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Resource mobilization and financial
mechanism: resource mobilization**

Study on the relationship between biodiversity and climate finance**

Note by the Secretariat

Introduction

1. In decision 16/34 the Executive Secretary was requested, subject to the availability of resources, to commission, or undertake, alongside relevant international institutions, studies on: (a) the relationship between debt sustainability and the implementation of the Convention; (b) how the guidance on safeguards in biodiversity finance mechanisms adopted in decisions XII/3 and 14/15 has been implemented, identifying good practices and lessons learned, as well as opportunities for improving implementation of the guidance; and (c) the relationship between biodiversity and climate finance (para. 26 (b)).
2. A study on the relationship between biodiversity and climate finance is provided in the present document. The study has been prepared by an independent consultant who was commissioned by the Secretariat. Notification No. [2026-014](#) was issued on 2 February 2026 to invite peer reviews of an earlier draft. Notification No. [2026-025](#) was issued to extend the deadline for the peer review of the document to 20 May 2006, following a request by the Subsidiary Body on Implementation at its sixth meeting. The present final draft considered all inputs received until this deadline.
3. The document is issued in the form and language in which it was received.

* CBD/COP/17/1/Rev.1.

** The present document is being issued without formal editing.

The Relationship between Biodiversity and Climate Finance

Prepared in response to CBD/COP/DEC/16/34 paragraph 26 (iii)

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Parties: Argentina; Belgium; Brazil; Canada; El Salvador; France; Germany; Japan; Netherlands; Norway; Peru; Russian Federation; Switzerland; United Kingdom.

United Nations and intergovernmental bodies: Organization for Economic Co-operation and Development (OECD); Office of the United Nations High Commissioner for Human Rights (OHCHR); United Nations Development Programme (UNDP); United Nations Environment Programme (UNEP); UN Women.

Observer organizations, networks and academic institutions: Advisory Committee of Subnational Governments; CBD Women's Caucus; CDP; The Common Initiative; Conservation International; Global Youth Biodiversity Network; Greenpeace; GRID-Arendal; ICLEI – Local Governments for Sustainability; International Institute for Environment and Development (IIED); Institutional Investors Group on Climate Change (IIGCC); The Nature Conservancy; Trinity College Dublin; University of Bristol; Utrecht University; World Rural Forum.

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List of Abbreviations

Abbreviation	Definition
ART	Architecture for REDD+ Transactions
ASEAN	Association of Southeast Asian Nations
BCA	Biodiversity Credit Alliance
BER	Biodiversity Expenditure Review
BIOFIN	Biodiversity Finance Initiative (UNDP)
BNG	Biodiversity Net Gain
BZBIC	Belize Blue Investment Company
CAP	Common Agricultural Policy (European Union)
CBAM	Carbon Border Adjustment Mechanism (European Union)
CBD	Convention on Biological Diversity
CBDR-RC	Common But Differentiated Responsibilities and Respective Capabilities
CDM	Clean Development Mechanism
CDP	Carbon Disclosure Project
CDR	Carbon Dioxide Removal
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CFMCA	Coalition of Finance Ministers for Climate Action
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
COP	Conference of the Parties
CRCF	Carbon Removal Certification Framework (European Union)
CRS	Creditor Reporting System (OECD)
CSDDD	Corporate Sustainability Due Diligence Directive (European Union)
CSRD	Corporate Sustainability Reporting Directive (European Union)
DAC	Development Assistance Committee (OECD)
DAE	Direct Access Entity (GCF)
DFC	United States International Development Finance Corporation
DFI	Development Finance Institution
DNSH	Do No Significant Harm
EbA	Ecosystem-based Adaptation
EbM	Ecosystem-based Mitigation
Eco-DRR	Ecosystem-based Disaster Risk Reduction
EFRAG	European Financial Reporting Advisory Group
EHS	Environmentally Harmful Subsidies
EIA	Environmental Impact Assessment
EIB	European Investment Bank
ENCORE	Exploring Natural Capital Opportunities, Risks and Exposure
ES	Executive Summary
ESF	Environmental and Social Framework (World Bank)
ESG	Environmental, Social and Governance
ESMS	Environmental and Social Management System (GCF)
ESRS	European Sustainability Reporting Standards
ESRS E4	ESRS Environment Standard 4 – Biodiversity and Ecosystems
ESVD	Ecosystem Services Valuation Database
EU	European Union
EUDR	European Union Deforestation Regulation
FAO	Food and Agriculture Organization of the United Nations
FfB	Finance for Biodiversity (Foundation)
FNA	Financial Needs Assessment
FPIC	Free, Prior, and Informed Consent

FRLD	Fund for responding to Loss and Damage
GBFF	Global Biodiversity Framework Fund
GCF	Green Climate Fund
GDP	Global Real Gross Domestic Product
GEF	Global Environment Facility
GEO-7	Global Environment Outlook 7 (UNEP)
GHG	Greenhouse Gas
IAPB	International Advisory Panel on Biodiversity Credits
IBRD	International Bank for Reconstruction and Development
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICI	Inclusive Conservation Initiative (GEF)
ICVCM	Integrity Council for the Voluntary Carbon Market
IDB	Inter-American Development Bank
IEO	Independent Evaluation Office (GEF)
IEU	Independent Evaluation Unit (GCF)
IFC	International Finance Corporation
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCA	Indigenous Protected and Conserved Area
IPCC	Intergovernmental Panel on Climate Change
ISSB	International Sustainability Standards Board
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
KMGBF	Kunming-Montreal Global Biodiversity Framework
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LEAF	Lowering Emissions by Accelerating Forest finance (Coalition)
LEAP	Locate, Evaluate, Assess, Prepare (TNFD approach)
LLA	Locally Led Adaptation
mCDR	Marine Carbon Dioxide Removal
MDB	Multilateral Development Bank
MRV	Measurement, Reporting, and Verification
NAP	National Adaptation Plan
NBFPs	National Biodiversity Finance Plans
NbS	Nature-based Solutions
NBSAPs	National Biodiversity Strategies and Action Plans
NCQG	New Collective Quantified Goal
NDCs	Nationally Determined Contributions
NELD	Non-Economic Loss and Damage
NGFS	Network for Greening the Financial System
ODA	Official Development Assistance
ODF	Official Development Finance
OECD	Organisation for Economic Co-operation and Development
OECMs	Other Effective Area-based Conservation Measures
OHCHR	Office of the United Nations High Commissioner for Human Rights
PINE	Policy Instruments for the Environment (OECD database)
QU.A.L.ITY	Quantification, Additionality, Long-term storage and Sustainability (EU CRCF criteria)

REDD+	Reducing Emissions from Deforestation and Forest Degradation
SBI	Subsidiary Body on Implementation
SBM	Supervisory Body Mechanism (Article 6.4)
SCCF	Special Climate Change Fund
SDG	Sustainable Development Goal
SDR	Sustainability Disclosure Requirements (United Kingdom)
SD Tool	Sustainable Development Tool (Article 6.4)
SEEA	System of Environmental-Economic Accounting
SFDR	Sustainable Finance Disclosure Regulation (European Union)
SFN	State of Finance for Nature (UNEP)
SGP	Small Grants Programme (GEF)
SIS	Safeguards Information System (UNFCCC)
SOE	State-Owned Enterprise
STAP	Scientific and Technical Advisory Panel (GEF)
TCFD	Task Force on Climate-related Financial Disclosures
TFFF	Tropical Forest Forever Facility
TNC	The Nature Conservancy
TNFD	Taskforce on Nature-related Financial Disclosures
TOSSD	Total Official Support for Sustainable Development
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNEA	United Nations Environment Assembly
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNEP FI	United Nations Environment Programme Finance Initiative
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
USD	United States Dollar
VCMI	Voluntary Carbon Markets Integrity Initiative
VOC	Volatile Organic Compound
WEF	World Economic Forum
WRI	World Resources Institute
WTO	World Trade Organization
WWF	World Wide Fund for Nature

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Executive Summary

ES.1 Introduction and Mandate

The Kunming-Montreal Global Biodiversity Framework (KMGBF), adopted in December 2022, sets targets to halt and reverse biodiversity loss by 2030. The Convention pursues three primary objectives: conservation of biological diversity, sustainable use, and equitable benefit-sharing. COP16 adopted Decision 16/34 on Resource Mobilization in February 2025, establishing *a strategy for resource mobilization for the period 2025–2030*.

Decision 16/34, Section III “Objectives and Actions,” establishes three objective areas for both international and domestic resource mobilization:

- (1) New and additional resources
- (2) Identification and elimination, phasing out or reform of financial flows causing harm to biodiversity
- (3) Enhancement of uptake, accessibility, effectiveness, efficiency, transparency and accountability in resource provision and use

This study examines how financial flows can align so that expanded climate finance serves biodiversity conservation during 2026–2030, focusing on four central KMGBF targets:

- Target 14 (public and private flows progressively aligned with biodiversity),
- Target 15 (businesses and institutions monitoring and disclosing biodiversity risks and impacts),
- Target 18 (eliminating, phasing out or reforming harmful subsidies, reducing them by USD 500 billion per year by 2030), and
- Target 19 (mobilizing USD 200 billion per year by 2030 from all sources, with Target 19a requiring USD 20–30 billion in official development finance).

Three thematic areas structure the analysis: (a) scaling finance delivering measurable biodiversity outcomes, (b) managing biodiversity trade-offs from climate finance, and (c) establishing transparent accountability.

Analytical Framework. This assessment employs two complementary analytical frameworks. Chapters 2–4 analyze documented finance relationships using three finance categories: (1) synergistic finance, where biodiversity conservation and climate objectives advance together; (2) trade-off finance, where climate objectives are pursued at cost of biodiversity; and (3) isolated finance, where finance addresses one objective without systematic attention to interconnections. This typology describes how finance functions and where risks and opportunities lie. Based on this evidence, Chapter 5 and this Executive Summary formulate recommendations structured around three thematic areas aligned with Decision 16/34 Objective and Action groups resource mobilization: (a) capitalizing on emerging opportunities, (b) integrating biodiversity into climate finance mechanisms, and (c) enhancing transparency and accountability. This distinction ensures that evidence assessment (organized by finance outcomes) and policy recommendations (organized by action type) remain analytically clear whilst serving the CBD’s focus on actionable pathways for Parties.

ES.2 Analytical Findings: Finance Relationships between Climate and Biodiversity Finance and Outcomes

Finance flows relate to biodiversity through three documented categories. Synergistic finance advances biodiversity and climate objectives simultaneously – ecosystem-based adaptation, nature-based solutions, REDD+ and forest restoration exemplify cases where biodiversity and climate benefits co-occur. High-integrity NbS, explicitly designed and safeguarded to deliver measurable biodiversity outcomes, require deliberate design, safeguards and monitoring; biodiversity benefit is not automatic. Trade-off finance advances climate objectives whilst degrading biodiversity – monoculture afforestation, unscreened renewable energy, and large hydropower exemplify cases where climate objectives are met alongside ecosystem or species harm. Isolated finance addresses one objective without interconnections. The Convention mandates conserving biodiversity extent, condition, and resilience, implying improvements in areas under conservation, species composition and habitat quality, and adaptive capacity to withstand stress.

Finance Gaps and Drivers. Tracked biodiversity finance was estimated at approximately USD 124–143 billion – the most recent comprehensive global estimate, dating to 2019 – representing an estimated 14–20 percent of estimated USD 700–900 billion annual need (Deutz et al., 2020). Biodiversity-specific official development finance reached USD 16.8 billion in 2023, 16 percent below Target 19a’s 2025 milestone of USD 20 billion (OECD, 2025a). Active disinvestment vastly exceeds conservation investment: environmentally harmful subsidies totaled USD 2.4 trillion in 2023; private nature-degrading capital totaled USD 4.9 trillion. Together, nature-negative finance totaled USD 7.3 trillion, compared to just USD 220 billion invested in nature-based solutions that year – a 30:1 ratio of harmful to beneficial flows, reflecting structural misalignment (UNEP, 2026). Agricultural land-use change is responsible for over 80 percent of terrestrial biodiversity loss (Newbold et al., 2016), with harmful subsidies among the key financial drivers incentivizing this expansion, making their reform foundational to both Target 18 and Target 19.

Table ES.1: Biodiversity Finance Status

Finance Stream	Current	Target	Gap	Primary Driver
Biodiversity finance (all sources)	USD 124–143 B/year	USD 700–900 B/year	USD 560–780 B/year ¹	Nature-negative flows (USD 7.3T)
Biodiversity finance (international ODF)	USD 16.8 B (2023)	USD 20–30 B (2025–2030)	USD 3.2 B short of 2025 target ²	Budget constraints
Environmentally harmful subsidies (public)	USD 2.4 T ³	Reduce by USD 500 B/year	USD 1.9 T remains	Political economy barriers
Private nature-degrading capital	USD 4.9 T ⁴	No KMGBF-specific target	—	Absence of disclosure/regulatory requirements

¹ Deutz et al., 2020 (2019 estimate)

² OECD, 2025a

³ UNEP, 2026

⁴ UNEP, 2026

Target 18: Subsidy Reform Pathways. Target 18 addresses harmful incentives with a reduction goal of USD 500 billion per year by 2030. Agricultural and fisheries subsidy reform has direct biodiversity implications because current structures incentivize practices that are contrary to conservation. Successful implementation requires four elements: comprehensive inventories, political mandates with time-bound goals, structured stakeholder processes, and explicit linkages to positive incentives. Implementation status (September 2025): nineteen countries completed assessments; 106 additional countries are planning. The OECD records 869 biodiversity-positive incentives globally, including 227 biodiversity-positive taxes generating USD 10.9 billion annually. The binding constraint is political mandate durability, not method availability.

Table ES.2: Nature-Negative vs. Nature-Positive Incentive Pathways

Nature-negative incentives (current)	Nature-positive incentives (reform)
Monoculture expansion	Crop and livestock diversification
Pesticide intensification	Organic and regenerative agriculture
Wetland drainage	Wetland and riparian restoration
Overfishing and stock depletion	Sustainable fisheries management
Habitat connectivity loss	Indigenous peoples and local communities-led conservation

Target 19: Finance Mobilization and NCQG Alignment. Target 19 requires mobilizing USD 200 billion per year by 2030 from all sources. The New Collective Quantified Goal (NCQG) sets a USD 300 billion-per-year target for developing-country climate action by 2035, with an aspirational call for USD 1.3 trillion. NCQG targets 2035 and focuses on developed-country commitments; Target 19 targets 2030 and requires mobilization from all sources. These are distinct instruments with different timescales and responsibility structures. If biodiversity criteria are integrated into NCQG operationalization, climate finance could advance conservation through ecosystem-based adaptation, NbS, and REDD+. Without integration, climate finance risks reinforcing nature-negative investment. A critical safeguard: finance serving both objectives should not be double counted.

Scaling up international climate finance (NCQG) offers opportunities to enhance biodiversity synergies and manage trade-off risks, if safeguards are embedded from the outset. Separately, domestic fiscal reform – inventorying and reforming harmful subsidies, green budgeting, sectoral mainstreaming – operates within each country's policy space and represents complementary leverage for alignment. Progress toward integrated outcomes requires action in both dimensions.

