature.
- Alignment with, and completion of, international standards.
- Delivery on stakeholder expectations, such as public demand for responsible business conduct, legal requirements for nature protection, and investor requests for risk disclosure.

7. Pilot testing: Next steps for financial institutions in the adoption of TNFD Recommendations

This second cohort of UNEP FI pilots has confirmed the interest in continuing to explore capacity building and knowledge needs from financial institutions. This includes ongoing work to develop more comprehensive means for assessing nature-based risks, in line with TNFD Recommendations and other emerging sustainability reporting requirements.

Key priorities on nature-related risks and disclosures for financial institutions

Finally, piloting institutions also highlighted how they see internal priorities on their roadmap to adopting specifically TNFD disclosures. According to in-pilot survey results, only 30% currently report on nature-related risks internally. Over the next 12 months, however, 70% of respondents plan to start doing so. This compares to a figure of 90% for the external reporting of climate-related issues over a long-standing period. Participants reported their key nature-related priorities over the next 12 months as:

- Disclosing the TNFD Recommendations.
- Gaining clarity on the pathway from nature-related risk to financial risk for risk management.
- Scenario analysis for water scarcity and biodiversity loss.
- Heatmapping portfolio risks.
- Applying relevant use case for scenario analysis.
- Internal team capacity building for nature-related risk.
- Translating learnings from climate risk to nature risk within institution.
- Sourcing relevant datasets (including data on nature loss transition pathways for high-impact sectors if a full-fledged analysis is not possible).
- Furthering dialogue with non-governmental organisations.
- Better understanding of nature-related data providers (including the WWF Risk Filters) and how their output overlays with financial risk information.
- Enhancing the understanding of the impact of nature loss on individual organisations
- Understanding client-level risks.
- Improving the prioritisation of nature integration into risk management processes.

7.1 Next steps: From implementation to action

As a trusted partner to the financial sector, UNEP FI stands ready to support and guide financial institutions through the evolving and complex landscape of nature finance. As part of this work, UNEP FI will continue its work through the now renamed TNFD implementation programme. The goal is to translate this complex topic into actionable steps for financial institutions taking advantage of UNEP FI's experience in existing programmes. This includes steps to identify nature-related risks, conduct resulting risk analyses, manage these risks and identify nature-related opportunities.

The release of the TNFD final recommendations provide a new pathway for financial institutions to act on nature loss. At the beginning of this journey, we call on all those interested in understanding and gaining hands-on experience with the application of the TNFD framework to join our TNFD implementation programme. **For more information on UNEP FI's TNFD implementation programme, please access the website or [express your interest here](#).**

In addition, we will continue to provide resources for financial institutions to take their first step and navigate through the complex landscape of nature action. Some of these planned resources will be applicable to all financial institutions, while others will be targeted at a specific industry. For example, a new [nature target-setting guidance](#) for banks has been recently published. This guidance provides a practical framework for banks to act on nature loss and set nature targets to align with the Kunming-Montreal Global Biodiversity Framework and the TNFD.

Building on the work we have been doing over the past years, UNEP FI will continue to support and accompany financial institutions in their journey to identify and address their impact on the natural world.



References

INSPIRE (2023). [Building Blocks for Central Banks to Develop Nature Scenarios](#).

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (2023). [Models of drivers of biodiversity and ecosystem change](#).

Network for Greening the Financial System (NGFS) (2023). [Nature-related Financial Risks: a Conceptual Framework to guide Action by Central Banks and Supervisors](#).

Partnership for Biodiversity Accounting Financials (PBAF) (2022). [Taking Biodiversity into account, PBAF Standard v2022—Biodiversity impact assessment—Footprinting](#)

Taskforce on Nature-related Financial Disclosures (TNFD) (2023). [Recommendations of the Taskforce on Nature-related Financial Disclosures](#).

Taskforce on Nature-related Financial Disclosures (TNFD) (2023). [Getting started with adoption of the TNFD Recommendations](#).

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unepfi.org



info@unepfi.org



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