Study on Biodiversity Positive Impact

Final Report

Presented to

FMO Entrepreneurial Development Bank

Presented by

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For biodiversity, land and climate benefits

Contents

List of Abbreviations

ADB: Asian Development Bank

AFD: Agence Française de Développement

ASN: Algemene Spaarbank Nederland (Dutch bank)

BAU : Business-as-usual

CCB: Climate, Community & Biodiversity

CBD: Convention on Biological Diversity

DCFD: Dutch Fund for Climate and Development

Defra: UK Department for Environment, Food & Rural Affairs

DESNZ: UK Department for Energy Security and Net Zero

DFIs: Development Finance Institutions

E&S: Environmental and Social

EIB: European Investment Bank

ESG: Environmental, Social, and Governance

EU: European Union

FMO: Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden (Dutch Development Bank)

FSLU: Forestry and Sustainable Land Use

GCF: Green Climate Fund

GIS: Geographic Information Systems

ICMA: International Capital Market Association

ICUN: International Union for Conservation of Nature

IDB: Inter-American Development Bank

IFC: International Finance Corporation

IPBES: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

JNCC: Joint Nature Conservation Committee

KoM: Kick-off Meeting

KPI: Key Performance Indicator

LMICs: Low- and Middle-Income Countries

MDB: Multilateral Development Banks

MFF: Mobilising Finance for Forests

MRV: Measurement, Reporting, and Verification

OECD: Organisation for Economic Co-operation and Development

SDG: Sustainable Development Goals

TNFD: Taskforce on Nature-related Financial Disclosures

UNEP: United Nations Environment Programme

WBCSD: World Business Council for Sustainable Development

WWF: World Wide Fund for Nature

Executive Summary

The Mobilising Finance for Forests (MFF) programme is funded by the UK government's International Forests Unit and the Kingdom of the Netherlands and managed by the Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO). It was established in 2021, and its aim is to channel investments into forestry and sustainable land use (FSLU) sectors in low- and middle-income countries to enhance carbon sinks, protect biodiversity, and deliver economic co-benefits. However, the lack of robust methodologies for identifying, measuring, and reporting net-positive biodiversity impacts has limited the programme's ability to fully quantify its contributions to biodiversity finance. To address this gap, FMO and the Department for Energy Security and Net Zero of the UK government commissioned Trinomics and Rio Impact to conduct a study focused on nature investments under MFF and provide practical recommendations for allocating, structuring, and monitoring investments to ensure measurable, net-positive impacts on biodiversity.

The report draws on a systematic methodology, combining extensive literature reviews and semi-structured interviews with key stakeholders, including development finance institutions (DFIs), multilateral development banks (MDBs), and MFF customers and stakeholders. Through these sources, the study explores concepts and approaches related to nature and biodiversity finance, identifies relevant practices followed by current MFF customers and other ecosystem stakeholders, and delivers actionable guidance to advance biodiversity outcomes in the FSLU sector while enhancing FMO's evidence-based approach to biodiversity finance.

Definitions

By aligning with the broader term "nature finance," FMO and the UK government would enhance consistency with other DFIs and global frameworks, facilitating coherence in financial tracking, taxonomies, and investment strategies. The analysis of the terminology currently used in the reviewed documents to describe financial transactions aiming at generating benefits for nature reveals the absence of a universal term. **Biodiversity finance** has traditionally been used to refer to financial flows that support the conservation and sustainable use of biodiversity. More recently, the concept of **nature-positive finance** has emerged, emphasising a shift from merely reducing harm to actively generating net gains for nature and biodiversity. The World Bank Group uses "**nature finance**" as an umbrella term, distinguishing between "nature-positive finance," which delivers measurable biodiversity improvements, and "nature-mainstreaming finance," which supports broader transitions to nature-positive practices.

Guidance and practices in use

The reviewed guidance on nature and biodiversity finance identifies two main approaches to tracking financial flows, with taxonomies serving as the core tool for identifying eligible activities and measuring impact. Much of the reviewed guidance on biodiversity finance focuses on tracking financial flows, revealing one approach that treats all nature-related activities as nature-positive finance and another that tracks, nature-positive activities separately from nature mainstreaming activities, combining them to form the total "nature finance." Within finance tracking methods, **taxonomies** of sectors and activities that qualify as nature-positive or biodiversity-related are the building blocks of nature finance, assisting financial intermediaries and investees to identify eligible activities and measure impact.

Prioritising activities and business models that generate dual nature and climate benefits, especially through Nature-based Solutions (NbS)[1], can accelerate the scaling of nature finance. Activities that contribute to nature and biodiversity generally fall under four categories: 1. Protection of ecosystems; 2. Restoration of degraded ecosystems; 3. Sustainable use of natural resources (i.e. shifting from operations that drive nature loss); and 4. Creating enabling conditions for implementing these activities. As highlighted in several guidance documents, a crucial component of nature finance is addressing the biodiversity-climate nexus through NbS projects that effectively tackle biodiversity, climate, and societal challenges simultaneously. Business models for nature can be broadly categorised into two types: value creation models (generating financial returns) and risk reduction models (mitigating environmental risks). Promising examples of such models are found in sustainable forestry, regenerative agriculture, ecotourism, blue economy initiatives, and biodiversity-focused ventures.

Financial mechanisms and Technical Assistance are critical for scaling nature finance, enabling the translation of high-level commitments into tangible investments that deliver biodiversity benefits. A wide range of financial instruments – e.g. investment loans, results-based financing, equity investments, and blended finance – can mobilise capital for nature-related projects. Grants play a key role in de-risking innovative models, while biodiversity credits and Payments for Ecosystem Services (PES) can create revenue streams by linking conservation outcomes to market-based incentives. Technical assistance projects further support effective implementation, from project development to impact measurement, through capacity building.

Biodiversity impact monitoring is essential for ensuring the effectiveness, transparency, and accountability of nature finance initiatives, enabling stakeholders to measure and report outcomes of investments in nature. Effective monitoring relies on establishing baselines, using tailored biodiversity indicators, and combining remote sensing with on-the-ground verification to capture measurable and credible outcomes. Third-party verification and alignment with global standards, such as the TNFD, further enhance the reliability of impact reporting, ensuring that nature finance delivers tangible benefits for biodiversity and ecosystems. For forestry-related projects, assessing positive impacts on nature and biodiversity requires tailored approaches that account for the sector's specific challenges and ecological dynamics.

Frameworks, indicators and tools to assess biodiversity impact

FMO and MFF face a complex but evolving landscape for measuring biodiversity and nature impacts, requiring a tailored and collaborative approach to ensure credible and effective impact assessment. While a broad array of frameworks, indicators, and tools exist, none are fully suited to FMO's and MFF's diverse investment needs. The review finds that trade-offs exist between complexity, rigour, cost, expertise, and user-friendliness. To address this, FMO can follow one of the three main options. First, taking into account the significant resources and time required, an approach would be to tailor a set of indicators for MFF/FMO, drawing from existing frameworks while adapting them to different investment locations and activity types. Another approach would be to tailor a set of indicators drawing from existing frameworks, leverage commercial providers for proprietary impact measurement solutions, or align with peers developing formal biodiversity strategies.

Insights from capital providers

Biodiversity is gaining traction in the strategies and operations of DFIs and MDBs, but its integration remains uneven and less advanced compared to climate change, highlighting the

[1] *Nature-based Solutions are actions to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits (IUCN, 2016)*

need for greater standardisation and progress in nature finance. While around half of the reviewed institutions have developed biodiversity strategies or action plans, these efforts are still nascent and often integrated into climate targets. Definitions of biodiversity finance and nature (-positive) finance are often used interchangeably or remain unspecified; however, progress is being made with initiatives like the Joint MDB Group providing a foundation for coherence. Most frameworks currently focus on managing biodiversity risks rather than promoting net-positive outcomes, though efforts to measure, monitor, and report biodiversity impacts are underway. In the meantime, DFIs and MDBs are exploring innovative financing instruments, such as biodiversity credits, nature bonds, and debt-for-nature swaps, to bridge the gap and drive meaningful progress in biodiversity conservation.

Insights from funds and projects

FMO and MFF customers are integrating biodiversity goals into activities such as forestry, agroforestry, and agriculture, though positive biodiversity outcomes are often treated as co-benefits rather than primary objectives. Customers combine commodity production (e.g., FSC-certified timber, cocoa, teak) with conservation and restoration efforts, creating business models that balance economic productivity with ecological benefits. In forestry, sustainable timber production is paired with conservation measures; in agroforestry, degraded landscapes are transformed into productive ecosystems; and in agriculture, deforestation-free and sustainable practices are prioritised. Revenue streams vary, with some customers generating income from sustainable commodities, while others leverage carbon and biodiversity credits or combine multiple approaches to enhance financial and ecological outcomes.

Effective impact monitoring for biodiversity investments relies on adherence to standards, community engagement, and robust baseline and ex-post assessments, though challenges remain in balancing cost, scalability, and precision. Customers align with international certifications (e.g., FSC, IFC Performance Standards) to ensure responsible practices, while community engagement is prioritised as a key factor for long-term sustainability. Baseline biodiversity assessments provide critical reference points for project areas, though methods vary widely depending on goals and contexts. Ex-post monitoring approaches differ among customers, with some relying on advanced technologies (e.g., eDNA, Internet of Things sensors) for precise assessments and others using simpler on-the-ground methods. A combination of both seems to be the best way to reduce costs and enhance scalability, while fully capturing ecosystem complexity.

Customers face significant challenges in monitoring and verifying biodiversity impacts, including high costs, resource constraints, and evolving stakeholder expectations, underscoring the need for innovative solutions and long-term funding commitments. Key challenges include the high cost of advanced monitoring tools, difficulties in attributing biodiversity outcomes to specific interventions, and a shortage of trained personnel. Additionally, unclear mandates from funders, risk-averse financing, and the need for long-term funding to support ongoing monitoring further complicate efforts.

Actionable insights

Building on the findings of this study and prioritising actionable insights that are both impactful and feasible, FMO and MFF can strengthen their contributions to biodiversity by adopting a clear nature finance strategy, establishing a robust tracking and impact measurement framework, leveraging nature-based solutions, using Technical Assistance to evaluate different approaches, and exploring the landscape approach for biodiversity-positive investments, as outlined in the actionable insights and implementation considerations presented in the table below.

	Actionable insights	Implementation considerations
1	Adopt a clear strategy for nature finance and an agenda that establishes investments in nature and biodiversity as a stand-alone objective	- Treat nature finance as a distinct priority alongside climate finance, leveraging co-benefits, and ensure actions under one objective do not negatively affect the other.. - Continue engaging with DFIs and MDBs to align with global best practices and ensure consistency in methodologies and impact measurement. - Update MFF's Theory of Change to define nature and climate benefits, priority activities, and key indicators based on scientific evidence.
2	Establish a framework to track and report financial flows contributing to nature and measure and monitor biodiversity impacts, balancing simplicity, scientific rigour, and governance, using appropriate tools and indicators	- Further explore key aspects such as taxonomy development, finance tracking, and biodiversity impact measurement before implementing a robust framework. - Align with DFIs/MDBs and adapt peer approaches (e.g., IFC, Finnfund) to FMO/MFF operations for consistency in reporting. - Develop a clear and simple taxonomy of eligible activities, ensuring alignment with global frameworks (e.g., Joint MDB Group, World Bank). - Balance the breadth of MFF-funded forest activities with the need for portfolio-level tracking of biodiversity-related finance. - Define flexible impact indicators at FMO level to ensure consistency, using IFC Biodiversity Finance Metrics as a reference. - Engage biodiversity experts for scientific credibility and robust framework development. - Encourage innovative monitoring (e.g., remote sensing, eDNA,) and consider third-party certification for impact assessment.
3	Leverage Nature-based solutions opportunities through strategic participation in carbon and biodiversity markets	- Focus on projects that generate both carbon credits and biodiversity benefits for maximum impact. - Engage in biodiversity credit platforms (e.g., BCA Alliance, Conservation Finance Alliance) to track market developments. - Partner with project incubators (e.g., Ecosystem Restoration Associates, Resilient Landscapes, Landscape Finance Lab) to scale NbS investments. - Follow evolving standards (e.g., Verra, Plan Vivo) to ensure credibility in carbon and biodiversity markets. - Analyse regulatory conditions and assess the feasibility of integrating biodiversity and carbon credits in investment strategies.
4	Develop a Technical Assistance initiative as a pilot to scope methodologies and service providers for biodiversity impact measurement	- Launch a technical assistance initiative to test biodiversity impact measurement methodologies and assess service providers. - Collaborate with scientific institutions, conservation organisations, and market leaders to ensure science-based and best-practice-aligned approaches. - Compare biodiversity measurement solutions for reliability, scalability, and cost-effectiveness. - Develop a roadmap to integrate biodiversity impact measurement into FMO's due diligence, reporting, and investment strategies. - Provide training and knowledge-sharing sessions for internal teams and investees to support implementation.

1 Introduction

1.1 Scope

The Mobilising Finance for Forests (MFF) programme was established in 2021 aiming to direct private capital into the forestry and sustainable land use (FSLU) sector in low- and middle-income countries (LMICs) to prevent deforestation and protect standing tropical forests and combat other unsustainable land use practices that drive climate change. It is managed by the Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO) and funded by the UK Government's International Forests Unit (IFU) and, since 2024, by the Kingdom of the Netherlands (Ministry of Foreign Affairs). The IFU, jointly managed by the Department for Energy Security and Net Zero (DESNZ) and the Foreign, Commonwealth & Development Office (FCDO), aims to protect tropical forests and their associated benefits. It provides policy support to governments and delivers international climate finance programmes, including those focused on technical assistance and governance, REDD+ and mobilising private investments to the sector.

To achieve its overarching goals, the MFF works to build private investment markets that support sustainable forest management, prevent deforestation, enhance carbon sinks, restore biodiversity, and improve livelihoods and community engagement. When it comes to biodiversity-related goals, however, current methodologies for identifying, measuring, and reporting (net) positive biodiversity impacts are underdeveloped, with a stronger focus on mitigating negative effects than quantifying positive contributions. To address this gap, FMO and the DESNZ commissioned Trinomics and Rio Impact to conduct this study on biodiversity-related investments in the context of the MFF to provide FMO with practical recommendations on allocating, structuring, and monitoring investments to ensure measurable net-positive impacts on biodiversity.

The objective of the study is to contribute to FMO's evidence-base, informing financial decisions that aim to generate a (net) positive impact on biodiversity, both across sectors and with a particular focus on FSLU sector in developing economies. Specifically, this study aims to:

- **Develop Actionable Insights:** Provide FMO and MFF, with recommendations on how to allocate, structure, and monitor investments that enhance nature.
- **Analyse Current Approaches:** Review current methodologies used by MFF portfolio clients to measure biodiversity impacts, identifying their strengths, weaknesses, and capacity levels.
- **Recommend Improvements:** Suggest steps to ensure that program investments effectively contribute to biodiversity positively (including robust measurement (MRV) frameworks).

The terms used in the report to refer to financial transactions aiming to generate benefits for nature vary depending on each section and their objectives:

- When reviewing and analysing definitions, concepts, frameworks or tools produced by various institutions and organisations (other than FMO/MFF), the exact term employed in the respective sources is used.
- When formulating recommendations or extracting key takeaways for FMO/MFF's benefit, we consistently use the term "nature finance" as the umbrella term used to refer to the impact side (instead of risk side), encompassing both "nature-positive finance" and "nature mainstreaming finance."

1.2 Methodology

The data used in this report was collected through two main methods, extensive literature review and semi-structured interviews, which informed and complemented each other to help with answering the research questions and addressing the aims of this study.

1. Extensive literature review

The literature review for this study followed a systematic approach comprising four key steps:

a) The initial step involved a comprehensive search to identify all relevant literature, compiling a long list of sources across four categories of documents, namely (i) policy and strategy documents, (ii) research and scientific articles, (iii) standards and guidance documents, and (iv) tools and datasets. In total, 138 documents produced by financial institutions, international organizations, NGOs, think tanks and research institutions were screened.
b) 23 literature sources from the long list were selected for an in-depth review and analysis aimed at answering the overarching research questions. These selected sources were systematically analysed and the insights were extracted in a dashboard which is provided separately as an annex (Appendix III) to this report in addition to the summary presented in Section 2.
c) 48 separate identified approaches to biodiversity reporting frameworks, tools and indicator sets were scanned for relevance to the MFF and FMO more broadly, with a shortlist of 16 explored in greater detail for potential use by the MFF and FMO to reporting biodiversity-positive impacts
d) The final step involved a targeted desk review of methodologies and approaches adopted by Development Finance Institutions (DFIs) and Multilateral Development Banks (MDBs). This phase aimed to inform and complement the interviews with peer institutions. For each DFI and MDB, key information was collected on biodiversity-related funds, established methodologies, and nature-focused strategies available on their websites. These findings are provided in Appendix IV.

2. Semi-structured interviews

To inform the analysis, we conducted interviews with three categories of stakeholders:

a) **Scoping interviews with FMO and DESNZ team members.** Insights from these interviews helped to shape up the planning phase of the study and their summaries were included in the inception report.
b) **Interviews with FMO's peer institutions** including DFIs and MDBs, to collect insights into their current practices and challenges in measuring impact of nature finance, and any emerging international standards. Nine such interviews were conducted based on the long list of interviewees suggested in the inception report.
c) **Interviews with MFF's current beneficiaries, and other stakeholders** to collect insights on challenges at investee level, needs and practical recommendations for future financial and technical assistance. 21 interviews in this category were conducted based on a long list of interviewees suggested in the inception report.