Conservation Led by Indigenous Peoples and Local Communities and the Associated Finance Gaps. indigenous peoples and local communities steward approximately 80 percent of remaining terrestrial biodiversity. Only 6 percent of bilateral biodiversity finance directly reached Indigenous Peoples and Local Communities in 2022, despite documented cost-effectiveness and durability. This gap reflects limited access to mechanisms and underrepresentation in decision-making. Scaling access for indigenous peoples and local communities through options such as dedicated grant windows, capacity building, land-rights recognition, benefit-sharing mechanisms, and grievance processes is documented as a pathway to increase conservation effectiveness and advance equity. Three interdependent pathways address the finance gap: Target 18 subsidy reform, Target 19 resource mobilization, and conservation led by indigenous peoples and local communities. Partial action alone leaves gaps unaddressed.

ES.3. Analytical Findings: Managing Biodiversity Trade-offs

Climate finance is scaling from USD 136.7 billion (2024) to USD 300 billion annually, creating both opportunities and risks. Integration of biodiversity criteria could advance conservation; absence creates trade-off risks. Documented trade-off pathways include monoculture afforestation in biodiverse ecosystems, large hydropower on biodiverse rivers, biofuel expansion that pressures native ecosystems, unscreened renewable energy, and unverified carbon offsets. Current asymmetry in flows: biodiversity finance directed to climate reached 84 percent (2015–2023); climate finance directed to biodiversity reached 20–22 percent. This reflects institutional separation – NDCs and NBSAPs develop through separate channels, with no systematic integration of biodiversity into the climate finance architecture.

Safeguard and Integration Pathways. Multiple pathways for managing trade-offs are documented. FPIC protocols, implemented by multilateral institutions and bilateral donors, demonstrate feasibility when conducted in indigenous languages with a genuine right to withhold consent; this improves outcomes and respects rights. Biodiversity baselines and monitoring standards developed by MDBs establish feasibility of systematic assessment, though consistency varies. Customary and Indigenous land-rights protections improve conservation effectiveness and community acceptance. Emerging benefit-sharing and grievance mechanisms demonstrate transparency; implementation varies by context. Some countries have begun harmonizing climate and biodiversity planning through integrated baselines and unified screening. Options include integrated NDC-NBSAP strategies measuring both emissions and ecosystem metrics, dual-objective targets, unified screening of large-scale public finance for biodiversity impacts, and harmonized reporting to UNFCCC and CBD. Implementation timelines and effectiveness depend on existing institutional coordination and technical capacity.

ES.4: Analytical Findings: Transparency and Accountability

Climate and biodiversity finance operate through separate systems, creating three documented gaps: no standardized mechanism to prevent double-counting of dual-benefit investments, biodiversity outcomes not routinely measured in climate finance systems, and domestic mobilization largely untracked globally. Several nature-related instruments have matured in parallel but serve distinct functions: TNFD provides voluntary corporate risk-disclosure recommendations (733 organizations, USD 22.4 trillion in assets under management), ESRS mandates EU corporate sustainability disclosure, sustainable finance taxonomies classify which investments qualify as environmentally sustainable, and MDB safeguards govern environmental and social risk management at the project level. Because these instruments were designed for different purposes, they do not currently produce a comparable, aggregable measure of biodiversity finance. Closer alignment on a shared set of core biodiversity metrics (ecosystem extent, condition, resilience) across these instruments could improve data comparability over time and reduce the reporting burden on financial institutions subject to multiple frameworks, without requiring full convergence into a single tracking system.

When investments serve both climate and biodiversity objectives, the same project risks inflating reported progress in both systems. A USD 100M project delivering 30% climate and 70% biodiversity benefits should allocate USD 30M and USD 70M, respectively. The literature identifies coordinated options – separate baselines with independent databases, allocation rules defining investment shares across mitigation, adaptation, biodiversity conservation, and ecosystem restoration, verification standards requiring independent confirmation of both outcomes, and compatible reporting templates that allow dual-benefit projects to be tracked with transparent allocation percentages. These approaches are documented but operationalized

inconsistently across systems; no universal joint UNFCCC-CBD mechanism currently prevents double-counting.

Priority areas for progress during 2026–2030, subject to national circumstances and capacity, include: integrating biodiversity safeguards (FPIC, baselines, monitoring) into NCQG operationalization; accelerating Target 18 subsidy reform assessments and phase-out pathways; harmonizing NDC-NBSAP finance strategies nationally; scaling direct access for indigenous peoples and local communities through dedicated grant windows; standardizing biodiversity metrics across climate and biodiversity systems; integrating biodiversity outcome reporting into UNFCCC frameworks; and harmonizing corporate nature disclosure standards. Progress in one area supports progress in others; gaps affect the effectiveness of all.

ES.5: Conclusions

Chapters 2–4 analyze documented finance relationships using three categories: synergistic cases where biodiversity and climate objectives advance together, trade-off cases where climate finance risks undermining biodiversity, and isolated cases where finance addresses objectives separately. Based on this evidence assessment, this section formulates recommendations organized around three thematic areas on optimizing co-benefits and synergies: capitalizing on emerging opportunities, integrating biodiversity into climate finance mechanisms, and enhancing transparency and accountability. This structure ensures recommendations are grounded in the evidence whilst providing for actionable pathways for Parties during 2026–2030.

Current biodiversity finance (USD 124–143 billion annually) falls short of need (USD 700–900 billion). Active subsidization of nature-degrading activities (USD 7.3 trillion) represents the largest diversion of conservation finance. NCQG expansion (USD 300–1,300 billion by 2035) creates opportunity if aligned with biodiversity, but risks reinforcing trade-offs without deliberate safeguards.

Three interdependent pathways could contribute to closing the biodiversity finance gap during 2026–2030.

- First: Scaling synergistic finance through Target 18 subsidy reform, Target 19 mobilization, and indigenous peoples and local communities-led conservation.
- Second: Managing trade-offs through embedding safeguards in project design, harmonizing national strategies, and measuring ecosystem outcomes.
- Third: Establishing accountability through standardizing metrics, integrating biodiversity into climate finance transparency, preventing double-counting, and strengthening corporate disclosure. Target 18 (subsidy reform) and Target 19 (finance mobilization) address finance gaps through distinct fiscal mechanisms and should proceed simultaneously for maximum effect.

Institutional Readiness (2026–2030). The international architecture for implementation is largely in place, though Parties’ own reporting suggests this has not yet translated into adequate capacity on the ground. Additional finance could be made available through USD 7.3T in potentially redirectable subsidies and USD 300–1,300B in climate finance; early indications are that reform pathways may be feasible (19 countries completing assessments; 106+ planning; 869 biodiversity-positive incentives operating globally). At the same time, national reporting under the Convention consistently identifies inadequate financial, human and technical resources as a leading obstacle to implementation, particularly for Targets 18 and 19 (Secretariat of the Convention on Biological Diversity [SCBD], 2026a). Documented constraints include

harmonization gaps, inconsistent safeguard implementation, limited direct access for indigenous peoples and local communities (6% of bilateral finance), supply-chain disclosure gaps, and lack of joint UNFCCC-CBD mechanisms.

Seven Areas for Consideration. Chapter 5.3 identifies seven areas meriting consideration during 2026–2030, organized by three thematic areas addressing documented misalignments between finance flows and biodiversity outcomes.

Thematic area (a): Capitalizing on Emerging Opportunities.

- Area 1 addresses synergy between biodiversity, climate, and development finance through embedding biodiversity objectives into climate finance architecture and MDB strategies, influencing how expanded climate finance (NCQG) contributes to Targets 18 and 19. Demonstrating biodiversity co-benefits for climate outcomes offers mutual gains on equal footing, consistent with Paris Agreement Article 5.1.

Thematic area (b): Integrating Biodiversity into Climate Finance.

- Area 2 supports Target 18 implementation through inventories, green-budgeting tools and structured reform to reduce harmful incentives and repurpose fiscal space, linking subsidy reform to NbS investment, just-transition measures, and indigenous peoples and local communities-led conservation.
- Area 3 aligns public finance flows with nature-positive pathways through green budgeting, DNSH principles and nature-positive screening of public budgets and development finance; design principles can be adapted to private finance and blended instruments.
- Area 4 establishes quality standards and safeguards for climate-related instruments by strengthening safeguards in carbon markets, renewable energy and adaptation to prevent trade-off finance; high-integrity NbS meeting recognized standards prevent trade-offs, whilst poorly sited renewables and grey infrastructure undermine ecological integrity.
- Area 5 advances transparency and nature-related disclosure frameworks through convergence around core climate-biodiversity indicators; TNFD's 733 organizations demonstrate adoption trajectory despite less than 1% company disclosure of biodiversity impacts.
- Area 6 scales access mechanisms for indigenous peoples and local communities by ensuring the indigenous peoples and local communities hold genuine governance authority – design leadership, budget control and monitoring oversight – not just implementation roles; tenure security, FPIC and benefit-sharing are essential safeguards for durable outcomes.

Thematic area (c): Enhancing Transparency.

- Area 7 integrates biodiversity into loss and damage governance and finance by recognizing non-economic dimensions (cultural, spiritual, linguistic) of ecosystem loss alongside economic losses; integrating biodiversity safeguards and nature-based recovery into loss and damage instruments, prioritizing natural buffers over grey infrastructure, addresses interconnected economic and non-economic dimensions of ecosystem collapse.

Cross-convention collaboration may strengthen implementation. Options include (1) extending climate-biodiversity finance working groups to strengthen coherence between NCQG and Target 19 monitoring; (2) coordinating guidance on NbS quality criteria, safeguards and the rights of

indigenous peoples and local communities, building on the CBD Secretariat's peer review and complementary frameworks; and (3) strengthening interoperable corporate disclosure regimes to reduce reporting friction and accelerate nature-positive capital allocation.

Should successor global sustainable development goals be developed, KMGBF implementation offers three lessons:

- (1) Rights-based approaches led by indigenous peoples, local communities and family farmers should be a core principle, recognizing them as rights-holders and key stewards, with explicit indicators on tenure security, FPIC implementation, and finance reaching organizations they lead.
- (2) Hard-wiring nature into macroeconomic goals, recognizing biodiversity and ecosystem integrity as foundational to poverty reduction, food security and economic stability, with explicit targets aligning finance with nature-positive pathways and subsidy reform.
- (3) Integrating finance architecture with safeguards against double-counting, including specific targets on climate-biodiversity finance volumes, quality and alignment, with clear methodological guidance preventing double-counting of dual-benefit flows. Future frameworks could treat climate, biodiversity, pollution and finance as interconnected dimensions of a single safe and just operating space.

Chapter 1: Introduction, Mandate, and Analytical Framework

The Kunming-Montreal Global Biodiversity Framework (KMGBF), adopted at the 15th Conference of the Parties (COP-15) in December 2022, established ambitious targets for biodiversity conservation and sustainable use, including comprehensive resource mobilization targets (CBD, 2022). Target 19 of the Framework calls for substantially increasing financial resources from all sources – domestic and international, public and private – to at least USD 200 billion per year by 2030, with at least USD 30 billion per year in international flows from developed to developing countries by 2030. Target 18 addresses the elimination and reform of harmful subsidies and incentives (CBD).

Despite these commitments, a substantial biodiversity finance gap persists. Annual biodiversity financing from tracked sources was estimated at approximately USD 124–143 billion – the most recent comprehensive global estimate, dating to 2019 – while the estimated need reaches USD 700–900 billion annually (Deutz et al., 2020). This gap is particularly acute in developing countries, where capacity constraints limit domestic resource mobilization and international support remains inadequate.

Simultaneously, climate finance has expanded significantly under the Paris Agreement and the New Collective Quantified Goal (NCQG), creating unprecedented opportunities to align climate and biodiversity finance mechanisms. However, climate finance also carries risks: poorly designed or sited renewable energy projects, large-scale agriculture-for-biofuel initiatives, and carbon offset schemes can generate trade-offs that undermine biodiversity objectives. The nexus between climate and biodiversity finance thus presents both opportunities for scaling and risks to manage.

In response to these challenges, the CBD Conference of the Parties adopted Decision 16/34 on Resource Mobilization in February 2025 at the 16th Conference of Parties (CBD, 2025, COP Decision 16/34). The Decision mandates the development of a Strategy for Resource Mobilization for the period 2025–2030 and commissions three technical studies to inform its implementation. This assessment is one of those three studies.

1.1. Study Mandate and Context

Decision 16/34 requested the Executive Secretary to commission, or undertake, alongside relevant international institutions, a study on the relationship between biodiversity and climate finance [CBD, 2022, Decision 16/34, para. 26(b)]. In response, this assessment examines how the emerging climate-finance architecture under the Paris Agreement – including the NCQG – may help close the biodiversity finance gap and advance the Kunming-Montreal Global Biodiversity Framework, and identifies concrete areas that may inform future discussions over 2026–2030 (CBD, 2022; UNFCCC, 2024b, 2025). While climate finance could in principle relate to a wide range of KMGBF targets, this study concentrates its analysis on Targets 14, 15, 18 and 19, which most directly engage the resource-mobilization, mainstreaming and transparency dimensions of the biodiversity-climate finance relationship; linkages to other targets (2, 7, 8, 11, 12, 20) are noted where relevant but not analyzed systematically. Consistent with the Executive Summary's framing, Targets 18 and 19 function as the direct capital levers examined throughout (Sections 3.1, 5.2), Targets 14 and 15 as the systemic governance embedding those flows into public and private decision-making (Sections 4.1, 4.2), and Target 12 – urban green/blue infrastructure – as a brief, contextual touchpoint within infrastructure-

related discussion (Section 3.3), given its more peripheral relevance to the study’s macro-finance focus.

Scope and Purpose. This study gives Parties a current technical assessment of biodiversity-climate finance alignment, focused on recent evidence and institutional practice and on how the NCQG and Resource Mobilization Strategy may affect the resource-mobilization, mainstreaming and transparency dimensions of the KMGBF over 2026–2030. “Alignment” is used throughout in a descriptive sense – the degree to which finance flows and biodiversity outcomes move in a consistent direction – rather than to imply a specific governance mechanism, conditionality, or preferred term; some Parties prefer “coherence” to describe the same underlying relationship, and this study does not take a position between the two. It synthesizes existing high-quality assessments rather than developing new frameworks or primary datasets, offering a non-prescriptive roadmap reflecting differing national capacities. All options identified are possible avenues for Parties’ consideration, not prescriptions Parties are expected to adopt. While framed primarily in technical and financial terms, the underlying objective – closing the biodiversity finance gap – is inseparable from human well-being, food security, livelihoods, and the rights of indigenous peoples and local communities, which are addressed throughout, particularly in Sections 2.5, 3.4, and 4.4.

The study is anchored in several KMGBF targets defining the current resource-mobilization landscape (CBD, 2022). **Target 19 anchors financial ambition**, aiming to mobilize at least USD 200 billion per year by 2030 from all sources, including sub-target 19a, which aims to increase international flows from developed to developing countries to at least USD 20 billion per year by 2025 and USD 30 billion by 2030 (CBD, 2022). This assessment focuses primarily on 19a, the most readily quantifiable sub-target, while also drawing on 19e – optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises – given its direct relevance throughout.

