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# **Preface**

This report has been commissioned by the Nordic Working Groups for Environment and Economics (NME) and Biodiversity (NBM) based on an order by the Committee of Senior Officials for the Environment and Climate. The report has been prepared by Norion Consult in cooperation with The Biodiversity Consultancy. The team responsible for drafting the report consisted of Rikke Fischer-Bogason, Elvira Borgman, Amalie Engelbrecht Hansen, Alma Møller Nielsen (all from Norion) and Leon Bennun from The Biodiversity Consultancy.

The report presents an assessment of how the Nordic financial institutions NEFCO (Nordic Environment Finance Corporation), NDF (Nordic Development Fund) and NIB (Nordic Investment Bank) tackle issues related to biodiversity in their operations. The analysis covers methods applied by the institutions to promote biodiversity in their activities. Additionally, information is provided regarding how the banks take into account nature-based solutions and the EU taxonomy rules in their activities. The report concludes that the Nordic financial institutions are well advanced with regard to biodiversity issues but there is still a potential to increase their efforts in this field.

Comments and inputs to the report have been provided by Members of the Nordic Working Groups for Environment and Economy (NME) and for Biodiversity (NBM) during the preparation of the report. The authors of the report are responsible for the content as well as the assessments and recommendations, which do not necessarily reflect the views and the positions of the governments in the Nordic countries.

#### August 2023

Magnus Cederlöf Chair of the Nordic Working Group for

**Environment and Economics** 

Sjúrður Hammer Representative of The Nordic Working

Group for Biodiversity's in the steering

group.

# List of abbreviations

BIOFIN The Biodiversity Finance Initiative

CBD Convention on Biological Diversity

CDSB Climate Disclosure Standards Board

ES Ecosystem Services

EIA Environmental Impact Assessment

ESB The Ecosystem Services Benchmarking Tool

ESG Environmental, Social and Governance

GDP Gross Domestic Product

IFC International Finance Cooperation

IFI International Finance Institution

IPBES The Intergovernmental Science-Policy Platform of

Experts on Biodiversity and Ecosystem Services

NCP Nature's Contributions to People

NDF Nordic Development Fund

Nefco Nordic Environment Finance Corporation

NFD Nordic Financial Development

NGFS Network for Greening the Financial System

NIB Nordic Investment Bank

OECD The Organisation for Economic Co-operation and

Development

PBAF Partnership for Biodiversity Accounting Financials

PES Payments for Ecosystem Services

SBTN Science-Based Target Network

SDG Sustainable Development Goals

SFDR Sustainable Finance Disclosure Regulation

TCFD Taskforce on Climate-related Financial Disclosures

TEEB The Economics of Ecosystems and Biodiversity

TNFD Taskforce on Nature-related Financial Disclosures

UNEP United Nations Environment Programme

WBCSD World Business Council for Sustainable Development

WWF Worldwide Fund for Nature

# Glossary

**Biodiversity** 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 the species, between species and of ecosystems<sup>[1]</sup>.

Biodiversity dependency

A reliance on or use of biodiversity, including biological resources (e.g., materials, liquids, genetic resources) from both species and interaction with various ecosystem processes and services (e.g., pollination, water filtration, crop pest/disease control or water flow regulation)<sup>[2]</sup>.

Biodiversity impact

A change in the diversity of ecosystems and/or species that may take place because of business activities. Changes to the state of ecosystems (e.g., extent and condition/integrity) and species (e.g., habitat, population size) can be used to signal changes in biodiversity<sup>[3]</sup>.

Biodiversity loss

The reduction of any aspect of biological diversity (i.e., diversity at the genetic, species and ecosystem levels) is lost in a particular area through death (including extinction), destruction or manual removal; it can refer to many scales, from global extinctions to population extinctions, resulting in decreased total diversity at the same scale<sup>[4]</sup>.

CDSB (2021)

#### Biodiversity Mainstreaming

The mainstreaming of biodiversity can be defined as integrating or including actions related to conservation and sustainable use of biodiversity at every stage of the policy, plan, programme, and project cycle, regardless of whether inter-national organizations, businesses or governments lead the process. The objective of mainstreaming biodiversity is to help reduce the negative impacts that productive sectors, development investments and other human activities exert on biodiversity, by highlighting the contribution of biodiversity to socioeconomic development and human well-being. This requires enhanced collaboration with development sectors and actors<sup>[5]</sup>.

### Ecological Footprint

The ecological footprint measures how much nature we use compared to how much we have. This accounting approach tracks how much biologically productive land and water area an individual, population or activity uses to produce all the resources it consumes, to house all its infrastructure, and to absorb its waste given prevailing technology and resource management practices<sup>[6]</sup>.

#### Ecosystem

A dynamic complex of plant, animal, and microorganism communities, and the non-living environment interacting as a functional unit<sup>[7]</sup>.

#### Ecosystem Services

The benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services such as nutrient cycling that maintain the conditions for life on Earth<sup>[8]</sup>.

#### Externality

A positive or negative consequence (benefits or costs) of an action that affects someone other than the agent undertaking that action and for which the agent is neither compensated nor penalized through the markets<sup>[9]</sup>.

CBD (n.d.)

Global Footprint Network (n.d.)

Global Footprint Network (n.d.)

The Millennium Ecosystem Assessment (2005)

IPBES (n.d.)

#### Financing Green

Through investments that can create a positive impact on nature, for example through protection and restoration of degraded habitats, or by supporting economic and social development that reduces the pressures on biodiversity.

Such investments are increasingly termed 'naturepositive'[10].

### Greening **Finance**

So that investment decisions include better consideration of nature-related risks and impacts, to avoid, minimise, restore and when necessary, offset negative impacts to biodiversity<sup>[11]</sup>.

#### Nature

In the context of IPBES, refers to the natural world with an emphasis on its living components. Within the context of western science, it includes categories such as biodiversity, ecosystems (both structure and functioning), evolution, the biosphere; humankind's shared evolutionary heritage, and biocultural diversity. Within the context of other knowledge systems, it includes categories such as Mother Earth and systems of life, and it is often viewed as inextricably linked to humans, not as a separate entity [12]

### Mitigation hierarchy

A sequence of actions applied to the management of biodiversity impacts, consisting of four stages:

- Avoid impacts on biodiversity. 1.
- Reduce biodiversity impacts as far as possible. 2.
- 3. Restore/remediate impacts that are immediately reversible; and
- 4. Offset residual impacts to achieve a desired net outcome (e.g., no net loss or net gain)[13].

#### Natural Capital

The stock of renewable and non-renewable natural resources (e.g., plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people [14].

<sup>10.</sup> WWF & The Biodiversity Consultancy group (2021)11. WWF & The Biodiversity Consultancy group (2021)

<sup>12.</sup> IPBES (n.d.)

<sup>13.</sup> CDSB (2021)

<sup>14.</sup> Natural Capital Coalition (2016)

Nature-based Solutions

Actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human wellbeing, ecosystem services and resilience and biodiversity benefits<sup>[15]</sup>.

Nature's Contributions to People

All the contributions, both positive and negative, of living nature (i.e., diversity of organisms, ecosystems, and their associated ecological and evolutionary processes) to the quality of life for people. Beneficial contributions from nature include such things as food provision, water purification, flood control, and artistic inspiration, whereas detrimental contributions include disease transmission and predation that damages people or their assets. Many NCP may be perceived as benefits or detriments depending on the cultural, temporal, or spatial context<sup>[16]</sup>.

Physical Risk

Risks arising when natural systems are compromised, due to the impact of climatic (i.e., extremes of weather) or geologic (i.e., seismic) events or changes in ecosystem equilibria, such as soil quality or marine ecology. These can be event driven (acute), chronic or both<sup>[17]</sup>.

Transitional Risk

Risks that result from a misalignment between an organisation or an investor's strategy and management and the changing regulatory and policy landscape in which it operates. Developments aimed at halting or reversing the damage to nature, such as government measures, technological breakthroughs, major changes, litigation and changing consumer preferences can all impact risks<sup>[18]</sup>.

Safequards

Policies and tools for minimising and managing biodiversity impact<sup>[19]</sup>.

<sup>15.</sup> UNEA (2022)

Systemic Risk Risks arising from the breakdown of an entire system,

rather than the failure of individuals parts. Characterised by modest tipping points combining indirectly to produce large failure and cascading interactions of physical and transition risks (contagion), as one loss triggers a chain of

others and stops systems from recovering their

equilibrium after a shock<sup>[20]</sup>.

Value Chain An organisation's direct operations, upstream activities,

and downstream activities. Direct operations cover activities over which the organisation has direct control, upstream activities cover the activities of suppliers and downstream activities are those linked to the purchase, use, re-use, recovery, recycling and final disposal of the

organisation's products and services<sup>[21]</sup>.

TCFD Taskforce on Climate-related Financial Disclosures

TEEB The Economics of Ecosystems and Biodiversity

TNFD Taskforce on Nature-related Financial Disclosures

UNEP United Nations Environment Programme

WBCSD World Business Council for Sustainable Development

WWF Worldwide Fund for Nature

20. TNFD (2022) 21. CDSB (2021)

# Summary

The report provides a status of existing analytical tools and public and private strategies that ensure that public and private investments strengthen, not weaken, biodiversity. The report also looks closer at the approaches to working with biodiversity in the Nordic financial institutions Nefco (Nordic Environment Finance Corporation), NDF (Nordic Development Fund) and NIB (Nordic Investment Bank), and examines their methods to ensure promotion of biodiversity through their financial activities. Moreover, it is studied how nature-based solutions and the EU Taxonomy are included in the biodiversity efforts of the banks.

Finance institutions have facilitated the expansion of business activities detrimental to biological diversity. By investing in sectors such as agriculture, fisheries, fossil fuels, and energy, and providing funding to polluting industries, the finance sector has supported activities that have led to biodiversity loss. [22] However, the demand for investing in activities with positive impact on nature is rapidly rising, and the financial sector is increasingly urged to align their portfolios with biodiversity positive outcomes. Several opportunities are pointed out to step up initiatives, and many nature positive investment activities are already in place. These activities include initiatives and forums for knowledge sharing, standards and framework for application of new procedures, and tools for incorporating considerations to biodiversity into operations.

Financial institutions commonly apply safeguards to prevent that their financial activities weaken biodiversity. This includes criteria and procedures to identify biodiversity features of high concern, a risk-based approach to financial activities, and application of the mitigation hierarchy.

The Nordic Development Fund (NDF), the Nordic Investment Bank (NIB) and the Nordic Environment Finance Cooperation (Nefco) are all international finance institutions who together make up the Nordic Finance Group. The Nordic financial institutions have a clear environmental mandate and are all working with the biodiversity agenda more or less actively. Although the aim for biodiversity positive impact is mentioned at the strategic level for all institutions, they have no set targets for the number of financial activities that should include nature-positive outcomes. Biodiversity is considered in the project design and screening, concretely through for example exclusion lists, but it is less clear how biodiversity impacts are addressed through the project implementation and monitoring. The Nordic financial institutions are thereby on the forefront of biodiversity financing, but they can

increase their efforts to ensure that they strengthen, not weaken, biodiversity through their operations. This can be done through a number of recommendations synthesised from the report findings:

#### Recommendations

- Examine exposure to physical and transitional biodiversity risk of the operations.
- Educate staff and investors on biodiversity.
- Educate clients on biodiversity considerations and reporting.
- Develop or adopt biodiversity safeguard framework/action plan for the operations.
- Integrate and combine biodiversity and climate considerations in financing
- Focus financing activities directly towards nature-positive outcomes.
- Change the assessment horizons of financing to better include the long-term perspective of biodiversity impacts.
- Create partnerships between finance and biodiversity actors

# 1. Introduction

Recently, many financial institutions are turning their focus towards preservation of nature, ecosystems, and biodiversity. There is a growing realisation of negative impacts from financial activities on nature which has made some institutions change their strategies from "do no harm" to "do good". This is based on recognition of the fact that economic growth has driven biodiversity loss, and that previous strategies aiming to safeguard biodiversity in financing activities have been unsuccessful. While previous strategies have often been ad hoc and aimed at specific activities within financing, the need is now for a holistic integration of biodiversity aspects throughout the whole finance sector. This has potential to unleash the beneficial role that financial institutions could play in the struggle for preserving biodiversity. The focus of this study lies specifically on the Nordic International Finance Institutions (IFI's), being the Nordic Development Fund (NDF), the Nordic Investment Bank (NIB) and the Nordic Environment Finance Cooperation (Nefco). All three Nordic IFIs have sustainability as part of their mandate and a clear focus on environmental aspects, and it is therefore highly relevant to study what measures they apply in order to ensure that they have a positive impact on biodiversity. The study covers the following topics:

- The status globally, in the EU, and the Nordic Region in terms of financial analytical tools and public and private strategies that will ensure that private and public investment promotes, not weakens, biodiversity.
- How the Nordic financial institutions (NEFCO, NDF, NIB) work with biodiversity to ensure that they promote, not weaken, biological diversity.
- How active the Nordic financial institutions are in financing nature-based climate solutions.
- How the institutions follow up on and use the EU's taxonomy (see EU taxonomy) in their biodiversity work.

The report is commissioned by the Nordic Working Group for Environment and Economy (NME) and the Nordic Working Group on Biodiversity (NBM) under the Nordic Council of Ministers. It has been written by Elvira Borgman, Amalie Engelbrecht Hansen, Alma Møller Nielsen and Rikke Fischer-Bogason from Norion Consult, and Leon Bennun from The Biodiversity Consultancy. We would like to direct our gratitude towards the informants that have provided valuable input through interviews and written correspondence.

### 1.1. Use of the term biodiversity

The UN Convention on Biological Diversity (CBD) has defined 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 the species, between species and of ecosystems."

In this study, we will align with this definition. To limit the scope to the most biodiversity relevant activities, this study takes departure in financial activities that are directly related to nature areas, biological systems, ecosystems and species. We do however acknowledge that other activities aimed at for example environmental protection and climate change have indirect effects on biodiversity. These are not primarily studied but may be included in the report to the extent that they are relevant for the analysis.

# 2. Background

# 2.1. The need for integrated biodiversity considerations in the finance sector

Economic growth relies on natural capital. Despite this fact, there is a discrepancy between this dependency and the activities of the financial sector, contributing to threats towards biodiversity and the natural environment. The financial sector must turn this trend around by aligning their activities with biodiversity objectives and play a positive role in preserving and restoring functional ecosystems<sup>[23]</sup>.

According to IPBES, five major factors are the main drivers of biodiversity loss<sup>[24]</sup>. These are:

- Land-use and sea-use change
- Direct overexploitation of natural resources
- Climate change
- Pollution of soil, water, and air
- Spread of invasive species

All business activities contribute to these five factors, whether it is through resource extraction, manufacturing, transportation, consumption, or end-of-life treatment. Certain sectors have considerably higher negative impact on biodiversity than others, due to their large contribution to biodiversity loss drivers. The main value chains that are responsible for most of the biodiversity loss are the food system, the infrastructure and mobility sector, the energy sector and the textile sector<sup>[25]</sup>. Our food system has the leading role in land-use change as the conversion of natural areas to crop or grazing land accounts for 80% of global land use change<sup>[26]</sup>.

Finance institutions have facilitated the expansion of business activities detrimental to biological diversity. By investing in sectors such as agriculture, fisheries, fossil fuels, and energy, and providing funding to polluting industries, the finance sector has supported activities that have led to biodiversity loss<sup>[27]</sup>. This is also true for national governments, who have invested in and provided subsidies to said industries, and thereby contributed to the exploitation of nature.

<sup>23.</sup> OECD (2021)

<sup>24.</sup> IPBES (2019)

<sup>25.</sup> Benton et al. (2021)

<sup>26.</sup> Campbell et al. (2017) 27. IPBES (2019)

Consideration of nature has been absent in the finance sector and in economic models in general, and issues related to the biosphere have been dismissed as externalities. However, with increasing demonstration of environmental crises, consideration for the natural environment in the financial sector has gradually become necessary or in many cases even a business opportunity. This is seen, for example, in the inclusion of climate change in economic models and in shifting energy investments from fossil fuels to renewable sources. Until recently, the financial sector has primarily focused on climate aspects of their investments, monitoring GHG emissions. It has been expressed that this scope needs to be broadened to address the interconnected climate and biodiversity crises we are facing.