The interviews were guided by semi-structured questionnaires designed to fit the profile of the interviewees b and c (as included in the Inception report). The desk research conducted prior to each interview helped to further tailor the questions on a case-by-case basis.

1.3 Limitations

Due to time and resource constraints, we had to opt for a selective scope of the literature review, focusing on 23 sources out of the 138 initially identified. While the selection process prioritised sources that were deemed the most relevant to the research questions agreed in the Inception report, it may have led to exclusion of sources containing valuable information.

The documents reviewed featured significant variations in terms of depth and rigor, which has an impact on the level of detail and accuracy of the insights extracted and consequently diminishes the consistency of responses to the research questions.

The field of nature finance is rapidly evolving, with new strategies, policies, frameworks, standards, and tools emerging frequently. In addition, much of the literature review and interviews for this the study were held in parallel to the 2024 United Nations Biodiversity Conference (Biodiversity COP16) and 2024 UN Climate COP29. While we aimed to include new relevant publications launched during the COPs, full coverage of all new developments is not guaranteed.

The complexity of the topics addressed in the interviews combined with variations in interviewees' technical expertise on the technical aspects discussed, means that the level of detail and the extent of the information obtained through interviews is not consistent across stakeholders.

1.4 Report structure

Following the introduction, Section 2 presents the findings of an in-depth literature review and semi-structured interviews, focusing on the practices, frameworks, and tools used to allocate, structure, and monitor investments that generate positive outcomes for nature. The findings are organised into five overarching themes:

1. **Definitions and concepts** – Examining how financial transactions that contribute to biodiversity and nature are described in the relevant literature and among FMO's peer organizations.
2. **Tracking and measuring nature finance** – Reviewing guidance and practices for identifying eligible activities, measuring investment impact, and business models and financial mechanisms that support biodiversity and nature finance.
3. **Frameworks, indicators, and tools** – Exploring methodologies used to define, monitor, and assess the biodiversity impact of investments, with a focus on approaches relevant to FMO and MFF.
4. **DFI and MDB approaches** – Investigating how DFIs and MDBs structure nature finance and measure biodiversity impact.
5. **FMO and MFF customers** – Assessing customer business models, biodiversity impact measurement practices, and the challenges and needs they face.

The report concludes with a set of actionable insights (Section 3) outlining key steps FMO and MFF can take to enhance their positive impact on biodiversity. These actionable insights are structured into five conceptual steps: i) Ambitions and strategies, ii) Frameworks, tools, and indicators, iii) Impact measurement and reporting, iv) Business models and financial mechanisms, v) Technical assistance.

The report includes several annexes providing detailed background information. Appendix 1 assesses FMOs and the UK government's ambitions and strategies, reviewing publicly available and internal FMO and MFF documents to evaluate their knowledge base and methodological approach, ensuring recommendations align with internal strategies. Appendix 2 outlines the agreed research questions and data sources. Appendix 4 summarises key findings and includes an Excel dashboard detailing literature review results, frameworks, tools, and indicators. Appendix 4 overviews DFI and MDB approaches to biodiversity and nature finance. Finally, Appendix 5 provides information relevant to FMO investees/customers, MFF customers, and other ecosystem stakeholders.

2 Biodiversity and nature finance insights from the sector

The growing emphasis on nature finance in recent years has led to a rapidly developing stock of resources on definitions, frameworks for nature and biodiversity finance, as well as those building an evidence base of business models and mechanisms tested and their results. This section provides a

summary of the insights extracted from 23 key publications produced by development finance, research organisations, and think tanks. The findings of the review are provided in full in a user-friendly Excel dashboard (Appendix IV). The insights from each publication are organised around the overarching research questions agreed in the inception phase (included in Appendix II), looking at:

- **Definitions**: refers to concepts currently being used by various entities in the sector to refer to financial transactions aiming to generate benefits for nature.
- **Guidance**: defines the scope of what is nature finance, as presented in the Definitions section. In addition, the resources reviewed provide insights into the "how" by highlighting:
  - **Practices**: includes methodologies or approaches used to determine which financial transactions can be considered nature finance.
  - **Activities and Business models**: focuses on eligible activities and business models that hold the potential to realise positive nature and biodiversity outcomes while generating revenue.
  - **Financial mechanisms and Technical Assistance:** includes information on those financial instruments that can facilitate capital flows toward nature-related projects and on Technical Assistance for project development and impact measurement.
  - **Impact measurement**: refers to guidance on the assessment and evaluation of biodiversity impacts of nature-related projects.

2.1 Definitions and concepts currently used

Key takeaways:

- Biodiversity refers to the diversity of life across genes, species, and ecosystems, while "nature" is broader, including both living organisms and non-living elements like air, water, and land.
- Biodiversity finance is traditionally used to describe financial flows for conservation and sustainable use of biodiversity. Institutions, such as the UNDP and IFC, have used this term to describe funding activities benefit nature and biodiversity.
- Nature-positive finance is a newer term gaining traction in financial discussions, focusing on going beyond harm reduction to actively generate net gains for nature and biodiversity.
- MDBs classify investments that focus on conservation and sustainable use of nature as "nature-positive," whereas the World Bank Group distinguishes between nature-positive, nature-mainstreaming, and nature impact mitigation finance.
- Aligning with the nature finance term, FMO and the UK government would ensure consistency with other DFIs and global frameworks and in financial tracking, taxonomies, and investment strategies.

This section presents an analysis of the concepts currently being used by various entities in the sector. Thus, the language used in this section reflects the variety of the terms employed, with each source's exact term and definition cited to ensure accuracy. This approach highlights both the similarities and differences between concepts, while identifying current trends and potential avenues for FMO/MFF and UK to follow.

2.1.1 Disentangling nature and biodiversity

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) defines **biodiversity** as "the variability among living organisms from all sources including terrestrial,

marine, and other aquatic ecosystems and the ecological complexes of which they are a part."[2] This encompasses variations within and among species, biological communities, and ecosystems in terms of their genes, characteristics, and functional attributes, as well as in their abundance and distribution. In other words, biodiversity captures the diversity of life across all forms and environments, covering a range of dimensions (e.g. ecosystem, species, and genetic diversity). As highlighted by Agence Française de Développement (AFD, 2022), the concept of "**nature**" is broader in scope. In addition to living organisms, it encompasses non-living elements of the physical world – such as air, land, water, and minerals – and often includes a strong cultural dimension.

Biodiversity is a fundamental component of nature, regulating the health, stability and productivity of ecosystems.[3] A rich diversity of species contributes to the resilience of natural systems, enabling their adaptation to changing conditions and the provision of essential services such as carbon sequestration, water purification, and pollination. At the same time, through its ecosystems, ecological structures, and physical processes, nature provides the shelter, food, clean air and water that sustain all living organisms – including us. The availability of suitable habitats, the regulation of nutrient and water cycles, and the maintenance of ecological interactions depend on the broader integrity of nature, which in turn supports thriving species populations and genetic diversity. This interdependence of nature and biodiversity could possibly explain the interchangeable use of these terms in defining finance aimed at conserving ecosystems and species.

2.1.2 Biodiversity finance

The concept of "**biodiversity finance**" has long been used to describe fiscal and financial flows directed toward the conservation and sustainable use of nature. The Kunming-Montreal Global Biodiversity Framework (KMGBF) explicitly refers to "biodiversity finance" as the financial resources mobilised to support the implementation of national biodiversity strategies and action plans. Moreover, the United Nations Development Programme (UNDP) adopted this term to frame its Biodiversity Finance Initiative (BIOFIN)[4], which was launched in 2012, aiming to address the global challenge of financing biodiversity conservation by providing technical support to countries to develop and implement comprehensive strategies for funding biodiversity action. More recently, the International Finance Corporation (IFC) incorporated this term into its Biodiversity Finance Reference Guide, defining biodiversity finance as investments that contribute to activities that conserve, restore, or avoid a negative footprint on biodiversity and ecosystems. While biodiversity finance has traditionally been the dominant term in policy and financial discussions, in recent years, alternative concepts have emerged to describe investments aiming to protect and restore nature.

2.1.3 Nature (-positive) finance

Recognising that ecosystem degradation contributes to the emergence and spread of pandemics, protecting and restoring nature became central to post-COVID-19 recovery strategies, leading to the term "nature-positive" gaining significant traction as a key approach for achieving a resilient and sustainable recovery.[5] The term was soon embraced by a coalition of organizations, including the World Wildlife Fund (WWF) and the World Business Council for Sustainable Development (WBCSD), who endorsed a "nature-positive global goal for nature", with three measurable temporal objectives: Zero Net Loss of Nature from 2020, Net Positive by 2030, and Full Recovery by 2050.[6] In the same year, G7 leaders declared that the world must become not only "net zero" but also "nature-positive".[7] This

[2] *IPBES (N/A). Biodiversity definition*

[3] *WWF (2024). Living Planet Report 2024 – A System in Peril. WWF, Gland, Switzerland*

[4] *UNDP (N/A). BIOFIN*

[5] *COVID-19 Response and Recovery: Nature-Based Solutions for People, Planet and Prosperity. Recommendations for Policymakers. November 2020.*

[6] *Locke et al. (2021), A Nature-Positive World: The Global Goal for Nature.*

[7] *G7, (2021), Cornwall UK, 2021: 2030 Nature Compact*

momentum grew as Multilateral Development Banks (MDBs) published a Joint Statement on Nature, People, and Planet, which underscored the need to address drivers of biodiversity loss and invest in "nature-positive" solutions.[8] The concept of "nature-positive" has since become central in biodiversity discussions and has influenced initiatives across public and private sectors. While there is no universally aligned definition among business, finance, government, and civil society actors, in the core of the "nature-positive" concept is the emphasis on a shift from merely reducing harm to actively generating net-positive outcomes for biodiversity.

The joint group of MDBs (2023) have provided a foundational definition of **nature-positive finance**, characterising it as financial support directed toward activities that safeguard, restore or sustainably use nature, or of that enables actions contributing to the implementation of the KMGBF. In this definition, an investment is nature-positive when (a) it makes a substantive contribution to nature; (b) has expected positive outcomes for nature that are measurable and can be assessed and monitored against a baseline or a business-as-usual (BAU) scenario; and (c) is not expected to introduce significant adverse environmental risks or impacts. Similarly, according to AFD (2022), for investments to be considered nature-positive, they must meet high environmental due diligence standards, including compliance with the biodiversity mitigation hierarchy to ensure no net loss for nature, and additionally, must be designed explicitly to yield a net biodiversity gain, against a baseline that compares projected biodiversity outcomes with and without the project's intervention.

While broadly aligned, the World Bank's (WB) Nature Finance framework introduces an additional conceptual distinction between "nature-positive finance", which is intended to generate measurable gains for biodiversity or ecosystem services compared with business-as-usual, and "**nature mainstreaming finance**", which has a broader scope and aims to create the enabling conditions for a more systemic economic transition to deliver the nature positive goal across all economic activities.[9] Through this, WB reserves the "nature-positive" label strictly for investments that enhance nature, while grouping both nature-positive and nature-mainstreaming finance under the broader category of "**nature finance**." Furthermore, the WB definition specifies the scope of a third category of **"nature impact mitigation finance"** which captures the activities and associated finance intended solely to ensure compliance with the Environmental and Social Framework (ESF) and the Performance Standards through the application of the mitigation hierarchy. Unlike the first two categories of finance, which capture value addition for nature, this category represents finance directed strictly at identifying, evaluating, and managing any potential adverse risks and impacts of projects on nature. Thus, the definition included in the WB framework highlights and formalises the fact that finance directed at ensuring compliance with safeguards or national regulations should not be counted as nature finance, which was also indicated in the MDBs *Common Principles for tracking nature positive finance*.

2.1.4 Converging to the right terminology

Many financial institutions are increasingly committing to biodiversity and nature (-positive) finance as a key component of their sustainability agendas, a shift that has been catalysed by the adoption of the KMGBF at COP15 in 2022. While the main goal of these commitments is to align financial activities with global biodiversity goals, institutions may differ in the approaches taken to define and operationalise such investments.

A review of sources for this study suggests that the vast majority of organisations now use the term "nature-positive finance," either exclusively or interchangeably with "biodiversity finance." This trend is further reinforced by the adoption of the MDBs Common Principles, which implicitly support a shift toward the broader concept of nature finance. Additionally, most DFIs and MDBs interviewed for this

[8] *MDBs (2021), Joint Statement by the Multilateral Development Banks: Nature, People and Planet*

[9] *World Bank (2024), International Development Association's Twentieth Replenishment Mid-Term Review: Note on Nature Finance Tracking Methodology*

study appear to be aligning with the nature finance framework, recognising its ability to capture wider range of financial flows linked to nature and biodiversity. As DFIs develop and refine their approaches, a greater distinction between nature-positive and nature-mainstreaming finance is emerging. Moreover, the discussions held during the workshop conducted for this study highlighted that several DFIs emphasise nature-mainstreaming as a critical tool for addressing biodiversity loss at a systemic level, often prioritising it over investments aimed directly at nature conservation.

Given these trends, FMO and the UK government would benefit from adopting terminologies that align with widely used frameworks, ensuring consistency and harmonisation with other financial institutions. The term "nature finance" offers a practical and flexible solution, serving as an umbrella concept that distinguishes between nature-positive and nature-mainstreaming finance. In addition, by adopting this terminology, FMO and the UK government would be better positioned to develop supporting tools, such as taxonomies, finance tracking methodologies, and business models, that align with frameworks used by other financial institutions, ensuring consistency in how different aspects of nature finance are structured and applied.

2.2 Guidance and practices in use

Key takeaways

- There are several approaches for tracking finance that positively contribute to nature and biodiversity, each with distinct characteristics and requirements, which often make alignment challenging.
- Taxonomies are the building blocks of nature finance, as they can assist financial intermediaries and investees to identify eligible activities and help with impact measurement.
- Exploring the biodiversity-climate nexus by prioritising activities that generate double benefits, particularly by employing NbS, offers the opportunity to more rapidly scale up nature finance.
- A range of financial instruments – such as loans, thematic bonds, biodiversity credits, and Payments for Ecosystem Services (PES) – are essential for operationalising nature finance. Grants and blended finance are key for de-risking projects and attract private capital while delivering measurable nature benefits.
- Biodiversity credits offer a promising but complex tool for conservation financing. While they differ from carbon credits in scope and metrics, their combination in specific projects can create synergies, achieving both biodiversity and climate goals.
- Technical assistance (TA) further supports project development, impact measurement, and capacity building, ensuring long-term financial sustainability for biodiversity-focused investments.
- Third party verification taking place as part of nature-relevant certification processes can be leveraged to monitor and measure nature-positive impact. This can increase efficiency and reduce transaction costs.
- For forestry related projects, measuring positive impacts on nature and biodiversity requires tailored approaches.

2.2.1 Guidance for practices on Nature (-positive) finance tracking

World Bank's "Note on nature finance tracking methodology" (2024) is the most recent resource providing guidance on the scope of nature finance. It builds on the previous definitions and frameworks produced by the MDB (2023) and AFD (2022) and it refines the distinction between finance that primarily aims to deliver measurable benefits for biodiversity or ecosystem services

compared to a BAU (nature-positive) and finance supporting broader transitions to nature-positive practices (nature-mainstreaming finance). It also created a third category of finance, the nature impact mitigation finance which encompasses the resources used to ensure compliance with safeguards. The approach proposed to determine eligibility of financial flows to one of the three buckets follows a three-step screening process. First, the project is assessed against a taxonomy of qualifying activities. If the project does not align with any activities in the taxonomy, it is not classified as nature finance. If it does, the second step evaluates whether it introduces risks to nature, including the potential to exacerbate the drivers of biodiversity loss, contribute to habitat conversion, or negatively impact Critically Endangered or Endangered species. Projects posing such risks or failing to address them are classified as nature-mainstreaming finance. If these risks are addressed, the third step assesses whether the project demonstrates a clear measurable positive impact on biodiversity or ecosystems. If it cannot, it remains nature-mainstreaming finance, while, if it can, it qualifies as nature-positive finance.

The WB approach builds on the best practice proposed by the MDB "Common principles for tracking nature-positive finance" (2023) that relies on (1) determining eligibility based on a taxonomy of activities followed by (2) a process-based approach, applying three nature-positive eligibility criteria (i.e. 1. Make a substantive contribution to nature; 2. Expected positive outcomes are measurable; 3. Significant adverse environmental risks and impacts are not introduced). While the taxonomy-based essence of the first stage remains the same for both WB and MDB guidance, WB's second stage allows for finance that is not considered to be nature-positive to be categorised in one of the other two baskets with the help of a decision tree.

While the MDB guidance remains quite broad, the AFD guidance offers a more detailed approach to quantify positive contributions to nature, by introducing a coefficient-based system to classify the biodiversity contributions of projects, ranging from 100% for the most impactful activities (e.g. habitat restoration) to 20% for lower-impact ones (e.g. tackling cumulative chronic pressures). These coefficients reflect the biodiversity pressures identified by IPBES and provide a systematic way to report nature-positive finance alongside climate finance under the "Planet" dimension of the bank's Sustainable Development Goals contributions.