Target 14 focuses on integrating biodiversity values across government and economic sectors, progressively aligning planning and financial flows with the Framework’s goals (CBD, 2022). Target 15 calls on Parties to enable and encourage businesses and financial institutions to monitor, assess and disclose their biodiversity-related risks, dependencies and impacts (CBD, 2022); this study treats Target 15 as anchoring its transparency-related discussion in private-sector accountability, corporate value-chain risk tracking, and double-materiality disclosure frameworks such as TNFD and the EU’s CSRD/ESRS E4 (Section 4.1).

Target 18 addresses identifying and eliminating, phasing out, or reforming incentives, including subsidies, that are harmful to biodiversity – the agreed KMGBF formulation – in a proportionate, just, effective, and equitable way, reducing them by at least USD 500 billion per year by 2030 while scaling up positive incentives (CBD, 2022). This study uses “environmentally harmful subsidies” as shorthand for this category of public and fiscal support – direct payments, tax expenditures, price supports – for activities in fossil fuels, agriculture, fisheries and water use whose net effect degrades biodiversity or ecosystem function; “EHS” is used only as shorthand after this definition and is not a substitute for the agreed Target 18 language. Section 3.1 and Table 3.1 detail their sectoral composition. Because Target 18 addresses reform of harmful incentives rather than new conservation finance, it is a distinct, complementary fiscal lever to Target 19: this assessment treats subsidy reduction as fiscal reallocation – redirecting existing harmful spending – analytically distinct from, and not a substitute for, the net new resource mobilization sought under Target 19 and the NCQG; both are necessary but non-fungible (Section 5.2).

Subsidy reform under Target 18 proceeds within Parties’ own policy space; relevant WTO agreements – particularly the Agreement on Subsidies and Countervailing Measures, the Agreement on Agriculture, and the Agreement on Fisheries Subsidies – form part of the broader trade context for some Parties’ reforms and define permitted and prohibited subsidy categories under those Parties’ existing trade commitments. This study references these WTO agreements factually as relevant context, without asserting a legal subordination of CBD-related subsidy-reform recommendations under Target 18 to WTO disciplines, which remains for Parties to determine (Section 4.2).

These targets frame a single resource-mobilization challenge: closing the biodiversity finance gap by shifting the scale, composition and alignment of finance, summarized in Table 1.1 (CBD, 2022; Deutz et al., 2020), which together frame the study’s central question – how climate-finance scale-up can help close the biodiversity finance gap while ensuring climate-related actions avoid or minimize adverse biodiversity impacts (CBD, 2022; UNFCCC, 2024b; UNEP, 2026; NGFS, 2023a).

Table 1.1: Key Global Finance Benchmarks Relevant to Biodiversity-climate Alignment

Benchmark	Target/Value	Source
BIODIVERSITY (KMGBF)		
Target 19 total	USD 200 billion/year by 2030	CBD, 2022
Target 19a (international to developing countries)	USD 20B by 2025; USD 30B by 2030	CBD, 2022
Current progress (2023)	USD 16.8B (biodiversity-specific) ^[5]	OECD, 2025a
Target 18 (reduce harmful subsidies)	USD 500 billion/year by 2030	CBD, 2022
Finance gap (annual shortfall)	~USD 700–900 billion/year ^[6]	Deutz et al., 2020
CLIMATE FINANCE		
USD 100 billion goal (legacy)	USD 136.7B/year (2024, exceeded) ^[7]	OECD, 2026a
NCQG (new goal)	USD 300 billion/year by 2035	UNFCCC, 2024
Aspirational pathway	USD 1.3 trillion/year by 2035 ^[8]	Baku-Belém Roadmap, 2025
NATURE-BASED SOLUTIONS (NbS)		
Current finance (2023)	USD 220 billion/year	UNEP, 2026

⁵ Biodiversity finance progress: KMGBF Target 19a requires USD 20 billion to developing countries by 2025. As of 2023, biodiversity-specific ODA reached USD 16.8 billion – a shortfall of 16 percent, though up from USD 15.4 billion in 2022. Under the broader biodiversity-related accounting method, multilateral development banks narrowly overtook bilateral donors as the largest source of finance in 2023 (USD 13.9 billion vs. USD 13.6 billion) – though bilateral finance remains larger under the narrower biodiversity-specific method used above (USD 7.9 billion vs. USD 7.2 billion). Only 6 percent targeted Indigenous Peoples and Local Communities (OECD, 2024a, 2025a).

⁶ Finance gap estimate: The USD 700–900 billion annual shortfall range (Deutz et al., 2020) is an illustrative order-of-magnitude figure, sensitive to how “biodiversity finance” is defined and baseline assumptions on ecosystem costs. Narrower OECD estimates (2020) put total biodiversity finance at USD 78–91 billion/year.

⁷ Climate finance scaling: The predecessor USD 100 billion annual goal (2013–2024) has been exceeded for three consecutive years. The new NCQG goal (USD 300B by 2035) scales climate finance targets significantly higher than biodiversity targets, illustrating a persistent funding disparity.

⁸ Aspirational targets: The Baku-Belém Roadmap (UNFCCC, 2025a) is a non-binding technical report, not an adopted CMA decision. It outlines pathways but provides no guarantee.

Estimated needs (2030/2050)	USD 571B/year / USD 771B/year	UNEP, 2026
HARMFUL SUBSIDIES		
Current flows (2023)	USD 7.3 trillion/year ^[9]	UNEP, 2026

Parties are to submit seventh national reports, and reports under the Protocols, by 28 February 2026, feeding into the first global review of collective KMGBF implementation progress at COP17 in 2026, with a subsequent review at COP19 in 2030 (SCBD, 2025a). In parallel, at CMA-6 in Baku in November 2024, Parties adopted the NCQG, under which developed country Parties are to take the lead, progressively scaling up mobilization from 2025, in reaching at least USD 300 billion per year by 2035, from a wide variety of sources – public and private, bilateral and multilateral, including alternative sources (UNFCCC, 2024b, Decision 1/CMA.6, para. 8(a)). This goal is not limited to public and bilateral flows; this assessment refers to it as the “NCQG goal” rather than a “minimum floor” to avoid implying a guaranteed or exclusively public funding stream. Building on this, the COP29 and COP30 Presidencies produced the Baku to Belém Roadmap to 1.3T, a non-binding technical report – not a formally adopted CMA decision – outlining possible pathways to scale up climate finance from all public and private sources to USD 1.3 trillion per year by 2035 (UNFCCC, 2025a). COP-30 decisions in Belém strengthened guidance on forests, adaptation, and climate-finance institutions (UNFCCC, 2024b, 2025).

Recent trends confirm a constrained, volatile macro-financial environment, creating at least four structural constraints:

- **Official development assistance (ODA) from OECD countries has contracted sharply.** Official development assistance (ODA) from OECD countries has contracted sharply. ODA fell 23.1% to USD 174.3 billion – the largest recorded annual drop. This follows a 6.1% decline in 2024, bringing ODA to 4.2 percent below 2019 levels in real terms (OECD, 2026b). The composition of aid has shifted significantly within bilateral channels. Grants fell by 29.1%, while loans fell by only 10.3%, indicating a shift away from non-repayable assistance. Core contributions to the UN system fell by 27% – the largest annual drop on record (OECD, 2026b). The geographic impact has been concentrated among the world's poorest countries. Least-developed countries received 25.8% less aid; global aid to sub-Saharan Africa fell 26.3%. Moreover, the OECD projects a further 5.8% decline in 2026 (OECD, 2026b).

This directly tightens fiscal space for environmental investment in low-income, nature-dependent countries precisely when needs are rising (UNCTAD, 2025a). While biodiversity finance draws on diverse instruments beyond ODA, these trends reinforce the case for reallocating harmful flows and improving the quality of existing finance rather than seeking expansion alone (UNEP, 2023; OECD, 2025b).

- **Rising Debt Burdens.** Governments facing high sovereign debt increasingly rely on loans rather than grants for climate and biodiversity investment (UNCTAD, 2025a). This constrains their ability to allocate domestic resources to nature-positive spending. Debt-for-nature swaps and debt-linked conservation instruments are expanding as tools to address this constraint (TNC, 2021; OECD, 2024a). However, these instruments remain

⁹ Harmful subsidies: Public environmentally harmful subsidies account for USD 2.4 trillion/year; private nature-negative finance USD 4.9 trillion/year (2023). Estimates range USD 2.6–7 trillion/year depending on methodology (UNEP, 2026; IMF, 2023).

contested by civil society organizations, with some advocating their rejection (CFFA-CAPE et al., 2023).

- **Shifting Donor Priorities.** Defence spending and domestic commitments in several donor countries are reducing budgetary room for international environment and development finance (OECD, 2026b). This is consistent with the historic ODA contraction documented above. The policy response increasingly emphasizes systematic alignment of climate and biodiversity finance rather than expansion in parallel tracks (UNEP, 2025; OECD, 2025b).
- **Contested multilateralism and governance transitions.** Recent geopolitical developments create significant uncertainty about the future scale and predictability of multilateral finance, affecting burden-sharing, the stability of long-term support, and patterns of international cooperation (UNCTAD, 2025a). Changes in multilateral participation increase transaction costs for future diplomacy, create institutional vacancies, and risk undermining scientific cooperation and deepening North-South divides in climate and nature negotiations.

Several analyses accordingly emphasize aligning remaining and emerging finance flows with nature-positive objectives, backed by strong safeguards, transparency frameworks, and standards that maintain investment confidence under geopolitical uncertainty (UNEP, 2023; TNFD, 2023).

Notwithstanding these institutional goals, technical assessments indicate a significant biodiversity finance gap of approximately USD 700 billion per year, sensitive to definitional and methodological choices, as noted above (Deutz et al., 2020; OECD, 2020). OECD data show biodiversity-specific development finance reaching USD 16.8 billion in 2023, with biodiversity-related development finance of USD 29.8 billion – suggesting the 2025 Target 19a milestone could be met if current trends persist, but may be jeopardized by projected cuts in development finance (OECD, 2025a, drawing on OECD-DAC Creditor Reporting System statistics). This shortfall can be evaluated against the fiscal risks of ecosystem degradation set out below.

Box 1.1: The Macro-economic Cost of Biodiversity Inaction

The annual biodiversity finance gap is estimated at approximately USD 700 billion (Deutz et al., 2020), an order-of-magnitude figure that helps contextualise the fiscal risks of inaction. World Bank modelling shows that even a partial collapse of three essential ecosystem services – wild pollination, marine fisheries, and timber from native forests – would trigger substantial macroeconomic damage (World Bank, 2021a).

By 2030, such a scenario would reduce global real GDP by USD 2.7 trillion annually, a 2.3% contraction relative to the baseline. These losses distribute unequally: low-income, nature-dependent regions face disproportionate risk, with GDP declines potentially exceeding 10% in Sub-Saharan Africa. The agricultural sector faces particularly acute exposure, as wild pollinators support crops that represent roughly one-sixth of global food production value.

The broader systemic risk is more severe: complete degradation of ecosystem services could threaten 7–9% of global GDP, reinforcing the assessment that biodiversity loss is a material macroeconomic and fiscal risk alongside its environmental and human dimensions. These estimates remain conservative, capturing only partial service collapse and excluding cascading effects across interconnected natural systems.

Note. Adapted from The Economic Case for Nature: A Global Earth-Economy Model to Assess Development Policy Pathways, World Bank, 2021a.

These ecosystem risks are material macro-economic and fiscal risks alongside their direct environmental and human consequences. A potential 2.3% annual reduction in global GDP – and significantly higher losses in nature-dependent regions – illustrates why several analyses describe biodiversity loss as a “macro-critical” risk that can undermine national debt sustainability and long-term development stability (World Bank, 2021a). Closing the USD 700 billion finance gap can thus be framed not only as an environmental target under KMGBF Target 19 but, in some analyses, as a fiscally prudent response to the risk of larger economic losses.

These risks interact with a constrained finance landscape marked by tighter fiscal space, rising debt burdens and contested multilateralism. A substantial share of climate finance has been, and is likely to remain, loan-based, with implications for debt sustainability and fiscal space for biodiversity investment (UNCTAD, 2025a); this relationship is explored further in the parallel study on debt sustainability and Convention implementation. The combination of falling ODA, shifting domestic spending priorities, and uneven implementation of international commitments is frequently associated with calls to scale up high-integrity Nature-based Solutions, reform environmentally harmful subsidies, strengthen safeguards and disclosure frameworks, and expand direct access for indigenous peoples and local communities (UNEP, 2023, 2025; OECD, 2025b; Rainforest Foundation Norway, 2021; WWF et al., 2021).

1.2. Analytical Framework: The Three Relationship Areas

To evaluate the biodiversity–climate nexus, this study maps how climate-related finance for mitigation and adaptation affects biodiversity outcomes, distinguishing three relationship areas: isolated, synergistic, and trade-off finance (OECD, 2019b; UNEP, 2023; TNFD, 2023). This relationship is bi-directional: while the scale-up of climate finance under the NCQG may help close the biodiversity finance gap, biodiversity-positive and nature-based finance can equally strengthen climate mitigation and adaptation outcomes. In assessing these relationships, the framework also considers whether human rights are at risk - including potential impacts on land tenure and on the rights to food, water, and a clean, healthy and sustainable environment - consistent with States’ obligations under international human rights law. International climate finance flows fall into three main categories – mitigation, adaptation, and support for responding to loss and damage (Chapter 2, Box 2.1) – recognized respectively under Articles 4, 7 and 8 of the Paris Agreement.

This study organizes its assessment of evidence around three types of relations between climate and biodiversity finance: Synergistic Finance, Trade-off Finance, and Isolated Finance. More details on these categories are presented later in this chapter.