Biodiversity loss from financial activities is one of the branches of environmental concerns that has grown in the later years, and an issue that has been thoroughly described in the Dasgupta<sup>[28]</sup> report that received wide international attention. There is also growing attention to the potential consequences of biodiversity loss to private sector companies and the finance sector. Many important supply chains rely on the functions supplied by natural ecosystems, and the degradation of these will as such have negative consequences to businesses and financial institutions and society as a whole. These nature-related dependencies are captured by the term nature risk. Nature risk can manifest as physical risk, damaging the assets of an institution, transition risk, which relates to changing market conditions, and systemic risk, which describes negative effects on the whole natural or financial system<sup>[29]</sup>. Biodiversity loss is as such a direct threat to financial institutions. Financial institutions and public funding need to shift to investments in activities that have positive impact on biodiversity. As stated in the Dasgupta report, "A significant portion of the responsibility for helping us to shift course will fall on the global financial system"[30]. Official Development Assistance flows directed towards biodiversity conservation in developing countries are still too low<sup>[31]</sup>, and opportunities lie in funding activities that promote nature and projects that support ecosystem integrity, conserve natural areas and use sustainable practices. The annual finance gap between what is spend on biodiversity conservation and what is needed has been estimated to be approximately USD 589-824 billion per year<sup>[32]</sup>. Simultaneously, financial institutions must stop investing in activities that degrade nature and biodiversity. It is estimated that governments annually spend between USD 500 billion and USD 1 trillion on subsidies that are harmful to the environment, mainly through subsidies to the agronomic and fossil fuel sectors<sup>[33]</sup>.

<sup>28.</sup> Dasgupta (2021) 29. TNFD (2022) 30. Dasgupta (2021)

<sup>31.</sup> Dasgupta (2021) 32. Deutz et. Al. (2020) 33. UNEP & ELD (2022)

# 2.2. The potential for the financial sector to increase nature-positive investments and Nature Based Solutions

The demand for investing in activities with positive impact on nature is rapidly rising, and the financial sector is increasingly urged to align their portfolios with biodiversity positive outcomes. Many nature positive investment activities are already in place, and new initiatives are surfacing.

Overall, strategies can be divided into two categories: Increasing investments that are positive for nature and reducing investments that have negative impacts on nature. The first category can be termed financing green, representing the efforts to invest more in activities that are positive for nature, while the second category can be termed greening finance, encompassing divestment from harmful activities.

#### 2.2.1. Financial approaches to nature-positive investments

Many nature-positive investments have indirect beneficial effects on biodiversity conservation, while some are directly aimed at biodiversity conservation (Table 1).

**Table 1.** Overview of indirect and direct nature positive activities. Adapted from WWF and The Biodiversity Consultancy.<sup>[34]</sup>

Indirect potential nature positive activities	Direct nature positive activities
<ul> <li>Climate change adaptation</li> <li>Climate change mitigation</li> <li>Disaster risk reduction</li> <li>Environmental restoration</li> <li>Human health</li> <li>Sustainable livelihoods</li> </ul>	<ul> <li>Ecological restoration</li> <li>Promotion of sustainable natural resource use</li> <li>Payments for conservation</li> <li>Payments for ecosystem services</li> <li>Biodiversity-friendly commodities</li> <li>Law enforcement</li> <li>Research and monitoring</li> <li>Protected area support</li> </ul>

Until now, most sustainable investment activities have climate adaptation or mitigation as their primary focus, with indirect benefits for nature. Investment in Nature-based Solutions which can promote synergies between climate goals and biodiversity conservation are key to make finance nature positive. Scaling up investments in these solutions are a significant opportunity.

There are several financial approaches that can support investment in naturepositive activities: Many of which are already being used by public development banks. Examples are:

- Grants
- Pay for success structures
- Sustainability bonds or green bonds
- Public loans linked to environmental programs
- Investments integrating Natural Capital Accounting
- First loss or other concessional capital
- Financial guarantees or risk insurance
- Leveraging debt conversion for nature conservation
- Private loans and/or equity linked to positive environmental outcomes
- Targeted investment in conservation businesses
- Technical assistance funds or project preparation grants.

This section has presented the potential for financial institutions to contribute positively to biodiversity conservation through overall strategies and investment activities. Ongoing initiatives have pinpointed the need for specific tools in order to implement well-functioning criteria, standards, and safeguards. Several analytical tools have already been developed globally to support the uptake of nature-positive investments in the financial sector. Examples of such analytical tools will be presented in the next chapter.

# 2.3. Analytical tools to ensure positive biodiversity strategies

Integrating biodiversity into finance and investments is complex, but there already exist numerous tools and frameworks to help better account for biodiversity and/or enable nature positive investments. Furthermore, multiple different forums and initiatives have been established in recent years with the purpose of establishing ways to share knowledge of best practices future developments and/or to send a message on the willingness to address the topic and act on the biodiversity crisis. But there are still numerous difficulties and little data that enable properly connecting biodiversity and finance activities in a meaningful way that allows to better support the integration of biodiversity into decision-making processes. But the finance-biodiversity nexus is currently drawing more and more attention, and in addition to already existing tools there are several initiatives in development, including in the Nordic countries. Two projects have recently received funding from the Swedish research institution MISTRA. The first project, FinBio, which is led by the Stockholm Resilience Centre, will develop methods and metrics to identify business models that protect biodiversity<sup>[35]</sup>. FinBio will aim to develop tools and strategies that support investors in financial decision making for biodiversity positive impacts[36]. The other project, BIOPATH, led by Lund University, will also innovate new methods for biodiversity considerations in financial decision making, with specific focus on land use aspects. Outcomes from both projects are expected to be highly relevant for investment activities in the Nordics.

The list below (Table 2) provides an overview of Key initiatives & Forums and Tools & Frameworks. A list with further details can be found in Appendix B.

<sup>35.</sup> MISTRA (2022) 36. MISTRA FinBio (2023)

**Table 2:** Overview of Key initiatives & Forums and Tools & Frameworks

#### **Key Initiatives & Forums**

#### **Biodiversity/Nature Specific Focus**

- The Align Project
- Biodiversity and Ecosystem Services Network (BES-Net)
- Coalition for Private Investment in Conservation (CPIC)
- Cross-sector Biodiversity Initiative
- EU Finance@Biodiversity Community
- Finance for Biodiversity Foundation
- Natural Capital Finance Alliance
- NatureFinance
- Partnership for Biodiversity-Accounting Financial (PBAF)

#### **Sustainability Focus**

- The Capitals Coalition
- Financial Centres for sustainability (FC4S)
- Global Impact Investing Network (GIIN)
- International Platform on Sustainable Finance (IPSF)
- The Science-based targets network.
- UNEP Finance Initiative

#### Frameworks & Standards

- Decision-making in a nature-positive world. A Corporate Diagnostic tool.
- Handbook for nature-related financial risks
- Kunming-Montreal Global Biodiversity Framework
- The Natural Capital Protocol
- PBAF Standard vs 2021
- Science-Based Targets for Nature
- The Sustainable Investment Framework
- The System of Environmental Economic Accounting Ecosystem Accounting (SEEA-EA)
- TNFD Framework

#### Tools

#### **Biodiversity Focus**

- Biodiversity Footprints for Financial Institutions (BFFI)
- Biodiversity Risk Filter
- Corporate Biodiversity Footprint (CBF)
- Exiobase
- Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE)
- Integrated Biodiversity Assessment Tool (IBAT)
- The Ocean+ Data Viewer
- Protected Planet database
- Species Threats Abatement & Recovery Metric (STAR)

#### **Sustainability Focus**

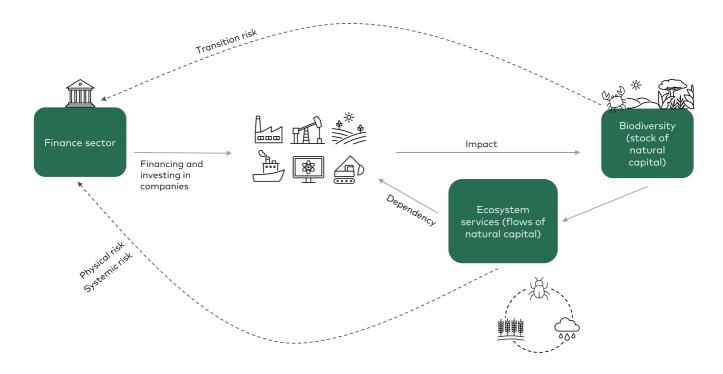
- Integrated Valuation of Ecosystem Services and Tradeoffs (InVEST)
- The Equator Principles
- Portfolio Impact Analysis Tools for Banks

### 2.4. Commonly used biodiversity safeguards

Biodiversity safeguards play a crucial role in protecting and preserving biodiversity and are employed to mitigate the negative impacts and promote sustainable practices. The safeguards encompass a wide range of approaches and tools.

#### 2.4.1. Risk-based approach

Investing in activities that cause harm on nature and biodiversity brings several types of risks for financial institutions, as illustrated in Figure 1.

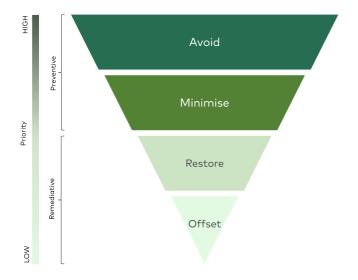


**Figure 1.** Overview of risks for financial institutions. Relationship between financial sector, economy, biodiversity and ecosystem services, and resulting risks. Adapted from WWF and The Biodiversity Consultancy.<sup>[37]</sup>

A risk-based approach requires that financial institutions consider the physical, systemic, and transition risk of biodiversity of their investments, as these translate into market and credit risks. Risk-screening of potential projects serves as an opportunity to identify projects with potentially high biodiversity risk, that are not eligible for funding or whose funding should be withdrawn.

#### 2.4.2. Mitigation hierarchy

The mitigation hierarchy is an acknowledged tool to manage potential risks and impacts to biodiversity, often used by financial institutions<sup>[38]</sup>. The method aims to accommodate a "no net loss" goal for biodiversity. This report makes use of a fourstep mitigation hierarchy which includes the steps: Avoid, minimise, restore, and offset impacts (Figure 2). Preventative measures lie at the top of the hierarchy and are thereby meant to be the ones most widely used. If preventative measures are not possible, or if residual impacts remain, remediative measures should be taken. The mitigation hierarchy places its weight on avoidance, which can refer to avoidance of negative impacts by altering the project and avoiding certain parts, but to a large degree also encompasses complete avoidance of funding to projects that have potential negative impacts, as it is generally more cost-effective to avoid negative impacts in the first place than to apply restoration or offsetting.



Avoid negative impacts by considering alternative locations, technologies, layout, phasing or scope of the project.

Avoidance is often the least costly mitigation step and, in many cases, the only option to protect pristine biodiversity.

Where complete avoidance is not possible minimisation of impacts is the next step. Minimising efforts should contribute to reduction of the intensity, significance, and duration of impacts.

Restoration entails repair of any degradation or damage on biodiversity or ecosystems. This can for example be done by re-establishment of the ecosystem function, structure and composition.

Offsetting negative impacts is the last resort in case all other options are unsuccessful, or there are residual impacts after taking all other measures. It thereby works as compensation for any residual negative impacts. Offsets should be designed to achieve measurable positive biodiversity outcomes that fulfil the no net loss criteria or contribute to net gain.

**Figure 2.** The mitigation hierarchy<sup>[39]</sup>.

<sup>38.</sup> IFC (2012)

<sup>39.</sup> Cross Sector Biodiversity Initiative (2015)

#### 2.4.3. Criteria to identify biodiversity features of high concern.

In order to evaluate whether projects can be considered a threat to biodiversity features of high concern, financial institutions apply certain criteria to identify relevant areas or traits. Criteria are often built around for example the Integrated Biodiversity Assessment Tool<sup>[40]</sup> database to identify important areas for biodiversity, or around the IUCN species Red List<sup>[41]</sup>.

## 2.5. International Agreements and Regulatory requirements

This following section will outline international agreements and regulatory requirements for sustainable financing.

#### 2.5.1. The Kunming-Montreal Biodiversity Framework

One of the most significant milestones in tackling the biodiversity crisis is the adoption of the Kunming-Montreal Global framework, which is considered to be to the nature agenda what the Paris Agreement is to climate change. The framework was adopted by 196 parties to the Convention on Biological Diversity in December 2022 at COP 15 in Montreal Canada<sup>[42]</sup>. The financial sector widely backs the new agreement. 150 financial institutions called on world leaders before the deal was reached to adopt an ambitious post-2020 Global Biodiversity Framework and adopt measures that set a clear mandate to align financial flows with biodiversity conservation since financial institutions have a significant role to play in halting and reversing nature loss<sup>[43]</sup>.

The framework has four long-term goals for 2050 and presents 23 targets for urgent action in the current decade to ensure that by 2030 several targets are reached such as the protection of 30 % of nature, and that we are on the right trajectory for achieving the 2050 goals. Some of the targets suggest measures directly aimed at the financial sector and outline several actions needing to be taken by the financial sector. The third section of the targets describes tools and solutions for mainstreaming and implementation. Target 14 describes the need for biodiversity to become an integral part of decision-making processes across levels of government and sectors and ensure proper alignment of fiscal and financial flows with the framework goals. Target 15 states the need to implement adequate measures, including legal measures to ensure that financial institutions regularly monitor and assess their risks, dependencies, and impacts on biodiversity and that they are transparently disclosed, thereby contributing to reducing negative impacts,

O. IBAT (2023)

<sup>41.</sup> IUCN Red List (2023) 42. CBD (2022A) 43. UNEP FI (2022)

reducing biodiversity-related risks and increasing positive impacts and ensure sustainable production patterns. To address the nature-related funding gap, Target 19 calls for an increase in financial resources from both public and private sources, an increase in domestic resource mobilisation, and a reallocation of funds from the global north to the global south. Some of the measures suggested in Target 19 include PES (Payments for Ecosystem Services) schemes, green bonds, biodiversity offsets and credits, and to optimise co-benefits and synergies with measures that target both biodiversity and climate change<sup>[44]</sup>.

Besides the global biodiversity framework, other supporting documents were adopted, including a monitoring framework with indicators for tracking progress towards reaching the goals. The monitoring framework will be continuously updated and further developed in the coming years<sup>[45]</sup>. Addressing the financial gap and ensuring proper funding is crucial in achieving the goals of the global biodiversity framework, and the additionally adopted decision 15/7 resource mobilisation. An important part of the decision is the establishment of the Kunming-Montreal Global Biodiversity Framework Fund. Financial institutions and multilateral development banks are invited to support the framework and to partner with the newly established fund. The decision also presents the first phase and initial building blocks for a strategy for resource mobilisation. Under the strategy for resource mobilisation, the COP calls for a "fundamental transformation of the global financial architecture and the reform of multilateral development banks and international financial institutions including investment banks, to make them fit for purpose in supporting the implementation of the Kunming-Montreal Global Biodiversity Framework, sustainable development and just transition efforts in developing countries" [46]. A mechanism for planning, monitoring, reporting and review was also adopted. Under the cooperation, synergies and stakeholder engagement, the business and finance community dependent on biodiversity is invited to make commitments that will contribute to national biodiversity strategies and the global biodiversity framework<sup>[47]</sup>.

Many parties will soon update their biodiversity strategies and action plans to ensure alignment with the new global framework by adopting new policies and/or legislation. This provides new risks as well as new opportunities for businesses and financial institutions. As a response to the global biodiversity framework, UNEP FI will update their guidance for setting biodiversity targets in order to align it with the new global framework, especially relevant to the signatories to the Principles for Responsible Banking and calls for alignment with other initiatives<sup>[48]</sup>.