MDBs (2023) underline that nature-positive finance should be tracked and reported separately from climate finance, as while these can often overlap, climate finance does not always benefit nature other than addressing climate change as a driver of nature loss and nature-positive finance does not always support climate change mitigation or adaptation. In cases of aggregated green finance reporting, explicit tagging of projects that contribute to both goals is necessary to maintain clarity and accountability.

2.2.2 Eligible activities and business models

Activities, sub-sectors, and business models that aim to benefit nature span diverse industries and reflect innovative approaches to integrating biodiversity and nature conservation into economic systems. These activities are supported by sectoral taxonomies, financing mechanisms, and tools that aim to achieve measurable biodiversity outcomes.

The MDBs (2023) outline a range of **activities** that contribute directly to nature-positive outcomes. These include the protection of ecosystems and biodiversity in good ecological condition, the restoration of degraded ecosystems, and the sustainable use and management of natural resources. Enabling measures, such as policy development, capacity-building, and financial resource mobilization, are also identified as critical to supporting these efforts. The IFC Biodiversity Finance Reference Guide (2023) presents an extensive taxonomy of activities that benefit biodiversity categorised in three groups: those aimed at restoration and conservation as primary objective, activities that seek to generate biodiversity co-benefits in sector-specific investments, and activities related to NbS to conserve, enhance, or restore ecosystems and biodiversity. In forestry, the European

Forest Institute (EFI, 2024) highlights activities such as conserving rare biotopes, enhancing forest connectivity, and promoting genetic diversity through natural regeneration. These actions ensure forestry practices align with biodiversity goals while delivering long-term ecological benefits. Offering a complementary perspective, the AFD broadens the scope of nature-positive activities by including integrated spatial planning for rural and urban territories and governance-focused measures, such as the development of biodiversity policies and strategies. AFD also emphasises the sustainable management of natural resources across value chains and promotes investments aimed at reducing chronic human-induced pressures on ecosystems.

Emerging **sectors**, such as agriculture, forestry, and urban development, offer significant potential for positive biodiversity results. The IFC Guide (2023) presents activities with biodiversity co-benefits in five key sectors that possess the capacity to address the drivers of biodiversity loss, including agriculture, freshwater and marine sustainable production, waste management, forestry, and tourism. The Finance for Biodiversity Foundation (2023) highlights the potential for NbS as promising activities that can exploit synergies between nature and climate. NbS are actions to address societal challenges (e.g. climate change, natural disasters) through the protection, management or restoration of natural or modified ecosystems.[10] It further proposes circular economy as another promising area, with investments in biodegradable materials and recycling technologies helping to reduce pollution and pressure on natural resources.

At the implementation stage, addressing the **biodiversity-climate nexus** is a crucial component of nature finance. The Finance for Biodiversity Foundation (2023) identifies five key recommendations to unlock synergies between biodiversity and climate finance. These include financing projects that generate dual benefits for biodiversity and climate while minimising trade-offs, prioritising sectors with significant biodiversity and climate impacts, and engaging companies on these interconnected topics. Additionally, prioritising sectors with high biodiversity and climate impacts, engaging companies on these interconnected topics, and integrating biodiversity considerations into climate-related targets, policies, and reporting frameworks are essential for achieving aligned progress.

Nature-based Solutions (NbS) are particularly effective business models for addressing biodiversity, climate, and societal challenges simultaneously.[11] To address the simultaneous crises of biodiversity loss, climate change, and poverty the JNCC (2021) set out the 'triple win' for NbS projects to deliver on enhancing biodiversity, addressing climate change, and reducing poverty. To achieve this, NbS projects must adhere to a set of principles, including designing projects with longevity and adaptability to ensure resilience over time, incorporating social and environmental safeguards to protect vulnerable ecosystems and communities, providing sustainable and equitable financial incentives to ensure stakeholder buy-in, building robust, long-term monitoring systems to track progress, and engaging local communities through participatory approaches. The Global Center on Adaptation and environmental Change Institute (2023) further highlights pathways for scaling NbS investments. These include developing analytical tools to map NbS opportunities and measure their benefits, creating typologies of NbS investments to inform national investment plans (i.e. outlining project characteristics, revenue potential, and optimal roles for private and public finance), and building enabling environments for financial flows. The report also emphasises working strategically across scales to mobilise private finance, factoring nature-related risks into decision-making, and collaborating internationally to develop metrics and markets for NbS. Despite their significant potential, NbS models face challenges, including high risk and uncertainty around evolving markets and regulatory environments hindering broad investor appeal (CPIC, 2023). To address this, de-risking mechanisms such as blended finance and innovative approaches are essential to support the sector until it reaches maturity. Additionally, the sector suffers from a shortage of human capital to design and develop new NbS projects, limiting its growth. CPIC also notes that many NbS investments have

[10] *IUCN (2016). Resolution 69, Defining Nature-based Solutions*

[11] *World Bank Group (n.d.). Nature-based Solutions for Climate Resilience and Adaptation. Climate and Development Brief*

long J-curves, requiring 15 to 30 years to reach full potential – far exceeding typical investment horizons.

There are significant business opportunities in conserving, sustainably using, and restoring biodiversity that can generate revenue streams from new business models and access to emerging markets, products, and services. European Commission (2024) has compiled several examples of such business models implemented in Europe, which can be broadly categorised into two groups: value creation and risk reduction. **Value creation business models** generate financial returns by leveraging sustainable investments that enhance biodiversity. Examples include investments in certified forests that can capture more carbon and improve nature preservation; sustainability-linked financial products, such as interest rate discounts on loans tied to biodiversity outcomes, and long-term investment models that monetise forest commodities (timber and non-timber), carbon credits, biodiversity credits, and Payments for Ecosystem Services (PES). **Risk reduction business models** focus on mitigating environmental risks that could otherwise lead to financial losses. Examples include improving soil health to enhance agricultural productivity and revenues for farmers, as well as nature-based flood prevention measures, such as wetlands or mangrove restoration, that can reduce damage costs associated with extreme weather events for companies and communities while generating returns through savings on insurance premiums and increased land value. The use of NbS or green infrastructure to mitigate risks across sectors is highlighted by several publications, including the JNCC (2021) and UNEP FI (2023). NbS, such as constructed wetlands and mangrove restoration projects, integrate biodiversity conservation into sectors, like infrastructure, energy, and urban planning, delivering biodiversity benefits while reducing climate-related risks, such as flooding.

Biodiversity credits, as noted by the Global Environment Facility (2024) and British International Investment (2024), represent a promising approach to conservation financing. These credits link specific biodiversity outcomes, such as habitat restoration, to market-based incentives, providing financial rewards for measurable conservation gains. Similarly to carbon credits, biodiversity credits are market-based instruments that incentivise positive environmental outcomes, but they differ significantly in their objectives, scope, and implementation. Specifically, carbon credits are interchangeable – meaning that one tonne of carbon emitted in Africa can be compensated by a carbon sequestered in Asia – whereas biodiversity credits are not, since a degraded ecosystem in one location cannot be compensated by a restored ecosystem elsewhere. In addition, carbon credits rely on relatively standardised metrics (e.g. tons of CO2 avoided or sequestered), whereas biodiversity credits require diverse and context-specific metrics (e.g. species richness, habitat quality, etc.), making them more challenging to quantify and verify. This also complicates proving biodiversity credits' additionality compared to carbon credits, since biodiversity outcomes are often interdependent with other ecosystem services, making it difficult to isolate the specific impacts of a conservation action (GEF, 2024). Despite these mismatches, **biodiversity-linked carbon standards and credits**, as described by the GEF (2024), represent another promising mechanism. While carbon and biodiversity credits differ in their design and implementation, they can be combined effectively when projects are designed to deliver co-benefits for both climate and nature. For example, reforestation or mangrove restoration projects can simultaneously sequester carbon and enhance biodiversity, creating synergies between the two goals. By integrating biodiversity metrics into carbon credit frameworks, these instruments can operate on the nature-climate nexus and link biodiversity gains with financial incentives, enabling investors to fund projects like habitat restoration while achieving measurable outcomes for both climate and nature.

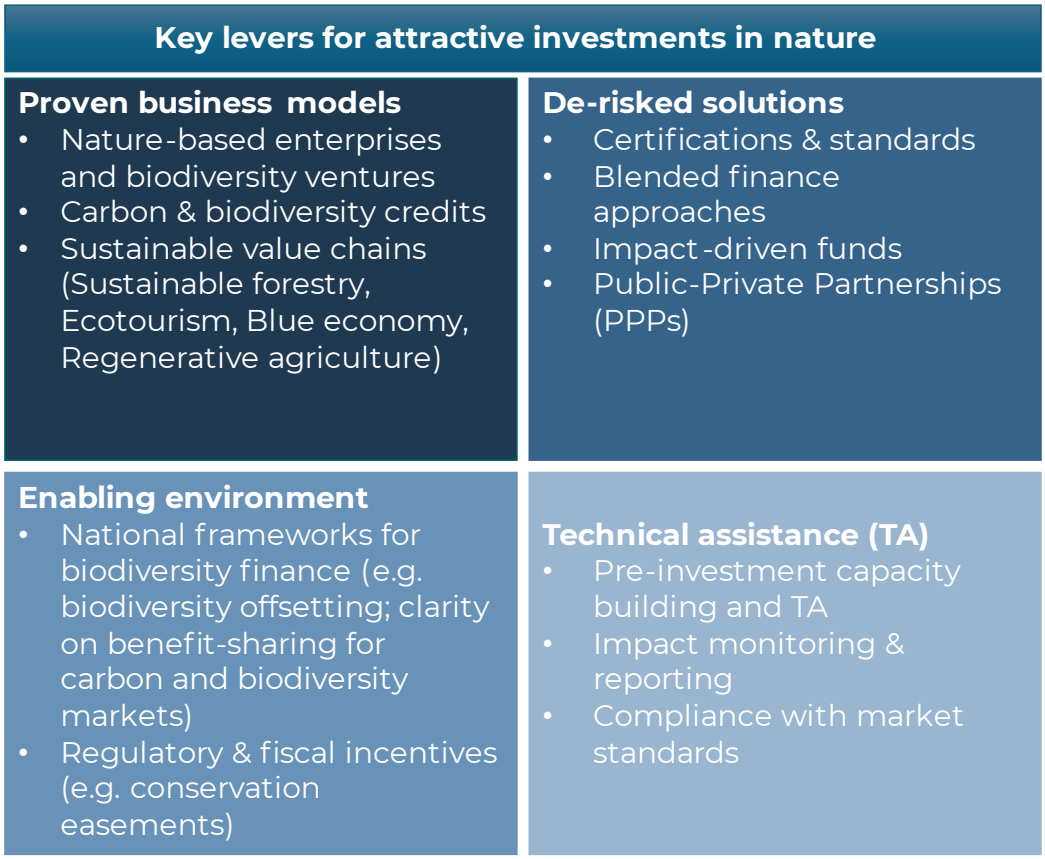
Another impactful model is **Payments for Ecosystem Services (PES)**, which aligns economic incentives with conservation goals. According to the GEF (2024), PES schemes reward activities like water purification, creating sustainable livelihoods for local communities while preserving ecosystem services.

The World Economic Forum (2020) estimated that nature-positive business models could generate up to $10.1 trillion in annual business value and create 395 million jobs by 2030. These opportunities

span a range of sectors, including food, land and sea use, infrastructure and buildings, and energy and extractive industries. Some business models are already attracting private capital, such as alternative proteins and food waste reduction technologies, while others, including land restoration and sustainable fisheries, are being driven by impact investors and blended finance initiatives.

As can be seen in the figure below, to maximise biodiversity outcomes while ensuring solid financial returns, investments in nature must integrate biodiversity conservation objectives with scalable, revenue-generating mechanisms that are de-risked through financial instruments, enabling policy frameworks, and technical assistance (TA) for effective implementation.

Figure 1 Key factors for attactive investments in nature



Proven business models

Successful business models for nature investments leverage established financial instruments to monetise ecosystem services and sustainable resource use.

- **Sustainable forestry** integrates responsible timber harvesting with certified sustainable value chains (e.g., FSC, PEFC) while generating additional revenues through carbon credits and biodiversity credits. The potential of innovations in nascent timber products (e.g. high-value low-volume timber) and precision forestry (e.g. geospatial mapping, fire detection, precision application of inputs, fully mechanised harvesting) are also highlighted as promising business models.[12]
- **Regenerative agriculture** enhances soil health, increases carbon sequestration, and improves crop resilience while securing premium market prices for sustainably produced goods and tapping into carbon credit markets (e.g., CCB Standard, Gold Standard, VCS). In

[12] *World Economic Forum (2020). The Future Of Nature And Business. New Nature Economy Report II*

addition, precision agriculture (e.g. satellite imagery, big data, and AI-driven farm management) could increase large-scale farm yields by 40%, and certified sustainable foods, such as soy, palm oil, coffee, and cocoa could create significant market opportunities.[13]

- **Ecotourism**, particularly in biodiversity-rich regions such as the Amazon, Congo, Costa Rica, Kenya, and Vietnam, offers direct economic incentives for conservation by creating local employment, eco-lodging businesses, and visitor experiences tied to rewilding and protected areas.
- **Blue economy ventures**, such as seaweed farming, sustainable aquaculture, and marine ecosystem restoration, restore biodiversity while unlocking new income streams from sustainable seafood markets, carbon sequestration initiatives, and bioplastics development.
- **Biodiversity ventures**, such as those backed by Rewilding Capital Europe (see Textbox in Section 2.2.4), showcase how restoring natural ecosystems attracts blended finance vehicles, including impact funds that mix public, philanthropic, and private capital to scale conservation-driven business models.
- **Biodiversity credits**, both voluntary and for compliance purposes, is an emerging asset class that represents an additional financial instrument for businesses to monetise conservation actions, meet corporate sustainability targets, and participate in biodiversity markets.

De-risked investment solutions: Certifications, standards & blended finance

To enhance financial attractiveness, these models must integrate de-risking mechanisms that reduce investment uncertainty and attract large-scale capital flows:

- **Certifications & recognised standards**: Third-party certifications (e.g., FSC for forestry, MSC for fisheries, and organic labels for agriculture) enhance marketability and investor confidence by ensuring compliance with best practices.
- **Carbon and biodiversity credit markets**: Businesses leveraging high-integrity crediting mechanisms (e.g., VCS, ART TREES, Gold Standard, and biodiversity crediting platforms) can secure long-term revenue streams.
- **Blended finance structures**: Investments in nature benefit from impact-driven financial vehicles that de-risk early-stage ventures. Blended finance approaches combine concessional public capital (e.g., development finance institutions, philanthropic funding) with private sector investments, helping to scale biodiversity-related projects.

Enabling environment: policy & regulatory support

Though not under FMO's control, a conducive regulatory and policy framework is essential for private sector participation and long-term financial viability of investments in nature.

- **Government policies** supporting biodiversity finance (e.g., national frameworks for carbon and biodiversity credits) create a predictable investment landscape and encourage businesses to integrate conservation into their models.
- **Public-private partnerships** (PPPs) help scale nature-based solutions, especially when governments provide guarantees or fiscal incentives for biodiversity-friendly investments (e.g; development of conservation easements).
- **Alignment with international frameworks**, such as the Taskforce on Nature-related Financial Disclosures (TNFD) and Science-Based Targets for Nature (SBTN), ensures that companies align with emerging global standards for biodiversity accountability.

[13] *ibid*

Technical assistance (TA) for implementation and impact reporting

To ensure project developers are ready to implement nature-positive approaches effectively, TA plays a critical role in capacity building, impact assessment, and market access:

- **Pre-investment TA** helps businesses refine their financial models, develop biodiversity metrics and reporting frameworks, and ensure compliance with certification schemes.
- **Implementation TA** enables businesses to adopt best practices, integrate monitoring systems, and maximise returns while meeting biodiversity goals.
- **Impact reporting & verification** is crucial for accessing carbon and biodiversity credit markets, securing investor trust, and demonstrating measurable environmental benefits.

2.2.3 Financial mechanisms and Technical Assistance

Financial mechanisms are essential for operationalising nature finance, translating high-level commitments into tangible investments that support biodiversity and ecosystems. Financial mechanisms refer to the instruments and structures that facilitate capital flows toward nature-related projects.

MDBs (2023) highlight a range of financial instruments that can be leveraged to support nature-positive finance commitments. These include investment loans, policy-based financing, results-based financing instruments, equity investments, and advisory services, among others. MDBs also assist clients in developing sustainable or thematic bonds, guarantees, and credit lines to mobilise capital for nature-related projects. However, for financing structures where the specific use of proceeds is not predetermined – such as intermediated financing or sustainability-linked instruments – the assessment of their contribution to nature-positive outcomes should be approached with caution and a conservative methodology.