This study’s own isolated–synergistic–trade-off framework maps biodiversity outcomes primarily against mitigation and adaptation finance; Chapter 3 separately examines loss-and-damage-related trade-off risk (Section 3.1). Within the KMGBF, Target 8 provides for Parties to “Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solutions and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity” (CBD, 2022, Decision 15/4, Target 8). Target 8 is not solely a mitigation target. Its concluding clause – which commits parties to

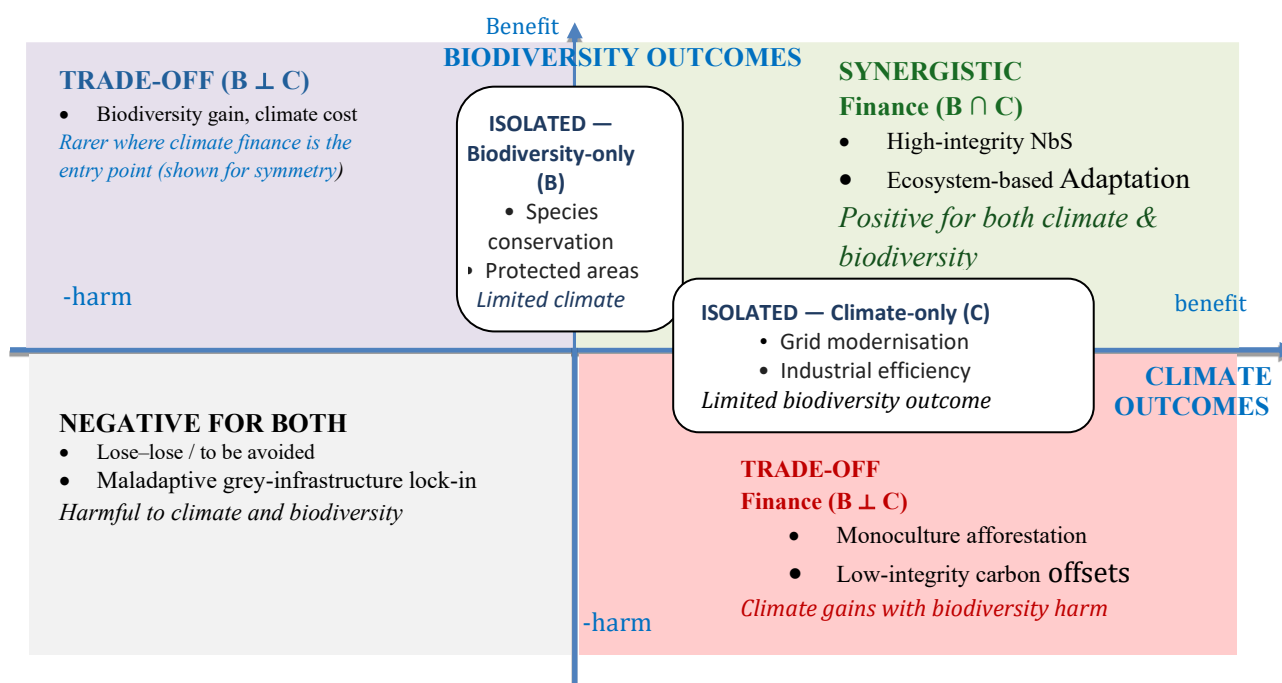
minimizing negative and fostering positive impacts of climate action on biodiversity – captures the core relationship this study examines. The analytical framework presented below operationalizes this relationship by distinguishing between isolated effects, synergistic effects, and trade-offs. Target 11 addresses restoring and maintaining nature’s broader contributions to people, including but not limited to climate regulation; neither Target maps one-to-one onto a single climate-finance category, and both are referenced here as relevant KMGBF touchpoints rather than the source of the mitigation/adaptation distinction itself (CBD, 2022, Targets 8, 11).

The Fund for responding to Loss and Damage (FRLD) was operationalized at COP28 and confirmed at COP29. It addresses irreversible losses from ecosystem collapse or species extinction. These non-economic losses (termed NELD) require distinct policy approaches. This assessment notes this and examines it in Chapter 3 (Section 3.1) and Area 7 but anchors its primary framework to mitigation and adaptation finance for two reasons.

First, loss and damage is not a defined KMGBF element, so it does not map onto this study’s KMGBF-anchored biodiversity outcomes as mitigation and adaptation do.

Second, loss and damage is recognized under Article 8 of the Paris Agreement but rests on a materially different legal basis from the treaty obligations underpinning mitigation and adaptation finance. Parties have explicitly agreed its funding arrangements are “based on cooperation and facilitation and do not involve liability or compensation” (Chapter 2, Box 2.1; UNFCCC, 2023, Decision 1/CP.28 and 5/CMA.5). There is no agreed, operational definition of “nature-based solutions for loss and damage” as a distinct biodiversity finance category; several Parties consulted cautioned against presenting loss and damage as an undifferentiated third climate-finance pillar for biodiversity purposes. Where the assessment discusses biodiversity-relevant responses to extreme events (e.g., post-disaster ecological restoration), it uses the more precise terms “disaster risk reduction” and “biodiversity and climate finance for responding to loss and damage,” rather than implying that “loss and damage finance” is a distinct, agreed-upon biodiversity finance category.

Figure 1.1: Biodiversity-climate Outcome Space for Finance Flows



Note: The vertical axis represents biodiversity outcomes; the horizontal axis represents climate outcomes. Synergistic finance lies in the upper right quadrant, trade-off finance in the lower right, and isolated finance spans the upper left and central neutral band.

Figure 1.1 presents the framework as a quadrant diagram. The vertical axis represents biodiversity outcomes; the horizontal axis represents climate outcomes. The framework maps finance flows into four zones: synergistic finance in the upper-right quadrant (both biodiversity and climate gains), trade-off finance in the lower-right quadrant (climate gains but biodiversity losses), isolated finance in the upper-left quadrant (biodiversity gains but climate neutral), and neutral finance in the central band (OECD, 2019b).

- 1) **Isolated finance and action (B-only or C-only).** Isolated finance refers to flows or interventions pursuing either biodiversity or climate objectives with limited or no explicit consideration of the other (OECD, 2019b). Examples include species-focused conservation programs in already well-protected areas, which deliver biodiversity outcomes with little direct influence on emissions trajectories, and grid-modernisation or digital-infrastructure projects that support mitigation while assuming biodiversity impacts are neutral and unassessed (CBD, 2022). Large-scale adaptation investments prioritizing grey infrastructure (dykes, levees, seawalls) without exploring complementary NbS similarly reduce climate risk but often leave biodiversity co-benefits unrealized (Depietri & McPhearson, 2017; EESI, 2023b).
- 2) **Synergistic finance and action (B ∩ C).** Synergistic finance comprises actions explicitly designed to deliver positive, measurable outcomes for both climate and biodiversity across mitigation and adaptation (CBD, 2022; UNEP, 2023). A flagship example is mangrove restoration: mangroves simultaneously provide coastal protection (adaptation), sequester carbon (mitigation), and restore habitat (biodiversity), contributing to multiple KMGBF targets and NDCs (UNEP, 2021a, 2023; IPBES, 2024). Other approaches include integrated landscape and seascape management, high-integrity forest and wetland

NbS, urban EbA, and selected debt-for-nature or blue-bond structures linking measurable climate and biodiversity outcomes (UNEP, 2021a, 2023; TNC, 2021). This assessment classifies a subset of synergistic finance as ‘biodiversity and climate finance for responding to loss and damage’ rather than as a stand-alone ‘loss and damage finance’ category. Such classification captures finance that rebuilds ecosystem services and the underlying biodiversity following extreme events. Relevant examples include post-disaster restoration of mangroves, seagrasses, and wetlands, as well as biocultural heritage recovery for indigenous peoples and local communities (UNEP, 2023; WWF et al., 2021).

- 3) **Trade-off finance and action (B $\perp$ C).** Trade-off finance describes actions delivering measurable gains in one domain while creating documented harm or significant risk in the other (Dasgupta, 2021; UNEP, 2023). This category corresponds to the negative impacts of climate action on biodiversity that Target 8 requires to be minimized (CBD, 2022, Decision 15/4, Target 8). C-positive/B-negative cases include monoculture afforestation for rapid carbon sequestration on biodiverse grasslands or savannas, which may reduce emissions but degrade ecosystem integrity, and poorly sited renewable-energy or transport infrastructure fragmenting high-biodiversity habitats (IPCC, 2019; Seddon et al., 2021). B-positive/C-negative cases include conservation measures that displace vulnerable communities into more climate-exposed areas or new deforestation frontiers, and strict coastal protection measures that prevent climate-resilient livelihood diversification (IPBES, 2019).

Trade-offs also arise where rapid climate responses inadvertently sacrifice biodiversity for short-term stabilization (Dasgupta, 2021). “Grey” infrastructure lock-in – using post-disaster finance to build hard coastal defenses that destroy remaining mangroves and coral reefs – creates maladaptation by undermining ecosystem-based protection (EESI, 2023a; Global Commission on Adaptation, 2019). Maladaptive resettlement – relocating climate-displaced populations into high-biodiversity “new frontiers” – can similarly increase emissions and degrade ecosystem integrity (IPCC, 2019; EESI, 2023a). Chapter 2 primarily examines the upper-right quadrant of Figure 1.1; Chapter 3 focuses on the lower-right quadrant and governance approaches that may reduce such trade-offs (UNEP, 2023; TNFD, 2023).

Table 1.2 applies this framework across the mitigation and adaptation climate-finance categories, showing synergistic pathways and trade-off risks with their biodiversity mechanisms. Loss and damage, the third category, is not shown as a discrete row: the evidence base remains limited following the recent operationalization of the Fund for responding to Loss and Damage (more details in Section 2.2.2 and Box 2.1). Its absence reflects the state of the evidence, not a judgment on its relevance to biodiversity.

Table 1.2: Climate-Finance Categories

Climate Finance Component	Synergistic Approach (Nature-Positive)	Trade-off Risk (Nature-Negative)
Mitigation	Native reforestation and natural regeneration (Griscom et al., 2017). Biodiversity mechanisms: habitat restoration and connectivity; native species recovery;	Monoculture plantations (IPCC, 2019). Biodiversity risks: habitat homogenization; loss of native species diversity; disruption of ecological processes

	ecosystem structure enhancement. [Aligned with KMGBF Target 2]	
Adaptation	Ecosystem-based Adaptation (EbA) (UNEP, 2021a). Biodiversity mechanisms: mangrove/wetland restoration for coastal defense; wildlife corridor creation for migration adaptation; watershed protection for water security	Maladaptive grey infrastructure (EESI, 2023). Biodiversity risks: coastal ecosystem destruction; barrier effects on species movement; hydrological disruption

The study addresses several critical challenges in evaluating this nexus (UNEP, 2021a; TNFD, 2023):

- **Distinguishing genuine integration from “biodiversity-washing”:** assessing whether projects labeled nature-positive are backed by solid outcome evidence, not generic co-benefit claims (UNEP, 2021a; TNFD, 2023).
- **Assessing additionality for biodiversity:** whether climate-labeled finance represents genuinely new resources for nature or largely repackages pre-existing conservation funding under labels such as NbS (UNEP, 2021a; OECD, 2019b).
- **Measuring biodiversity outcomes:** biodiversity lacks a single universal metric, requiring context-specific indicators, baselines and monitoring to track co-benefits and trade-offs (TNFD, 2023; IPBES, 2024).

Applying this framework across scales. The framework above applies primarily to individual finance flows and instruments. Beyond these, several jurisdictional approaches are examined in Chapters 2 and 4: jurisdictional REDD+, the Tropical Forest Forever Facility, and bioregional-financing platforms. These operate through governance and finance arrangements organized around defined sub-national or national jurisdictions – such as states, provinces, watersheds, or forest landscapes – rather than individual projects. Jurisdictional approaches are particularly relevant because key decisions on land use, spatial planning, and public investment for biodiversity-climate alignment occur at sub-national and national levels. The roles of subnational and local governments are discussed further in Section 4.4.

1.3. Methodology and Study Limitations

The study uses a mixed-methods approach, triangulating policy decisions, institutional reporting, and peer-reviewed literature rather than collecting new primary data (OECD, 2024a; UNEP, 2025; IPBES, 2024), comprising three components:

1. **Desk review.** A structured review of policy, institutional reports, and peer-reviewed literature through June 2026 provided the evidence base, including CBD/UNFCCC decisions, KMGBF and Paris Agreement guidance, and assessments from UNEP, IPBES, and others (OECD, 2024a; UNEP, 2025; IPBES, 2024).
2. **Targeted expert consultations.** Targeted expert consultations with representatives from multilateral funds, finance ministries, indigenous peoples and local communities, civil society, and research institutions were conducted during public review as informal external review. Expert input validated and nuanced the analysis with regional and sectoral context, particularly regarding finance architecture and engagement mechanisms for indigenous peoples and local communities, rather than reshaping the report’s structure or key messages.

3. **Peer review process.** The assessment underwent a comprehensive peer review process conducted from 27 January to 20 May 2026 and received extensive reviews from 36 entities in total (3 academic institutions; 14 Parties; 2 international organizations; 12 non-governmental organizations; 2 subnational organizations; 3 UN bodies, and 2 observer organizations). This process generated close to 2,000 valuable comments and suggestions. During the revision process, each comment was systematically reviewed, analyzed, and addressed according to technical merit and analytical robustness. This iterative incorporation of peer-review feedback resulted in substantial revisions throughout the report and served as a critical input for the final analysis. The review process did not result in material changes to the study's treatment of the mandate under decision 16/34, although some updated text has been proposed under the relevant paragraphs in recommendation 6/1 of the Subsidiary Body on Implementation.
4. **Illustrative case-study analysis.** Short vignettes on four instruments examined in Section 4.6 – a sovereign debt-for-nature conversion (Belize), mandatory corporate biodiversity disclosure (the EU's CSRD/ESRS E4 regime), environmentally harmful subsidy reform (the EU's Common Agricultural Policy eco-schemes and member-state practice), and a taxonomy-gated sovereign green bond (China) – illustrate high-integrity synergies and critical trade-offs (TNC, 2021; UNEP, 2023).

The assessment draws on OECD DAC climate-finance statistics and Rio markers, GCF and GEF project databases and independent evaluations, and MDB reports and safeguard assessments (OECD, 2024a; GCF, 2024a; GEF, 2025a; EIB, 2023a; Germanwatch, 2024). The finance-gap analysis reflects the latest data and Rio-aligned investment needs from State of Finance for Nature 2026, using 2023 as base year and real 2024 USD (UNEP, 2026), and draws on emerging frameworks such as TNFD pilot results and recent CBD and UNFCCC reports, including NBSAPs and Biennial Transparency Reports (TNFD, 2023; UNFCCC, 2024b).

Several constraints shape the analysis's scope and depth. Private-finance data gaps mean that many private-sector flows lack the granularity needed to assess specific biodiversity impacts; therefore, the assessment uses proxy indicators and illustrative case studies (OECD, 2024a; UNEP, 2023). Headline finance figures throughout this study – including the USD 700–900 billion annual finance-gap estimate and the USD 124–143 billion in tracked biodiversity-relevant finance – derive from different methodologies and are not always directly comparable (Deutz et al., 2020); where relevant the study notes source, reference year and known methodological differences (for example, between Deutz et al.'s (2020) finance-gap estimate and OECD's (2020) narrower USD 78–91 billion estimate), though full reconciliation is beyond scope. The policy landscape is evolving rapidly, particularly regarding the NCQG and Article 6 carbon-market rules, so the analysis focuses on established trends and systemic patterns (UNFCCC, 2024b). Time constraints mean the study synthesizes existing high-quality work rather than generating new primary datasets, which may under-represent very recent or smaller-scale initiatives (UNEP, 2025; IPBES, 2024). Consistent with the study's non-prescriptive character (Section 1.1), the options identified are illustrative and evidence-informed rather than validated recommendations; complementary national and regional analyses may usefully inform their applicability.

This assessment employs two complementary analytical frameworks. Section 1.2 introduced the framework that describes financial relationships by outcome (isolated, synergistic, trade-off), which grounds Chapters 2–4 and provides a granular basis for assessing individual instruments and risks. Chapter 5 then organizes evidence-based recommendations around the three main objectives and actions from Decision 16/34 (capitalizing on opportunities, integrating biodiversity, enhancing transparency), which organizes pathways by the type of action Parties

might take. Both frameworks are grounded in the same evidence; they organize that evidence differently to serve different analytical purposes. Chapter summaries below outline how each chapter applies these frameworks.