<sup>44.</sup> CBD (2022A)

<sup>45.</sup> CBD (2022R) 46. CBD (2022C)

<sup>46.</sup> CBD (2022C) 47. CBD (2022D) 48. UNEP FI (2023)

#### 2.5.2. EU Policies

The overarching EU Policies on sustainable finance are the Action Plan on Financing Sustainable Growth from 2018 and the Strategy for financing the transition to a sustainable economy published in  $2021^{[49]}$ . The strategy will provide tools and incentives for financing the transition to a sustainable economy, and to mitigate the environmental and climate risk in the financial sector. A corner stone of sustainable financing in the EU Taxonomy regulation, which aims to provide criteria for sustainable financial activities. The EU Taxonomy feeds into reporting and disclosure directives recently adopted by the EU – the Corporate Sustainability Reporting Directive and the Sustainable Finance Disclosure Regulation. The Corporate Sustainability Reporting Directive regulates the reporting requirements for large and listed companies on their sustainability risks and impacts. Meanwhile, the Sustainable Finance Disclosure Regulation determines how financial market participants are required to disclose sustainable financial products. Each of the laws are further described below.

#### 2.5.3. EU taxonomy

The Taxonomy Regulation entered into force in July 2020 and has since been delegated in 2021 and 2022<sup>[50]</sup>. The regulation outlines performance criteria with regards to Green Deal Objectives. By providing technical screening criteria, it provides opportunities for companies, investors and financial market participants to establish whether economic activities contribute to environmental objectives<sup>[51]</sup>.

The EU taxonomy has a guiding purpose and does not entail any types of obligations on companies or prohibition against certain types of investments. Rather, it is expected to provide benefits though increased transparency, classification, and communication regarding which economic activities that can be considered environmentally sustainable.

The taxonomy includes economic activities in several sectors, which are held against six environmental objectives<sup>[52]</sup>:

- 1. Climate change mitigation
- 2. Climate change adaptation
- 3. The sustainable use and protection of water and marine resources
- 4. The transition to a circular economy
- 5. Pollution prevention and control
- 6. The protection and restoration of biodiversity and ecosystems

<sup>49.</sup> EU (2021A)

<sup>50.</sup> EU (2020A)

<sup>51.</sup> EU (2023)

<sup>52.</sup> EU (2023)

The sixth objective regarding biodiversity is most relevant for this study. However, the other environmental objectives also have relevance based on their indirect impact on biodiversity and ecosystems. Economic activities will be assigned technical screening criteria tied to each of the environmental objectives. These technical screening criteria are defined through delegated acts to the taxonomy regulation. Currently (Q1 2023), only the first delegated act on sustainable activities for climate change adaptation and mitigation objectives has been published<sup>[53]</sup>. The remaining delegated acts which contain screening criteria for the five other environmental objectives, including protection and restoration of biodiversity and ecosystems, have been presented in draft versions by the EC (April 2023). The technical screening criteria for the protection and restoration of biodiversity and ecosystems contains two categories of environmental activities:

- 1. Conservation including restoration, of habitats, ecosystems and species and
- 2. Hotels, holiday, camping grounds and similar accommodation

Once the final version of technical screening criteria for the protection and restoration of biodiversity and ecosystems are published, this will provide a clearer framework for finance activities contributing positively to biodiversity.

For an activity to be classified as sustainable it is not sufficient to contribute to one of the of the six objectives. The activity must not violate any of the other objectives either. There are four criteria for classifying an economic activity as sustainable:

- 1. The economic activity contributes to one of the six environmental objectives
- 2. The economic activity does 'no significant harm' (DNSH) to any of the six environmental objectives
- 3. The economic activity meets 'minimum safeguards' such as the UN Guiding Principles on Business and Human Rights to not have negative social impact
- 4. The economic activity complies with the technical screening criteria developed by the EU Technical Expert Group

If these four criteria are fulfilled, the activity can be classified as sustainable according to the Taxonomy.

While the Taxonomy does not entail any obligations on its own, it has ties to other EU legislation that require companies to disclose the share of taxonomy-aligned activities. This is part of the Sustainable Finance Disclosure Regulation and the Corporate Sustainability Reporting Directive.

#### 2.5.4. EU Corporate Sustainability Reporting Directive

The Corporate Sustainability Reporting Directive entered into force in January 2023<sup>[54]</sup>. The directive requires all companies with more than 500 employees and listed companies to report their environmental and social risks in a standardised manner. Reporting should be done according to the European Sustainability Reporting Standards, which are currently in draft form<sup>[55]</sup>. The drafts include Biodiversity and Ecosystems as one of the environmental areas that should be disclosed. This covers reporting of action plans and targets related to biodiversity and ecosystems, as well as impacts, risks and opportunities within these areas.

#### 2.5.5. EU Sustainable Finance Disclosure Regulation

The EU Sustainable Finance Disclosure Regulation (SFDR) has been effective since March 2021 with the purpose to harmonise sustainability related transparency and disclosure requirements for financial market participants and financial advisers. The regulation requires financial market participants to assess and publicly disclose sustainability and environmental, social and governance (ESG) factors in their investments. Sustainability-related information should be disclosed at entity level as well as at product level, entity being the level of a for example a bank, and product being the level of for example a portfolio or pension scheme.

At entity level, financial market participants are required to disclose information about their policies on the integration of sustainability risks in their investment decision-making process. Moreover, they need to disclose information on where they consider investment decisions to have adverse impacts on sustainability factors and a statement of due diligence regarding these impacts. If they do not consider adverse impacts on sustainability factors of investment decisions, they should state clear reasons for why they do not do so. In remuneration policies, financial market participants shall include information on how these policies are consistent with the integration of sustainability risks.

<sup>54.</sup> EU (2022A) 55. EFRAG (2023)

### Definition of 'sustainable investment' in the SFDR (Sustainable Finance Disclosure Regulation)

'Sustainable investment' means an investment in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy, or an investment in an economic activity that contributes to a social objective, in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations, or an investment in human capital or economically or socially disadvantaged communities, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices, in particular with respect to sound management structures, employee relations, remuneration of staff and tax compliance.

[56]

At product level, financial market participants must disclose principal adverse impacts on sustainability factors.

The SFDR classifies financial products into three types<sup>[57]</sup>

- Products that have sustainable investments as their primary objective (Article 9)
- Products that promote environmental and social characteristics, among other characteristics (Article 8)
- Products without integrated ESG considerations (Article 6)

Products that fit under Article 8 and 9 need to fulfil additional disclosure requirements<sup>[58]</sup>. For Article 8 products, information that should be disclosed should include descriptions of how environmental or social characteristics should be met, and information on how an eventual included index used for benchmarking is consistent with the mentioned characteristics. Products that fit under Article 9 where sustainable investment is the objective and an index has been designated as a reference benchmark, information should be included on how the designated index aligns with the sustainable objective. Furthermore, there should be an explanation as to why and how the chosen index differs from a broad market index. If no index is included as benchmark, information on how the sustainable objective is to be attained should be included.

57. EU (2020B) 58. EU (2020B)

<sup>56.</sup> EU (2020B)

The specific regulatory technical standards that financial market participants should use for SFDR disclosure were adopted by the European Commission in April 2022. These standards outline the methodology, content and presentation of the disclosed content<sup>[59]</sup>.

#### 2.5.6. Proposed or forthcoming regulatory requirements

In addition to the regulations described above, there are forthcoming legislative initiatives from the EU that will influence financial institutions with regards to sustainable investments. A European Green Bond standard was proposed in 2021. Currently, there is no existing EU regulation for Green Bonds, and Green bonds standards have not yet been legislated at national level by EU Member States, making the European Green Bond Standard the first on the EU market. The Green Bond Standard must support the upscale of green bonds on the European market and strengthening of the sustainability requirements for existing green bonds<sup>[60]</sup>.

The proposed framework includes four key requirements<sup>[61]</sup>:

- Green bond funds should be fully allocated to EU taxonomy aligned projects
- There should be full transparency on the allocation of bond proceeds, regulated by reporting requirements
- External reviewers should check all green bonds for compliance and taxonomy alignment
- External reviewers must be supervised by the European Securities Markets Authority

Requirements will be voluntary and aim to make it possible to differentiate between EU Green Bonds, which will serve as a form of "gold standard", and other green bonds. The standard will apply to bonds that are designated "European green bonds", but also bonds that are earmarked as "green" without making use of the term "European green bonds". The standard will provide opportunities for issuers of green bonds, such as the Nordic financial institutions, to demonstrate that their investments are aligned with the EU taxonomy.

<sup>60.</sup> EU (2021B) 61. European Commission (2021)

# 3. Methodology

In order to study financial tools that will ensure that investments promote biodiversity, we have applied a combined approach with desk study, interviews and maturity assessment (Figure 3) (further described below). The results from each step feed into the conclusions and recommendations which are targeted at Nordic Financial Institutions, but also at Nordic decision-makers and stakeholders involved with biodiversity and financing in general.

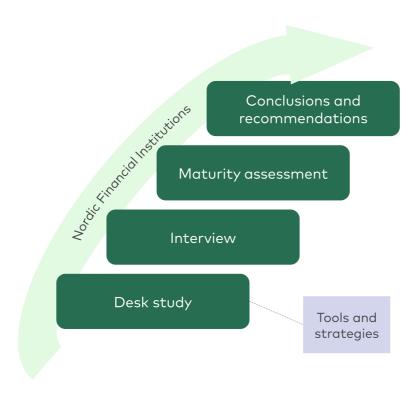


Figure 3: Methodology of research study

### 3.1. Desk study

A desk study has been carried out to i) Identify global tools and strategies to ensure that financial activities promote, not weaken biodiversity ii) Review tools and strategies used by the Nordic financial institutions to ensure that their financial activities promote, not weaken biodiversity.

The identification of tools and strategies used globally, in Europe, and in the Nordic countries has been based on an extensive literature review of academic literature and reports, web research and prior work of the consulting team. The uptake and usability of the identified tools has been analysed.

Biodiversity tools and safeguards used by the Nordic Financial Institutions have been studied by mapping the institutions' strategies, policies, investments and projects. This provided data on the institutions' efforts at strategic level down to the concrete actions that they carry out in their financial activities.

#### 3.2. Interviews

Semi-structured personal interviews have been carried out with representatives from the environment and sustainability departments at each of the three international finance institutions. One interview was carried out with each institution, engaging either one or two personnel from each financial institution. Interviews were conducted online in February 2013. One additional interview was carried out with each institution in March 2023, where data was collected from fund managers, monitoring experts and sustainability staff respectively.

The interviews have served as a platform for further analyses of strategies and tools used by the Nordic Financial Institutions to safeguard biodiversity. The interviews also covered specific topics such as the application of the EU Taxonomy and to which extent the institutions focus investments towards Nature-based Solutions.

### 3.3. Maturity assessment

To assess whether NEFCO, NDF and NIB have implemented relevant approaches to biodiversity actions, an organisational thematic analysis has been prepared for all three IFIs as a mean to uncover the level of implementation/maturity of the biodiversity agenda (Appendix A). The goal of the maturity assessment has been to review the level of biodiversity mainstreaming within each of the Nordic financial institutions. The CBD defines the mainstreaming of biodiversity as:

"integrating or including actions related to conservation and sustainable use of biodiversity at every stage of the policy, plan, program and project cycle, regardless whether international organizations, businesses or governments lead the process." [62]

If financing institutions are expected to – at a minimum – do no harm to nature, biodiversity must be accounted for when identifying, preparing, appraising, negotiating, approving, and finally implementing and evaluating projects and programs<sup>[63]</sup>.

The organizational analysis is based on a maturity model developed by Norion, inspired by the McKinsey 7S model. The maturity model has been developed by determining maturity levels for each organizational parameter as seen in Appendix A. Based on the model and on data collected through desk studies and interviews, a maturity assessment has been carried out for each of the financial institutions. A first version of the assessment was based on the desk studies, whereafter the results and preliminary conclusions was validated and further developed through the interviews described above.

<sup>62.</sup> CBD (2019) 63. WWF & The Biodiversity Consultancy (2021)

# 4. Nordic international financial institutions

The Nordic Development Fund (NDF), the Nordic Investment Bank (NIB) and the Nordic Environment Finance Cooperation (Nefco) are the international finance institutions that comprise the Nordic Finance Group.

- NDF's key focus is climate change and development projects in low-income countries
- NIB's key focus is long term financing of projects that improve and benefit the environment of the Nordic and Baltic countries
- NEFCO finances projects within the field of sustainable green growth and climate, mainly small and medium-sized projects. They have no specific geographic area of concern, but finances projects globally.

#### International Finance Institution (IFI):

An IFI is a financial institution that has been established (or chartered) by more than one country, and hence is subject to international law. Its owners or members are generally national governments. An IFI has full legal capacity to enter into agreements; to acquire and dispose of immovable and movable property; and to be party to legal proceedings.

The three institutions collaborate in numerous ways. NDF purchases administrative services from NIB<sup>[64]</sup>. The senior director of NIB is a member of the NDF's board of directors as an observer. Nefco and NIB run programmes together, and in 2019 they established a 15-year loan programme financing energy-efficiency and renewable energy projects in Eastern Europe<sup>[65]</sup>. All three Nordic IFI's have sustainability as part of their mandate, and a clear focus on environmental aspects.

# 5. NDF – Nordic Development Fund

The Nordic Development Fund (NDF) was established in 1988 and commenced operations in 1989. NDF is a joint Nordic international finance institution of the five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden. NDF is governed by its constituent documents which define the privileges and immunities of NDF and its personnel. The purpose of NDF is explained in article 1 of the agreement:

"The purpose of the Nordic Development Fund (...) is to promote economic and social development in developing countries through the participation in financing on concessional terms of projects of interest to the Nordic countries." [66]

NDF is funded by the development budget from each Nordic country with an active portfolio of EUR 359,3 million (by the end of 2022)<sup>[67]</sup>. Since the introduction of a climate mandate in NDF in 2009, the key focus of this IFI has been projects that target the nexus of climate change and development in lower-income countries, thereby providing support to developing countries and the most vulnerable people affected by climate change<sup>[68]</sup>. Climate mitigation, climate adaptation or projects enveloping both must be included as project objectives, and other environmental concerns including biodiversity are also part of the scope.

NDF has co-financed 135 climate projects in 30 countries, mainly in Africa<sup>[69]</sup>. It is a co-financial institution, meaning supplemental financing flows are required. NDF finances projects in both the private and the public sector.

# 5.1. Instruments in use

NDF operates with three types of financial instruments: Grants, concessional loans, and equity, used individually or in combinations when relevant.

NDF describes the key elements of their mandate as<sup>[70]</sup>:

- Nexus between climate and development
- Focus on lower-income countries and countries in fragile situations
- Concessionary financing
- Nordic priorities

<sup>66.</sup> NDF (2020A)

<sup>67.</sup> NDF (2023A)

<sup>68.</sup> NDF (2020B

<sup>70.</sup> NDF (2020R)

Under the first element, NDF points out that the climate agenda is closely interlinked with other aspects of the environment such as biodiversity, and NDF will continue to make efforts to identify activities in the nexus between climate change, biodiversity, and the oceans. NDF does not have any targets specifically for biodiversity, in terms of how many projects that should be directed at positive biodiversity benefits, but biodiversity is part of the current strategy<sup>[71]</sup>.

# 5.2. Strategies and Policies

The most recent strategy of NDF was published in 2020. It is valid until 2025<sup>[72]</sup>.

Activities within the strategy include:

- Advancing Nordic Leadership
- Developing early-stage project and design structures
- Providing catalytic finance for launch and scale

The primary focus for NDF is Climate change, the 13<sup>th</sup> Sustainable Development Goal. It is stated in NDF's strategy that:

"NDF works in a holistic way towards the development challenges spelled out in the other sixteen SDGs, recognising the interlinkages to and actively seeking co-benefits with other SDGs, not least with regard to environmental objectives. The position entails a strong focus on inclusive development as well as a proactive approach on gender responsiveness in line with Nordic priorities. NDF is well -placed to further advance the Nordic agenda both on a policy level and on an operational level." [73]

The NDF Strategy emphasizes Nordic priorities and how these are incorporated into the NDF mandate. In the description of Nordic priorities, biodiversity is mentioned as an important aspect. Biodiversity is included in the strategy with regard to safeguards, but also with regard to synergies in projects directed towards climate. NDF acknowledge the important linkages between climate change and biodiversity loss, and search for synergies to address both issues through their financina<sup>[74]</sup>.