Grant funding has played a crucial role in de-risking and accelerating innovative business models for nature by providing early-stage capital that attracts further investment. These grants often support projects that integrate nature-based solutions, enhance environmental resilience, and create sustainable revenue streams. The EBRD Chisinau River Bic Rehabilitation Loan in Moldova combines a loan with grant support from the Green Climate Fund to implement nature-based flood protection measures.[14] The project integrates green spaces and stormwater management to reduce flood risk, improve water quality, and enhance the city's resilience. While currently backed by public finance, it provides a scalable model for incorporating private investment in municipal green infrastructure. Another example that illustrates the use of grants to kick-start financially viable conservation models is the Blended Blue Finance Facility (BBFF), which aims to improve the management of Marine Protected Areas in Southeast Asia through a blended finance approach. A grant supported the development of a financial model, helping BBFF structure the facility, secure investor commitments, and attract private capital.[15]

Other innovative financial mechanisms include **blue-bonds and biodiversity-linked bonds**, as developed by IFC and Proparco, to foster positive biodiversity outcomes. The New Forests (2024) publication also emphasises the role of **blended finance in nature-positive investments**. By combining concessional and commercial funding, this approach de-risks conservation projects and attracts private-sector participation. For example, one DFI uses its AAA Rating to leverage public resources to be combined with private investment, including for blended finance vehicles that can be used for biodiversity investments. In addition, Rewilding Europe Capital uses blended finance to support businesses and initiatives focused on nature restoration, biodiversity, and sustainable land

[14] *European Commission (2024). Business Models and Investments for Nature. Full report. EU Business & Biodiversity Platform. Workstream Finance*

[15] *Convergence Blended Finance (2023). Supporting Blended Finance Solutions for Natural Capital in Asia: Learnings from the Asia Natural Capital Design Funding Window. Convergence Learning Report.*

use, combining public and private funding to scale up rewilding efforts across Europe (see Textbox below).

Innovative financial instruments and business models are crucial for addressing the unique challenges of nature finance. The Coalition for Private Investment in Conservation (CPIC, 2023) proposes **the capital continuum framework**, which matches appropriate financing to each stage of project development. Early-stage projects, which often face significant funding gaps, benefit from tools such as **strategic grants and technical assistance**, as demonstrated by the Partnerships for Forests (P4F) initiative.

Technical assistance (TA) can also be a lever for catalysing positive biodiversity impacts, as part of project development and/or impact measurement. For example, EIB plans to develop TA for clients on biodiversity credits supporting technical methodological aspects. Proparco is setting up a Nature Capital Facility, which will emphasise sustainable land use and biodiversity conservation, complemented by TA to enhance client capacity for biodiversity management and impact tracking. For example, one fund which promotes biodiversity investments in sectors like agriculture and forestry, includes a technical assistance programme whose themes may concern biodiversity.

Rewilding Europe Capital

Rewilding Europe is a leading example of how blended finance vehicles can successfully invest in nature-positive ventures that enhance biodiversity while delivering solid financial returns. Through its **Rewilding Europe Capital (REC)** initiative, the organization leverages a mix of public, philanthropic, and private investments to scale nature-based enterprises that support ecological restoration and economic sustainability.

How Rewilding Europe Capital uses blended finance:

- Layered Capital Structure – REC combines funding from public grants, impact investors, and commercial lenders, reducing risks for private investors while ensuring long-term sustainability. This approach de-risks early-stage conservation projects, making them more attractive for institutional investors.
- Investing in Nature-based enterprises – The fund provides loans and equity investments to businesses that promote rewilding, such as eco-tourism lodges, sustainable forestry, regenerative agriculture, and wildlife-related ventures. These businesses generate sustainable revenue streams while restoring habitats and boosting local economies.
- Biodiversity and carbon market integration – Many REC-backed ventures tap into biodiversity credits and carbon credit markets (e.g., CCB Standard) to monetise conservation efforts. By restoring landscapes and improving ecosystem services, these projects become eligible for payments linked to carbon sequestration and biodiversity enhancement.
- Scalability and replicability – Rewilding Europe's model proves that biodiversity restoration can be commercially viable. By demonstrating profitability, REC attracts more investors, enabling further capital flow into nature-based businesses across Europe.

2.2.4 Guidance for impact measurement

Impact measurement is a crucial aspect of nature finance, as it allows for the evaluation and assessment of the effectiveness and outcomes of investments in nature. This process involves the use of specific metrics and indicators that are capable of capturing the current status of biodiversity and ecosystems and the positive changes brought about by financial interventions. By systematically capturing and reporting these impacts, stakeholders can ensure transparency, accountability, and

continuous improvement of nature finance initiatives. Among the various sources reviewed, three publications provide substantial guidance on impact measurement.

The IFC (2024) is a supplement to the IFC Biodiversity Finance Reference Guide offering a comprehensive framework for measuring and reporting impact of biodiversity finance activities. It provides a set of indicative metrics for each eligible activity found in the Reference Guide able to capture outputs, outcomes, and impacts of these activities, using preestablished numerical units. A key element emphasised in the IFC publication is the establishment of baselines that capture the state of the relevant metric before the intervention, enabling a clear assessment of the changes generated by the implementation of the activities. Additionally, these metrics align with the Taskforce on Nature-related Financial Disclosures (TNFD)'s core and additional disclosure metrics, enhancing synergies between biodiversity finance impact reporting and corporate nature-related financial disclosures.

To ensure biodiversity outcomes are credible and trustworthy, GEF (2024) emphasises the role of third-party verification in the impact measurement process. The publication encourages the use of customised biodiversity indicators tailored to specific project objectives, such as monitoring canopy structure, threatened species populations, incidents of invasive species, or agricultural conversion.

For forestry, the European Forest Institute (2024) highlights the importance of tailored monitoring approaches to ensure compliance and track biodiversity outcomes, particularly for projects in ecologically important locations or over large areas. Combining remote sensing with on-the-ground checks, such as using bioacoustics and environmental DNA, ensures that biodiversity gains are both measurable and verifiable. For greater detail on impact measurement see Section 2.3.

2.3 Frameworks, indicators and tools for biodiversity impact measurement

Key takeaways

- Many existing frameworks, indicator sets and tools are available to investors to account for biodiversity and nature-positive impact, with varying degrees of rigour, cost and user burden.
- No single biodiversity or nature-positive indicator, or ready-made set of indicators exists to meaningfully represent MFF or FMO impacts. Freely-available tools are more suited to providing more general environmental context information, or nature-related risks of different geographic areas.
- Some existing sets of indicators could be drawn from in tailoring a set of MFF / FMO indicators, varying by investment location and activity type. It can be expected that both development of an appropriate framework, and then implementation of the framework to investments, will involve significant resources over time.
- Commercial providers also offer proprietary products tailored to a user's needs and context, with options to certify outputs. Some of FMO's peers work with third party providers for environmental data. FMO already uses pre-approved certification for 'green labelling', and one option could be to build on this for biodiversity or nature-positive reporting.
- Many of FMO's peers are developing formal approaches to biodiversity or nature-positive strategies, although none appear to have finalised strategies as yet.
- In a dynamic environment with uncertain direction for incorporating biodiversity and nature into operations, a prudent way forward would be to collaborate with other DFIs and MDBs to develop and adopt a widely used framework among similar organisations.

A broad array of frameworks, indicators and tools exist to assist investors to define, monitor and assess the nature or biodiversity impacts of their investments. These have been developed for a range of different contexts, purposes and users, and have varying suitability for demonstrating biodiversity-positive outcomes of investments through FMO and the MFF. A summary of a subset of these instruments (5 frameworks, 4 indicators and 6 tools) is provided in 4, Table 5 and Table 6 in Appendix III, colour coded with green, orange, and red according to their level of relevance -high, medium, or low, respectively.

Our review of these approaches found no single indicator or set of ready-made indicators that FMO or MFF could confidently employ for the range of investments that they may make. Indeed, our review finds that trade-offs exist between complexity, rigour, cost, expertise, and user-friendliness. While several freely available tools and frameworks exist, none appear specifically suited to the needs of FMO and MFF in recording and demonstrating the biodiversity performance of investments at the project scale. Most freely available tools could at best provide information and context about the general region in which an investment takes place (e.g. IBAT, LEFT, Trends.earth), and/or nature-related risks of those locations (such as IFC PS 6, that FMO already uses). We note that according to the definition of nature positive finance, compliance with safeguards does not qualify as 'nature positive', and as PS 6 is similar to safeguards, its use would not alone deliver nature-positive compliance. More generally, It is unlikely that these types of tools could be relied upon to track changes in nature-positive outcomes on small project sites such as MFF investment projects.

Some larger investors have developed frameworks and tools for their own use in their investments (such as the Critical Ecosystem Partnership Fund monitoring system), or to be used by those that receive their grant funding (e.g. Darwin Initiative). These tend to be tailored specifically to the context required of the investor, with rigorous process and indicators selected to match their needs. This approach could be replicated for the MFF, depending on the scale of resources available.

Credibility in the selection of framework and/or indicator set is important to protect against greenwashing. While it would be tempting to propose a simple set of clear indicators that in themselves prevent greenwashing, in reality the implementation of a framework or data collection process for indicators is complex and easily gamed if carelessly chosen. For example, greenwashing or manipulation of results can easily be done in project implementation, for example by proponent selection of monitoring sites favourable to producing the highest outcome – we use this example to reinforce that selection of indicators alone will not prevent risk of greenwashing. Independent verification of any approach will be critical, either through use of a recognised commercial product or through an MFF / FMO process of independent verification. Balancing the need for sufficient credibility with cost of implementation is something best done in collaboration with peers and experts.

Some of the reviewed indicator sets could be drawn upon in the development of an MFF or an FMO-wide framework:

- One set of indicators is offered in 'Biodiversity Finance Metrics for Impact Reporting' by IFC, which dedicates a section to six Forestry and Plantations eligible activities with 32 suggested metrics, that are referenced against TNFD reporting, Green Bond Principles and Global Biodiversity Framework targets. It should be acknowledged that, as with implementation of any framework, identification of appropriate metrics to represent biodiversity changes at MFF project sites still requires the collection of both baseline data before intervention, and on-going data collection at investment sites over time to demonstrate these impacts.
- Alternatively, the Nature Positive Initiative proposes a public consultation for the development of nature positive indicators, which closed on 13 November 2024 after which a report is scheduled for release in early 2025. The initiative intends to build consensus around an authoritative set of indicators that reliably represent nature positive outcomes in different ecosystems, so that they can be widely used by all the actors in the field. As an example of

the complexity of indicators in this space, the Nature Positive Initiative currently has a long list of 451 indicators in terrestrial ecosystems, with a shortlist of 37.

On the selection of an appropriate set of indicators that can be reliably tailored to the different contexts of MFF investments, we expect that MFF would likely need the assistance of forest biodiversity experts. This expertise would also be used within in a broader framework for indicator selection, data collection, reporting over time, and independent review.

Some commercial providers offer proprietary products that offer to work with clients to develop a measurement and reporting process for environmental impact. Some of these, such as Accounting for Nature, offer certification and verification, with independent experts to review and approve methods and ongoing reporting. These are likely to involve significant time and resource commitments to develop specifically for MFF/FMO use, but provide the benefit of external expertise to develop and administer. We note that FMO already relies on certification obtained by some of their investees for the purpose of green labelling.[16] One option for MFF/FMO may be to build upon this approach by approving a set of 'nature positive' certifications or processes that investees can use to demonstrate the nature-positive impacts of their activities.

Several specialists and practitioners interviewed argued that a single indicator representing biodiversity performance was not feasible across ecosystems and geographic regions. Some interviewees argued that a set of indicators should be chosen to reflect the specific needs of the investor, the ecosystem and the region in which each investment is made. This implies that indicator selection may differ between projects, and require biodiversity expertise in this selection process.

Indeed, the tools or frameworks that appear most aligned to the needs of the MFF have either been developed specifically to meet an investor's needs with regionally-specific ecological profiling, or they propose this as part of their approach. Examples include ARIES for SEEA, Accounting for Nature, Darwin Initiative.

It appears unlikely that any existing freely-available tools can be used to meaningfully and defensibly demonstrate the nature-positive performance of MFF investments over time. However, developing a bespoke solution for MFF (or FMO more broadly) will come at a cost to develop and also to implement over time. MFF is likely to require technical assistance to both develop and implement an approach. Those that have developed bespoke solutions appear to have significant investment scale that may justify the development and implementation cost required (e.g. CEPF), or a narrow geographic scope which allows for development of a detailed solution in this narrow scope (e.g. mining sites).

Our interviews with peers identified none that were using any proprietary products, although one DFI reported working with NatureMetrics and Biometrio, suggesting a preference to use third-party certification rather than develop an approach in-house.

Of FMO's peers, while IFC has produced key guidance documents on biodiversity metrics and impact tracking approaches, Finnfund appears to be the closest DFI to produce a framework for tracking biodiversity positive outcomes over time, developing a broad framework to be applied across several ecosystems and different eligible activities, with associated metrics currently under development. Their method is currently being tested, and may be a useful starting point for an approach by FMO. More generally, a prudent way forward may be to collaborate with other DFIs, MDBs and research organisations or think tanks to develop and adopt a more widely utilised framework. This will also ensure the credibility of the process through collaborating with peers.

The indicators selected for use in MFF / FMO projects may be useful in reporting on the investment for Rio Markers, however the ultimate value allocated to investments is more closely reflected in the

[16] *See section 2.5:* *https://archive.annualreport.fmo.nl/2021/FbContent.ashx/pub_1000/downloads/v220316113626/FMO%20Green%20Methodology%202021.pdf*

overall objectives of an investment than the type of indicators for which data is collected on a project. However, where significant change in key nature or biodiversity indicators can be highlighted, this will support any claim for investment allocation as 'principle' or 'significant' in relation to biodiversity.

An analysis of a range of frameworks, indicators and tools that may be considered by MFF / FMO is provided in Tables 4, 5, and 6 of Appendix III.

2.4 Insights from capital providers: Approaches used by MDBs and DFIs to measure biodiversity impacts

Key takeaways:

- Biodiversity is taken into account by all peers, even if the topic is more or less strategic from one player to another. Although around half of the peers have a biodiversity strategy or action plan, the subject is still much less integrated by players than climate change
- The definitions of biodiversity finance / nature (-positive) finance, and the distinction between biodiversity and nature do not seem to be always specified in peers' communications or sometimes seem to be used interchangeably. However, and as mentioned earlier in the study, the Joint MDB Group and the World Bank/IFC have developed their own definitions
- Few players have biodiversity objectives, either in terms of impact on biodiversity or in terms of volumes of finance dedicated to biodiversity. But some climate targets, more spread among peers' practices, integrate NBS as a way to achieve them.
- Most frameworks in place that refer to biodiversity are more concerned with risks / negative impacts on biodiversity, rather than net positive. All DFI or MDB peers were aware of the drive towards biodiversity positive, all reported efforts underway to develop a biodiversity-positive approaches, but very few have a developed framework in place
- IFC seems to be the more advanced as the institution's Biodiversity Finance Reference Guide was supplemented by a Biodiversity Finance Metrics for Impact Reporting in October 2024
- Even if the (positive) impacts on biodiversity are not always clearly measured, all the players have explored biodiversity-related instruments (impact funds in sustainable forestry, nature bonds, biodiversity credits, debt-for-nature swaps etc.)
- Biodiversity and the measurement and monitoring of (positive) impacts are a key issue among peers and several initiatives are under development. For example, the MDBs Joint Group is working on a set of indicators for nature, Finnfund is developing a positive measurement and reporting framework, EIB is in the process of developing a comprehensive biodiversity framework.

Interviews with FMO peer stakeholders found that all DFIs and MDBs are grappling with the challenge of measuring and accounting for biodiversity outcomes associated with their investments. The scale of biodiversity-related investment undertaken by DFI and MDB peers differed significantly, and while most of them indicated that they are currently working on approaches to measuring biodiversity impacts of investments, some were more advanced than others in their progress.

The following table and analysis provide an overview of the peers' approaches to biodiversity finance / nature (positive) finance and where they stand in terms of biodiversity impact measurement (See Appendix V for more detailed information on each peer institutions).

Table 1 Overview of insights from capital providers

Criteria	How are peers positioned?	To what extent are "positive" considerations currently integrated?
Biodiversity strategy / commitments	• Around half of the players have a dedicated biodiversity strategy • Biodiversity is often included in a more general E&S and/or climate policy • Players with a dedicated biodiversity strategy include “positive” aspects	**Medium**
Biodiversity-related definitions	• The definitions and distinction of biodiversity finance / nature finance / nature-positive finance do not seem to be always specified in peer communications • MDBs joint group for example propose its definitions	**Medium**
Biodiversity targets	• Few players have targets, either for biodiversity impacts or for funding dedicated to biodiversity • Some exceptions: AFD has a dedicated nature-positive financing target	**Low**
Biodiversity impact assessment and monitoring	• No indicators seem to stand out, including for positive aspects • Most players measure impact on biodiversity from a risk management perspective • Impact measurements appear to be project specific and the tools and methodologies used combine remote sensing and on-site approaches	**Low**
Biodiversity instruments / business models	• Even if the (positive) impacts on biodiversity are not always clearly measured, all the players have explored biodiversity-related instruments • Impact funds in sustainable forestry, nature bonds, biodiversity credits, debt-for-nature swaps etc.	**Medium**
Technical assistance for biodiversity	• Numerous players offer technical assistance on biodiversity-related topics or are planning to do so • However, the programs do not necessarily seem to be dedicated to positive impacts	**Low**
Plans for the future	• Biodiversity and the measurement of (positive) impacts is a key issue among peers • Initiatives are developing, both through group initiatives (MDBs) and from peers independently • The initiatives of the MDB working groups should be followed closely	**High**

2.4.1 Biodiversity strategy / commitments

The topic of biodiversity is acknowledged by all peers, though its strategic importance varies among them. Approximately half of the peers have a dedicated biodiversity strategy.