Chapter 2, *Scaling Synergistic Finance*, examines documented synergies in ecosystem-based adaptation, NbS, REDD+ and sustainable land management, applying the Isolated–Synergistic–Trade-off framework.

Chapter 3, *Managing Biodiversity Trade-offs*, assesses trade-off risks and safeguard options, also applying the Isolated–Synergistic–Trade-off framework.

Chapter 4, *Transparency, Accountability and Mainstreaming*, explores gaps and options for measuring and integrating biodiversity outcomes, again applying the Isolated–Synergistic–Trade-off framework.

Chapter 5 translates the evidence into options organized by action type, structured around thematic areas aligned with the objective and action groups of Decision 16/34.

1.4 Reviews received from Parties and Stakeholders on the First Draft of the Study

Thirty-five entities submitted comments: fourteen Parties, five intergovernmental and UN agencies, and sixteen observer organizations. Observers included academic institutions, non-governmental organizations, and stakeholder networks. Reviewers submitted comments in three forms: direct edits to the text (tracked changes), comment annotations, and separate written submissions. This generated 1,863 individual comments. Of these, 1,021 were accepted and 501 were partially accepted. A further 329 were noted without a change to the text. The remaining 12 fell outside the scope of the document or chapter under review. Reviewers proposed changes to framing, terminology, and emphasis. There was broad consensus on the value of the study's core analysis. Key reviewer comments are summarized below:

- **Precision of terminology and agreed language:** Several Parties requested closer alignment with agreed decision text. This included the exact wording of KMGBF Targets 18 and 19. It also included the language of the New Collective Quantified Goal. Reviewers asked for a clearer distinction between subsidy reform (Target 18) and new resource mobilization (Target 19).
- **Accuracy of legal and institutional references:** Reviewers identified gaps in referencing relevant instruments. This included World Trade Organization agreements on subsidies. Reviewers also requested a clearer distinction between two types of instruments. The first is decisions formally adopted by the Conference of the Parties to the CBD (CBD COP). The second is decisions formally adopted by the UNFCCC Conference of the Parties and its Paris Agreement (UNFCCC COP/CMA). This should be distinguished from voluntary or still-emerging instruments, such as TNFD, TFFF, and CSRD.
- **Respecting the mandates of other conventions:** One Party raised concerns about certain passages on climate-related loss and damage. These passages, in the Party's view, risked prejudging matters under negotiation at the UNFCCC. The Party recommended language that does not presume the outcome of other Conventions' processes.
- **Equity, gender, and intergenerational considerations:** Some reviewers raised equity concerns. They requested more explicit treatment of gender-responsive finance design. They

also requested clearer direct-access provisions for women and youth. This complements existing provisions for indigenous peoples and local communities.

- Tracking, transparency and cross-convention coordination: Reviewers highlighted persistent gaps in tracking-system compatibility. This includes the compatibility of biodiversity and climate finance tracking. Reviewers also flagged the risk of double-counting across systems. They suggested closer attention to related work by the Secretariat and other institutions.

The feedback received during the peer review strengthened the study's accuracy, terminology, and equity considerations. Most specific comments received (82 per cent of those received) were accepted or partially accepted and integrated into the present document, leading to a significant expansion of the study and its reference list¹⁰. Some feedback, however, extended beyond the study's mandate, for instance proposals to expand the study's thematic coverage, by assessing new revenue-generating or valuation mechanisms. Such comments, while being recognized as being valuable per se as pointing to further research opportunities, were not integrated into the text.

¹⁰ Note: For further reading on key related topics outside the present document's scope that readers may wish to consult: UN Women (2024), Gender-responsive climate and biodiversity finance. Also see the Secretariat's note on Opportunities to strengthen tracking of the various sources of biodiversity finance ([CBD/SBI/7/INF/20](#)).

Chapter 2: Scaling Synergistic Finance – Pathways to Integration

Nature-based Solutions (NbS), Ecosystem-based Adaptation (EbA), ecosystem-based mitigation (EbM) and ecosystem-based disaster risk reduction (Eco-DRR) can deliver measurable benefits for both climate and biodiversity objectives when well designed and adequately safeguarded (Griscom et al., 2017; Seddon et al., 2021; see Box 2.1). These are analytical categories rather than exhaustive.

Securing land, resource, and customary rights of indigenous peoples and local communities and enabling them to design and lead interventions is itself a pathway to synergistic outcomes, not merely a safeguard. Biodiversity consistently performs better on indigenous peoples and local communities-governed lands (IPBES, 2019). Where the NbS and EbA categories are used, they are most effective when applied alongside Indigenous and local knowledge systems for ecosystem conservation and adaptive management, consistent with the Locally Led Adaptation principles discussed in Section 2.2.2. At CMA-6 in Baku in November 2024, Parties adopted the New Collective Quantified Goal (NCQG) on climate finance. The decision text distinguishes two elements: it decides a goal, led by developed countries, of at least USD 300 billion per year by 2035 for developing country Parties' climate action, from a wide variety of sources – public and private, bilateral and multilateral, including alternative sources (UNFCCC, 2024b, Decision 1/CMA.6, para. 8(a)); and it separately calls on all actors to enable scaling climate finance to developing countries, from all public and private sources, to at least USD 1.3 trillion per year by 2035 – a call rather than a decided target, informed by the Baku to Belém Roadmap to 1.3T (UNFCCC, 2024b, Decision 1/CMA.6, para. 7; UNFCCC, 2025a).

International climate finance to developing countries – the relevant NCQG denominator – reached an estimated USD 196 billion in 2023, so the USD 300 billion goal implies roughly a 53 percent increase, and the USD 1.3 trillion call implies close to a sevenfold increase (Climate Policy Initiative, 2025). Global climate finance from all sources reached USD 1.9 trillion in 2023 and is estimated to reach USD 2 trillion in 2024, though around 80 percent is mobilized and deployed domestically rather than internationally (Climate Policy Initiative, 2025, 2026).

This scale-up creates opportunities to better integrate biodiversity objectives, safeguards and co-benefits into climate-finance design, alongside continued efforts to mobilize finance directly for biodiversity under KMGBF Target 19's international and overall finance goals (see Section 1.2; CBD, 2022).

This chapter examines pathways for achieving such integration – including governance and access pathways such as subnational and local-government implementation and indigenous peoples and local communities' direct access – that shape whether finance reaches effective, equitable outcomes on the ground:

- Defining the synergistic landscape and current finance flows (2.1–2.2)
- Multilateral climate funds (2.3)
- Forest and ecosystem finance (2.4)
- Indigenous peoples and local communities' access (2.5)
- Enabling infrastructure such as taxonomies and disclosure (2.6)

Available evidence indicates synergistic finance remains modest relative to overall climate flows, but identifiable pathways exist to scale it if biodiversity is integrated systematically as climate finance expands under the NCQG.

Box 2.1 clarifies how this assessment uses NbS, EbA, EbM and Eco-DRR across the three main categories of international climate finance flows: mitigation, adaptation, and support for responding to loss and damage.

Box 2.1: How NbS, EbA, EbM and Eco-DRR Fit Together

This assessment uses a simple hierarchy, grounded in existing international definitions, to organize climate–biodiversity linkages.

- **Nature-based Solutions (NbS)** are the overarching category. UNEA Resolution 5/5 defines NbS as “actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits” (UNEA, 2022). Here, NbS includes ecosystem-based measures relevant to mitigation, adaptation, and disaster risk reduction linked to loss and damage.
- **Ecosystem-based Adaptation (EbA)** is a subset of NbS. The CBD and UNFCCC define EbA as “the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people adapt to the adverse effects of climate change” (SCBD, 2009; UNFCCC, 2015c). All EbA is NbS; not all NbS is EbA.
- **Ecosystem-based mitigation (EbM)** refers to NbS primarily designed to reduce emissions or enhance removals, such as native forest restoration, peatland re-wetting, and mangrove and seagrass restoration (UNEP, 2026; Griscom et al., 2017), sitting in the mitigation column of Table 1.2.
- **Ecosystem-based disaster risk reduction (Eco-DRR)** refers to NbS deployed to reduce and manage risk before, during and after extreme events – for example, mangrove, reef and wetland restoration that buffers coastal hazards, or biocultural heritage recovery strengthening the resilience of indigenous peoples and local communities. Eco-DRR can support both ex-ante risk reduction (adaptation) and post-event recovery relevant to loss and damage.
- **Mitigation and adaptation are underpinned by specific treaty obligations** (Paris Agreement Articles 4 and 7, including NDCs and the Global Goal on Adaptation), whereas loss and damage is addressed through a distinct, operationalized architecture – the Warsaw International Mechanism, the Santiago Network, and the Fund for Responding to Loss and Damage (FRLD). The FRLD was established at COP28 (Decision 1/CP.28 and 5/CMA.5) and its operationalization confirmed at COP29, including the World Bank’s confirmation as interim secretariat host, the Philippines as Board host country, and appointment of the Fund’s Executive Director (Decision 5/CP.29 and 6/CP.29). Parties have explicitly agreed these funding arrangements are “based on cooperation and facilitation and do not involve liability or compensation” (UNFCCC, 2023, Decision 1/CP.28 and 5/CMA.5; UNFCCC, 2024c, Decision 5/CP.29; UNFCCC, 2015a, Decision 1/CP.21, para. 52). Loss and damage support is therefore best understood as an operationalized category of the climate finance architecture rather than a structural “third pillar” with the same legal basis as mitigation and adaptation. There is also no agreed, operational definition of “nature-based solutions for loss and damage” as a distinct finance instrument class; this report uses “NbS for loss and damage” as an analytical description of interventions observed

in practice (e.g., post-disaster ecosystem restoration), not settled UNFCCC or CBD terminology.

Sources: UNEA, 2022 (Resolution 5/5); SCBD, 2009; UNFCCC, 2015c; UNEP, 2026; Griscom et al., 2017; UNFCCC, 2023 (Decisions 1/CP.28 and 5/CMA.5); UNFCCC, 2024c (Decisions 5/CP.29 and 6/CP.29); UNFCCC, 2015a (Decision 1/CP.21, para. 52).

Climate finance flows are organized here around these three main categories and their biodiversity interactions, recognizing they differ on a legal basis (Box 2.1). NbS are relevant across all three: mitigation-oriented NbS (EbM) within mitigation finance; EbA within adaptation finance; and Eco-DRR interventions relevant to averting, minimizing and addressing loss and damage, understood descriptively rather than as a formally defined finance sub-category. The biodiversity outcomes of climate actions, and climate outcomes of biodiversity-focused measures, are mapped as synergistic, isolated or trade-off finance flows (OECD, 2019b; UNEP, 2023; TNFD, 2023).

2.1. Defining the Synergistic Landscape: Nature-based Solutions and the Nexus Approach

The literature on achieving Paris Agreement and KMGBF objectives identifies pathways for financial systems to shift from siloed climate or biodiversity investments toward synergistic approaches that deliver measurable benefits for both (UNFCCC, 2024b). GEO-7 calls for transformations in energy, food, cities, and consumption to address interlinkages among climate change, biodiversity loss, and pollution (UNEP, 2025). UNEP frames these interlinkages as a “triple planetary crisis” – a term not in CBD decision text and used here only to denote UNEP’s characterization. This analytical framework is distinct from, though interacting with, the poverty and inequality dimensions that determine who bears costs and captures benefits of finance flows. NbS and EbA are central to this transition, as recognized by UNEA and successive UNFCCC and CBD decisions (UNEP, 2021a, 2022).

Secretariat of CBD (SCBD, 2009) and UNFCCC (2015) guidance define Ecosystem-based Adaptation (EbA) as using biodiversity and ecosystem services to help people adapt to climate impacts such as flooding, drought, and extreme heat (SCBD, 2009; UNFCCC, 2015c). These EbA approaches often deliver mitigation co-benefits through carbon storage (UNEP, 2021a; Griscom et al., 2017). Under the UNEA Resolution 5/5 definition in Box 2.1, biodiversity benefit is a defining feature of NbS, not an optional add-on to mitigation or adaptation outcomes; this study accordingly uses “high-integrity” as shorthand for NbS meeting this full definition in practice, including its social, environmental and governance requirements, rather than as a separate standard.

Synthesis studies indicate that high-integrity NbS could deliver up to one-third of the cost-effective mitigation needed by 2030 to keep 1.5°C within reach, though the evidentiary basis varies by intervention type and region, and the figures are indicative (Griscom et al., 2017). Well-designed NbS can also reduce climate risks and safeguard ecosystem services, with GEO-7 identifying scaling as particularly important for adaptation, ecosystem resilience, and human health (Griscom et al., 2017; UNEP, 2025). The conditions under which these benefits materialize – integrity standards, safeguards, and long-term monitoring – are examined in Sections 2.3–2.4 and, for risks posed by poorly designed interventions, in Chapter 3.

The IPBES Nexus Assessment finds that biodiversity, water, food, health, and climate form an interconnected system in which isolated decisions generate unintended trade-offs, calling for

governance approaches that better account for these interlinkages (IPBES, 2024; Pörtner et al., 2023). Synergistic finance recognizes that a single intervention – such as restoring mangroves – may provide coastal protection (adaptation), sequester carbon (mitigation) and restore habitat (biodiversity), contributing to KMGBF Targets 1, 2, 8 and 11 and national priorities (CBD, 2022; UNEP, 2023). This chapter examines finance mechanisms seeking such joint outcomes, the governance conditions – subnational implementation and indigenous peoples’ and local communities’ access – determining whether they are realized, and how they can be scaled. This emphasis on financial-instrument design is not a claim that improved design alone resolves underlying drivers of climate–biodiversity trade-offs: where finance intersects with insecure land tenure, weak local governance, or asymmetric bargaining power, technical co-benefit frameworks have limited traction unless paired with the rights-based and access reforms in Section 2.5.

2.2. Current Scale and Trajectory of Finance

Current NbS finance remains modest relative to the trillions in nature-negative flows, making portfolio composition and integrity as important as overall scale (UNEP, 2023). Paulson Institute estimates that agriculture, forestry, and fisheries subsidies – a major component of harmful nature-negative subsidies – reached roughly USD 840 billion in 2024, up from USD 542 billion in 2019; combined with fossil fuel, mining, construction, energy, and transport subsidies, global harmful subsidies reached USD 2.6 trillion in 2024, with biodiversity-positive incentives remaining comparatively small (Paulson Institute, 2025). Figures vary across sources by scope and methodology. The Paulson Institute’s agriculture, forestry, and fisheries subsidies estimate (USD 840 billion) is a narrower subset of harmful subsidies, while the State of Finance for Nature (USD 2.4 trillion and USD 7.3 trillion, Section 2.2.2) captures a broader range of sectors, including fossil fuels. These represent complementary estimates of overlapping but distinct categories. Positive investment in nature remains substantially outweighed by nature-negative flows – a scale mismatch that synergistic finance could help address by increasing NbS investment and redirecting nature-negative expenditure (UNEP, 2023; CBD, 2022). However, incremental NbS increases alone will not offset continued nature-negative flows. Achieving this requires subsidy reform (Chapter 3, Section 3.1) and integrity safeguards (Sections 2.3–2.4) alongside NbS scaling. Poorly designed NbS can itself reproduce extractive or exclusionary dynamics (Chapter 3, Section 3.2).