<sup>71.</sup> NDF Environmental & Social Safeguards Specialist (February 1, 2023). Personal interview.
72. NDF (2020B)
73. NDF (2020B)
74. NDF (2020B)

# 5.2.1. NDF Environmental & Social Policy

Through NDF's Environmental and Social Policy they formalise their requirement to recipients of their funding to safeguard and, if possible, enhance biodiversity<sup>[75]</sup>. This is stated as:

"NDF will require the recipients of its financing to take active measures in the protection, conservation, management, and sustainable use of living natural resources. Recipients are required to ensure that activities include measures to safeguard and, where feasible, enhance ecosystems and the biodiversity they support." [76]

Thereby, NDF draw up ambitious strategic plans regarding the biodiversity impact of their financing.

# 5.3. Biodiversity concerns in NDF's project portfolio

Biodiversity screening in investments involves an evaluation of potential environmental impacts associated with investment projects or portfolios. The goal is to identify and assess the risks and opportunities that may arise from biodiversity-related issues.

# 5.3.1. Investments and projects

NDF requires certain information about a project from the project owner including:

- Project description
- Description of potential significant impacts, both social and environmental
- A quantification of the project's impact on GHG emissions
- All applicable permits and licenses related to environmental and social aspects of the project.

#### A. IFC Performance standard

# 6: Biodiversity conservation and sustainable natural resource management (2006)

## Objectives:

- To protect and conserve biodiversity.
- 2. To maintain the benefits from ecosystem services.
- 3. To promote the sustainable management and use of natural resources through the adoption of practices that integrate conservation needs and development priorities.

According to NDF's Minimum Standards, any project must adhere either to International Finance Corporation's (IFC) Performance Standards or to the World Bank Environmental and Social Standards<sup>[77],[78]</sup>. The biodiversity aspects of these standards are defined in the IFC Performance Standard 6 (see text box A) and the World Bank's Environmental and Social Standards 6 (text box B), respectively. In addition to this, all projects must follow the relevant Environmental, Health and Safety Guidelines from the World Bank Group<sup>[79]</sup>.

### B. Environmental and Social Standard

# 6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

### Objectives:

- To protect and conserve biodiversity and habitats.
- To apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity.
- 3. To promote the sustainable management of living natural resources.
- 4. To support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adaption of practices that integrate conservation needs and development practices.

<sup>7.</sup> NDF (2021C)

<sup>78.</sup> World Bank (2023) 79. International Finance Corporation (2023)

### Results Management Framework

NDF designs, monitors, reports and commissions evaluations of its co-financed projects activities based on their Results Management Framework (RMF)<sup>[80]</sup>. The RMF includes a set of core aggregate indicators in which the Sustainable Development Goals are integrated, and it is designed to be flexible and incorporate eventual upcoming requirements. The indicators are built on NDF Theory of Change and cover the levels strategic activities, outputs and outcomes<sup>[81]</sup>.

One of the overarching outcome categories is titled "Natural capital and waterenergy-food nexus" and this is the most relevant for direct biodiversity monitoring. This overarching category is informed by four core indicators<sup>[82]</sup>. These indicators and excerpts from the indicator descriptions are presented below:

Number of policies, plans, strategies, and technologies developed in support for integrated resource management addressing specific water- energyfood related concerns and efficiency measures.

Policies, plans and strategies can for example include measures and solutions addressing the following (but are not limited to)<sup>[83]</sup>:

- Design and planning support to policies, plans and strategies for integrated natural resources management (INRM) addressing specific water-, energyand food-related concerns.
- Support to sustainable use and/or management of natural resources.
- Support to sustainable and climate smart/friendly agricultural production.
- Number of measures on conservation, sustainable use and/or management of natural resources supported to benefit the habitat, biodiversity, and/or ecosystems.

Measures can for example include products and services addressing the following (but are not limited to)<sup>[84]</sup>:

- Participatory protection of geographical areas to achieve the long-term conservation of nature with associated ecosystem services and cultural values.
- Support to conservation efforts of habitat, biodiversity, and/or ecosystems.
- Support to restoration efforts of degraded areas.

<sup>80.</sup> NDF (2021B) 81. NDF (2021B) 82. NDF (2021D) 83. NDF (2021D) 84. NDF (2021D)

- Policy and planning support for sustainable management of areas and species: area-based conservation approaches, including protected area management: ecosystem services and ecosystem-based adaptation.
- Support to climate smart land use practices on avoidance of deforestation, erosion and drought.
- Nature-based solutions to protect, sustainably manage, and restore natural and modified ecosystems.
- 3. Number of people benefiting from improved conservation, sustainable management, and use of natural resources.

Measures provided may for example include (but are not limited to)<sup>[85]</sup>:

- Support to sustainable use and/or management of natural resources.
- Support to sustainable and climate smart/friendly agricultural production.
- Participatory protection of geographical areas to achieve the long-term conservation of nature with associated ecosystem services and cultural values.
- Support to conservation efforts of habitat, biodiversity, and/or ecosystems.
- Support to restoration efforts of degraded areas.
- Policy and planning support for sustainable management of areas and species: Area-based conservation approaches, including protected area management: Ecosystem services and ecosystem-based adaptation.
- Policy and planning support for decoupling of socioeconomic development through oceans-related sectors and activities from environmental and ecosystems degradation (re: blue economy).
- Support to climate smart land use practices on avoidance of deforestation, erosion and drought.
- 4. Size of area brought under improved conservation, sustainable management, and use of natural resources.

Solutions and measures provided may for example include (but are not limited to) [86].

- Design and planning support to policies, plans and strategies for integrated natural resources management (INRM) addressing specific water-, energyand food-related concerns.
- Support to sustainable use and/or management of natural resources.
- Support to sustainable and climate smart/friendly agricultural production.

- Participatory protection of geographical areas to achieve the long-term conservation of nature with associated ecosystem services and cultural values.
- Support to conservation efforts of habitat, biodiversity, and/or ecosystems.
- Support to restoration efforts of degraded areas.
- Policy and planning support for sustainable management of areas and species: Area-based conservation approaches, including protected area management: Ecosystem services and ecosystem-based adaptation.
- Policy and planning support for decoupling of socioeconomic development through oceans-related sectors and activities from environmental and ecosystems degradation (re: blue economy).
- Support to climate smart land use practices on avoidance of deforestation, erosion and drought.

Indicators are applied throughout the whole project cycle. In the origination phase, the indicators are considered in the project design to assess the impact potential of the project. The indicators are then reported by the project partners through annual project reports, which are submitted to project managers for review and the Monitoring and Evaluation Specialist for further quality assurance and review. Project reports are developed mostly annually until the end of the project period. Most of the projects undergo a final evaluation conducted by independent evaluators. Many projects also incorporate a mid-term evaluation. NDF has expressed that they are following the development of the CBD, the Aichi targets, and the SDGs to align the RMF with these overarching agreements and see how they can support the uptake in developing countries<sup>[87]</sup>.

### 5.3.2. Investment criteria

Sectors and activities that NDF do not finance are formally defined through an exclusion list[88]. An excerpt of the biodiversity relevant aspects of the exclusion list can be seen in Table 3. The table describes selected criteria and additional information as defined by NDF, which has been matched with the relevant driver of biodiversity loss (see Background). Biodiversity is explicitly included in the exclusion list twice: Once through "Activities prohibited by host country legislation or international conventions relating to the protection of biodiversity resources or cultural heritage". Biodiversity is also mentioned in relation to biofuel projects, as these are excluded if they are "based on feedstock grown on land with high carbon content or biodiversity value".

87. NDF Monitoring and Evaluation Specialist (February 1, 2023). Personal interview. 88. NDF (2021C)

**Table 3.** NDF Exclusion criteria and their relevance for biodiversity loss drivers.

Biodiversity relevant exclusion criteria		
Criteria	Additional information	Relevant biodiversity factor
Activities deemed illegal under host country laws or regulations, or international conventions and agreements or subject to international phase-out bans, such as:	<ul> <li>a. Production of or trade in products containing PCBs.</li> <li>b. Production of or trade in pharmaceuticals, pesticides/herbicides, and other hazardous substances subject to international phase-outs or bans (Rotterdam Convention, Stockholm Convention).</li> <li>c. Production of or trade in ozone-depleting substances subject to international phase-out (Montreal Protocol).</li> <li>d. Trade in wildlife or wildlife products regulated under the CITES Convention.</li> <li>e. Transboundary movement of waste prohibited under international law (Basel Convention) except for non-hazardous waste destined for recycling.</li> <li>f. Activities prohibited by host country legislation or international conventions relating to the protection of biodiversity resources or cultural heritage.</li> <li>g. Production or trade in or use of unbonded asbestos fibres or asbestos-containing products.</li> <li>h. Shipment of oil or other hazardous substances in tankers which do not comply with IMO requirements.</li> </ul>	Land-use and sea-use change Direct overexploitation of natural resources Pollution of soil, water, and air Spread of invasive species
Unsustainable fishing methods, including blast- fishing, drift-net fishing or trawling in the marine environment.		Direct overexploitation of natural resources
Production of or trade in radioactive materials. This does not apply to medical equipment, quality control (measurement) equipment and any equipment where the radioactive source is trivial and/or adequately shielded.		Pollution of soil, water, and air

Investments into search, extraction, production, distribution, processing, and promotion of fossil fuels (coal, oil, natural gas and peat).			Climate change
Activities that increase use of fossil fuels and/or prolong the technical or economic lifetime of heat and power production using fossil fuels, except for back-up in power generation plants, for household cooking purposes and for processes where feasible alternatives do not exist.			Climate change
Biofuel projects if they are:	a.	Based on feedstock grown on land with high carbon content or biodiversity value, such as rainforests, wetlands, peat lands and grasslands, in reserves or on protected lands, or on lands with a high conservation value. b. Using a feedstock for production of liquid biofuels, where the overall climate and development benefits would be higher by using the same feedstock unprocessed for, e.g., direct combustion in a co-generation plant. c. Using solid biomass fuels from forests, planted or natural, having a carbon cycle incompatible with the Paris Agreement. d. First generation biofuel projects with production area over 75 ha.	Land-use and sea-use change
Commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests.			Direct overexploitation of natural resources
Production or trade in wood or other forestry products other than from sustainably managed forests.			Direct overexploitation of natural resources

### 5.3.3. Nature-based Solutions

NDF's focus on climate change and development projects, which puts extra weight on adaptation projects as these are typically under-financed, is well-suited for application of nature-based solutions. Nature-based solutions are included as a measure in the RMF and can thereby be included in project design as well as throughout the project cycle<sup>[89]</sup>. NDF is currently financing several projects that apply Nature-based solutions.

## Case example: Climate resilience and mangrove protection

NDF has co-financed a five-year project on the Caribbean coastline of Honduras where coastal communities are working on enhancing climate adaptation and resilience. A main goal of the project is to protect the mangrove forest, which functions as coastal protection against rising sea levels, a significant carbon pool and an ecosystem crucial for biodiversity. Through the project, local stakeholders have come together to protect the remaining forests and plant new trees for regeneration and an increased focus on natural resource governance is promoting new practices that increase resilience throughout the coastal region.

[90],[91]

## 5.3.4. Application of the EU taxonomy

NDF is not obligated to follow the EU taxonomy but considers it a valuable way to gain insights into sustainable financing, and which criteria can be set up for financial activities. Although the taxonomy is not formally applied, NDF is looking into the possibilities of using the Substantial contribution and Do No Significant Harm criteria to guide financial activities in the future<sup>[92]</sup>.

<sup>97.</sup> NDF (2023B)
90. NDF (2023B)
91. NDF (2023C)
92. NDF Environmental & Social Safeguards Specialist (February 1, 2023). Personal interview.

# 5.4. NDF's application of biodiversity safeguards

# 5.4.1. Risk based approach

NDF applies a risk-based approach to their projects, screening for environmental and social risks in the screening process and finding ways to address these in the origination and management phase. In the screening phase, all projects are assigned a risk rating<sup>[93]</sup>. The risk rating determines what information the financing recipient is required to provide to NDF.

Since NDF functions as co-financers of projects, they are also expected to comply with partner's risk frameworks.<sup>[94]</sup> The larger funders that they cooperate with have rigid frameworks and, in some cases, large reputational risk, requiring NDF to take this into account in their operations in addition to their own risk-mitigating mechanisms. NDF can also support the lead agency by offering additional resources for quality control of risk assessments<sup>[95]</sup>.

# 5.4.2. Application of the mitigation hierarchy

The mitigation hierarchy is formally applied through the IFC Performance standard 6 or through the World Bank's Environmental and Social Standard 6.

NDF works by identifying potential negative environmental consequences of their investments early in the process, and state that even though their policy would allow it based on the Minimum Standards, it is unlikely that NDF finances a project where biodiversity offsetting was needed<sup>[96]</sup>.

# 5.4.3. Monitoring requirements

Mitigation actions are addressed at the planning phase through the application of IFC PS6 or World bank ESS6 standards. An example of how mitigation actions are included can be found in the IFC PS6, where it is stated that:

"Given the complexity in predicting project impacts on biodiversity and ecosystem services over the long term, the client should adopt a practice of adaptive management in which the implementation of mitigation and management measures are responsive to changing conditions and the results of monitoring throughout the project's lifecycle."[97]

The compliance of projects to the Minimum Standards is continually monitored, and it is expected that mitigation actions are adapted during the course of the project.

<sup>93.</sup> NDF (2021C)
94. NDF Monitoring and Evaluation Specialist (February 1, 2023). Personal interview.
95. NDF Environmental & Social Safeguards Specialist (May 30, 2023). Personal communication.
96. NDF Head of Sustainability (February 1, 2023). Personal interview.
97. International Finance Corporation (2023)

# 5.5. Maturity assessment of NDF

The maturity of NDF (Table 4) is assessed using the maturity tiers developed by Norion (Appendix A).

**Table 4:** Maturity assessment of NDF

Category		Tier C	Tier B	Tier A
Strategy	Strategy		Х	
	EU alignment		Χ	
	Investment targets		×	
	Biodiversity goals			X
Board and management	Transparency			Х
	Decision-making		Χ	
Systems	Investments targeted at biodiversity		Х	
	Biodiversity safeguards		Χ	
	Project screening		×	
	Risk assessment		×	
	Project management		Χ	
	Project monitoring		X	
	Project evaluation		Χ	
	Frameworks and tools		Χ	
Structure	Responsibility		Х	
	Overview		Χ	
Employees	Education		Х	
	Competences		×	
	Internal knowledge sharing		Χ	
Culture	Awareness		Х	
	Topicality		Χ	
Communication	External communication			×
Network	International partnerships		Х	
	External knowledge sharing			X
	International agreements			X

# 6. NIB - Nordic Investment Bank

# 6.1. Introduction

The Nordic Investment bank (NIB) is a financial institution co-owned by eight countries: Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, and Sweden. NIB finances both private and public projects, both in and beyond the member countries. It mainly finances projects within the member state region, but also operates on the international market. NIB provides loans to governments, municipalities, as well as financial institutions and limited companies. The bank provides sustainability-linked loans which are tied to sustainability key performance indicators for companies. It manages funds such as the Baltic Sea action Plan Fund (together with Nefco), which is related to biodiversity conservation. NIB mainly finances projects within the fields of

- Technical progress and innovation
- Human capital and equal economic opportunities
- Improvements in infrastructure
- Market efficiency and business environment
- Climate change mitigation
- Resource efficiency
- Pollution reduction
- Preventive measures

# 6.1. Strategies and Policies

According to NIB's mission, they "...finance projects that improve productivity and benefit the environment of the Nordic and Baltic countries." [98]. The strategy of NIB is to provide long-term loans and funding to customers to ensure sustainable growth. NIB has five environmental focus areas in its mandate, and will lend to projects that bring pollution reduction, preventive measures, resource efficiency, development of clean technology and climate change mitigation [99].

The sustainability aspects of NIB's operations are regulated through the Sustainability Policy. It is explicitly stated in NIB's Sustainability Policy that "NIB will support its member countries' efforts to achieve climate goals and enhance biodiversity in nature<sup>[100]</sup>." Moreover, biodiversity considerations are explicit with regards to protection of the Baltic Sea. Loans that are related to water protection can be included in NIB's Nordic-Baltic Blue bonds.