For instance, IDB launched its Natural Capital and Biodiversity Mainstreaming Action Plan in 2024, which aims to integrate biodiversity and natural capital into the IDB Group's operations, focusing on key areas where nature can drive economic, social, and climate-resilient development.[17] Additionally, the plan seeks to support and accelerate countries' efforts to achieve their nature-positive goals. Another example is Finnfund, with its Nature and Biodiversity Statement in August 2024.[18] Finnfund is committed to (i) Ensure no net loss of biodiversity in its investments; (ii) Develop and fostere nature and biodiversity net-gains; (iii) Promote more systematic, harmonised, and transparent nature-related financial disclosures and reporting.

Most actors with a biodiversity strategy or action plan incorporate a "positive" approach or at least mention it. However, climate considerations continue to take precedence over biodiversity and in many cases, biodiversity is integrated into broader environmental and social or climate policies.

2.4.2 Biodiversity-related definitions

The definitions of "biodiversity finance" and "nature(-positive) finance", as well as the distinction between biodiversity and nature, are not always explicitly stated in peers' communications. As highlighted earlier in this study, the Joint MDB Group and the World Bank/IFC have established such definitions, providing a potential reference for the industry. However, in many cases, the terms "nature (positive) finance" and "biodiversity finance" are used or seem to be used interchangeably by peers, as also highlighted by AFD (2022). Moreover, several peers do not provide any definitions at all.

These elements demonstrate a lack of standardization in how these terms are defined and used across the sector.

2.4.3 Biodiversity targets

Only a very limited number of players at the moment have defined concrete biodiversity objectives, either in terms of impact on biodiversity or the volume of funding allocated to biodiversity. AFD Group is one of the few institution with a target to increase its funding for biodiversity to €1 billion by 2025 while ensuring that 30% of its climate finance is nature-positive.

While climate targets remain predominant among peers, some DFIs, consider nature-based solutions as tools to achieve their climate objectives.

2.4.4 Biodiversity impact assessment and monitoring

Most existing frameworks that address biodiversity tend to focus on mitigating risks and negative impacts rather than promoting a "net positive" approach. Many peer institutions rely on the IFC Performance Standard 6 (PS 6) framework, which is primarily designed for risk assessment and aims to prevent adverse effects on biodiversity and other environmental aspects linked to investments.

Additionally, most institutions have noted that their frameworks for climate reporting are far more developed than those for biodiversity reporting. While all DFI and MDB peers acknowledge the growing momentum toward nature-positive approaches and report ongoing efforts to develop relevant strategies, very few have established comprehensive frameworks.

[17] *Inter American Development Bank, IDB Invest, & IDB Lab (2024). IDB Group Natural Capital and Biodiversity Mainstreaming Action Plan 2024-2025. https://doi.org/10.18235/0013120*

[18] https://finnfund.fi/wp-content/uploads/2024/09/Finnfund-Nature-and-biodiversity-statement-FINAL_220824.pdf

IFC appears to be the most advanced in this area, having supplemented its Biodiversity Finance Reference Guide with a Biodiversity Finance Metrics for Impact Reporting in October 2024. This new document provides specific metrics to assess the eligible activities outlined in the Reference Guide where listed investment activities are organised into three main categories: (i) Investments that generate biodiversity co-benefits; (ii) Investments in biodiversity conservation and restoration; (iii) Investments in nature-based solutions.

However, no biodiversity indicators seem to stand out across institutions, with many peers highlighting the challenges of defining and monitoring positive impact metrics. Impact measurement remains largely project-specific, relying on a combination of remote sensing technologies and on-site assessment methodologies. For example, one PE firm uses tools and methodologies such as GIS (Geographic Information System), drone mapping, vegetation mapping and relies on specialists on the ground.

2.4.5 Biodiversity instruments / business models

Although the (positive) impacts on biodiversity are not always clearly measured, all players have explored nature-related business models. These include sustainable forestry funds and investments, which incorporate conservation commitments such as setting aside a percentage of hectares for protection and adhering to FSC practices. For example, most of the forestry companies in which Criterion Africa Partners invests have between 30 and 70% of their areas reserved for conservation.

Additionally, institutions have engaged with innovative financing mechanisms. For instance, one MDB explores instruments such as nature bonds, biodiversity credits, and debt-for-nature swaps. In 2022, Proparco granted its first blue line of credit to China-based Bank of Qingdao. The USD 150 million blue loan, led by the IFC in collaboration with the ADB and KfW subsidiary DEG, aims to support the Chinese bank in launching over 50 blue finance projects by 2025.[19]

However, one of the key challenges identified is the relatively small size of many biodiversity projects, which may not meet investment criteria of large financial institutions. Moreover, while biodiversity credits, both voluntary and for compliance purposes, have been recognised as a promising opportunity, the market remains limited in scale.

2.4.6 Technical assistance for biodiversity

Many players provide or plan to provide technical assistance on biodiversity-related topics, including the application of IFC PS 6 requirements (e.g. Finnfund), the implementation of innovative finance mechanisms (e.g. IDB) and the integration of biodiversity data into the Global Biodiversity Information Facility (e.g. ERDB). However, these programs do not always appear to be specifically designed to generate biodiversity positive impacts.

2.4.7 Plans for the future

Biodiversity, along with the measurement and monitoring of (positive) impacts, remains a key issue among peers, with several initiatives currently in development. MDB working groups' initiatives warrant close attention, particularly the development of a taxonomy for nature-positive activities and a standardised set of indicators for nature, both of which are set to be launched by COP 30. In addition, Finnfund has been working on a biodiversity-positive measurement and reporting framework that builds upon IFC PS 6. This framework incorporates indicators from TNFD and IUCN, combined with a broader process to report net positive outcomes, including the use of specific biodiversity metrics. One DFI is in the process of creating a comprehensive biodiversity framework based on three core pillars: appraisal, tracking, and risk assessment. A co-benefits methodology is being prepared,

[19] https://www.proparco.fr/en/actualites/new-blue-loan-help-bank-qingdao-pilot-blue-finance-supporting-chinas-climate-goals

collaborating with other MDBs to assess and report biodiversity contributions within broader projects, emphasising practicality over standalone biodiversity initiatives. Lastly, one DFI aims to expand its financing for marine protected areas (MPAs) and explores strategies to make small-scale projects bankable.

2.5 Insights from funds and projects

Key takeaways

- Biodiversity is often a co-benefit rather than a primary objective, with many (potential) customers and investees generating revenue from production-oriented activities such as sustainable timber, agroforestry, and certified commodities (e.g., FSC or fair-trade goods). Others derive income from environmental credits, including carbon and biodiversity credits, while those focusing on facilitation and strategic support – without owning assets – generate revenue by connecting projects with funding and expertise. Many combine these approaches.
- Large-scale restoration approaches and agroforestry systems, which moves away from seeing biodiversity as a co-benefit, seem to offer scalable business models that could be investigated further by FMO for MFF. Moreover, the emerging biodiversity credits market may also be a possible instrument to use and/or support. It is essential, however, to first create a robust governance structure that fosters transparency, accurate baselines and monitoring to de-risk this novel market, and FMO could be a propeller.
- Advanced technologies like eDNA and Internet of Things (IoT) sensors offer precise biodiversity assessments but remain costly and resource-intensive. Simple on-the-ground methods used by some customers are more accessible but may lack scalability and fail to capture the full complexity of ecosystems. A combination of both on-the-ground methods and advanced technologies seems to be the winning approach.
- Both current and other ecosystem stakeholders point to the need for funders to provide support for capacity building and to extend investment timeframe in order for long term biodiversity outcomes to manifest.

2.5.1 About customers/investees and other ecosystem stakeholders

The insights summarised in this section are based on 12 in-depth interviews conducted during the study with current FMO investees and customers, MFF investees, and other ecosystem stakeholders. These interviews aimed to capture the perspectives of current and prospective partners, exploring their alignment with FMO and MFF's biodiversity investment goals and identifying opportunities and challenges in financing and implementing such projects.

2.5.2 Business models

In the **forestry sector**, customers/investees focus on sustainable timber production and asset management. These models support biodiversity through measures like active conservation and restoring degraded lands. Their business models primarily rely on the demand for FSC-certified products and, in some cases, carbon credit generation. While biodiversity improvements are generally viewed as co-benefits rather than primary objectives, one FMO customer/investee stands out with a specific target of achieving a 10% net biodiversity gain. Another ecosystem stakeholder shares this focus on forestry by restoring degraded wetland forests, blending biodiversity and carbon objectives into their business model. This stakeholder's environmental impact units, designed to attract corporate investments, align with the objectives of current FMO and MFF customers, who also integrate carbon finance mechanisms to support biodiversity goals.

In the **agroforestry sector**, one stakeholder focuses their operations on integrating cocoa plantations with teak forests, creating a mixed-use landscape that supports both economic productivity and ecological health. In relation to other ecosystem stakeholders, one emphasises sustainable agroforestry by combining organic and fair-trade practices with partnerships with smallholder cooperatives. On the other hand, another stakeholder focuses in transforming degraded lands into productive ecosystems through mixed-species planting, targeting ecological restoration while integrating bamboo harvesting for renewable energy and materials.

In the **agricultural sector**, another stakeholder aims to deliver inclusive, sustainable, and deforestation free commodities and forest products while protecting and restoring remaining tropical rainforest. This goal is pursued through providing term loans to large corporate players in the agri-commodity industry, fostering sustainable practices and integrating biodiversity considerations into their operations.

One stakeholder operates environmental investments focusing on the Colombian compliance market for **biodiversity offsets.** They establish conservation and restoration areas through long-term lease agreements with landowners and develop detailed management plans, ecological baselines, and monitoring protocols. Companies in sectors like infrastructure, oil and gas, and mining purchase biodiversity credits to fulfil regulatory offset requirements, with performance payments tied to verified milestones. Furthermore, the same customer also engages in voluntary markets. One ecosystem stakeholder presents an alternative model to credits by stacking carbon and biodiversity credits to create **'nature credits'** that target both emission reductions and nature-positive impacts**.** Their methodology ties credit prices to the cost of interventions plus incentives, aiming to ensure fair value of conservation efforts. Another stakeholder offers a distinct approach, focusing on **pre-financing and project development** to ensure nature outcomes. By strengthening the business case for projects and encouraging diversified revenue streams, this customer helps make conservation efforts economically viable. Another stakeholder operates in the environmental commodities space, offering solutions, such as **biodiversity credits and advisory services** for sustainable practices. By facilitating projects that generate biodiversity credits and connecting clients with funding mechanisms, they help drive conservation and restoration initiatives.

Across these sectors, most stakeholders share a focus on integrating **biodiversity as a co-benefit** of their primary business model. They emphasise aligning ecological restoration with commercial goals, whether through carbon credits, sustainable commodities or ecosystem services. However, they differ in the maturity of biodiversity markets, with some customers operating in more established markets, while other ecosystem stakeholders explore emerging opportunities such as biodiversity credits.

2.5.3 Impact measurement

Biodiversity is increasingly **viewed as an important component** of FSLU investments for FMO and for the MFF customers/investees that were interviewed. This has prompted customers/investees to place greater emphasis on biodiversity considerations in project design, implementation and monitoring.

Adherence to standards and recognised certifications

Building on this increased focus on biodiversity, stakeholders adhere to a range of established **standards and certifications** in responsible forestry and land use, biodiversity conservation, carbon reduction, and community engagement, aligning projects with international best practices and market expectations. While some customers and investees directly apply these standards to their operations and owned assets, others adopt these frameworks for the projects they invest in or help develop.

Table 8 in Appendix V highlights the key standards and certifications recognised by the FMO's Green Methodology (2021) that were identified during the interviews, summarising their relevance to nature finance and the investees that currently apply them.

Apart from the standards and certifications presented in Table 8 in Appendix V, interviewees also highlighted other standards and certifications outside those that align FMO's Green Methodology. For instance, one stakeholder complies with **Conservation International**, which offers guidance and frameworks to enhance biodiversity outcomes and minimise harm in investment and conservation projects; another one adheres to the **Climate, Community & Biodiversity Standards** (CCB) which are certified land management projects that deliver co-benefits for climate change mitigation, biodiversity conservation, and local communities; while a DFI fulfils **Fair Trade** standards, which apply to a wide range of products and supply chain actors with the aim to alleviate poverty and advance sustainable development.

Biodiversity baseline assessment

A baseline assessment is an initial evaluation of ecological characteristics in a project area, providing a reference point for documenting biodiversity, habitat conditions, and environmental parameters. In biodiversity investments, it is critical for understanding ecosystem starting conditions, guiding project planning, and enabling the monitoring and verification of biodiversity gains. These assessments also ensure alignment with regulatory requirements and international standards, enhancing credibility and accountability. All customers/investees integrate baseline biodiversity or environmental assessments to understand the ecological characteristics of their project areas. Examples include:

- A stakeholder engages in **extensive due diligence prior to acquisition**, supported by consultants. This process involves detailed evaluations of species presence, habitat conditions, and compliance with environmental regulations. The assessment requires investments to meet IFC standards, and to align with the customer's biodiversity goals of protecting and restoring native ecosystems.
- A stakeholder employs a **staged approach to baseline assessments**, beginning with rapid ecological evaluations before bidding on properties. This initial assessment helps them quickly determine the suitability of potential investments. Upon proceeding, they conduct more in-depth ecological assessments with consultants, including soil analyses. This method allows them to efficiently allocate resources toward properties that promise significant biodiversity benefits.
- Another stakeholder **integrates biodiversity considerations into broader environmental and social assessments** rather than conducting dedicated biodiversity baselines. When acquiring new lands, they assess potential conservation areas – particularly degraded and wetland zones – through the collaborative efforts of their environmental, social, and Geographic Information Systems (GIS)mapping teams, supplemented by third-party soil assessments. Although they do not perform specific biodiversity assessments, they compile records of species identified during these evaluations. This information guides their conservation efforts, particularly in wetland and riparian areas.
- A stakeholder adopts a **multi-tiered approach to baseline assessments**, guided by regulatory requirements from Colombia's Ministry of Environment on biodiversity offsets and other licensing agencies. Their methodology includes indicators such as biomass gain, species richness and abundance, transformed versus natural land cover, and landscape-level socio-ecological metrics. These assessments are tailored to specific ecosystems, particularly degraded areas, and are conducted consistently throughout their 30-year projects.
- Another stakeholder, through the projects they support with their advisory services, **incorporate both technological and on-the-ground methodologies in their baseline assessments**. By leveraging GIS, field data collection, and national registries, they create detailed mappings of biodiversity features for their projects. This integrated approach

enables them to establish robust baselines that inform tailored monitoring plans and conservation strategies.

Key learnings include the necessity for context-specific methods, the need for low cost and reliable technology and external expertise.

Ex post assessments regarding biodiversity management and monitoring

Similarly, biodiversity management and monitoring approaches adopted by the MFF and FMO investees reveal a mix of methodologies, technologies and development stages. Each company's strategy reflects its unique operational focus, certification requirements, and the challenges inherent to its geographic and environmental contexts. More specifically:

- A stakeholder employs **biannual assessments**, conducted during both wet and dry seasons, integrating diverse tools such as camera traps, field assessments (e.g., footprints and droppings), and aquatic monitoring. They are also exploring emerging technologies like environmental DNA (e-DNA) and bioacoustics to enhance their biodiversity monitoring capabilities, though these remain costly and logistically complex.
- A stakeholder employs a **combination of structured monitoring and community involvement**. Monthly biodiversity monitoring is conducted by a contracted biologist, focusing on plantations and their surroundings. This approach is complemented by on-the-ground assessments using night cameras, water testing, and empirical observations. They also integrate biodiversity corridors and indigenous tree species into their operations to promote ecological restoration.
- Another stakeholders methods include **remote sensing, transects, and ecosystem health assessments** focused on grasslands, indigenous forests, and water systems. They also employ anti-poaching measures and actively conserves and reintroduces indigenous fish species into local rivers. Their landscape mosaic approach, which balances plantation forests, natural forests, and grasslands, exemplifies how diverse land uses can support species diversity.
- Another stakeholder **integrates biodiversity management into broader environmental and social assessments**. Their monitoring efforts rely on permanent sampling plots, transect walks, and insect trapping, supported by a team of 30 internal staff. Third-party audits every five years provide additional validation.
- Another stakeholder, in comparison, is in the early stages of developing biodiversity monitoring systems as many of its projects are still in the development phase. Their **participatory approach** emphasises flexibility, allowing for meaningful dialogue with local stakeholders. The customer relies on certification standards such as Verra, Gold Standard, and Plan Vivo to guide their biodiversity goals.
- Another stakeholder relies on **comprehensive action plans for biodiversity monitoring**. Indicators used include forest cover extent, condition of undisturbed forests, and the consistency of restoration programs. Restoration efforts often focus on fencing and natural regeneration as proxies for biodiversity recovery, given the logistical and financial challenges of monitoring species-level outcomes. While satellite data and third-party verifications provide valuable insights, the customer acknowledges the limitations of these methods in capturing biodiversity complexity and prefers locally specific data where possible.
- An interviewed ecosystem stakeholder employs **advanced technologies**, including Internet of Things (IoT) sensors, camera traps, and audio recordings, to systematically assess biodiversity changes with a high degree of precision. In contrast, other ecosystem stakeholders rely on **more traditional, on-the-ground methods**. One prioritises farm-level indicators tied to organic and fair-trade certifications, with biodiversity treated as a secondary outcome of sustainable practices. Another stakeholder relies on straightforward activity-based metrics, such as habitat hectares protected, and another one integrates ecological and soil health indicators alongside community-involved monitoring. While these simpler

methods may be more practical and cost-effective, they may face limitations in scalability and capturing the full complexity of biodiversity outcomes.