2.2.1 Isolated Finance and Missed Opportunities for Synergy

A significant share of current biodiversity- and climate-related finance targets one objective with little explicit consideration of the other (OECD, 2019b). Some isolation is relatively benign: certain grid modernization or digital infrastructure investments have limited direct ecosystem interactions, and narrowly focused species-recovery programs in already well-protected areas offer limited mitigation potential when emissions are driven by other sectors (CBD, 2022). Elsewhere, apparent isolation represents a missed opportunity: large-scale adaptation and disaster-risk-reduction programs have often prioritized grey infrastructure (dykes, levees, seawalls) without exploring complementary NbS that could enhance resilience while restoring habitats (Depietri & McPhearson, 2017; EESI, 2023b). Urban and transport investments often proceed without systematic assessment of green infrastructure – urban forests, wetlands, riparian buffers – that could reduce heat-island effects, manage flood risk and create biodiversity corridors; well-designed urban tree canopy along transport routes can also support walking and cycling, linking urban greening to transport-sector mitigation directly, not only adaptation (Depietri & McPhearson, 2017; Rolhauser et al., 2024).

Isolated biodiversity-only finance can underperform where climate considerations are ignored: protected-area expansion that does not consider projected climate impacts may target areas unlikely to remain climate-suitable or overlook connectivity and resilience opportunities; basic climate-risk screening in conservation finance can help shift such funding toward synergistic outcomes (SCBD, 2023; Buenafe et al., 2025). These patterns explain why overall expenditure volumes do not always translate into proportionate gains for nature – relatively modest adjustments in project design and appraisal can determine whether finance remains isolated or contributes to synergies (UNECE, 2025). A further consideration in treating climate and biodiversity finance as separate reporting categories is the risk of double-counting: the same expenditure can be reported by different actors as fulfilling distinct UNFCCC and CBD commitments, potentially overstating aggregate progress – a risk to be weighed against the benefits of convention-specific accountability, addressed further in Section 4.1.

2.2.2 Synergistic Climate-biodiversity Finance

Despite growing political recognition, synergistic finance remains small relative to overall climate and nature-negative flows. The latest State of Finance for Nature analysis estimates global NbS finance at around USD 220 billion in 2023 – roughly USD 197 billion public and USD 23 billion private, including certified commodity supply chains, offsets, sustainable bonds and philanthropy – meaning public finance accounts for around 90 percent of tracked flows, with private contributions modest and concentrated (UNEP, 2026). In the same year, nature-negative finance totaled roughly USD 7.3 trillion, including USD 2.4 trillion in environmentally harmful subsidies and USD 4.9 trillion in private capital – exceeding NbS finance more than 30 to 1 (UNEP, 2026). Under the Rio-aligned scenario, annual NbS investment needs are estimated at USD 571 billion by 2030 and USD 771 billion by 2050, implying current flows would need to increase more than two-and-a-half-fold by 2030 and triple by mid-century (UNEP, 2026). GEO-7 stresses that without redirecting nature-negative flows, incremental NbS increases are unlikely alone to reverse biodiversity decline (UNEP, 2025).

In this study, synergistic finance comprises two complementary dimensions: increasing the absolute volume of high-integrity NbS and EbA, and realigning existing climate-labeled and development flows to more systematically deliver biodiversity co-benefits (Deutz et al., 2020). NCQG operationalization – scaling mobilization from a wide variety of sources to at least USD 300 billion per year by 2035 (UNFCCC, 2024b, Decision 1/CMA.6, para. 8(a)) – represents an opportunity to advance both objectives if biodiversity safeguards and co-benefits are integrated from the outset, alongside the parallel KMGBF Target 19 goals.

Quantifying the intersection of climate and biodiversity finance reveals a persistent portfolio asymmetry. OECD tracking of DAC bilateral ODF shows 84 per cent of biodiversity-related bilateral ODF also targets climate objectives over 2015–2023 (rising from 78 per cent in 2015 to 92 per cent in 2022, before settling at 89 per cent in 2023), while only 21 per cent of climate-related bilateral ODF targets biodiversity on average over the same period (19 per cent in 2022; 22 per cent in 2023) (OECD, 2025a; see also Defra & TNC, 2025).

This asymmetry is substantially structural rather than a policy-alignment failure: most climate finance funds capital-intensive industrial mitigation and utility-scale infrastructure lacking a localized ecological interface, whereas biodiversity finance is disproportionately land- and ecosystem-based and thus more likely to touch climate-relevant carbon stocks almost by construction (OECD, 2025a) – pointing to an opportunity to embed nature objectives more systematically in the much larger pool of climate-labelled finance, rather than as comparable underperformance in both directions. Structural asymmetry in overlap ratios does not, however,

reduce the relevance of Target 8, which provides for minimizing negative and fostering positive impacts of climate action on biodiversity (CBD, 2022, Decision 15/4, Target 8); that provision addresses climate action generally, not only the biodiversity-labelled share of climate finance. UNEA-7's December 2025 Ministerial Declaration calls for advancing “sustainable solutions for a resilient planet,” reinforcing this alignment opportunity (UNEA, 2025a). Table 2.1 summarises major synergistic finance pathways, instruments, evidence of co-benefits, and key scaling levers, including the governance and access arrangements – subnational implementation and direct access for indigenous peoples and local communities – on which effectiveness depends.

Table 2.1: Major Synergistic Finance Pathways and Levers

Pathway	Main Instruments	Evidence of Co-Benefits	Key Scaling Levers
NbS and EbA	Native reforestation, agroforestry, coastal restoration, watershed management	Mitigation, adaptation, and biodiversity co-benefits documented across multiple NbS interventions (IPBES, 2019)	Tripling adaptation finance; EbA eligibility criteria; MRV technical support
Multilateral climate funds (GCF, GEF)	Integrated programs, results-based payments, blended finance, guarantees	High NbS portfolio share in adaptation finance; integrated programming demonstrates multiple co-benefits	Portfolio-level biodiversity targets; co-benefit tracking systems; direct access modalities; adoption of Locally Led Adaptation (LLA) principles
MDB nature-positive alignment	Policy-based loans, outcome bonds, green guarantees	Emerging tracking principles; pilots such as the Wildlife Conservation Bond demonstrate viability at small scale	Nature-positive metrics integration; DNSH safeguards; project pipeline support
Innovative forest finance	TFFF, subnational and jurisdictional REDD+ (i.e., REDD+ programs implemented at the level of a national or subnational – state, provincial or regional – government, as distinct from individual project sites), LEAF Coalition finance	Stock-based forest payments are an innovative mechanism with potential to help close the biodiversity finance gap, though the TFFF itself has not yet been operationalized and important design questions remain (including exposure to emerging-markets debt); indigenous peoples and local communities -inclusive models demonstrate enhanced outcomes where implemented, though large-scale evidence remains limited given the recent launch of several instruments	Capitalization mechanisms; benefit-sharing frameworks for indigenous peoples and local communities; robust safeguards
Sovereign and private instruments	Blue bonds, debt-for-nature swaps, sustainability-linked bonds, payments for ecosystem services, biodiversity offsets and credits, parametric	Debt relief combined with measurable conservation outcomes across a growing series of sovereign debt conversions, including Seychelles in 2015, Belize in 2021, Barbados in 2022 and Ecuador/Galápagos in 2023 (Silver	Transaction cost reduction; standardization of terms; independent verification

	climate/nature insurance	& Campbell, 2018; TNC, 2021; IDB, 2026)	
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***Note:** Ecosystem-based disaster risk reduction (Eco-DRR) and other loss-and-damage-linked NbS pathways are not included as a discrete row given the still-limited evidence base following the FRLD’s recent operationalization (Box 2.1); this is an area for future evidence development, not a substantive exclusion. This is not an exhaustive list; other approaches, including subsidy reform and sustainable public procurement, are discussed elsewhere in this study.*

These pathways provide the main entry points for scaling synergistic finance. The overarching architectural pipeline through which global climate and biodiversity finance commitments flow, scale, and translate into integrated on-the-ground impacts is systematically mapped out in Table 2.2. This framework tracks the system across four sequential stages: global finance sources, multilateral and subnational delivery channels, operational implementation mechanisms, and verified environmental and social outcomes.

Table 2.2: Synergistic Finance Architecture – From Commitments to Outcomes

Stage Architecture	Core System Components	Main Operational Function
1. Finance Sources	Climate Commitments: NCQG targets (at least USD 300 bn/yr by 2035) Biodiversity Finance: KMGBF Target 19 (at least USD 200 bn/yr by 2030) and GEF-8 Innovative Finance: Debt-for-nature swaps, outcome bonds, and the TFFF	Establishes the core international funding baselines and capital commitments.
2. Delivery Channels	Multilateral & Public Funds: GCF (~45–47% NbS share), GEF Integrated Programmes, and bilateral ODA International Institutions: MDB Nature Finance Common Principles Private Capital: Blended finance structures and standalone market investments Subnational Platforms: Municipal and local government frameworks	Intermediates and distributes finance across public, private, and subnational actors.
3a. Thematic Approaches	High-Integrity NbS & EbA: Measures meeting full UNEA 5/5 criteria Ecosystem Restoration: Targeted terrestrial, coastal, and marine restoration	Defines what physical and ecological activities receive funding.
3b. Instruments & Modalities	Forest Carbon Infrastructure: REDD+ and subnational jurisdictional finance Direct Access Windows: Community-led mechanisms (e.g., GEF ICI, TFFF community benefit-share)	Determines how finance is operationalized, managed, and delivered locally.
3c. Enabling Conditions	Taxonomies: Frameworks applying Do-No-Significant-Harm (DNSH) rules Disclosure Regimes: Value-chain transparency frameworks (e.g., EU CSRD/ESRS)	Functions as regulatory infrastructure to steer capital flows.

4. Measurable Outcomes	Climate Actions: Verified mitigation, adaptation, and loss-and-damage responses Biodiversity Metrics: Ecosystem integrity tracking (KMGBF Targets 1, 2, 8, 11) Social Co-Benefits: Indigenous peoples' and local communities' tenure security, customary rights, and benefit-sharing	Measures on-the-ground impacts across interconnected target domains.
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The multi-tiered pipeline mapped out in Table 2.2 tracks how international finance commitments cascade through global institutions down to concrete field outcomes. Moving this architecture from a fragmented to a synergistic state requires addressing specific operational and legal realities across each stage of the flow:

Macro-Fiscal Context (Stages 1 and 2): International funding targets are most effective when matched by domestic public financial management architectures (Stage 2). National targets are driven by domestic instruments such as National Biodiversity Finance Plans (NBFs) developed through the UNDP BIOFIN frameworks; domestic and national public finance is addressed in detail in Chapter 4. At the country level, this alignment follows a sequenced implementation pathway – from national strategies (NBSAPs and NDCs) through a Biodiversity Expenditure Review, Financial Needs Assessment and Resource Mobilization Strategy to costed, investable pipelines. On the delivery side, Stage 2 expands MDB tracking beyond traditional “Do-No-Harm” safeguard baselines toward nature-positive alignment. This is achieved by embedding biodiversity into country macro-diagnostics and aligning public tracking with private initiatives like the UNEP FI frameworks.

Operational Rules and Safeguards (Stages 3a, 3b, and 3c): Stage 3 separates ecological activities from their governance modalities. High-integrity outcomes depend on treating safeguards such as Free, Prior, and Informed Consent (FPIC) and secure land tenure as non-negotiable preconditions for project eligibility rather than as downstream project side-effects. Stage 3c also highlights regulatory tracking infrastructure, such as the EU CSRD/ESRS regimes, which span climate, biodiversity, and social disclosure. Rather than representing a direct financial flow, this transparency layer provides the standard-setting baseline to steer corporate capital away from nature-negative investments.

System Interconnectedness and Many-to-Many Causality (Stage 4): A major limitation of traditional linear flow diagrams is the false assumption that specific financial instruments map exclusively to isolated outcomes. In reality, Stage 3 components demonstrate complex, overlapping, many-to-many relationships with Stage 4 outcomes. For instance, a direct financial allocation to an Indigenous-led coastal mangrove restoration project concurrently yields carbon mitigation, localized ecosystem-based adaptation, verified habitat restoration, and enhanced local tenure security. Portfolio assessments by bodies such as the CBD Subsidiary Body on Implementation (SBI) are best placed to evaluate these blended outcomes jointly rather than auditing climate and biodiversity indicators in isolation.

At the source level, NCQG operationalization represents a major expansion of climate finance, creating both opportunities and risks for biodiversity (UNFCCC, 2024b); traceable NbS finance remains modest relative to overall climate flows, indicating considerable scope to realign existing portfolios (UNEP, 2023). At the multilateral-channel level, GCF's 45–47 percent NbS portfolio contribution demonstrates that climate funds can mainstream nature when governance systems incentivize multi-benefit approaches (GCF, 2024a); GEF Integrated Programs similarly design explicitly for cross-focal-area outcomes (GEF IEO, 2025). MDBs, given their capacity to

mobilize public finance and influence national policy, are central to the KMGBF Resource Mobilization Strategy; ten have adopted the Common Principles for Tracking Nature Finance – a voluntary initiative, with no equivalent intergovernmental commitment –, with current focus on operationalizing these consistently across project pipelines and reporting (OECD, 2024c).

At the mechanism level, pathways reflect different theories of change. High-integrity NbS and EbA offer the most direct route; REDD+ – established under Decision 1/CP.16, Section C, covering policy approaches and positive incentives on reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries – and subnational or jurisdictional forest finance provide performance-based payments rewarding verified outcomes, though effectiveness depends critically on safeguard implementation (Chapter 3, Section 3.2). Direct-access mechanisms – the GEF Inclusive Conservation Initiative, TFFF benefit-sharing, and Indigenous-led funds such as the Pawanka Fund, Mesoamerican Territorial Fund and Nusantara Fund – are grounded in Indigenous peoples' and local communities' standing as rights-holders under international law, not solely instrumental stewardship claims, and work best where communities lead design and implementation directly rather than as intermediary- managed beneficiaries (GEF, 2021a; WWF et al., 2021). The Locally Led Adaptation (LLA) principles, endorsed by the GCF, GEF and Adaptation Fund, provide an accountability framework for assessing these commitments (GCF, 2024a; GEF, 2021a). Sustainable-finance taxonomies and mandatory disclosure – particularly the EU CSRD and ESRS E4 – function as enabling infrastructure, creating transparency and steering private capital toward nature-positive activities (EFRAG, 2023).