NIB's Responsible Investment Framework outlines investment principles for the treasury operations<sup>[101]</sup>. The framework is used to ensure that projects that NIB invests in fulfil the ESG performance expectations. It is stated in the Responsible Investment Framework that NIB actively seeks counterparties that seek to fulfil certain environmental goals and requirements, such as The Convention on Biological Diversity.

# 6.3. Biodiversity in NIB's project portfolio

# 6.3.1. Mandate rating and ESG-assessment

Prior to a credit decision, all projects undergo a mandate rating to make sure that the project fulfils NIB's mandate: To finance projects that improve productivity and benefit the environment of the Nordic and Baltic countries<sup>[102]</sup>. Parallel to this each transaction is taken through an ESG assessment that focuses on ensuring compliance with NIB's Sustainability Policy, exclusion list. The ESG assessment focuses both on the projects and counterparty level. The process is illustrated below<sup>[103]</sup>.

### Counterparty ESG assessment



### Project ESG assessment



Biodiversity aspects are included in the ESG assessment for projects and counterparties, especially within certain sectors including mining and forestry<sup>[104]</sup>. During the project ESG assessment, the analysis focusses on potential environmental impacts, including biodiversity, that would arise during the construction, during the operation and decommissioning. For this purpose, an environmental impact assessment (where applicable), quantification of the project's relevant emissions and discharges to the environment, permits and licences, description of potential significant environmental, social or governance impacts, environmental and social management plan, etc. will be used. During the counterparty analysis material ESG factors related to client's activities are analysed, including climate, pollution and waste, biodiversity, and resource efficiency aspects. Where necessary supply chain considerations are also considered in terms of potential biodiversity loss (e.g. supply chains linked to deforestation practices).

Throughout the process NIB monitors if its clients are compliant with NIB's Sustainability strategy, exclusion list and ESG guidelines. If the clients deviate from this along the way NIB address their concerns. The Lending Department is responsible for implementing the ESG guidelines for lending.

# 6.3.2. Investments and projects

NIB has a clear environmental focus in its project portfolio, however, biodiversity is not an explicit focus point compared to climate change mitigation, pollution reduction, resource efficiency and resilient infrastructure<sup>[105]</sup>. Biodiversity is integrated in an implicit, cross-cutting way into these environmental drivers.

In an investment or lending process, the sustainability and mandate team is involved from the beginning. Each project is rated on a scale from negative to excellent both from environmental and productivity perspectives. NIB has set a target that at least 50% of mandate rated projects should receive the excellent or good environmental mandate rating. The same target refers also to the productivity mandate, which encompasses impacts within areas such as technical progress and innovation, improvements in infrastructure, or human capital. Each project can get either one or both mandates. The logic behind such approach is rooted in NIB's mandate which outlines that both environment and productivity are equally important for NIB.

In the environmental impact rating, the assessment is carried out through as an aggregated qualitative and quantitative assessment<sup>[106]</sup>. The qualitative assessment is sector-based, with sectors receiving a pre-assigned rating based on their potential to contribute to the achievement of international and national

104.NIB, Head of Sustainability (May 12, 2023) Personal Communication. 105.NIB (2018) 106.NIB (2019)

targets for pollution reduction, 'preventive measures' (resilient infrastructure), resource efficiency and climate change mitigation. The quantitative impact assessment is based on the outcome impact indicators values connected to the specific project, which are forecasted to assess changes in for example energy or raw material use after project implementation.

### 6.3.3. Investment criteria

Sectors and activities that NIB do not finance are formally defined through an exclusion list. An excerpt of the biodiversity relevant aspects of the exclusion list can be seen in Table 5. The table describes selected criteria and additional information as defined by NIB, which has been matched with the relevant driver of biodiversity loss (see Background). Biodiversity is not directly mentioned in the exclusion list, however the list contains many aspects directly or indirectly related to biodiversity loss as listed in the third paragraph (Table 5).

**Table 5.** NIB Exclusion criteria and their relevance for biodiversity loss drivers.

Biodiversity relevant exclusion criteria		
Criteria	Additional information	Relevant biodiversity loss driver
Counterparty activities	<ul> <li>Activities or materials deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international phase-outs or bans</li> <li>Such as: Wildlife or products regulated under the Convention on International Trade in Endangered Species or Wild Fauna and Flora (CITES); ozone depleting substances, PCB's (Polychlorinated Biphenyls) and other specific, hazardous pharmaceuticals, pesticides/herbicides or chemicals; unsustainable fishing methods (e.g., blast fishing and drift net fishing in the marine environment using nets in excess of 2.5 km in length)</li> </ul>	Direct overexploitation of natural resources  Pollution of soil, water and air  Spread of invasive species  Land-use and sea-use change  Climate change  Pollution of soil, water and air
	<ul> <li>Destruction of High Conservation Value areas (natural habitats where these values are considered to be of outstanding significance or critical importance)</li> <li>In the event that any of the following activities form a significant part of a counterparty's business activities:         <ul> <li>Mining, extraction or processing of thermal coal or peat</li> </ul> </li> <li>Energy generation based on thermal coal or peat</li> <li>Exploration, extraction, production and transport of unconventional or Arctic oil and gas</li> </ul>	

Projects: Energy	<ul> <li>Mining, extraction or processing of thermal coal and peat</li> <li>Exploration, extraction or production facilities (i.e. upstream) for crude oil or natural gas</li> <li>Any energy generation based on fossil fuels (natural gas, oil, coal, or peat)</li> <li>Producing, processing and/or trading of palm oil and its derivatives for energy use</li> </ul>	Climate change  Land-use and sea-use change
Projects: Infrastructure	<ul> <li>Transportation, storage and refining infrastructure (i.e. midand downstream) for oil</li> <li>Transportation, storage or processing infrastructure (i.e. midand downstream) for natural gas not supporting energy transition to low-carbon gases (e.g. fossil-free hydrogen, biogas)</li> <li>Other transportation infrastructure such as ports, rail networks and vehicles, if the majority of business consists of coal (i.e. hard coal or lignite), peat and oil transport</li> </ul>	Climate change  Land-use and sea-use change  Pollution of soil, water and air
Projects: Extractive industries (non-energy)	<ul> <li>Mining, mineral processing and chemical extraction of radioactive mineral resources</li> <li>Mining and processing of minerals for the sole purpose of using as gems</li> <li>Sand mining</li> </ul>	Pollution of soil, water and air  Direct overexploitation of natural resources
Projects: Research and development	<ul> <li>Research in exploration, extraction, or production of fossil fuels'</li> <li>Research in purely fossil fuel-based power trains for road transport or stationary energy generation</li> <li>Research involving animal testing not in compliance with EU directives or national legislation</li> </ul>	Climate change  Direct overexploitation of natural resources

### 6.3.4. Nature-based Solutions

Although NIB has a strong environmental focus and the core of their financing lies in sustainable activities, nature-based solutions is not a specific focus for the institution. According to NIB, this is mainly related to the availability of such bankable projects. Many of their financed projects apply technological and infrastructural solutions rather than nature-based ones, but NIB welcomes the implementation on nature and biodiversity related proactive and protection measures within such projects.

Beyond NIB's regular lending operations, NIB contributes to environmental protection and climate change offsetting.

### Case example: Old-growth forest protection in Lithuania

NIB has supported the acquisition and protection of a 5-hectare old growth forest area in Lithuania through the NGO the Ancient Woods Foundation. The new protected area can contribute to biodiversity preservation of threatened flora, fauna, and fungi.

Protection of a forest area is a nature-based solution with joint climate and biodiversity benefits, and this case demonstrates how financial measures can be used as a tool to conserve threatened ecosystems.

[107]

## 6.3.5. Application of the EU taxonomy

Since 2022, NIB assesses the alignment of each new project with the EU taxonomy, including the fulfilment of technical screening criteria and Do No Significant Harm criteria, which also includes biodiversity.

In addition, NIB has assessed the entire NIB bond pool category alignment with the EU taxonomy. The first estimated alignment assessment for the NIB Environmental Bonds Framework project categories was performed as part of the 2021 Impact report. [108] For each Environmental Bond category, the assessment was made for the most relevant environmental objective in the EU taxonomy. Climate change mitigation was most commonly found to be the relevant environmental objective. The preliminary alignment assessment results displayed that the majority of

environmental bond project categories were estimated as aligned with the environmental objectives of the EU taxonomy. In the 2022 Annual Report, NIB reported on another screening of the alignment of the Environmental Bond project categories to the EU Taxonomy and found that out of the total disbursed loan volume, 99,6% were considered taxonomy eligible<sup>[109]</sup>.

# 6.4. NIB's application of biodiversity safeguards

# 6.4.1. Risk based approach

In general, NIB takes a risk-based approach to all its financing, and an objective analysis is performed for all projects it engages in. NIB is conservative with regards to risk and only finances projects that can demonstrate economical and technical stability<sup>[110]</sup>. NIB categorises all projects based on their potential negative environmental and social impact based on the categorisation from the EU EIA Directive<sup>[111]</sup>. This allocates projects into three categories:

- Category A Projects
  - Corresponding to Annex I in the EU EIA Directive. Likely to have irreversible, diverse or unprecedented impacts.
- Category B Projects
  - Corresponding to Annex II in the EU EIA Directive. Likely to have limited, largely reversible environmental and social impacts. Subject to focused environmental assessment.
- Category C Projects
  - No requirement for an EIA, as projects are likely to have no negative environmental and social impact.

Biodiversity risk is considered in cases when NIB finds that it is relevant for the project. This is highly sector dependent. In case NIB finds that a project is of high biodiversity risk, it asks the clients to disclose more explicit information on the project. NIB in some cases make use of the ENCORE platform (Appendix B) to identify biodiversity or ecosystem service hotspot areas.

109.NIB (2023A) 110. NIB (2023B) 111. NIB (2022B)

# 6.4.2. Application of the mitigation hierarchy

The mechanisms of the mitigation hierarchy are stated in NIB's risk management policy as:

"The Bank recognises that adverse environmental and social impacts cannot be avoided in all circumstances. In these cases, the Bank seeks for the negative impacts to be appropriately reduced, mitigated, or compensated for." [112]

# 6.4.3. Requirements for planning, implementing, and monitoring mitigation actions and (if necessary) offsets

Monitoring of mitigation actions is assessed from project to project based on the ESG assessment<sup>[113]</sup>. A specific monitoring clause can be put into a loan bond agreement with the client<sup>[114]</sup>. NIB returns to a client three years after the project, to examine whether the impacts determine ex-ante have materialised ex-post<sup>[115]</sup>. If impacts cannot be demonstrated, this factors in, if the client applies for a new loan. The ex-post evaluation does not have effects on the loan which was already received.

# 6.5. Maturity assessment of NIB

The maturity of NIB (Table 6) is assessed using the maturity tiers developed by Norion (Appendix A).

<sup>112.</sup> NIB (2022D) 113. NIB (2022B) 114. NIB Head of Sustainability (7 February, 2023). Personal Interview. 115. NIB Head of Sustainability (May 12, 2023) Personal Communication.

**Table 6:** Maturity assessment of NIB

Category		Tier C	Tier B	Tier A
Strategy	Strategy		Х	
	EU alignment		X	
	Investment targets		X	
	Biodiversity goals		X	
Board and management	Transparency			Х
	Decision-making		X	
Systems	Investments targeted at biodiversity		Х	
	Biodiversity safeguards	X		
	Project screening		X	
	Risk assessment		X	
	Project management		X	
	Project monitoring	Χ		
	Project evaluation	Χ		
	Frameworks and tools		X	
Structure	Responsibility			Х
	Overview		X	
Employees	Education		Х	
	Competences		X	
	Internal knowledge sharing		X	
Culture	Awareness		Х	
	Topicality			X
Communication	External communication		X	
Network	International partnerships		Х	
	External knowledge sharing			X
	International agreements			X

# 7. Nefco – Nordic Environment Finance Corporation

# 7.1. Introduction

Nefco is an international financial institution founded by the five Nordic countries in 1990. It focuses on financing the initial scale-up of Nordic green solutions for scale-up on international markets. Nefco finances both private and public projects and primarily provides finances for Nordic SME's entering the international market and to municipalities in Eastern Europe through green public sector projects. It has also financed projects across the globe. Moreover, it manages funds for governmental organisations and green development programs.

Nefco has an explicit sustainability focus and works with requirements from the EU taxonomy, the Paris Agreement, the EU Green Deal, the Nordic vision 2030 and the SDGs in its investments, as well as its own sustainability criteria. Biodiversity is included in the Environmental and Sustainability Policy, where Nefco states that it strives to work in alignment with the EU Biodiversity Strategy. The institution has also recently started a Biodiversity Pilot Programme for small and medium-sized companies focusing on concrete conservation measures, which is described in section 7.3.2.

Nefco works in several sectors including:

- Agriculture, forestry, and fishery sustainable food production, nutrient recycling, and manure management
- Energy-efficiency small-scale financing in municipally owned buildings
- Industry and services resource efficiency and circular economy
- Renewable energy
- Waste and recycling waste management and waste recycling technologies
- Water and wastewater with a special focus on reducing nutrient discharges to the Baltic Sea

# 7.2. Strategies and Policies

Nefco's Strategy from 2021 to 2025 states that Nefco's primary purpose is to accelerate the green transition by:

"Financing environmentally sustainable small and medium-sized projects using Nordic solutions and technologies that have the potential to be scaled up on global markets and have a substantial positive environmental impact, and support globally set common targets and contributions."[116]

Biodiversity and ecosystems are mentioned frequently in the strategy, and the strategy communicates that Nefco wishes to align with the Nordic priorities of a biodiversity-positive economy.

Nefco's overall sustainability policy is defined by the Environmental and Sustainability Policy<sup>[117]</sup>. The policy document has guidelines tied to it, outlining the more concrete implications of the policy on project financing<sup>[118]</sup>. In Nefco's Environmental and Sustainability Policy it is clearly stated that it wants to commit to work towards a biodiversity-positive economy. According to the policy, Nefco's investments should be sustainably designed and implemented to protect biodiversity.

# 7.3. Biodiversity in Nefco's project portfolio

## 7.3.1. Investments and projects

Nefco monitors projects and makes annual disclosures on the impacts of its financing and its own operations.

Nefco has developed its own procedures for sustainability assessments for investment projects. The assessment procedure is split into three parts - initial screening of a potential project, sustainability assessment, and finally sustainability monitoring<sup>[119]</sup>. In the initial screening step, Nefco assesses the potential environmental benefits of the project, and ensures that project activities are not included on the Exclusion list (below). If a project passes the initial screening and is accepted for funding, Nefco performs a sustainability assessment in collaboration with the client. The biodiversity relevant parts of the sustainability assessment include the EU taxonomy (described under EU taxonomy below) and Nefco's own criteria.

<sup>116.</sup> Nefco (2021A)

<sup>117.</sup> Nefco (2021A) 118. Nefco (2022B)

<sup>119.</sup> Nefco (2022B)

After project completion, Nefco monitors projects by collecting annual impact reports from clients. The reports are based on indicators defined by Nefco, which vary between projects and sector. Clients are also expected to report on an Environment and Social action plan in case that has been developed for the project.

Nefco has developed a Biodiversity Roadmap in which it is stated that during 2023, Nefco will perform a portfolio and process screening with focus on impacts and dependencies on nature. The aim of the screening is to identify potential high-risk sectors and risk areas in Nefco's investment portfolio. High-risk portfolio assets identified through the screening will be subject to further evaluation<sup>[120]</sup>. Moreover, Nefco aims to develop an internal biodiversity action plan based on the process.

# 7.3.2. Biodiversity Pilot Programme

Nefco has initiated a two-year Biodiversity Pilot Programme in 2022 aimed at small and medium-sized companies<sup>[121]</sup>. The aim of the programme is that it will create and test biodiversity solutions that can be applied by companies in the private sector. Through the programme, four selected client companies are offered consulting services and capacity building which will support them in developing a biodiversity management plan and in mapping their biodiversity impacts and dependencies<sup>[122]</sup>. This also serves as an opportunity for Nefco to understand its clients' needs for biodiversity management.