More generally, two stakeholders interviewed act as **intermediaries in nature finance**. While they play a crucial role in advancing the field by connecting projects with funding and expertise, measuring the direct biodiversity impacts of FMO investments in these organizations can be more challenging due to their indirect role in project implementation, as highlighted by WWF.

2.5.4 Engagement with local communities

Engagement with local communities emerges as a fundamental aspect of biodiversity-positive investments, driven by certification standards, requirements such as those from funders and frameworks like IFC Performance Standards, and as a differentiation factor driven by social responsibility or client demand. It was also widely acknowledged by all interviewees that community involvement and buy in is an essential condition for the sustainability in the long-term of any biodiversity related project.

Some investees embed **community engagement already at the project design stage**, with participatory approaches forming a central feature. For instance, some require integration of social studies and stakeholder consultations during the early stages of projects they invest/ are involved in. These steps ensure that the investments align with local needs and minimise potential conflicts. However, while one of them prioritises participatory planning to foster community ownership, another emphasises understanding operational risks and ensuring the feasibility of the investment.

Employment and capacity-building initiatives are a shared strategy to integrate communities into conservation efforts. A stakeholder stands out for its large-scale job creation programs, which include biodiversity training aimed at reducing practices like poaching and improving community awareness. Similarly, two other stakeholders employ local and indigenous populations, providing stable jobs and environmental education. However, the degree of involvement varies as one of them focuses on capacity building as part of its operational model, while the other promotes intercultural social responsibility through educational programs and partnerships with neighbouring communities.

Beyond this, a stakeholder employs direct **benefit-sharing mechanisms** such as allocating carbon credit revenues to local communities and renting community-owned land, to foster collaboration and ownership.

Some stakeholders also engage communities in **monitoring and operational processes**. Specifically, one customer/investee actively involves indigenous populations and local workers in species monitoring and conservation activities, creating a sense of shared responsibility for biodiversity outcomes. Another customer applies a similar approach, engaging local communities in post-project biodiversity surveys to reinforce their role as long-term stewards of the land.

2.5.5 Challenges and needs

Investees identify several challenges and needs in monitoring and verifying biodiversity impacts. These challenges often stem from the complexity of biodiversity measurement, resource constraints, and the evolving expectations of funders and stakeholders.

One major challenge identified by almost all investees is the **high cost of advanced monitoring tools and methodologies**. Techniques such as eDNA and bioacoustics, which offer precise biodiversity data, remain prohibitively expensive for widespread use. Some FMO and MFF customers highlight the logistical difficulties of scaling these technologies, especially in large or remote project areas. The need for more accessible and cost-effective tools is a recurring theme, with investees emphasising the importance of innovation and investment in this area.

Another barrier pointed out by interviewed stakeholders is the **difficulty of attributing biodiversity outcomes to specific interventions**, namely in demonstrating clear causal links between project activities and positive biodiversity trends, particularly when external factors also influence ecosystems. This lack of clear attribution can complicate reporting and diminish the perceived credibility of biodiversity claims.

Capacity constraints further exacerbate these issues. Many investees report a **shortage of trained personnel** to implement, monitor, and verify biodiversity initiatives effectively. This is particularly pronounced in regions where access to qualified local consultants is limited, creating a need for targeted capacity-building programs. Training environmental teams and community members in biodiversity monitoring is seen as a key area for improvement.

A stakeholder also highlighted the **frequent lack of clear mandates and criteria from funders.** This ambiguity forces investees to define biodiversity metrics and targets independently, creating inconsistencies and potential misalignment with funder expectations. They emphasised that clearer guidance from funders, including minimum quality standards, specific biodiversity goals, and explicit monitoring requirements, would greatly enhance their ability to design and implement effective biodiversity-positive projects.

Another stakeholder highlighted the **challenge of financing more innovative projects** due to risk-averse funders. They note that while much attention is given to impact frameworks and monitoring, risk frameworks used by DFIs and investors also need to evolve to accommodate innovative projects that offer new biodiversity solutions.

Customers also point to the **need for long-term funding commitments** to support ongoing biodiversity monitoring and verification. Short-term funding cycles are often insufficient to track biodiversity impacts over time, making it difficult to capture meaningful trends and outcomes. Investees also highlight the importance of aligning financial incentives with biodiversity goals, such as exploring payment for ecosystem services or creating markets for biodiversity credits.

Some stakeholders noted the **difficulty of shifting community perceptions** toward biodiversity conservation, particularly in regions where economic pressures drive unsustainable practices (e.g. like illegal logging). Another stakeholder also mentioned previous conflicts with local communities, highlighting the need for frameworks to manage expectations and foster dialogue. Furthermore, the **logistical and financial burdens** of community engagement—particularly in large-scale projects—remain a barrier for various stakeholders.

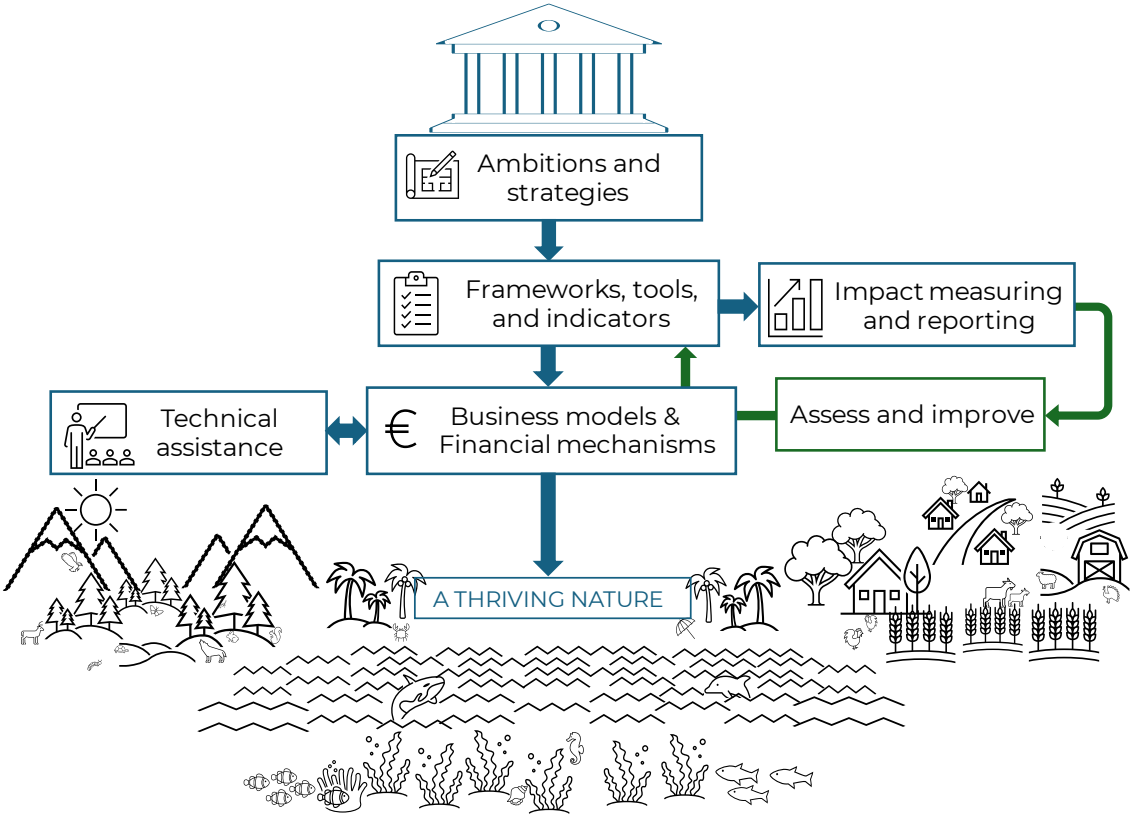
3 Actionable insights for next steps

This section provides actionable insights for FMO/MFF to scale up investments in biodiversity and measure their impact. These actionable insights are structured in five conceptual steps or at five levels, acknowledging that their design and implementation could follow an iterative approach, whereby the initial design is tested in practice and the learnings obtained are used to inform subsequent improvements of all stages.

As illustrated in the figure, scaling up investments in nature begins with defining high-level ambitions and strategies. These strategies establish objectives and targets that guide the development of a structured nature finance framework, including mechanisms for tracking and reporting financial flows and for measuring biodiversity impacts. In addition, based on the strategy, FMO/MFF will identify business models for investments in nature and determine suitable financial mechanisms. Once business models and financing instruments are in place, technical assistance can be tailored to help customers design and implement nature-positive projects while ensuring robust impact measurement and reporting. A key aspect of this framework is its iterative nature; where insights

gained from early implementation, including the experience of a first cohort of investees using the impact measuring tools, should be assessed and integrated into a refined framework. This continuous learning cycle, ideally conducted annually, will help improve effectiveness over time, ensuring a meaningful contribution to "a thriving nature".

Figure 2 Five pillars for scaling up investments in nature



3.1 Ambitions and strategies

Actionable insight 1: Adopt a clear strategy for nature finance and an agenda that establishes investments in nature and biodiversity as a stand-alone objective

Description

FMO should adopt a dedicated strategy for nature and biodiversity, recognising it as a distinct investment priority alongside its climate objectives. The Biodiversity Roadmap, which is nearing adoption by FMO, represents a step to the right direction. While its final form is not yet known, making biodiversity a strategic goal requires setting clear objectives, priorities, and implementation pathways, while ensuring alignment with emerging global frameworks, like the KMGBF. The strategy should also define the expected outcomes of nature finance and how these are measured and reported. At MFF level, the programme should build on its existing biodiversity KPIs by making its commitment to targeting biodiversity outcomes more explicit and strategically visible, complementing its overarching climate objectives.

Implementation considerations

- Nature finance should be treated separately and as equally important as climate finance, with both priorities being pursued in parallel. FMO should seek to leverage any synergies allowing joint progress on both fronts, while making sure that efforts to advance one objective do not have adverse impacts on the other.

- To align with emerging global good practices, FMO should actively engage with other DFIs and MDBs who are advancing their nature finance agendas. Participating in relevant consultations launched by other organisations will ensure consistency in frameworks, methodologies, and impact measurement.
- At MFF level, the programme's Theory of Change should be updated, based on scientific evidence, detailing the benefits for both climate and nature that forests can generate, the specific activities that the program is aiming to finance, and a list of indicators that captures both outputs and outcomes.

3.2 Frameworks, tools and indicators

Actionable insight 2: Establish a framework to track and report financial flows and measure and monitor biodiversity impacts, balancing simplicity, scientific rigour, and governance, using appropriate tools and indicators

Description

A well-defined framework for financial tracking and biodiversity impact measurement and reporting is essential for MFF and FMO to ensure investments deliver tangible biodiversity benefits while maintaining credibility and accountability. This framework should align with emerging global standards, incorporate baseline biodiversity assessments, require measurable biodiversity net gain targets, and integrate robust verification to prevent greenwashing. A crucial component of this framework is the development of a taxonomy of eligible activities, enabling the identification and tracking of financial flows that make a positive contribution to nature across FMO and MFF portfolios. It must also strike a balance between practicality and scientific rigour, ensuring that investees can implement it effectively while maintaining robust governance.

Implementation considerations

- Developing and implementing a robust framework for tracking nature finance and measuring biodiversity impact is a complex and resource-intensive process that requires further exploration of key aspects identified in this study, including taxonomy development, nature finance tracking approaches, and biodiversity impact measurement and reporting.
- Aligning with peer institutions' approaches is crucial for consistency in reporting, particularly as FMO often works alongside DFIs and MDBs on projects. While frontrunners such as IFC and Finnfund have already developed relevant frameworks, FMO/MFF should use these as references and adapt them to their specific operational contexts.
- A taxonomy of eligible activities should be designed to be both comprehensive and simple. Engaging with institutions such as the Joint MDB Group, the World Bank Group, and Finnfund will help ensure alignment with existing frameworks and avoid unnecessary duplication of efforts.
- At the MFF level, the list of eligible activities should balance capturing the variety of forest-related activities implemented by MFF customers with the need for portfolio-level tracking of biodiversity finance.
- To measure, monitor, and report biodiversity impacts effectively, FMO should define a set of flexible impact indicators, which will then be applied within MFF. Flexibility is emphasised to reflect the ongoing development of effective nature-positive approaches and the varying conditions of implementation. The IFC metrics outlined in the *Biodiversity Finance Metrics for Impact Reporting* publication provide a valuable reference.
- Expert input from biodiversity specialists may be necessary both during the framework's development and throughout its implementation to ensure credibility and scientific robustness.
- The use of emerging monitoring technologies, such as remote sensing, eDNA, and bioacoustics, should be encouraged through innovation grants or partnerships with

technology providers. Alternatively, third-party certification could be considered as a means of ensuring reliable biodiversity impact assessment. To test and refine these approaches in practice, a pilot programme could be implemented under an MFF project in collaboration with a commercial provider or third-party verification entity (see Actionable insight 4).

3.3 Business models and financial mechanisms

Actionable insight 3: Leverage Nature-based solutions opportunities through strategic participation in carbon and biodiversity markets

Description

One of the most effective ways to enhance both climate action and biodiversity conservation is through Nature-Based Solutions (NbS) that generate co-benefits for ecosystems and communities. Investments in forest restoration, regenerative agriculture, and sustainable land use can create financial value while delivering environmental and social impact. By strategically engaging in carbon markets, FMO can support high-integrity projects where carbon credit generation is closely linked to biodiversity protection. Additionally, biodiversity markets are evolving, and staying informed about developments such as biodiversity credits is crucial. It is nonetheless essential to adopt biodiversity credit approaches that adhere to ethical standards and are grounded in the strict application of the mitigation hierarchy, particularly when it comes to offset credits. Engaging in platforms like the Biodiversity Credits Alliance (BCA) and working groups of the Conservation Finance Alliance (CFA) can provide insights and networking opportunities to align investments with emerging best practices.

Implementation considerations

- Prioritise projects where carbon credit generation aligns with biodiversity conservation to maximise biodiversity, climate and financial returns.
- Monitor the development of biodiversity credits and participate in relevant platforms, such as the BCA and CFA working groups, to stay at the forefront of market evolution.
- Collaborate with project developers and incubators like Ecosystem Restoration Associates, Resilient Landscapes and the Landscape Finance Lab (among others) to scale high-impact NbS investments.
- Monitor established standards innovating on both carbon and biodiversity credits (e.g., Verra and Plan Vivo) to guarantee the credibility of both carbon and biodiversity outcomes.
- Assess the regulatory landscape and potential challenges and opportunities in combining biodiversity credits and carbon credits into investment strategies.

3.4 Technical assistance

Actionable insight 4: Develop a Technical assistance initiative as a pilot to scope methodologies and service providers for biodiversity impact measurement

Description

Developing robust methodologies for biodiversity impact measurement is essential for scaling nature-positive investments. Given the evolving landscape of biodiversity metrics and the need for credible, comparable data, FMO can leverage technical assistance to pilot biodiversity impact measurement approaches. A structured pilot program can help assess the capabilities of different service providers, methodologies, and technologies, ensuring that FMO adopts high-integrity and scalable biodiversity measurement solutions. By integrating biodiversity metrics into investment decision-making, financial institutions can enhance their contributions to conservation and align with emerging regulatory and market expectations.

Implementation considerations

- Design a targeted technical assistance initiative to test different biodiversity impact measurement methodologies and select relevant service providers.
- Collaborate with scientific institutions, conservation organizations, and market leaders to ensure methodologies are science-based and aligned with best practices.
- Evaluate the reliability, scalability, and cost-effectiveness of different biodiversity measurement solutions through comparative analysis.
- Develop a roadmap for embedding biodiversity impact measurement into FMO's due diligence, reporting, and investment strategies.
- Provide training and knowledge-sharing sessions to internal teams and investees to enhance understanding and implementation of biodiversity impact measurement.

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Annexes

Appendix I: FMO's and UK's biodiversity finance ambitions[20]

FMO's ambitions

FMO has a general objective of investing EUR 10 billion in climate action (SDG 13) by 2030, (2022 CLIMATE ACTION PLAN to 2030[21]) and within that amount, there is a commitment to build a forestry portfolio of up to EUR 1 billion by 2030 and to increase the volume of investments contributing to biodiversity. Biodiversity is not listed as a stand-alone investment objective in the CAP, but rather included as one of the "other" areas of footprint reduction under SDG 13 Climate action. The Climate Action Plan also states the aim of building a strategy and capacity to measure biodiversity in FMO's portfolios, as well as engaging with FMO's customers on this topic.

In 2023 FMO approved and began implementing its new Forestry Strategy. The new strategy broadens FMO's scope of investments beyond brownfield plantations to include a diversity of business models such as non-timber forest products. Throughout 2023, effort was put into operationalising the strategy.

To implement CAP's commitments related to biodiversity, the FMO Sustainability Strategy & Policy team is currently leading the development of a Biodiversity roadmap with a proposal that has already been submitted for board approval.