The outcome level highlights the assessment of synergistic finance not only by volume but also by verified impact across three dimensions: climate mitigation and adaptation; biodiversity integrity and KMGBF alignment; and social equity, including Indigenous peoples' and local communities' rights, gender equality, equal land rights for women and men, and benefit-sharing. This multi-dimensional accountability distinguishes genuinely synergistic finance from projects that claim co-benefits without demonstrating them, or that advance one objective while harming another (Chapter 3); rigorous evidence for this distinction varies across dimensions and is addressed further in Section 4.1.

Three insights emerge:

- The alignment challenge concerns not only total finance but whether it systematically integrates biodiversity or treats it as optional – sensitive to definitional choices, since narrower measures aligned with Paris Agreement Article 9 and NCQG tracking conventions show different overlap patterns than broader definitions (OECD, 2024c).
- Governance quality at national, subnational and municipal levels – including cities' innovation role as testing grounds for integrated policy (ICLEI, 2025) – shapes whether flows translate into genuine synergies, depending on subnational institutional capacity, which varies substantially.
- Effectiveness depends on complementary enabling conditions: secure land tenure, FPIC, equitable benefit-sharing, gender-responsive design, and MRV that tracks biodiversity alongside carbon metrics, together with transparent tracking of finance reaching organizations led by indigenous peoples and local communities directly rather than through intermediaries. Progress remains limited against existing benchmarks: the COP26-era commitment that at least 20 percent of forest and land-use finance pledges

reach indigenous peoples' and local communities' tenure and forest guardianship, given persistent evidence that actual shares remain well below this benchmark. Donor funding for the tenure rights and forest guardianship of indigenous peoples, local communities and Afro-descendant Peoples averaged approximately USD 728 million per year following the 2021 COP26 Forest Tenure Pledge – a 46 per cent increase on the preceding four-year period – yet remains below 1 per cent of climate aid and has declined gradually since a 2021 peak (Rights and Resources Initiative & Rainforest Foundation Norway, 2025; see also Rainforest Foundation Norway, 2021).

These conditions are particularly consequential for indigenous peoples and local communities and family farmers, for whom limited access to accreditation and the absence of household-level benefit-sharing design are persistent barriers to direct engagement; achieving genuine governance quality requires multilateral and national channels to create accreditation and access pathways for all local implementers, including indigenous peoples and local communities, family farmers, women, and youth.

2.3. Multilateral and Public Finance Pathways

Multilateral climate and environment funds, MDBs, bilateral providers and subnational governments shape the quality and direction of climate finance; their mandates, safeguard systems and co-benefit-tracking frameworks can promote or constrain synergistic approaches (OECD, 2024c).

2.3.1. Green Climate Fund and Global Environment Facility

The Green Climate Fund (GCF) is one of the largest public financiers of NbS, with internal analyses indicating that roughly 45–47 percent of its portfolio supports NbS across mitigation and adaptation windows (GCF, 2023; GEF IEO, 2025). The Fund uses its higher risk appetite to crowd in private capital through first-loss equity, guarantees, and technical assistance – as illustrated by the Amazon Bioeconomy Fund, which blends GCF resources with private investment in sustainable agroforestry and native timber value chains (GCF, 2023; WRI, 2024a).

In GEF-8, most Integrated Programs incorporate NbS elements to deliver multiple Global Environmental Benefits – for example, conserving primary tropical forests supports biodiversity, carbon storage and livelihoods (GEF, 2021a, 2022). The Inclusive Conservation Initiative (ICI) demonstrates how direct allocation to indigenous peoples and local communities can strengthen environmental outcomes and equity, supporting indigenous peoples and local communities-led stewardship across millions of hectares of high-biodiversity land (GEF, 2021a; WWF et al., 2021). Complementing this targeted mechanism, the GEF Small Grants Program (SGP) is a broader delivery framework for community-led action. Under its GEF-8 Operational Guidelines, the SGP continues to decentralize funding by providing direct financial and technical support to civil society, local communities, and Indigenous Peoples to drive localized environmental stewardship and sustainable development (GEF, 2024, 2025b).

GCF and GEF portfolio experience reveals governance features associated with high-integrity synergistic programming (GEF IEO, 2025): explicit multi-benefit objectives and indicators defined at design stage, making outcomes visible rather than implicit (GEF IEO, 2025); safeguard systems that recognize indigenous peoples' and local communities' rights and knowledge, including tenure, FPIC and equitable benefit-sharing provisions (FAO, 2016; Rainforest Foundation Norway, 2021); and flexible instruments – program-based approaches, subnational or landscape- scale operations – supporting long time horizons and adaptive management (GEF, 2021a; GEF IEO, 2025). Emerging literature also emphasizes the need to

reform global nature-finance architectures to address historical power imbalances, structural inequities, and the misallocation of resources that historically excluded local stewards from decision-making roles (Sorsby et al., 2026).

However, both funds face challenges tagging, measuring, and reporting biodiversity outcomes consistently, limiting Parties' ability to assess how much climate-labeled finance is genuinely nature-positive (GEF IEO, 2025; OECD, 2024c). GEF's synergistic role is reinforced by its mandate as a financial mechanism for all three Rio Conventions (CBD, UNFCCC, UNCCD), increasingly operationalized through multi-trust-fund projects blending the GEF Trust Fund with the LDCF and SCCF, alongside multi-focal-area projects spanning biodiversity and climate (GEF, 2021a; GEF IEO, 2025).

Most GEF-8 Integrated Programs and ICI grants remain large, multi-country operations. Medium- and small-grant windows accessible to local community organizations and women's groups represent a smaller share, limiting inclusiveness for implementers unable to meet large-scale programming's transaction-cost and co-financing thresholds (GEF, 2021a).

Beyond GEF's own windows, the Global Biodiversity Framework Fund, established within GEF in August 2023 following KMGBF adoption, targets at least 20 percent of resources reaching indigenous peoples and local communities. As with ICI, independent, systematically published monitoring of whether disbursements meet this target – including the share reaching organizations led by indigenous peoples and local communities directly rather than through intermediaries – is not yet in place, an accountability gap noted by several observers (GEF, 2023; Rainforest Foundation Norway, 2021).

2.3.2. Multilateral Development Banks: From “Do-No-Harm” to Nature-positive Alignment

MDBs are central to the KMGBF Resource Mobilization Strategy, given their ability to mobilize large volumes of capital and influence national policy; several have, in fact, financed biodiversity-related activities for an extended period (CBD, 2022; WRI, 2024a). Historically, MDB approaches relied primarily on safeguards to avoid or mitigate harm, with less systematic effort to generate positive outcomes (EIB, 2023a; World Bank, 2017), though recent developments indicate a shift.

In 2023, ten MDBs adopted Common Principles for Tracking Nature Finance, and a joint MDB nature taxonomy has since been developed, moving toward more consistent methodologies (MDBs, 2025; OECD, 2024c). This multilateral framework is designed to be interoperable with the UNEP FI and Finance for Biodiversity (FfB) Foundation's Finance for Nature Positive working model, facilitating a standardized approach across both public and private financial institutions. What remains early-stage is consistent application across project appraisal and results frameworks: early analysis suggests around one-third of MDB commitments are in sectors with material nature dependencies – infrastructure, energy, water – but nature-positive outcomes are not yet routinely embedded in project diagnostics (Neunuebel et al., 2025a; WRI, 2024a).

Emerging instruments illustrate how MDBs can link financial performance to verified nature results, such as the Wildlife Conservation Bond – a five-year, USD 150 million, principal-protected IBRD Sustainable Development Bond issued in March 2022. Investors forgo coupon payments; the IBRD instead makes conservation investment payments to the two participating protected areas. At maturity, investors receive their principal in full, together with a conservation success payment of up to USD 13.76 million, determined by the black rhino population growth

rate as calculated by Conservation Alpha and verified by the Zoological Society of London, and paid by the IBRD with funds provided by a performance-based grant from the Global Environment Facility (World Bank, 2022; WRI, 2024a). Two features are material to the model's replicability. Investors bear project outcome risk but not principal risk, so only the return above the benchmark is contingent on conservation performance. The contingent payment is financed by a GEF performance-based grant rather than by the MDB, so donors pay only on verified outcomes. The bond matures on 31 March 2027, so its conservation outcome is not yet final. A WRI (2024) assessment finds translating high-level principles into operational practice – staff capacity, incentive structures, country diagnostics – remains the primary bottleneck, suggesting three beneficial shifts: integrating nature into macro-economic and country diagnostics; applying nature-positive screening and Do-No-Significant-Harm criteria to climate operations – representing a floor rather than a ceiling, since moving beyond harm-avoidance toward demonstrable additional biodiversity gains would be a further step change in ambition (WEF, 2024c); and using concessional and blended-finance windows to de-risk NbS and EbA investment in client countries (Neunuebel et al., 2025a; WRI, 2024a). GEO-7 identifies MDBs as key actors in mobilizing and re-orienting capital for systemic environmental outcomes (UNEP, 2025).

2.4. Forest and Ecosystem Finance: Results-based and Long-term Mechanisms

Forests and other ecosystems are central to the biodiversity-climate nexus, and forest finance shows both synergies and trade-offs more clearly than most other areas (Angelsen et al., 2012; Dasgupta, 2021). This section examines the newly launched Tropical Forest Forever Facility (TFFF) and lessons from REDD+ and jurisdictional approaches. “Jurisdictional approaches” here refers to forest and land-use programs implemented at the scale of a defined administrative or political jurisdiction – national or subnational – rather than at project level; in many forest countries, implementation experience and evidence to date are concentrated at subnational level, where governments hold direct authority over land-use planning, permitting and enforcement (Angelsen et al., 2012). Equity dimensions – access barriers facing developing countries, indigenous peoples and local communities, women and youth – are addressed where instrument-specific evidence exists (e.g., TFFF's benefit-sharing provisions for indigenous peoples and local communities below) and more systematically in Section 2.5.

2.4.1. Tropical Forest Forever Facility

The Tropical Forest Forever Facility is a forest-finance mechanism launched by Brazil and partners at UNFCCC COP30 in Belém on 6 November 2025, addressing a longstanding market failure whereby tropical forests provide global climate and biodiversity benefits while forest countries bear most conservation costs (Government of Brazil, 2025; TFFF Secretariat, 2025a). As designed, it is a blended-finance vehicle targeting USD 125 billion capitalization: an initial “junior” sponsor-capital tranche of up to USD 25 billion, intended to de-risk and leverage a larger senior tranche raised through bond issuance (Government of Brazil, 2025; TFFF Secretariat, 2025a). Once capitalized, it is designed to invest in a diversified fixed-income portfolio and use returns to provide predictable, long-term, performance-based payments to participating tropical forest countries – including subnational and local implementing bodies – for verified standing forest, based on satellite-derived National Forest Monitoring System data (Government of Brazil, 2025; FAO, 2025).

Capitalization is in progress. The TFFF Launch Declaration was endorsed by 53 countries at the facility's launch on 6 November 2025 and by 66 countries – both tropical forest countries and

potential investor countries – by the close of COP30 on 22 November 2025, including developing countries that are home to over 90 percent of the world’s tropical forests (TFFF Secretariat, 2025a, 2025b). By the close of COP30, announced contributions exceeded USD 6.7 billion: Norway (USD 3 billion), Germany (EUR 1 billion over ten years), Brazil and Indonesia (USD 1 billion each) and France (EUR 500 million, subject to conditions), together with USD 5 million from the Netherlands and USD 1 million from Portugal in support of the Secretariat and USD 10 million from the Minderoo Foundation – against an interim sponsor-tranche target of USD 10 billion in 2026 and a USD 25 billion junior-tranche goal, within a full capitalization goal of USD 125 billion (TFFF Secretariat, 2025b, 2026). An Interim Board co-chaired by Brazil and Norway (TFFF Secretariat, 2026) has been established, and the World Bank has been confirmed as trustee and interim host, while forest-monitoring and safeguard modalities continue developing, including through an ad hoc technical working group on forest-degradation monitoring (TFFF Secretariat, 2025b; FAO, 2025). Because full capitalization, governance and disbursement modalities remain under development, the TFFF’s eventual scale and impact cannot yet be assessed empirically.

Three features are intended to distinguish the TFFF as a synergistic finance model, per its currently published design. First, payments are to be based on verified forest area rather than only emission-reduction flows, rewarding standing-forest “stocks” via satellite monitoring (Government of Brazil, 2025; FAO, 2025). Second, at least 20 percent of forest payments is designated for indigenous peoples and local communities, reflecting evidence that forests they manage often show lower deforestation and stronger biodiversity outcomes; ; the institutional arrangements through which they will access and control these funds, and their engagement in project design, remain to be defined (TFFF Secretariat, 2025b; WWF et al., 2021). Third, the mechanism is intended to complement, not replace, existing REDD+ and carbon-market initiatives, potentially providing a more stable, long-duration base for forest conservation finance with biodiversity and social co-benefits (Angelsen et al., 2012; Government of Brazil, 2025).

The TFFF’s reliance on capital-markets leverage means its financial risk-sharing structure, and forest countries’ participation terms, will remain a focus of technical scrutiny as design details are finalized (Government of Brazil, 2025; TFFF Secretariat, 2026). If fully capitalized and implemented with credible MRV, safeguards and genuine engagement of indigenous peoples and local communities, the TFFF illustrates how jurisdictional and subnational instruments can channel long-term climate- and biodiversity-related finance into forest conservation; whether it achieves this in practice remains an empirical question current evidence cannot yet answer (Government of Brazil, 2025).

2.4.2. REDD+ and High-integrity Carbon Markets

Over the past decade, REDD+ has been the main international framework linking forest conservation to climate finance (Angelsen et al., 2012; UNFCCC, 2011a). Facilities such as the Forest Carbon Partnership Facility and results-based payment programs have mobilized significant public finance, offering lessons for integrated approaches (World Bank, 2021b); programs with effective benefit-sharing, early stakeholder engagement and reliable MRV tend to deliver more durable emission reductions alongside biodiversity and social benefits (Angelsen et al., 2012; World Bank, 2021b). A substantial critical literature nonetheless documents persistent implementation challenges – carbon additionality and permanence risks, measurement uncertainty, land tenure conflicts, and unequal benefit distribution between intermediaries and forest communities – applying with particular force to project-level REDD+ (Angelsen et al., 2012; VCM, 2024; World Bank, 2024).

Recent efforts to scale subnational and jurisdictional REDD+ through the LEAF Coalition and similar initiatives show growing private interest in high-integrity forest credits. Jurisdictional-scale programs are generally distinguished from project-level REDD+ in that they internalize leakage within program boundaries, can be verified against national or subnational forest-monitoring systems, and embed safeguards and benefit-sharing in public policy rather than negotiating project-by-project – features associated with stronger integrity because they reduce elite-capture risk and improve jurisdiction-wide consistency (Angelsen et al., 2012).

Jurisdictional REDD+ also sits within the UNFCCC’s agreed REDD+ architecture: the Warsaw Framework for REDD-plus (Decisions 9/CP.19–15/CP.19), which establishes results-based finance, the Cancun safeguards, forest reference emission levels and MRV requirements, and which is reflected in Article 5 of the Paris Agreement. Project-level REDD+ continues to raise the additionality, permanence, leakage, and concerns regarding the rights of indigenous peoples and local communities (VCMI, 2024; World Bank, 2024). The key question at both scales is whether forest carbon finance protects and restores ecosystem integrity or instead incentivizes monoculture plantations and displaces deforestation elsewhere (IPCC, 2019); demand-side measures such as credible supply-chain due diligence can complement supply-side safeguards and MRV in managing this risk (Section 3.1).