### 7.3.3. Investment criteria

Sectors and activities that Nefco do not finance are formally defined through an exclusion list. An excerpt of the biodiversity relevant aspects of the exclusion list can be seen in Table 7. The table describes selected criteria and additional information as defined by Nefco, which has been matched with the relevant driver of biodiversity loss (see Background). Biodiversity is directly included in the exclusion list through the point "Activities prohibited in relation to the protection of biodiversity resources or cultural heritage". Biodiversity is also clearly considered through "Commercial activities relating to primary and old-growth forests" and "Destruction of High Conservation value areas". Moreover, the exclusion list contains many elements that have direct or indirect impact on biodiversity loss drivers. The relevant biodiversity loss drivers are added in the third column for overview (Table 7).

120.Nefco (2023B)

**Table 7.** Nefco Exclusion criteria and their relevance for biodiversity loss drivers.

	Biodiversity relevant project exclusion criteria		
Criteria	Additional information	Relevant biodiversity loss driver	
The production of or trade in any product or activity deemed illegal under host country (i.e., national) laws or regulations, international conventions, and agreements or subject to international phase outs or bans, such as	Ozone-depleting substances (ODSs), polychlorinated biphenyls (PCBs) and other specific, hazardous pharmaceuticals, pesticides/herbicides, or chemicals  • Wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species or Wild Fauna and Flora (CITES)  • Unsustainable fishing methods including, e.g., blast fishing and driftnet fishing  • Transboundary movements of waste prohibited under international law  • Activities prohibited in relation to the protection of biodiversity resources or cultural heritage  • Unbonded asbestos fibres or products containing asbestos	Land-use and sea-use change Direct overexploitation of natural resources Pollution of soil, water and air Spread of invasive species	
Forestry and Husbandry Exclusions	<ul> <li>Commercial activities relating to primary and old growth forests.</li> <li>Destruction of High Conservation Value areas</li> <li>Any greenfield livestock husbandry farm (meat, eggs, and dairy products)</li> <li>Keeping of animals for the primary purpose of fur production or any activities involving fur production</li> <li>Aquaculture farms raising fish directly in fenced-in areas of natural waters</li> </ul>	Land-use and sea-use change Direct overexploitation of natural resources. Spread of invasive species	
Fossil Fuel Exclusions	<ul> <li>Investments in components related to the use of fossil fuels</li> <li>Investment projects that include any components related to the use of fossil fuels financed by other project participants</li> <li>Projects leading to a lock-in effect on any use of fossil fuels within or outside the project scope</li> </ul>	Climate change	

### 7.3.4. Nature-based Solutions

Nefco does not yet target investments directly towards projects labelled as Nature-based solutions, but some of its financial activities can fit under the Nature-based solutions umbrella, especially projects under certain funds such as the Baltic Sea Action Plan Fund. Nature-based solutions are included in the Nefco strategy under a description of Nordic environmental priorities.

## Case example: Financing new drainage systems from agricultural soils

Nefco has financed a project on controlled drainage from agricultural soils in Southern Sweden to reduce eutrophication in the Baltic Sea. The project received funding through the Baltic Sea Action Plan Fund, which is co-financed by NIB and Nefco. A new drainage system made up of multifunctional water reservoirs, through which water can be recycled as irrigation to the crops, is supposed to contribute to decreased soil runoff and nutrient losses while also functioning as climate change adaptation. The project was funded in two phases, first through a pre-study, and afterwards through full-scale implementation running from 2022.

[123]

# 7.3.5. Application of the EU taxonomy

Nefco has adopted the EU taxonomy in 2021 and now uses it as the primary classification system for identification of investment projects. The aim is to increase alignment with the taxonomy objectives continuously.

All investment projects are assessed according to the EU taxonomy. According to its own assessments, 80% of its active investments agreed before 2022 are taxonomy eligible, meaning that the activities of the investee company are listed in the EU taxonomy and make a substantial contribution to the taxonomy objectives. [124] Nefco judges whether the economic activity is aligned with the EU taxonomy through three criteria: Technical screening criteria, Do No Significant Harm, and Minimum Social Safeguards. If these are all met, the project is considered aligned. In the 2021 self assessment, Nefco did not include the Do No Significant Harm principle, as data for assessment was not available from the projects which started before the taxonomy was adopted. Since 2022, Nefco has included the Do No Significant Harm principle in the assessment and found that while no investments could be considered fully aligned, 63% of the investments agreed in 2022 are considered partly aligned.

123. Nefco (2023A) 124. Nefco (2021B)

# 7.4. Nefco's application of biodiversity safeguards

Nefco is currently in the process of developing more specific biodiversity assessment practices, based on the portfolio screening and the Biodiversity Pilot Programme projects. It is not yet decided whether Nefco will make use of one of the biodiversity reporting frameworks that are already available, or if it will design its own assessment practices which can build a safeguards framework<sup>[125]</sup>.

# 7.4.1. Risk based approach

In general, Nefco applies a risk based approach to its projects<sup>[126]</sup>. For certain projects of higher risk, Nefco demands development of an Environmental and Social Action Plan to secure that the project has concrete plans for mitigation of significant risks<sup>[127]</sup>.

# 7.4.2. Application of the mitigation hierarchy

According to the Environmental and Sustainability Policy from 2022, "Nefco aims to minimise the negative impacts of its financing: In the case that adverse impacts cannot be avoided, these should be appropriately reduced, mitigated, or compensated for, and a plan for doing so developed. ". It thereby applies the mitigation hierarchy to its projects<sup>[128]</sup>.

# 7.4.3. Monitoring requirements

Environmental requirements are set at the planning stage. At every first meeting with a potential investee there is an environmental analyst present in order to assess the sustainability risks and positive environmental impact of the potential project<sup>[129]</sup>.

Indicators for monitoring are defined specifically for each project<sup>[130]</sup>. Projects that are subject to an Environment and Social Action Plan shall also report on the progress of these actions, including mitigation actions. All projects are subject to core indicator reporting: However, these core indicators do not include biodiversity or biodiversity relevant indicators such as land use change or habitat impact. In case it is considered relevant, biodiversity indicators can be added on top of the core indicators. Final monitoring is carried out three years after project implementation, with the aim to understand the long-term environmental impacts.

<sup>125.</sup> Nefco (2023B)

<sup>126.</sup> Nefco (2022A) 127. Nefco (2022B)

<sup>129.</sup> Nefco Vice President of Origination (16 March, 2023). Personal Interview.

<sup>130.</sup>Nefco (2022B)

# 7.5. Maturity assessment of Nefco

**Table 8:** Maturity assessment of Nefco

Category		Tier C	Tier B	Tier A
Strategy	Strategy		X	
	EU alignment			X
	Investment targets		X	
	Biodiversity goals			Х
Board and management	Transparency			Х
	Decision-making		X	
Systems	Investments targeted at biodiversity		Х	
	Biodiversity safeguards		X	
	Project screening		X	
	Risk assessment		X	
	Project management		X	
	Project monitoring	Χ		
	Project evaluation	Χ		
	Frameworks and tools		Χ	
Structure	Responsibility			Х
	Overview		Χ	
Employees	Education		Х	
	Competences		X	
	Internal knowledge sharing			X
Culture	Awareness		Х	
	Topicality			Х
Communication	External communication			Х
Network	International partnerships		Х	
	External knowledge sharing			X
	International agreements			X

The maturity of Nefco is assessed using the maturity tiers (Appendix A).

# 8. Conclusions

# Global status on analytical tools and strategies to ensure investments that promote biodiversity

Biodiversity is becoming "the new climate" in terms of the attention it is getting in the financial sector, and the requirements that financial institutions need to consider. The quickly growing attention to this very important topic is also seen in the number of financial analytical tools that are currently under development. In addition to a number of tools (Appendix B), private and public financial institutions' safeguards are the main strategies used at the current stage.

### The status on biodiversity work in the Nordic Financial Institutions

The Nordic Financial institutions are well on their way in terms of addressing and working with the biodiversity agenda. Overall, the Nordic Financial Institutions have outspoken biodiversity considerations at strategy and policy level, and they are following the development of analytical biodiversity tools, but have not yet adopted them. At finance activity level, the institutions incorporate biodiversity considerations into their ESG and risk assessments.

### Nature-based solutions in the Nordic Financial Institutions

The Nordic Financial Institutions are in some cases directing finances specifically towards Nature-based solutions and they have cases of Nature-based solutions in their portfolios. Since the Nordic Financial Institutions have climate in their mandate to a larger degree than biodiversity, Nature-based Solutions are to some degree regarded as an opportunity to integrate biodiversity considerations into projects that they can finance under a climate mandate.

### Use of the EU Taxonomy

The Nordic Financial Institutions Nefco and NIB actively make use of the EU Taxonomy for their financing activities. Both institutions asses the alignment of their projects with the technical screening criteria and the Do No Significant Harm Criteria from the taxonomy. NDF does not formally make use of the EU Taxonomy in their operations.

# 9. Recommendations for Nordic decision-makers

# Incorporate biodiversity clearly into the mandate of the Nordic Financial Institutions

The global biodiversity situation has deteriorated more severely than the climate situation<sup>[131]</sup>, and there is a clear need for financing nature positive initiatives. This needs to be reflected in the mandates of the Nordic Financial Institutions, where biodiversity needs to be integrated at the same level as climate.

# Support sub-national authorities in biodiversity financing

Provide guidelines and capacity building on how to incorporate biodiversity considerations in public financing, for example, through green bonds targeted at biodiversity.

# 10. Recommendations for Nordic financial institutions

## Examine exposure to physical and transitional biodiversity risks of the operations.

Map the institution's exposure to physical and transitional biodiversity risks to allow for long-term planning and resilience building. Institutions can make use of tools such as LEAP developed by the Task-Force on Nature-related Financial Disclosures, The Biodiversity Footprint Financial Institutions, The Natural Capital Protocol or ENCORE to assess and disclose risk at the project and portfolio level.

### Educate staff and investors on biodiversity.

Invest in internal capacity building to ensure that biodiversity considerations are holistically integrated throughout the organization and the project cycle. Subjects that are relevant to cover for all staff include a definition of biodiversity, the main threats against biodiversity, impacts and dependencies of the company and existing tools and procedures related to biodiversity.

### Educate clients on biodiversity considerations and reporting.

Clients and recipients of financing need to be equipped to handle biodiversity considerations in projects at the planning, implementation, and evaluation stage. Initiatives such as The Biodiversity Pilot Programme by Nefco can support the type of collaborative learning required for these types of processes.

# Develop or adopt biodiversity safeguard framework/action plan for the operations.

A well-defined biodiversity safeguard framework will help identify, clarify and disclose how considerations to biodiversity are included in the company's operations.

# Integrate and combine biodiversity and climate considerations in financing activities.

Analyse synergies and trade-offs between climate and biodiversity impacts as part of the project screening. Consider ecosystem-based approaches and nature-based solutions that, based on scientific evidence, can create synergistic outcomes.

# Focus financing activities directly towards nature-positive outcomes.

Make biodiversity benefits an inherent part of financing targets instead of an addon. Direct investments in nature needs to be increased, and the pace needs to be accelerated. The economic value of biodiversity is significant, and acting sooner will reduce the need for future investments in mitigation of biodiversity loss. A concrete way to finance biodiversity protection is to submit green bonds directly targeted at biodiversity benefits, which will be more attainable with the new European Green Bond Standard.

# Change the assessment horizons of financing to better include the long-term perspective of biodiversity impacts.

Biodiversity effects and impacts of activities are both slow and complex and do not fit within a project cycle of a few years. In order to perform sufficient biodiversity evaluation, monitoring and evaluation procedures need to be redesigned.

## Create partnerships between finance and biodiversity actors.

Financial institutions can at a larger degree make use of expertise from the environmental, nature, and biodiversity sectors, through partnerships and knowledge sharing. In addition to building new partnerships, institutions can take active part in platforms such as the Finance for Biodiversity Foundation, the Partnership for Biodiversity Accounting Financials, The Align Project, BIOFIN and NatureFinance.

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## 12. Appendix A

## Maturity tiers

Category		Tier C	Tier B	Tier A
Strategy	Strategy	Biodiversity is not included in the investment strategy.	The institution has a clearly formulated strategy to mitigate negative biodiversity impacts.	The institution has a clearly formulated, well-communicated and actively used strategy to mitigate negative and achieve positive biodiversity impacts.
	EU alignment	Do not use EU's strategy for biodiversity or EU taxonomy.	Refers to EU's strategy for biodiversity or the EU taxonomy.	The institution's strategy is in line with EU's strategy for biodiversity and the institution uses the EU taxonomy.
	Investment targets	Do not have stated environmental commitments.	They have climate investment targets, and a few are developing targets for investment in nature as a component of these.	They have biodiversity investment targets.
	Biodiversity goals	Biodiversity is not included in goals.	The goal is to do no harm on biodiversity.	The goal is to have a net-positive effect on biodiversity.
Board and management	Focus and transparency	There is no focus on biodiversity.	The vision on biodiversity is not shared outside the management.	The management explicitly mentions biodiversity as a focus area for the institution.
	Decision-making	Biodiversity is not considered a factor in decision-making.	Biodiversity is sometimes considered a factor in decision-making.	Biodiversity is always considered a factor in decision-making.  The management includes biodiversity experts in the

Systems	Investments targeted at biodiversity	Have no investments in nature.	They usually have few, if any, direct investments in nature.	Their investments in nature are still at a low level but increasing. A certain part of the portfolio is earmarked for biodiversity positive projects.
	Biodiversity safeguards	They rely on regulatory EIA processes rather than safeguard frameworks to manage risk.	They apply biodiversity safeguards (IFC's PS6, or in their own frameworks) though with limited supporting structures or capacity.	Consistently apply biodiversity safeguards (IFC's PS6, or in their own frameworks) with clear supporting structures and high capacity.
	Project screening	Biodiversity impacts are not included in the screening process.	Biodiversity impacts are to some extent included in the screening process under environmental impacts.	Biodiversity impacts are explicitly included in the screening process. Activities harmful for biodiversity are clearly stated in the exclusion list, and positive impact possibilities are taken into consideration.
	Risk assessment	Risk assessment does not have specific focus on biodiversity.	There is a framework to assess biodiversity risks and nature dependencies.	There is a framework to assess risks and dependencies which also includes trade-offs between different sustainability aspects.
	Project management	Biodiversity is not considered during the projects management.	Biodiversity is considered during the project management if the project has obvious effects on biodiversity.	Has procedures to continuously take biodiversity aspects into account during project management
	Project monitoring	Biodiversity is not always monitored specifically.	The project's effects on biodiversity are always monitored during the whole project period.	Long term effects on biodiversity (min. 10 year after) are monitored

	Project evaluation	Biodiversity is not always included as a factor in the evaluation process.	Biodiversity is only considered during evaluation if the project has obvious effects on biodiversity.	All projects include biodiversity as a factor in evaluations.  Evaluations are performed by external evaluators with biodiversity expertise.
	Frameworks and tools	The institution does not use specific tools or frameworks targeting biodiversity.	Sporadically makes use of own or international biodiversity frameworks for screening, management, and monitoring.	Consistently makes use of own or international biodiversity frameworks for screening, management, and monitoring.
Structure	Responsibility	There is no allocation of responsibilities regarding biodiversity.	There is an informal allocation of responsibilities regarding biodiversity.	There is a clear allocation of responsibilities regarding biodiversity.
	Overview	Only the person responsible knows.	Key employees in the institution are aware of the role distribution.	Everyone in the institution is aware of the role distribution.
Employees	Education	No option for further education in biodiversity.	There are opportunities for further education within biodiversity, and these opportunities are being used in single cases.	Further education on biodiversity is systemized, and funds are allocated for this purpose.
	Competences	No one has specific knowledge on biodiversity.	All relevant employees have basic knowledge of biodiversity financing, a few employees have expert knowledge.	People working with biodiversity have expert knowledge on the topic.
	Internal knowledge sharing	There is no internal knowledge sharing.	Knowledge sharing happens sporadically.	There is structured internal knowledge-sharing from the persons with expert knowledge.