FMO's Tools and methodologies

In terms of practical tools for biodiversity impact measurement, those remain to be developed or are in development. FMO's existing Sustainability Bond Framework[22] (2018) and Green Label Methodology (2024) include lists of eligible activities for the use of bonds proceeds and for the Green Label.

Additional mentions of nature-related activities are included in:

- Climate Mitigation: AGRICULTURE, FORESTRY AND LAND USE: Afforestation and reforestation, and biosphere conservation.
- Climate Adaptation: Activities Addressing Climate Vulnerability by strengthening the resilience or communities, goods, or ecosystems to climate change.
- Other Footprint: Conservation of natural resources – mostly referring to circular economy and waste;

However, both frameworks are designed to guide the ex-ante labelling of financial transactions and to determine the share of finance that can be reported as green, they are therefore not tailored for ongoing impact measurement. We note one exception: the SBF includes an impact monitoring method, but it is focused on only two KPIs, none of which is relevant for biodiversity: GHG emission reduction resulting from green investments at portfolio level and number of (in)direct jobs supported with FMO investments.

The Green screen 2024, which is an internal tool to help labelling of financial flows, in its 2023/2024 version includes a more granular list of activities relative to biodiversity, under a dedicated category *Investments in biodiversity conservation and/or restoratio*n. While impact indicators remain absent, the list contains roughly 30 activities split in three sub-categories:

- Freshwater and Marine Habitat Conservation

[20] *This analysis focuses on the UK Government as the Dutch Government joined while the study was already ongoing*

[21] https://www.fmo.nl/l/en/library/download/urn:uuid:25c25d01-4d2b-4585-a5ca-dd5682de71fe/fmo+climate+action+plan_2022.pdf

[22] https://www.fmo.nl/l/en/library/download/urn:uuid:3620dfa8-4068-44bc-977e-f62a38f60589/fmo+sustainability+bonds+framework.pdf

- Conservation Land Use/ Terrestrial Habitat Conservation
- Nature-based Solutions

The Green screen list is considerably more detailed than the previous eligibility lists and could be used as a basis towards developing impact indicators and a framework for impact measurement.

Generally, FMO's investments' negative impact is primarily assessed against an exclusion list and biodiversity-related risks, as defined per IFC PS6 standards and nature-dependencies. These efforts are focused on inside-out risk management and reducing the potential negative impacts on biodiversity, rather than on generating positive impact for biodiversity.

At programme level, Mobilising Finance for Forests (MFF) monitors and reports to the UK government annually tree environment related indicators: 1) Total hectares under sustainable forest management and sustainable agriculture (ICF KPI 17); 2) Total hectares of avoided deforestation and degradation (ICF KPI 8); 3) Amount of GHG emissions avoided/reduced as a result of the programme's investments (tCO2e)[23]. These figures are based on information reported by the companies and funds within the MFF portfolio. Besides these output level indicators, MFF's reporting does not appear to include any estimates of biodiversity outcomes or impact.

UK' s ambitions

UK's integrated approach to climate and nature is laid out in its 2030 Strategic Framework for International Climate and Nature Action (2023)[24], a joint effort led by the Department for Energy Security and Net Zero (DESNZ), the Department for Environment, Food & Rural Affairs (DEFRA) and the Foreign Commonwealth & Development Office (FCDO). The Framework is a core part of the UK's wider foreign policy and it outlines a vision to halve global emissions, halt and reverse nature loss and build resilience to climate impacts. It identifies the levers the UK will use to tackle six global challenges. Two of those are of particular interest for biodiversity finance:

- Challenge 3: Increase protection, conservation and restoration of nature and tackle key drivers of nature loss
- Challenge 5: Align global financial flows with a net zero, climate resilient and nature positive future.

Of particular relevance for this study, the framework lists as one of the levers to be used by the UK a contribution to building frameworks aligning global financial systems with nature positive global economy, as well as catalysing public and private climate and nature investments. In monetary terms, the UK's efforts will be underpinned by their pledge to double UK international climate finance (ICF) to £11.6 billion between 2021/22 and 2025/26, including at least £3 billion on protecting, restoring, and sustainably managing nature, with £1.5 billion on forests[25]. The framework also points to specific instruments delivering biodiversity benefits: the £100 million Biodiverse Landscapes Fund and the to £100 million of the Blue Planet Fund.

On the international arena, the UK has helped to build coalitions to push ambitions on nature and biodiversity topics. In 2022, the United Kingdom together with Ecuador, Gabon, Maldives jointly launched a call to action asking governments to support ambitious action for nature and endorse a 'Political Vision: A 10 Point Plan for Financing Biodiversity'[26] (Updated 28 December 2023) to support its protection, conservation, restoration, and sustainable use. The plan summarises actions to be taken globally to close the nature finance gap in support of the Kunming-Montreal Global Biodiversity Framework.

The UK, along with the other governments endorsing the plan, commit to align financial systems and their economies with pathways to become nature-positive, as well as climate neutral, resilient and

[23] https://mff.fmo.nl/FbContent.ashx/pub_1001/downloads/v240426092506/Annual_report_2023_MFF.pdf
[24] https://www.gov.uk/government/publications/2030-strategic-framework-for-international-climate-and-nature-action
[25] https://www.gov.uk/guidance/international-climate-finance
[26] https://www.gov.uk/government/publications/political-vision-the-10-point-plan-for-financing-biodiversity/the-10-point-plan-for-financing-biodiversity

less-polluting. The document aims to build high-level political consensus around main issues related to biodiversity finance, therefore it does not include any quantified targets.

More recently at COP16 in Columbia in November 2024, the International Advisory Panel on Biodiversity Credits (co-sponsored by the UK and France) launched its 'Framework for High-Integrity Biodiversity Credit Markets'.

Tools and methodologies

At local level, the Department for Environment, Food and Rural Affairs (Defra) made mandatory in England the biodiversity net gain (BNG) from February 2024[27]. The BNG policy requires all development projects to achieve at least a 10% net gain in biodiversity compared with the state before development. While this policy is not specifically tailored to measure the impact of financial transactions, it can provide a useful methodological basis to quantify the state of biodiversity at a specific point in time and allow comparison with its state at a later stage. For a given habitat, BNG is measured in standardised biodiversity units determined based on the size, quality, location and type of habitat measured. Step by step guidance tailored for developers, land managers and local planning authorities is available and could be used to inspire similar guidance for MFF, fund managers and investees or customers.

[27] https://www.gov.uk/guidance/understanding-biodiversity-net-gain#measuring-biodiversity-

Appendix II: Research Questions

Table 2 Set of research questions and data sources (agreed in the inception report)

Questions	Secondary source	Primary source
Methodological level: 1. How do MDBs and DFIs understand, assess ex ante (criteria)/ex post, and monitor net-positive impacts on biodiversity and communities at investee and fund levels? 2. What are good practices for monitoring biodiversity impact across different goals, business models, and biomes, including methods for baseline assessments? 3. What type of biodiversity databases could enhance the effectiveness of impact measurement?	• Peer analysis • Standards, guidelines • Policies, regulations • Studies, assessments	• Stakeholder interviews* • Workshop
Investment level 4. What are emerging practices, guidance, and ambitions (including of UK government and FMO) related to activities in biodiversity-positive investments or have considerable potential to contribute directly or indirectly to biodiversity? 5. What short-term actions and capacity-building measures are needed at the investment level (i.e. fund managers and projects) to monitor and verify biodiversity impacts and prevent greenwashing?	• Peer analysis • Standards, guidelines • Policies, regulations	• Stakeholder interviews* • Peer interviews • Workshop
Ecosystem level 6. What are relevant definitions of biodiversity, net positive impact, and meaningful contribution for MFF? 7. What activities, sub-sectors and business models are there in MFF and beyond to realize biodiversity-positive results? 8. How can the MFF Technical Assistance strengthen client capacity in biodiversity outcomes?	• Studies, assessments • Reports	• Stakeholder interviews* • Workshop

Appendix III: Desk Review

Table 3 below provides a summary of the main sources used for drafting Sections 2.1 and 2.2. Tables 4, 5, and 6 present a summary of reviewed frameworks, indicators, and tools (respectively) used to measure biodiversity or nature impacts. These are defined as:

- Frameworks are structures describing a process that can be used to demonstrate outcomes. They can use indicators as part of this process of implementation
- Indicators or sets of indicators are quantitative or qualitative factors that can be used to measure achievement, reflect changes, or help assess performance.
- Tools are specific instruments that have been developed for application to a specific context. They typically involve less user discretion on decision-making and are more prescriptive in use than are frameworks.

The detailed findings of the desk research, including the literature review (tab 1) and the frameworks, indicators, and tools review (tab 2) are provided in a full in a separate Excel dashboard.

Table 3 Summary of the dashboard (complete dashboard is provided as a separate Excel).

Source	Document type	Relevance	Contribution to study
World Bank (2024). Note on Nature Finance Tracking Methodology	Standards/ guidance	Finance tracking	- It provides a definition of nature finance distinguishing between nature-positive and nature-mainstreaming finance; ▪ Differs from the definition provided by MDBs (2023), reserving the nature-positive finance term only for investments that aim to deliver measurable positive biodiversity or ecosystem services outcomes; - It further establishes a third category of finance, the nature impact mitigation finance which encompasses the resources used to ensure compliance with safeguards. - It also provides an approach to determine eligibility of financial flows is similar to the one provided by MDBs (2023).
Global Environment Facility (2024). Innovative Finance for Nature and People: Opportunities and Challenges for Biodiversity-Positive Carbon Credits and Nature Certificates	Report/ study (grey)	Financial mechanisms & Business models	- It explores the current landscape, challenges, and opportunities for mobilising financial resources to support biodiversity protection, sustainable use, and restoration in a socially inclusive way; - It focuses on two emerging instruments: biodiversity-positive carbon credits and nature certificates (or biodiversity credits).
		Impact measuring	- It provides an overview of carbon and biodiversity certification standards and how to assess impact of these instruments.
New Forest (2024). Investing in a nature positive future	Report/ study (grey)	Business models	- Provides definitions of nature, biodiversity and nature-positive; - It adds a new perspective to the literature by introducing the concept of "option value" (i.e. the potential for multiple revenue streams from a land-based investment – such as crop and timber sales, carbon and biodiversity credits, and tradable water rights – to increase the overall value of an asset). This approach enhances both diversification of returns and asset value.
European Forest Institute (2024). Sustainable finance	Standard/ guidance	Activities	- The study proposes a list of biodiversity-friendly measures in different forest ecosystems, that can be applied at different management and ecosystem scales (landscape, habitat, species/population, and gene levels.

and forest biodiversity criteria - Scoping for an EU taxonomy	**Forestry specific**	Impact measuring	- It provides guidance for biodiversity-oriented forest management and proposes 26 quantitative indicators with example thresholds, applicable under the EU Taxonomy standard; - It offers an overview of monitoring possibilities for forest biodiversity and discusses compliance issues, considering the variability of forest ecosystems globally and within the EU.
British international investment (2024). Investing for impact in African forestry	Report/ study (grey) **Forestry specific**	Financial mechanisms & Business models	- It introduces sustainable forestry and provides an overview of forestry sector development in Africa; - It also examines how carbon credits will become increasingly important to the economics and impact case of sustainable forestry in Africa; - Briefly introduces the biodiversity credits as a novel financing solution of sustainable forestry in Africa.
MDBs (2023). Common Principles for tracking nature-positive finance	Standards/ guidance	Activities	- It provides a definition of nature-positive finance and relevant activity types; - Defines nature-positive eligibility criteria.
		Finance tracking	- It provides an approach for screening and identifying nature-positive finance, using a combination of a taxonomy and a process-based approach; - Offers overarching principles for tracking nature-positive finance.
IFC (2023). Biodiversity finance reference guide: Building on the green bond principles and green loan principles	Standard/ guidance	Activities	- Provides a taxonomy of biodiversity finance activities split in three categories – i.e. Investments in biodiversity conservation and/or restoration as the primary objective; Investment activities that seek to generate biodiversity co-benefits per sector; Investments in nature-based solutions to conserve, enhance, and restore ecosystems and biodiversity.
UNEP FI (2023). High-level roadmap: Aligning financial flows with the KMGBF	Standard/ guidance	Guidance	- It provides recommendations on integrating biodiversity within financial decision-making by setting a clear and consistent environment to catalyse action; taking action to align public and private financial flows with the KMGBF; and mainstreaming biodiversity through effective engagement.
Finance for Biodiversity Foundation (2023). Unlocking the biodiversity-climate nexus	Report/ study (grey)	Guidance	- It provides five key recommendations to unlock finance for the biodiversity-climate nexus: 1. Finance synergy-generating solutions for the biodiversity and climate nexus and those minimising trade-offs; 2. Identify and prioritise sectors with a high impact on biodiversity and climate; 3. Engage with companies on important nexus topics by leveraging relevant and existing frameworks; 4. Set up sector policies, taking into account synergies and trade-offs between biodiversity and climate; 5. Integrate biodiversity into climate targets, policy and reporting.
		Activities	- It analyses activities that can address the biodiversity-climate nexus, including NbS, agricultural solutions, alternative energy sources, and circular economy solutions. - The report recommends that financial institutions support investments in NbS, as they provide a direct way to exploit the synergies between nature and climate. ▪ It highlights the importance of adopting a "Do No Significant Harm (DNSH)" approach for NbS to avoid negative externalities, including regarding biodiversity.
CPIC (2023). Building a Capital Continuum for Nature-Positive Investments	Standard/ guidance	Guidance	- The report applies the capital continuum framework, which is based on the principle that it is necessary to match appropriate capital at each stage of project development and which addresses the critical gap in early-stage financing for NbS with high positive impact in biodiversity. - The paper highlights the crucial role DFIs can play in addressing this gap and provides recommendations on how they can take actions.
AFD (2022). Nature+ Finance: Principles for tracking biodiversity and nature-positive finance	Standard/ guidance	Activities	- It provides a definition of nature-positive finance and relevant activity types; - Defines nature-positive eligibility criteria.
		Finance tracking	- It provides an approach for screening and quantifying nature-positive finance, using to a coefficient-based approach; - Nature-positive finance flows are reported alongside AFD Group's climate finance, forming the "Planet" dimension of Bank's contribution to the Sustainable Development Goals.

World Business Council for Sustainable Development (2022). Forest Sector Nature-Positive Roadmap	Standard/ guidance **Forestry specific**	Guidance	- This report lays out the building blocks any company in the forest sector needs to implement to contribute to nature; - Building blocks for nature-positive business contribution: Assess & prioritise, Commit, Measure & value, Act, Transform, and Disclose & report. - However, it mentions that nature-positive is a societal goal, which, unlike net-zero in the climate space,, it should not be a company-level goal due the practical difficulties in quantitively demonstrating overall net gain.
		Activities	- It links circular economy to halting nature loss, scaling up the circular bioeconomy through activities in forest production, processing and manufacturing, and downstream; - It also provides examples of forest companies driving system-level transformational change at all stages of the value chain.
WWF (2021). Public development banks and biodiversity How PDBs can align with the Post-2020 Global Biodiversity Framework	Report/ study (grey)	Guidance	- The study provides policy, organisational, and technical recommendations and guidance for PDBs to scale up direct investment in nature conservation and restoration.
		Financial mechanisms & Business models	- It provides descriptions of innovative financing mechanisms for nature (without, however, delving into detailed implementation strategies or addressing challenges).
JNCC (2021). Nature-based solutions Triple win Toolkit	Standard/ guidance	Activities	- It offers NbS principles which describe how an NbS project can contribute to a triple win to enhance biodiversity, address climate change, and reduce povertyin the context of ODA funding; - It further provides recommendations, building upon these principles, for the effective and efficient delivery of NbS; - The toolkit emphasises that enhancing biodiversity should be an explicit objective, equal in importance to tackling climate change and reducing poverty; - It also reviews biodiversity indicators for measuring the impact of NbS interventions on biodiversity at both project and portfolio scales.
Paulson Institute (2020). FINANCING NATURE: Closing the Global Biodiversity Financing Gap	Standard/ guidance	Financial mechanisms & Business models	- The report lays out a list of green finance products and mechanisms, their definitions, challenges and specific dedicated standards/guidelines when existing for: ▪ Green Debt products: green bonds, green loans, Sustainability-Linked Loans, Credit Facilities ▪ Equity products: Private Equity Funds, Public Equity Funds ▪ Other Green Financial Products: Environmental Impact Bonds, Securitization, Structured Notes, ▪ De-risking mechanisms: blended finance, guarantees, insurance

Table 4. Summary of reviewed frameworks used to measure biodiversity or nature impacts (details are presented, in a separate Excel file). Colour code: Green – high relevance to MFF/FMO; Orange – medium; Red - low

Name	Type of instrument	Author / publisher	Scale of application	Brief summary	Relevance for FMO/MFF
Accounting for Nature Framework	Framework	Accounting for Nature (Wentworth Group of Concerned Scientists)	Project, portfolio	Assists entities to develop a verified process for tracking 'nature positive' outcomes at the project level, adapting SEEA environmental accounting principles to the project level. The process would involve defining a set of indicators across an investment portfolio (that can be verified by an expert panel), establish a reference state for the indicators in each bioregion, and establish a process for compiling data prior to commencement and every 5 years thereafter. Developed and applied in terrestrial ecosystems in Australia, but theoretically applicable worldwide.	The framework itself has only been applied in Australia, so may not be perfectly suited to MFF / FMO, although the type of approach could be useful to MFF in developing a rigorous and credible approach to measuring biodiversity positive impacts of investments. It appears to be quite a high resource process to develop and implement, producing detailed outputs, appearing rigorous and tailored to purpose. Aligned with the SEEA, it produces detailed outputs in a 'natural capital acccounting' format that can be third party certified. Depending on cost and resource demands, it may be too detailed for MFF / FMO use (costs were not shared with the project team).
Darwin Initiative	Framework	UK Government	Project level	Designed for a UK Government grant scheme that funds biodiversity investments internationally, it uses a 'Logframe' or logical framework for M&E of Darwin projects. Logical frameworks, commonly known as logframes, are a monitoring tool to measure progress against the Results Chain (Activities -> Outputs -> Outcome -> Impact), comparing planned and actual results using indicators, baselines, and targets.	By proposing a logical framework, each project must progress through the framework and identify tailored outcomes and impacts, with associated indicators. These are then tracked over time. The Darwin Initiative framework itself may not be directly suitable to MFF investments, the logical framework process it proposes could be useful in developing an MFF solution.
Biodiversity Impact Assessment Framework (BIAF)	Framework	The Biodiversity Consultancy, WWF Switzerland	Project, portfolio	Forward-looking framework that is designed to assist investors in understanding the likely biodiversity impacts of their investments. Losses and gains are expressed in terms of biodiversity extent, condition, and significance. Stated intention is to build on the framework to allow for post-investment tracking of biodiversity performance over time.	Currently a forward-looking framework to assess future biodiversity impacts of investments (and thus not usable for tracking the impacts of projects over time), in future it is intended to develop further to track outcomes over time. Once developed to track performance over time, this could potentially be useful for MFF, although it appears quite complicated to implement and does require ecological expertise and a good understanding of the drivers of biodiversity loss and how they relate to both local and global social and economic systems.

Critical Ecosystem Partnership Fund monitoring system	Framework	CEPF (AFD, Conservation International, EU, Fondation Hans Wilsdorf, the Global Environment Facility, the Government of Japan, World Bank)	Project level	Designed by the CEPF for investments it funds, it tracks indicators in four pillars including biodiversity. The 5 biodiversity indicators are relatively simple: Number of hectares of Key Biodiversity Areas (KBA) with improved management, Number of hectares of protected areas created and/or expanded, Number of hectares of production landscapes with strengthened management of biodiversity, Number of protected areas with improved management, Number of globally threatened species benefiting from conservation action.	The five biodiversity indicators are quite high level and may not represent best practice in biodiversity metrics in 2024. Implementation of data collection for the indicators is also simple, mostly being collected once at the end of the project. MFF may prefer a process that identifies a set of indicators specifically tailored to their context and needs that are recognised as best practice, with more frequent data collection to track progress over time
Science-Based Targets for Nature	Framework	Science-based Targets Network (SBTN)	Company level	STBN offers clear, measurable, actionable, and time-bound objectives designed to guide companies and cities in addressing their environmental impacts on biodiversity, land, freshwater, and oceans. The framework provides technical guidance to help organizations assess their environmental footprints, identify priorities, and take effective action. By offering a structured approach (or "guardrails"), SBTN enables stakeholders to ensure that their interventions are timely and appropriately targeted. The SBTN integrates a broader environmental perspective while maintaining global applicability. By linking freshwater, land, biodiversity, and ocean conservation to climate action, the framework ensures a holistic approach to nature conservation. For business to set SBTs for nature, the framework consists of five distinct steps: 1. Assess, 2. Interpret and Prioritise, 3. Measure, Set, & Disclose, 4. Act, and 5. Track.	The SBTN framework primarily focuses on mitigating businesses' negative impacts on biodiversity rather than promoting investments in biodiversity-positive projects, which is the core objective of FMO/MFF. Additionally, SBTN's impact measurement approach is designed to assess a company's overall negative environmental footprint rather than tracking positive biodiversity outcomes. Another limitation is that SBTN's monitoring framework applies to company-wide operations rather than evaluating projects on a case-by-case basis, which is necessary for financial institutions like FMO/MFF that assess the biodiversity impact of individual investments. Furthermore, while SBTN currently provides guidance for companies, its framework does not yet cater specifically to financial institutions, though future developments may address this gap.

Table 5. Summary of reviewed indicators that are used to measure biodiversity or nature impacts (details are presented in a separate Excel file). Colour code: Green – high relevance to MFF/FMO; Orange – medium; Red - low

Name	Type of instrument	Author / publisher	Scale of application	Brief summary	Relevance for FMO/MFF
Biodiversity Finance Metrics for Impact Reporting	Indicators	IFC	Project, portfolio	A supplement that enhances IFC's Biodiversity Finance Reference Guide to include impact reporting metrics for each eligible activity. The guide identifies indicative investment activities and project components eligible for biodiversity finance, and indicative metrics for each eligible biodiversity finance activity identified in the guide. It also offers preliminary considerations on the potential applicability of these metrics to sustainability-linked financing instruments. A Forestry and Plantations component includes 32 metrics and references them against TNFD reporting, Green Bond Principles and Global Biodiversity Framework targets	The 'Forestry and Plantations' section has 6 eligible activities and 32 suggested metrics along with additional information such as the need for baseline data and some metric-specific notes. This resource may be very useful for MFF in establishing relevant indicators, although it is likely that site-specific data collection will be required in relation to those indicators. MFF / FMO could well benefit from engaging with IFC and potentially aligning frameworks
Nature positive initiative Metrics	Indicators	Nature Positive Initiative (African Natural Captial Alliance, Bird Life International, Business for Nature, Campaign for Nature, Capitials Coalition, Conservation International, Global Commons Alliance, Global Reporting Initiative, ICLEI - Local Governments for Sustainability, Indigenous Information Network, InTent, International Union for Conservation of Nature, Nature4Climate, Nature Finance, Nature Positive Universities, Pew, Potsdam Institute for Climate Impact Research, Principles for Responsible Investment, Race To Resilience, Race To Zero, Science Based Targets Network, The Nature Conservancy, Taskforce on Nature-related Financial Disclosures, World Business Council for Sustainable Development, World Commission on Protected Areas, Wildlife Conservation Society, World Resources Institute, World Wide Fund For Nature)	Project, portfolio	An attempt to produce a common and authoritative approach to measure biodiversity positive outcomes. Currently under development, there are 37 short-listed indicators in the terrestrial ecosystem, and 449 indicators in the long list.	Once finalised (it is currently under consultation) it may assist in providing an accepted set of indicators relating to 'nature positive'. Presumably, users will still need to choose a subset of indicators relevant to their context, and measure these in a defensible way over time. Recommended that MFF / FMO follow development of this set of indicators

Biodiversity intactness Index	Indicators	Natural History Museum	Regional	Developed by the Natural History Museum, BII combines field data, satellite imagery, and algorithmic modelling to produce a global map of biodiversity intactness. It infers a baseline of species diversity and abundance from sites that are relatively undisturbed and compares it to areas with significant human activity.	With a regional focus and some recognised technical shortcomings, it does not seem well suited to MFF in accounting for biodiversity impacts of investments at the project level. At the site level, it seems poorly suited to track biodiversity changes over time.
IUCN Species Threat Abatement Restoration (STAR)	Indicators	IUCN	National, regional, sectoral, institutional	A metric that can be used to quantify the expected impact of actions to stemming global species loss, and can be used to calculate national, regional, sector-based, or institution-specific targets. A focus on threatened species and threat abatement, this is a forward-looking indicator.	More suitable to assisting decision-making about the potential of alternative implementation options to reducing threats to key species, than for ex-post assessment of biodiversity impacts of investments at the project level. However, it does produce some biodiversity indicators for threatened species

Table 6. Summary of reviewed tools to measure biodiversity or nature impacts (details are presented in a separate Excel file). Colour code: Green – high relevance to MFF/FMO; Orange – medium; Red - low

Name	Type of instrument	Author / publisher	Scale of application	Brief summary	Relevance for FMO/MFF
ARIES for SEEA	Tool	ARIES (BC3), SEEA (UN)	National, regional	This open source application uses A.I. to produce rapid, standardised, scalable and customizable ecosystem accounts for their area of interest that are consistent with the SEEA Ecosystem Accounting framework. Accounts can be compiled representing extent and condition of ecosystems and the services they provide (in both physical and monetary terms).	Application appears more focused on national and regional scale than smaller project scale, and the dependence on A.I. suggests that supplementary data collection would be required at site level to meaningfully track changes in biodiversity.
Encore	Tool	Global Canopy, UNEP FI, UNEP-WCMC	Portfolio, regional	An online tool that helps financial institutions explore their exposure to nature-related risk and understand their dependencies and impacts on nature. A "Biodiversity Module", which allows users to explore potential alignment of agriculture and mining activities with a nature-positive future.	The Biodiversity Module is most relevant, but without a forestry component it is probably not relevant to the MFF. It is also unclear whether it is applicable at the project level (rather than at a broad portfolio level or regional level).
Global Forest Watch (GFW) map	Tool	WRI	Portfolio	An online platform developed by WRI, which provides data and tools for monitoring forests. It does not appear to directly monitor biodiversity metrics (instead mapping key biodiversity areas, hotspots) and so may be ill-suited to MFF needs.	While relevant to forestry, GFW does not seem to be a tool that FMO could use to track the biodiversity performance of their investments at project or portfolio level. More of a risk management tool which can enable financial institutions monitoring their portfolio's potential negative impacts on forests and biodiversity.

Trends.earth	Tool	trends.earth (Conservation International, Lund University, NASA, Global Environment Facility, University of Bern, University of Colorado, USDA , USAID, University of California - Santa Barbara, University of North Carolina - Wilmington, Brown University)	Project, regional	Free and open source tool that allows users to assess time series data of key indicators of land change to produce maps and other graphics that can support monitoring and reporting, and to track the impact of sustainable land management. It may lack detail at the project level, requiring separate identification of biodiversity indicators and data collection.	The tool seems to focus on land degradation, rather than broader trends in biodiversity. It does not appear to target initiatives at the project level. It does not appear to be a tool that could confidently be applied by MFF to demonstrate biodiversity changes in project sites.
IFC PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Tool	IFC	Project, portfolio levels.	A risk management tool, designed to help organisations manage the environmental and social risks at project level, and applying a mitigation hierarchy of avoid, minimise, restore, offset	As a tool for managing environmental risks, it does not seem perfectly suited for FMO to use to ensure and/or demonstrate biodiversity positive outcomes of their investments. As it is already used by FMO E&S team, it could be built upon as part of a solution for 'nature positive' as has been done by Finnfund.
Local Ecological Footprinting Tool (LEFT)	Tool	University of Oxford	Project, portfolio	For a chosen area, the LEFT tool assembles relevant environmental data from global databases, producing maps displaying a simple index of ecological risk. Maps are produced at 30m resolution, with indicators such as numbers of globally threatened terrestrial vertebrate and plant species, beta-diversity of terrestrial vertebrates and plants, habitat fragmentation, wetland habitat connectivity, numbers of migratory species, and vegetation resilience.	Useful to assemble biodiversity metrics for the local area of an investment, but unclear how well data will update over time post-investment, as it relies on global databases for data outputs. Likely that site-specific data would still need to be gathered to provide a clear idea of biodiversity outcomes at the project level.

Appendix IV: Peers' biodiversity/nature positive approaches

Table 7 Summary of insights from capital providers

Criteria	How are peers positioned?	To what extent are "positive" considerations currently integrated?
Biodiversity strategy / commitments	• The topic of biodiversity is taken into account by all the peers, even if biodiversity is more or less strategic from one player to another • Around half of the peers have a dedicated biodiversity strategy and climate considerations still predominate compared to biodiversity • Biodiversity is often included in a more general E&S and/or climate policies • Most actors with a biodiversity strategy or action plan include the "positive" aspect • Peers who have implemented a biodiversity strategy include the IDB which launched in its Group Natural Capital and Biodiversity Mainstreaming Action Plan in 2024 and Finnfund which launched its Nature and biodiversity statement in August 2024	**Medium**
Biodiversity-related definitions	• The definitions of biodiversity finance / nature finance / nature-positive finance, and the distinction between biodiversity and nature do not seem to be always specified in peers' communications • As mentioned earlier in the study, the Joint MDB Group and the World Bank/IFC have developed their own definitions • The terms "nature (positive) finance" and "biodiversity finance" are sometimes used interchangeably in communications, as the AFD Group explains in one of its main documents • Several peers do not propose any definitions	**Medium**
Biodiversity targets	• Few players have biodiversity objectives, either in terms of impact on biodiversity or in terms of volumes of finance dedicated to biodiversity • Some climate targets integrate NBS has a mean to achieve them • AFD Group has an objective linked to the volume of financing for biodiversity: "build the Group's financial contribution towards biodiversity to reach EUR 1 billion by 2025 and ensure that 30% of the Group's climate finance is nature-positive"	**Low**
Biodiversity impact assessment and monitoring	• Most frameworks in place that refer to biodiversity are more concerned with risks / negative impacts on biodiversity, rather than "net positive". Most peer institutions referred to using the IFC PS 6 framework, which is a risk-assessment framework designed to prevent negative outcomes to biodiversity and other environmental aspects associated with their investments. • Most Institutions also noted a more developed framework for climate reporting than for biodiversity reporting	**Low**

	• All DFI or MDB peers were aware of the drive towards biodiversity positive, all reported efforts underway to develop a biodiversity-positive approaches, but very few have a developed framework in place • IFC seems to be the more advanced as the institution's Biodiversity Finance Reference Guide (which provides a structured approach to identify eligible use of proceeds that constitute biodiversity finance[1]) was supplemented by a Biodiversity Finance Metrics for Impact Reporting in October 2024. This document provides specific metrics for the eligible activities listed in the Guide. • No biodiversity indicators seem to stand out among peers, and the difficulty of defining and monitoring positive impact metrics has been mentioned by the peers • Impact measurements are often project-specific and the tools and methodologies used combine remote sensing and on-site approaches	
Biodiversity instruments / business models	• Even if the (positive) impacts on biodiversity are not always clearly measured, all the players have explored biodiversity-related instruments • These instruments include: o Sustainable forestry funds (% hectares set aside for conservation, FSC practices etc.) o Innovative finance mechanisms such as nature bonds, biodiversity credits, debt-for-nature swaps etc. o Blue bonds and loans • The size of biodiversity projects has been identified as a challenge as many are too small to fit the institutions' investment criteria • Biodiversity credits have been identified as potential opportunities but the size of the market is limited for the moment	**Medium**
Technical assistance for biodiversity	• Numerous players offer technical assistance on biodiversity-related topics or are planning to do so: application of IFC PS 6 requirements, implementation of innovative finance mechanisms, uploading biodiversity data to the Global Biodiversity Information Facility etc. • However, the programs do not necessarily seem to be dedicated to positive impacts	**Low**
Plans for the future	• Biodiversity and the measurement and monitoring of (positive) impacts are a key issue among peers and several initiatives are under development • Finnfund has been developing a biodiversity positive measurement and reporting framework, building on the IFC PS 6. The new framework will also integrate indicators from TNFD, IUCN (impact indicators) combined with a broader process to report net positive outcomes involving the use of specific biodiversity-related metrics. This framework has been developed in 2023 and was being tested in 2024. • A DFI is in the process of developing a comprehensive biodiversity framework, with efforts centered on three pillars: appraisal, tracking, and risk assessment. A co-benefits methodology is being prepared in collaboration with other MDBs to assess and report biodiversity contributions within broader projects, emphasising practicality over standalone biodiversity initiatives.	**High**

	• The initiatives of the MDB working groups should be followed closely: a taxonomy of nature positive activities and a set of indicators for nature (stocktake in harmonising metrics for nature finance) will be launched by COP 30	

[1] https://www.ifc.org/en/insights-reports/2022/biodiversity-finance-reference-guide

Appendix V: Standards used by Investees, Customers, and ecosystem stakeholders

Table 8 Standards used by FMO and MFF customers/investees and peers – interview results

Standard	Description
Forest Stewardship Council (FSC)	Sets standards for responsible forest management, ensuring biodiversity conservation, sustainable harvesting, and the protection of indigenous rights.
Verified Carbon Standard (VCS)	Provides a framework for measuring, monitoring, and verifying carbon reductions or removals, including biodiversity co-benefits.
Rainforest Alliance Sustainable Agriculture Standard	Promotes sustainable farming practices that conserve biodiversity, improve livelihoods, and enhance natural resource management
Gold Standard or Plan Vivo	Certifies projects that deliver social, environmental, and biodiversity benefits, focusing on community-based reforestation and ecosystem restoration.
Marine Stewardship Council (MSC)	The label sets standards for fisheries ensuring that seafood is fished in a sustainable way.
Roundtable for Sustainable Palm Oil Next - (RSPO Next)*	Sets standards that aim at minimising the negative social and environmental impact of companies dedicated to palm oil cultivation.
Aquaculture Stewardship Council (ASC)	Certifies responsibly farmed seafood to ensure a sustainable future for the aquaculture sector.
Programme for the Endorsement of Forest Certification (PEFC)	Promotes sustainable and responsible forest management, tailored to the local and national conditions.
Bonsucro	The label sets standards for sustainable sugarcane (and derivates) production and supply..

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