Culture	Awareness	No awareness of biodiversity.	Awareness of biodiversity is centred around certain employees or departments of the company.	Within the institution there is broad awareness of the relevance of biodiversity as a topic.
	Topicality	There is no small talk on either climate or biodiversity.	Small talk and discussions are typically focused on climate issues.	Biodiversity is spoken about as a topic between employees in the institution.
Communication	External communication	No external communication regarding biodiversity.	The institution has some communication regarding biodiversity topics.	The institution clearly communicates their efforts to have a positive impact on biodiversity.
Network	International partnerships addressing the biodiversity crisis	Is not party to any international finance initiatives.	Is party to international finance initiatives that address biodiversity. Follows the development of common international frameworks for biodiversity financing.	Is party to international finance initiatives that address biodiversity.  Cooperate with other institutions to develop common international frameworks for biodiversity financing.
	External knowledge sharing	The institution does not engage in knowledge-sharing activities.	The institution is somewhat engaged in knowledge sharing with other similar institutions.	The institution actively participates in knowledge sharing with other similar institutions.
	International agreements	Does not refer to international biodiversity agreements such as the CBD and the Aichi targets.	Refers to international biodiversity agreements such as the CBD and the Aichi targets.	Participates actively in the implementation of international biodiversity agreements such as the CBD and the Aichi targets.

# 13. Appendix B

Key Initiatives & Forums					
	Biodiversity/Nature Specific Focus				
Initiative	Description	Purpose	Members/Partners		
The Align Project	The Align project aims to align existing approaches to create consensus on a standardised approach for how businesses and financial institutions can measure and report on their impacts and dependencies on nature. This will be done by supporting the relevant stakeholders in developing a proposal for standardised, biodiversity-inclusive, natural capital management accounting practices for both businesses and financial institutions to uptake. The Align project is a three-year-long project initiated in 2021.	To align and create a consensus of best practices to account for natural capital and for measuring biodiversity impacts and dependencies	Founded by the European Commission, WCMC Europe, The capitals coalition, Arcadis, ICF and UNEP-WCMC		
Biodiversity and Ecosystem Services Network (BES-Net) <sup>[132]</sup>	BES-Net is a global network consisting of UNDP, UNEP-WCMC and UNESCO and more than 100 other organisations working on translating IPBES's information into on-the-ground biodiversity action. BES-Net is funded by the Government of Germany and SwedBio.  The network also includes the BES Solution Fund, which channels money into 'on-the-ground biodiversity solutions'	The aim is to bring actors together and to assist in implementing solutions that support on-the-ground biodiversity actions at local and national scales and in line with IPBES recommendations.	Consortium Partners: UNDP, UNEP-WCMC and UNESCO		

## Coalition for Private Investment in Conservation (CPIC)<sup>[133]</sup>

CPIC is a group of Civil Society Organisations, academia, private and public sector financial institutions working together increase investments in conservation. Their statement of intent says: "In order to sustain humanity's future on earth, substantial investment in natural capital is urgently needed. Given the benefits that nature provides to people, this investment should be framed as an investment in humanity, as part of the economic future laid out in the Sustainable Development Goals.' [134]

The coalition builds on the expertise of their partners and aims to connect financial institutions with in-country partners who can help develop and execute investable deals that can produce both environmental and financial return. Investment in the following sectors is prioritized:

- Coastal resilience
- Forest Landscape Conservation and Restoration
- Green Infrastructure for Watershed Management
- Sustainable Agriculture Intensification
- Sustainable Coastal Fisheries

The coalition work together to deliver an increase in private, return-seeking investment in conservation. Conservation finance represents an undeveloped private sector investment.

Founding partners: Cornell University, Credit Suisse, IUCN, natureVest. Other members include GIIN, Fauna & Flora International, European Investment Bank and WWF

## Cross-sector Biodiversity Initiative (CSBI)

CSBI is a collaborative knowledge platform for practitioners working across the sectors of finance, oil and gas and mining. The tools and guides that have been developed for the sector include:

- A cross-sector guide for implementing the mitigation hierarchy
- Good practices for the collection of biodiversity baseline date

Timeline Tool – a roadmap to identify milestones and interdependencies between project development schedules, timelines and actions required to effectively apply the Mitigation Hierarchy<sup>[136]</sup>

The scope is to develop and share good practices related to biodiversity and ecosystem services in extractive industries The initiative is a partnership between IPIECA, the international Council on Mining and Metals and the Equator Principles Association.

<sup>133.</sup> CPIC (n.d.A) 134. CPIC (n.d.B)

<sup>135.</sup> CSBI (n.d.) 136. CSBI (n.d.)

EU Finance@Biodiversity community	The participants in the forums will share their work and strategies concerning biodiversity and ecosystems. The ambition is to better integrate biodiversity into financial institutions' investment decision by:	Ensure that financial institutions better integrate biodiversity into their investment strategies	Members: ABN AMRO, Achmea Investment Management, Actiam, Affirmative IM, ASN Bank, AXA Investment Managers, Bank of	
	<ul> <li>Knowledge and best practice sharing</li> </ul>		Ireland, Bankinter, CDC Biodiversité, Conservation	
	<ul> <li>Establish three working groups: biodiversity accounting, positive biodiversity impact, and Impact &amp; responsibility.</li> </ul>		Capital, EIB, Finance in Motion, FMO, GLS Bank, ING, INOCAP, Mirova, Piraeus Bank, Rabobank and SCOR. CDSB, Ministry of	
	Contribute and take part in other developments and initiatives on green finance		Economic Affairs, Natural Capital Coalition, Natural Capital Finance Alliance, UNEP FI, VBDO	
Finance for biodiversity Foundation <sup>[137]</sup>	The Finance for Biodiversity Foundation is a non-profit organisation calling to reverse nature loss. One hundred twentysix financial institutions, representing EURO 18.8 trillion in	The commitment of financial institutions to call on global leaders and positively contribute	Members: ASN Bank, AXA, LGT Private Banking, Nordea Asset Management, and others,	
	assets, call on global leaders during the 15 <sup>th</sup> meeting of the Conference of the Parties (COP15) to the Convention on Biological Diversity (CBD) to agree on effective measures to reverse nature loss in this decade to ensure ecosystem resilience. Timeline Plan until 2024:	to biodiversity through finance activities.		
	1. Collaboration and knowledge sharing			
	2. Engaging with companies			
	3. Assessing impact			
	4. Setting targets			
	5. Reporting publicly on the above before 2025			
	The signatories own the Pledge, and any financial institution can sign up. Furthermore, the Finance for biodiversity community provides a forum for discussing and knowledge sharing of best practices for how to integrate biodiversity into finance activities.			
Natural Capital Finance Alliance (NCFA) <sup>[138]</sup>	In 2012 at the Rio+20 conference the alliance was formed to support the signatories of the Natural Capital Declaration. The 2012 declaration states the need for: "() the private and public sectors to work together to create the conditions necessary to maintain and enhance natural capital as a critical economic, ecological and social asset." [139] The alliance is led by a steering committee consisting of financial institutions and environmental experts.	The purpose of the alliance is to provide and develop tools and methodologies that can help the financial sector and other partners collaborate and Integrate natural capital considerations into financial sector reporting.	The Initiative is led by UNEP FI, Global Canopy	

<sup>137.</sup> Finance for Biodiversity Foundation (n.d.)
138. https://naturalcapital.finance/about-ncfa/
139. https://naturalcapital.finance/the-natural-capital-declaration/

NatureFinance <sup>[140]</sup>	NatureFinance was first established in 2019 as Finance4Biodiversity but changed to NatureFinance in 2022. NatureFinance's work evolve around:  1. Effective policy advocacy: increasing market opportunities and the success of nature positive enterprises and investments.  2. Market engagement: creating an ecosystem of investable, nature-related ventures with the potential to shape nature positive markets.  Innovation and incubation activities: accelerating nature positive outcomes at scale <sup>[141]</sup> .	The mission of NatureFinance is to increase the materiality of biodiversity in finance decision-making and align global finance with nature positive and equitable outcomes	Partners include Green digital Finance alliance, trase, SBTN, Global Canopy, TNFD and MAVA
Partnership for Biodiversity-Accounting Financials (PBAF)	PBAF is an industry-led partnership that provides guidance to financial institutions that want to analyse their biodiversity impacts (both negative and positive impacts) and dependencies. PBAF cooperates and aligns with the TNFD, the SBTN, the CC, and the Align project.	The primary aim is to develop a standard that enables financial institutions to assess and disclose impact and dependencies on biodiversity of loans and investments.	International partnership of banks, asset managers and investors.
	Sustainability Focus		
Initiative	Description	Purpose	Members/Partners
The Capitals Coalition <sup>[142]</sup>	A global collaboration of leading organisations in research, science, academia, reporting, investment, and business. The coalition develops, advocates for, and advances the capital's approach and has developed two standardised frameworks for identifying, measuring, and valuing dependencies on natural capital, including biodiversity guidance. The ambition of the Capitals Coalition is: "Our ambition is that by 2030 the majority of businesses, financial institutions and governments will include the value of natural capital, social capital and human capital in their decision-making and that this will deliver a fairer, just and more sustainable world."		Including UNEP, WWF, The World Bank, World Resources Institute, the Nature Conservancy, wbcsd, FAO, CDSB, CBD, EC, EIB, Global Canopy, IUCN, IFC, and numerous multinational companies

<sup>140.</sup>NatureFinance (n.d.) 141. NatureFinance (n.d.) 142. https://capitalscoalition.org/the-coalition/

Financial Centres for sustainability (FC4S) [143]	Financial Centres for sustainability is a network of international financial centres that work together to achieve the Paris Agreement and the Sustainable Development Goals. The FC4S was launched in 2017 with 11 financial centres adopting The Casablanca Statement on Financial Centres for Sustainability. The network is supported by a secretariat that provides support, best practices guidance, project development and research to support their members. Many of the members are public-private partnerships or municipally linked entities.	'The objective of FC4S is to accelerate the expansion of sustainable finance by enabling financial centres to evaluate the state of sustainable finance and to provide the tools and insights to engage local institutions, inform and influence policy, and ultimately accelerate market transformation' [144].	There are currently 39 members including Stockholm Green digital Finance
Global Impact Investing Network (GIIN) <sup>[145]</sup>	The network focuses on impact investments. The purpose of Impact investments is to generate positive measurable social and environmental impacts alongside a financial return. GIIN also have a research centre that collects information about current market trends and activities. In 2020 GIIN launched the new capitalism project to investigate how different stakeholders can work together to build a more just, equitable and inclusive economic system.	The Global Impact Investing Network is a membership-based network for investors and organisations that want to engage with impact investments.	
International Platform on Sustainable Finance (IPSF)	Founded in 2019 to honour the Paris Agreement, the IPSF is a forum for public authorities such as ministries of finance and central banks that develop environmentally sustainable finance initiatives and policies. Their objective is to mobilize private capital towards environmentally sustainable finance at an international level. The platform facilitates knowledge sharing and coordinates efforts on the agenda of environmental sustainability.	The purpose of the forum is to enhance international coordination, spread information and provide knowledge exchange on best practices in sustainable finance, and identify barriers for implementing best practices.	Founding partners: European Union, Argentina, Canada, Chile, China, India, Kenya, and Morocco.
The Science based targets network (SBTN)	The SBTN is a collaboration of global non-profits, and part of the Global Commons Alliance. The collaboration develops a framework and a method for companies to assess their impact and dependencies on nature. SBTN builds on the Science Based Targets initiative (SBTi) that focuses on the Climate crisis, the science-based targets for nature and climate can be developed together.	They develop methods, resources, and frameworks for companies to assess and their impacts and dependencies on nature, so they can set targets that address this, and identify nature positive opportunities.	Partners: CDP, UN Global Compact, World resources institute, WWF
UNEP Finance Initiative <sup>[147]</sup>	UNEP Finance Initiative was founded in 1992. UNEP FI is an extensive network of banks, insurers, and investors. Constituting 450+ members, representing USD 100 trillion. UNEP FI has created or cocreated the following frameworks:  • Principles for Responsible Banking (PRB)  • Principles for Sustainable Insurance (PSI)  • Principles for Responsible Investment (PRI)	UNEP FI helps financial institutions to develop practical approaches to setting and implementing targets in areas including GHG emissions, financing nature, sustainable consumption and production, and financial inclusion to address inequality.	Partners: Climate Action, Global Canopy, and principles for responsible investment.

<sup>143.</sup> FC4S (n.d.)
144. FC4S (n.d.)
145. GIIN (n.d.)
146. https://sciencebasedtargets.org/about-us/sbtn
147. https://www.unepfi.org/

Frameworks & Standards Header				
Title	Developer	Description	Sector	Scope
Decision-making in a nature positive world. A Corporate diagnostic tool	University of Cambridge Institute for Sustainable Leadership (CISL)	The sustainable investment framework is an open access tool, and it was launched to help businesses identify obstacles to implementing nature-based solutions. The tool has four different focus areas, they are based on the key challenges companies report on:	Business sector	Implementation of Nature based solutions
		<ul> <li>Dealing with the unknowns</li> <li>Making the financial case</li> <li>Navigating external and reputational pressures</li> <li>Engaging and influencing colleagues</li> </ul>		
		Each section provides descriptions of common challenges, their indicators, and causes, and how these might be perceived followed by actions to contend with these challenges		
Handbook for nature- related financial risks [ <sup>148</sup> ]	University of Cambridge Institute for Sustainable Leadership (CISL)	The handbook gives and introduction to key concepts in the biodiversity finance nexus and illustrates how nature loss constitute a financial risk and provide a framework that can be used to identify nature-related financial risks. The framework identifies three types of risks arising from nature loss: physical risk, transition risk and liability risk and how these manifests themselves and how they via their impacts on companies turn into financial risks for financial institutions.	Financial sector	Impacts and dependency on nature
Kunming-Montreal Global biodiversity framework <sup>[149]</sup>	UN COP15 biodiversity summit	The framework was adopted by 196 parties to the Convention on Biological Diversity in December 2022 at COP 15 in Montreal CanadaThe framework has four long-term goals for 2050 and presents 23 targets for urgent action in the current decade, to ensure that by 2030 we have reached several targets such as the protection of 30 % of nature, and that we are on the right trajectory for achieving the 2050 goals. Some of the targets suggest measures directly aimed at the financial sector and outline several actions needing to be taken by the financial sector.	Cross-sectional	Impacts and dependency on nature.
The Natural Capital Protocol <sup>[150]</sup>	The Capitals Coalition	A standardised framework to identify, measure, and value direct and indirect impacts (positive and negative) and/or dependencies on natural capital. It is intended to support better decision making for companies internally by including how we interact with nature in decision making. It is not a formal reporting framework and is not intended for external disclosure.	Mainly business sector	Impacts and dependency on nature.

148. CISL (2021) 149. CBD (2022) 150. Natural Capital Coalition (2016)

PBAF Standard vs 2022	The partnership for Biodiversity Accounting Financials	PBAF is a Biodiversity Accounting Standard for the Financial sector to help financial institutions reduce their negative impacts on biodiversity, and shift towards nature conservation and restoration by measuring how their loans and investments impact on biodiversity allowing them to make informed priorities.	Financial sector	Impacts on nature
		The PBAF standard consists of:		
		<ul> <li>Overview of impact assessments approaches and assessment of positive impact</li> </ul>		
		<ul> <li>Guidance, requirements, and recommendations on Biodiversity Foot printing.</li> </ul>		
		The standard identifies types of impact assessments:		
		<ul> <li>'Screening of a potential impact on biodiversity, based on (a)     Qualitative information on impact drivers, (b) Asset location and     geospatial biodiversity data, (c) Information on impact drivers &amp;     geospatial biodiversity data and/or (d) A quantified biodiversity     footprint.</li> </ul>		
		<ul> <li>Measuring actual impact on biodiversity, based on monitoring of actual changes in biodiversity and an attribution of these changes to interventions/actions financed.'<sup>[152]</sup></li> </ul>		
		The standard's biodiversity footprint guide consists of four steps:		
		1. Understand the investment.		
		<ol><li>Analysis of environmental inputs and outputs of economic activities.</li></ol>		
		<ol> <li>Analysis of the impact on biodiversity.</li> </ol>		
		4. Interpretation of the footprint result.		
		Nature dependency is going to be included in future revisions of the assessment.		
		PBAF aligns itself with other initiatives including TNFD, the European Align initiative and the Finance for biodiversity pledge.		
Science-Based Targets for Nature <sup>[153]</sup>	WWF, UN Global Compact, WRI and CDP	Science-Based Targets for Nature are currently developing science-based targets for nature, the first part will be available Q2 2023 and provide companies with a technical guide for how to assess and prioritise their environmental impacts and set targets accordingly to help improve their impacts.	Business sector	Impacts and dependency on nature.

<sup>151.</sup> PBAF (2022) 152. PBAF (2022) 153. SBTN (2023)

The System of Environmental Economic Accounting - Ecosystem Accounting (SEEA-EA)	United Nations, European Commission, FAO, OECD, World Bank Group	The SEEA organises and presents statistics on the environment and its relationship with the economy. The SEEA Central Framework was adopted by the UN Statistical Commission as the first international standard for environmental-economic accounting in 2012. The SEEA Ecosystem Accounting was adopted in 2021 and complements the Central Framework. The framework constitutes an integrated statistical framework and considers how individual environmental assets interact as part of natural processes within a given spatial area. By organising biophysical data, measuring ES, tracking changes in ecosystem assets, and linking this information to economic and other human activity. Can be applied at different scales both national and subnational	Policy and decisionmakers	Impacts and dependency on nature
The Sustainable Investment Framework [154]	The Investment Leaders Group (ILG) and CISL	Cambridge Institute for Sustainable Leadership has developed the Framework together with ILG. The Framework uses the SDGs as measures of performance and makes it possible to quantify investment impacts to support more informed investment decisions on six impact themes: <ul> <li>Healthy ecosystems</li> <li>Climate stability</li> <li>Resource security</li> <li>Basic needs</li> <li>Wellbeing</li> <li>Decent work</li> </ul>	Financial sector	Impacts on nature.
Taskforce on Nature- related Financial Disclosures (TNFD)	Global Canopy, AFD, CIFF, Australian government; Department of Climate change, energy, the environment and water, Ministry of Agriculture, Nature and Food Quality of the Netherlands, Government of Switzerland, FOEN & SIF, Government of the UK, Department for Env., Food and Rural Affairs, MACDOCH Foundation, Global Env. Facility, Green Finance Institute, UNDP, UNEP finance initiative, WWF	TNFD is a global initiative with the mission to develop and deliver a risk management and disclosure framework for organisations to report and act on evolving nature related issues which refer to nature-related dependencies, impacts, risks, and opportunities, with the aim to support a shift in global financial flows away from nature negative outcomes and toward nature-positive outcomes. The TNFD framework is intended for use globally by corporates and financial institutions of all sizes. The TNFD framework follows these principles:  Market usability. Science-based. Embrace nature-related risks. Purpose driven. Integrated and adaptive. Climate-nature nexus. Globally inclusive.  The framework consists of the following elements: Recommended disclosures Risk & Opportunity Assessment Approach (LEAP) Core Concepts & Definitions Data, Metrics & Targets Scenario Guidance Additional Guidance	All corporate sectors	Impacts and dependency on nature.

		Tools				
Biodiversity Focus						
Title	Developer	Description	Sector	Scope		
Biodiversity Footprints for	PRé, CREM and ASN Bank.	BFFI measures financial institutions' impact on biodiversity. The Methodology consists of four steps:	Financial sector	Impacts on nature		
Financial Institutions (BFFI)		<ol> <li>Understanding system boundaries: what economic activities are directly or indirectly linked to a company, project etc.</li> </ol>				
		<ol> <li>Identification of environmental inputs and emissions linked to economic activities.</li> </ol>				
		<ol> <li>Translation of emissions, land, water, and resource use into environmental pressures.</li> </ol>				
		<ol> <li>Interpret the results using both quantitative impact calculations and a qualitative analysis of the case study and the footprint results.</li> </ol>				
		Four different financial institutions tested the BFFI on four different cases. The goal was to gain knowledge and experience in calculating the biodiversity impacts of loans and investments and learn how financial institutions can use the results in a meaningfully <sup>[155]</sup> .				
Biodiversity Risk Filter	WWF	The risk filter is a free online tool to assess and respond to biodiversity risks and opportunities. The tool consists of four modules:	Business sector	Impacts and dependency on		
		<ol> <li>Inform: Dependencies and impacts on biodiversity</li> </ol>		nature.		
		2. Explore: maps for physical and reputational biodiversity risks				
		<ol> <li>Assess: biodiversity risks across your operations, value chain and investments.</li> </ol>				
		<ol> <li>Respond: mitigate your biodiversity risks and enhance resilience (not yet published, Q2 2023)</li> </ol>				
		WWF have also published a site with case studies showcasing how companies have applied the biodiversity risk filter.				
		WWF has also developed a Water Risk Filter <sup>[157]</sup> .				

<sup>155.</sup> Broer et al. (2021) 156. Church et al. (2022) 157. WWF (n.d.)

Cooperate Biodiversity Footprint (CBF)<sup>[158]</sup>

Iceberg Data Lab

The CBF assess the annual biodiversity impact of Corporates, Financial Institutions and Sovereign issuers. The methodology is meant to support financial actors in developing their investment strategies, reporting requirements, stewardship, and engagement policies in a way that account for biodiversity impacts. The CBF uses a science-based approach covering the material biodiversity impacts of corporates supply chain, processes, and products through their value chain. The methodology is based on the main biodiversity pressures identified by IPBES, and the CBF methodology models the following sub-pressures:

Financial and business sector.

Impacts on nature.

#### Change of land use:

- Land occupation
- Land transformation
  - Transformational Land Use
  - Incremental Land Use
- Fragmentation
- Encroachment

#### Pollution:

- Soil and water eutrophication
  - P, N, and NO<sub>x</sub> emissions
- Soil, water, and air acidification
  - NO<sub>x</sub> and SO<sub>x</sub> emissions
- Water Ecotoxicity
  - Ecotoxicity
- Soil Ecotoxicity
  - Ecotoxicity
- Ocean pollution
  - Plastic entanglement

#### **Climate Change:**

- Climate Change
  - GHG emissions

#### Over exploitation

• Not yet considered.

#### Invasive species

• Not yet considered.

Future planned improvements of the framework are to develop it further, so it includes:

- Positive biodiversity impacts
- Dependency to qualify companies' reliance on biodiversity and ecosystem services [5].

Exiobase	Exiobase Consortium (Norwegian University of Science and Technology, Netherlands Organization for Applied Scientific Research TNO, The Sustainable Europe, Universiteit Leiden, Vienna University of Economics and Business, 20 LCA Consultants)	Exiobase is: 'a global, detailed Multi-Regional Environmentally Extended Supply-Use Table (MR-SUT) and Input-Output Table (MR-IOT). It was developed by harmonizing and detailing supply-use tables for a large number of countries, estimating emissions and resource extractions by industry. Subsequently the country supply-use tables were linked via trade creating an MR-SUT and producing MR-IOTs from this. The MR-IOT that can be used for the analysis of the environmental impacts associated with the final consumption of product groups.'	Cross-sectional	Impacts on nature
Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE) tool <sup>[159]</sup>	Global Canopy, UNEP FI & UNEP- WCMC	The tool helps understand and visualise the impact of environmental change on the economy. The tool focuses on the goods and services nature provides and illustrates how businesses potentially depend and impact on nature, and how these might present a business risk. The tool is continuously being developed new additions includes a module that shall help financial institutions exploring natural capital opportunities, risks and exposures and help finance institutions to better align themselves with the global goals for biodiversity <sup>[160]</sup> .	Cross sectional	Impacts and dependency on nature.
Integrated Biodiversity Assessment Tool (IBAT)	BirdLife International, Conservation Internation, IUCN and UNEP-WCMC	IBAT is a map and reporting tool that provides geographic information on the presence of protected areas, key biodiversity areas and endangered species. IBAT can be used for biodiversity risk screening. IBAT is built upon the three following datasets:  • The World Database on Protected areas • The World Database of key Biodiversity Areas • The IUCN Red List of Threatened Species	Cross-sectional	Biodiversity risk screening
The Ocean+ Data Viewer <sup>[161]</sup>	UNEP WCMC	The Ocean+ Data Viewer offers spatial oceanic information and datasets on marine and coastal biodiversity. The datasets can be used as a knowledge foundation in decision-making concerning ocean restoration, management, and conservation	Cross-sectional	Can be used for impact assessment
Protected Planet database <sup>[162]</sup>	IUCN, UNEP WCMC	Protected planet constitutes several databases:  The World Database on Protected Areas (WDPA)  World Database on other effective area conservation measures (OECMs)  Global Database on Protected Area Management Effectiveness (GD-PAME)  The databases can be used for biodiversity risk assessments for businesses and as an investment planning tool.	Cross-sectional	Biodiversity risk screening

<sup>159.</sup> Natural Capital Financial Alliance (n.d.) 160.Natural Capital Financial Alliance (n.d.) 161. UNEP WCMC (N.d.) 162. Protected Planet (n.d.)

Species Threats Abatement & Recovery Metric (STAR)

IBAT alliance

STAR is a metric derived from the IUCN Red List of Threatened Species. The tool allows actors to identify opportunities for nature positive actions across the world. The STAR tool can be used to measure to what extent investments contribute to reducing the risk of species extinction (Previously known as BRIM).

Cross-sectional

Identify naturepositive actions across the world

		Tools		
		Biodiversity Focus		
Title	Developer	Description	Sector	Scope
Biodiversity Footprints for Financial Institutions (BFFI)	PRé, CREM and ASN Bank.	BFFI measures financial institutions' impact on biodiversity. The Methodology consists of four steps:  1. Understanding system boundaries: what economic activities are directly or indirectly linked to a company, project etc.  2. Identification of environmental inputs and emissions linked to economic activities.  3. Translation of emissions, land, water, and resource use into environmental pressures.  4. Interpret the results using both quantitative impact calculations and a qualitative analysis of the case study and the footprint results.  Four different financial institutions tested the BFFI on four different cases. The goal was to gain knowledge and experience in calculating the biodiversity impacts of loans and investments and learn how financial institutions can use the results in a meaningfully <sup>[163]</sup> .	Financial sector	Impacts on nature

Biodiversity Risk Filter

WWF

The risk filter is a free online tool to assess and respond to biodiversity risks and opportunities. The tool consists of four modules:

- Inform: Dependencies and impacts on biodiversity
- Explore: maps for physical and reputational biodiversity risks
- Assess: biodiversity risks across your operations, value chain and investments.
- Respond: mitigate your biodiversity risks and enhance resilience (not yet published, Q2 2023)

WWF have also published a site with case studies showcasing how companies have applied the biodiversity risk filter.

WWF has also developed a Water Risk Filter<sup>[165]</sup>.

**Business** sector

Financial

business

sector.

and

Impacts and dependenc on nature.

**Impacts** 

nature.

on

Cooperate Biodiversity Footprint (CBF)<sup>[166]</sup>

164. Church et al. (2022)

Iceberg Data Lab

The CBF assess the annual biodiversity impact of Corporates, Financial Institutions and Sovereign issuers. The methodology is meant to support financial actors in developing their investment strategies, reporting requirements, stewardship, and engagement policies in a way that account for biodiversity impacts. The CBF uses a science-based approach covering the material biodiversity impacts of corporates supply chain, processes, and products through their value chain. The methodology is based on the main biodiversity pressures identified by IPBES, and the CBF methodology models the following subpressures:

#### Change of land use:

- Land occupation
- Land transformation
  - Transformational Land Use
  - Incremental Land Use
- Fragmentation
- Encroachment

#### Pollution:

- Soil and water eutrophication
  - P, N, and  $NO_x$  emissions
- Soil, water, and air acidification
  - NO<sub>x</sub> and SO<sub>x</sub> emissions
  - Water Ecotoxicity
    - Ecotoxicity Soil Ecotoxicity
      - Ecotoxicity
    - Ocean pollution
      - Plastic entanglement

#### **Climate Change:**

- Climate Change
  - GHG emissions

#### Over exploitation

Not yet considered.

#### Invasive species

Not yet considered.

framework are to develop it further, so it includes:

Positive biodiversity impacts

Future planned improvements of the

Exiobase	Exiobase Consortium (Norwegian University of Science and Technology, Netherlands Organization for Applied Scientific Research TNO, The Sustainable Europe, Universiteit Leiden, Vienna University of Economics and Business, 20 LCA Consultants)	Exiobase is: 'a global, detailed Multi-Regional Environmentally Extended Supply-Use Table (MR-SUT) and Input-Output Table (MR-IOT). It was developed by harmonizing and detailing supply-use tables for a large number of countries, estimating emissions and resource extractions by industry. Subsequently the country supply-use tables were linked via trade creating an MR-SUT and producing MR-IOTs from this. The MR-IOT that can be used for the analysis of the environmental impacts associated with the final consumption of product groups.'	Cross- sectional	Impacts on nature
Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE) tool <sup>[168]</sup>	Global Canopy, UNEP FI & UNEP- WCMC	The tool helps understand and visualise the impact of environmental change on the economy. The tool focuses on the goods and services nature provides and illustrates how businesses potentially depend and impact on nature, and how these might present a business risk. The tool is continuously being developed new additions includes a module that shall help financial institutions exploring natural capital opportunities, risks and exposures and help finance institutions to better align themselves with the global goals for biodiversity <sup>[169]</sup> .	Cross sectional	Impacts and dependenc on nature.
Integrated Biodiversity Assessment Tool (IBAT)	BirdLife International, Conservation Internation, IUCN and UNEP-WCMC	IBAT is a map and reporting tool that provides geographic information on the presence of protected areas, key biodiversity areas and endangered species. IBAT can be used for biodiversity risk screening. IBAT is built upon the three following datasets:  • The World Database on Protected areas • The World Database of key Biodiversity Areas • The IUCN Red List of Threatened Species	Cross- sectional	Biodiversity risk screening
The Ocean+ Data Viewer <sup>[170]</sup>	UNEP WCMC	The Ocean+ Data Viewer offers spatial oceanic information and datasets on marine and coastal biodiversity. The datasets can be used as a knowledge foundation in decision-making concerning ocean restoration, management, and conservation	Cross- sectional	Can be used for impact assessmen

	IUCN, UNEP WCMC	Protected planet constitutes several databases:	Cross- sectional	Biodiversity risk screening
		<ul> <li>The World Database on Protected Areas (WDPA)</li> <li>World Database on other effective area conservation measures (OECMs)</li> <li>Global Database on Protected Area Management Effectiveness (GD-PAME)</li> <li>The databases can be used for biodiversity risk assessments for businesses and as an investment planning tool.</li> </ul>		
Species Threats Abatement & Recovery Metric (STAR)	IBAT alliance	STAR is a metric derived from the IUCN Red List of Threatened Species. The tool allows actors to identify opportunities for nature positive actions across the world. The STAR tool can be used to measure to what extent investments contribute to reducing the risk of species extinction (Previously known as BRIM).	Cross- sectional	Identify nature- positive actions across the world

Sustainability Focus				
Title	Developer	Description	Sector	Scope
Integrated Valuation of Ecosystem Services and Tradeoffs (InVEST)	Natural Capital Project	InVEST consists of numerous open- source software models that can be used to map and value nature's goods and services. Some of their models are:  Habitat Risk Assessment Urban Flood Risk Mitigation Scenic Quality	Cross- sectional	Impact and dependenc on nature
The Equator Principles [173]	The international Finance Corporation	The equator principles were first launched in 2003 and has since 2006 been aligned with the IFC Performance Standards. The 10 principles are meant to serve as a common baseline and risk management framework, that allow financial institutions to assess and manage environmental and social risks prior to financing projects. The Equator Principles are globally relevant, can be applied to all industry sectors, and the five following financial products:  Project finance Advisory Services. Project Finance. Project-related Corporate Loans. Bridge Loans.	The Financial Sector	Environmerisk manageme
		Project-Related Refinance, and Project-Related Acquisition Finance <sup>[174]</sup> .		

<sup>171.</sup> Protected Planet (n.d.) 172. Natural Capital Project (n.d.) 173. The Equator Principles Association (2023) 174. The Equator Principles Association (2023)

Portfolio Impact Analysis Tools for Banks<sup>[175]</sup> UNEP FI Positive Impact Initiative

The tool is not biodiversity specific but focuses more broadly on the sustainable development goals (SDGs).

The tool is an input-output workflow, that enable banks to comply with the second principle of principles for responsible banking on Impact Analysis and target-settina

Financial sector

Impacts on nature

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## About this publication

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