Some observers argue the double-counting risk identified in Section 2.2.1 is best addressed structurally, through unified funding windows with an explicit dual climate-and-biodiversity mandate rather than parallel, separately tagged streams – a legitimate design option among several considered in Chapter 4, Section 4.4; this study takes no position on which institutional model Parties should pursue.

This section’s forest-finance focus reflects the relative maturity of forest-specific, results-based mechanisms (REDD+, the TFFF) and their evidence base, not a judgement that agriculture matters less to the nexus. Agroecology and family farming are increasingly recognized as synergistic finance sources – through payments for ecosystem services in agricultural landscapes and the sustainable-agriculture components of GEF Integrated Programmes (Section 2.3.1) – but dedicated, results-based agricultural finance mechanisms comparable in scale and evidence to REDD+ or the TFFF are less developed at present, warranting further attention in future iterations.

2.5. Empowering Indigenous Peoples and Local Communities

Indigenous Peoples and local communities, including women and youth, manage territories that contain a large share of the world’s remaining intact ecosystems and serve as effective biodiversity stewards in both rural and urban settings (IPBES, 2019; WWF et al., 2021). This stewardship pattern and the scale of finance received directly by indigenous peoples and local communities are two separate, independently documented facts rather than a claimed causal relationship. Biodiversity declines more slowly on lands managed by indigenous peoples and local communities than in comparable non-Indigenous areas (IPBES, 2019), while they receive well under one per cent of international climate-related development assistance directly, and channel under 3 percent of total international biodiversity-related development finance by some estimates (OECD, 2024c; Rainforest Foundation Norway, 2021; WWF et al., 2021). Bilateral biodiversity-related development finance for indigenous peoples and local communities reached roughly USD 1.1 billion in 2023 – an increase, but still a small fraction of total biodiversity flows (Defra & TNC, 2025). Current estimates rely on donor-reported project tagging rather than verified disbursement to organizations led by indigenous peoples and local communities specifically, meaning the share genuinely reaching them directly, rather than through

intermediaries, is likely at the lower end of these ranges (OECD, 2024c; Rainforest Foundation Norway, 2021).

Scaling synergistic finance needs more resources, together with governance and access models that strengthen finance flowing through intermediaries as well as direct-access modalities, while upholding the rights and priorities of indigenous peoples and local communities. “Scaling” here spans three often conflated dimensions: scaling out (extending direct-access finance to more organizations led by indigenous peoples and local communities), scaling up (embedding enabling policy and governance frameworks, including subnational ones), and scaling deep (improving the durability and quality of outcomes from funds already delivered).

Direct-access modalities – the GEF’s Inclusive Conservation Initiative, the Tenure Facility, and Indigenous-controlled territorial management funds – strengthen ecological outcomes when finance flows through organizations led by indigenous peoples and local communities upholding rights and local priorities, and increasingly when those organizations lead project design and implementation directly rather than merely channeling funds designed elsewhere (GEF, 2021a; GEF IEO, 2025). Treating FPIC, secure land tenure, equitable benefit-sharing, and equal land rights for women and men as core preconditions – rather than co-benefits – of durable outcomes is a key approach: unlike co-benefits, which describe positive side effects, these are rights-based preconditions under international law (FAO, 2016; UN Women, 2024; CBD, 1992, Article 8(j)). Structural reforms that reduce administrative barriers, recognize the autonomous governance systems of indigenous peoples and local communities, and limit excessive intermediation are also relevant, alongside their meaningful participation – together with women and youth – as observers in fund governance. Scaling access is most effective when paired with operational safeguards capacity (FPIC procedures, benefit-sharing mechanisms, grievance channels) and linked to national biodiversity finance plans and NBSAP investment planning, so growth supports country-owned GBF implementation and reduces downstream risk.

By using their roles in territorial planning, multi-actor coordination, and the design of benefit-sharing mechanisms, national and sub-national public finance mechanisms can enhance access for indigenous peoples and local communities through community-level grant windows, support for their enterprises, and co-management arrangements for protected areas and other effective area-based conservation measures (OECMs), including Indigenous Protected and Conserved Areas (IPCAs) operating outside the formal protected-area system (OECD, 2024c; IUCN, 2021). Subnational governments play a particular enabling role given their mandates over territorial planning, land-use governance and local economic development, positioning them to facilitate inclusive financing and co-design projects with indigenous peoples and local communities (OECD, 2024c). Community-led and Indigenous-led funds – the Pawanka Fund, Mesoamerican Territorial Fund, Nusantara Fund, and IPAS Fund – demonstrate that finance flowing directly through organizations rooted in local realities produces stronger, more durable outcomes, offering lessons that may extend to other frontline actors, including family farmers, beyond this section’s focus on indigenous peoples and local communities. These approaches enhance effectiveness and legitimacy while preventing climate finance from exacerbating social inequities or undermining customary governance (Rainforest Foundation Norway, 2021; WWF et al., 2021).

Expanding direct-access mechanisms for indigenous peoples and local communities is intended to complement, not supersede, Parties’ authority over resource mobilization under the Convention. Article 20 provides the basis on which the Parties undertake to finance national activities that achieve the Convention’s objectives (CBD, 1992, Article 20; CBD, 2025, Decision

16/34, preamble). Direct-access channels – including GBFF allocations – are designed to operate within, not outside, national governance architecture: Decision 16/34 recognizes “the value of the role of indigenous peoples and local communities, women and youth, including by providing direct access to finance” (CBD, 2025, Decision 16/34, para. 14) and separately frames enhanced access as “improving access to and increasing financial resources for indigenous peoples and local communities” (CBD, 2025, Decision 16/34, para. 17), alongside the Resource Mobilization Strategy’s emphasis on national and subnational ownership (CBD, 2025, Decision 16/34, annex I). In practice, direct-access modalities are best designed to strengthen country-led strategies through co-management and state–community coordination, not to bypass national biodiversity finance planning. Recognizing diverse value systems – including, where countries recognize them, rights of nature and Mother Earth, and approaches rooted in reciprocity, collective stewardship and intergenerational responsibility – is integral to the Framework’s successful implementation [CBD, 2022, Decision 15/4, para. 6(b)].

Family farmers, who manage a substantial share of global agricultural land and can deliver biodiversity, soil-health and climate-resilience co-benefits through agroecological practice, are a related constituency whose finance access merits attention in complementary agricultural-finance policy (FAO, 2021). This section’s direct-access analysis retains its focus on indigenous peoples and local communities, consistent with the CBD mandate under Decision 16/34 and KMGBF Targets 22 and 23. Governance that is inclusive of indigenous peoples and local communities is addressed further in Section 2.3, on accreditation and access barriers, in Section 2.4.1, on benefit-sharing design under the Tropical Forest Forever Facility, and in Table 2.1.

2.6. Taxonomies, Disclosure and Standards as Enabling Infrastructure

Scaling synergistic finance faces a persistent barrier: the lack of widely used comparable criteria for nature-positive or biodiversity-aligned investment (TNFD, 2023). Here, “scaling” means wider adoption and consistent application of common classification and disclosure criteria across jurisdictions, not an increase in the volume of finance (see Section 2.5 for that dimension). This section examines three complementary strands: sustainable finance taxonomies, voluntary and mandatory disclosure frameworks, and the functions this infrastructure serves for synergistic finance.

There has been a significant increase in the development and implementation of sustainable-finance taxonomies that define environmentally sustainable activities, including Do-No-Significant-Harm-to-biodiversity requirements (ASEAN, 2025; EU, 2020; South Africa National Treasury, 2022). Building on the MDB Common Principles (Section 2.3.2), a small but growing number of MDBs and jurisdictions have begun to align their internal nature taxonomy work with these frameworks (OECD, 2024c). Beyond taxonomies, a related set of frameworks governs financial-instrument design and fund labelling – green-bond frameworks, the UK’s Sustainability Disclosure Requirements (SDR), the EU’s Sustainable Finance Disclosure Regulation (SFDR) – shaping how sustainability claims are marketed rather than how activities are classified (UK FCA, 2023; EU, 2019).

Voluntary disclosure frameworks such as TNFD guide companies and financial institutions in assessing and reporting nature-related dependencies, impacts, risks and opportunities (TNFD, 2023); the ISSB has signaled intent to incorporate TNFD-aligned disclosure into its global baseline standards, extending TNFD’s reach beyond jurisdictions with dedicated biodiversity mandates (ISSB, 2024). TNFD elements are substantially incorporated into the mandatory European Sustainability Reporting Standards, including ESRS E4. However, the EU’s “Omnibus I” directive, in force since March 2026, has narrowed mandatory CSRD scope to companies

exceeding 1,000 employees and EUR 450 million turnover – around 80 percent fewer companies than originally – while leaving ESRS E4’s substantive content largely intact for those still in scope and more closely aligned with TNFD (EU, 2026; EFRAG, 2025). These regimes’ primary, demonstrated function is increasing transparency; redirecting private capital toward KMGBF-supportive activities remains a hoped-for downstream effect rather than an established outcome, and the net effect of Omnibus-narrowed scope on this redirection remains an open empirical question (EFRAG, 2023; WEF, 2024a). UNEA-7 and GEO-7 emphasize strengthening these enabling conditions as part of integrated environmental governance (UNEA, 2025; UNEP, 2025).

Taxonomy and disclosure proliferation across jurisdictions raises interoperability, duplication and compliance-cost concerns, especially for entities subject to overlapping regimes – CSRD, the Corporate Sustainability Due Diligence Directive (CSDDD) – regional legislation rather than a multilaterally agreed instrument – and TNFD-based value-chain due-diligence expectations simultaneously (Chapter 3, Section 3.4.4 discusses the CSDDD/Omnibus interaction). Alignment and mutual recognition among taxonomies – building on the MDB Common Principles – would reduce these costs while preserving core function (ASEAN, 2025; EU, 2020). Approaches to mandatory disclosure vary: some stakeholders advocate expanding scope globally as enabling infrastructure, while other Parties favor voluntary, nationally determined approaches.

As with “co-benefits” terminology used throughout, biodiversity’s treatment within taxonomies and disclosure as an objective alongside climate does not subordinate it to climate-finance architecture: biodiversity conservation, sustainable use and equitable benefit-sharing remain primary Convention objectives in their own right (CBD, 1992, Article 1), independent of their treatment within climate-oriented disclosure regimes. While mandatory frameworks like the EU’s Corporate Sustainability Reporting Directive (CSRD) provide clear benchmarks, a significant institutional and capacity gap limits their direct application in developing countries. To bridge this gap, implementation pathways may prioritize gradual, phased approaches that build upon existing national fiscal and regulatory systems, rather than directly replicating complex European architectures.

These classification and disclosure tools serve three functions for synergistic finance. They rest on the premise, set out in IFRS S1, that sustainability-related disclosure should provide investors and other users of general-purpose financial reports with information useful for decisions about allocating resources (IFRS Foundation, 2023). In this context, the information concerns nature-related impacts, dependencies, risks and opportunities.

- First, they give public and private actors a common language identifying climate- and biodiversity-aligned investments (ASEAN, 2025; South Africa National Treasury, 2022).
- Second, they enable more consistent tracking of biodiversity co-benefits within climate-finance reporting, including NCQG and MDB portfolios (MDBs, 2025; OECD, 2024c).
- Third, they incentivize project developers and issuers – in green-bond and sustainability-linked-bond markets, for example – to incorporate biodiversity outcomes and safeguards directly into transaction design rather than treating them as secondary (TNFD, 2023; WEF, 2024a).

Investor usability depends on credible, comparable reporting: location-based baselines, context-appropriate indicators, transparent disclosure of methods and assumptions, and proportionate independent assurance where sustainability claims are monetized or publicly marketed – aligning with existing infrastructure rather than introducing parallel requirements (TNFD, 2023).

Empirical evidence on whether disclosure changes corporate behaviour remains limited and jurisdiction-specific. A study of Shanghai and Shenzhen A-share listed companies over 2011–2023 reports that ESG information disclosure significantly improves corporate environmental performance, with effects operating through green innovation, media attention and executive compensation, and more pronounced among state-owned enterprises, firms with stronger internal controls, and environmentally sensitive industries (Wu et al., 2025). That study examines composite ESG disclosure within a single jurisdiction rather than biodiversity-specific reporting under a mandatory regime, and it makes a causal claim, as in Wu et al. It is cited as indicative, not as establishing that disclosure redirects finance. Cross-country evidence qualifies this. A multilevel analysis (Shen et al., 2025) of firms across 34 countries over 2015–2022 finds that stronger corporate environmental performance is associated with higher financial performance, measured by return on assets and Tobin's Q ¹¹, and with lower capital costs, particularly the cost of equity; materiality-based environmental scores show weaker effects, which the authors attribute to limited data availability and inconsistent global integration of materiality concepts. They conclude that investors prefer firms with accountable environmental performance over those relying on disclosure alone (Shen et al., 2025). Read together, the two studies indicate that disclosure regimes matter through the performance they induce rather than through reporting as such. Neither source states this; the inference is drawn here.

¹¹ *Tobin's Q* compares a firm's market value to its physical asset value, with higher ratios indicating investors see value beyond tangible assets. *Cost of equity* is the return investors require for holding a company's stock; lower costs mean cheaper access to capital. *Materiality-based environmental scores* assess only the environmental factors considered financially relevant to a given industry, rather than applying uniform criteria across all sectors.

Chapter 3: Managing Trade-off Finance – Risks and Safeguards

Trade-off finance refers to a subset of climate-related investments that inadvertently degrade biodiversity through poorly designed mitigation, adaptation, or loss-and-damage projects. Rapid climate finance scaling under the NCQG creates urgency for three reasons: climate finance is expanding; systematic safeguards remain weak; and without them, expanded flows could accelerate ecosystem degradation while addressing climate objectives. This chapter examines three domains in which such trade-offs materialize: land-use mitigation that prioritizes carbon over biodiversity (3.2), renewable energy and adaptation infrastructure that fragment habitats or undermine coastal ecosystems (3.3), and the gap between safeguard policies and their implementation (3.4). It synthesizes approaches that reduce biodiversity harm while maintaining climate integrity (3.5). Chapter 2 examines the corresponding opportunities for scaling synergistic finance as the NCQG is implemented.

3.1. Identifying the Trade-off Nexus and the Impact Inequality

The KMGBF, adopted at CBD COP15 in December 2022, and the Paris Agreement are different but complementary instruments – the KMGBF is a non-legally binding COP decision, the Paris Agreement is a legally binding treaty. The rapid climate-finance scale-up is expected to increase a distinct category of trade-off finance: financial flows pursuing climate objectives – mitigation, adaptation, or loss-and-damage response – while harming or risking ecological integrity through species, habitat and ecosystem degradation. This is analytically narrower than the broader universe of nature-negative finance below.

Flows initially treated as “isolated” can become trade-off finance over time when biodiversity impacts are not assessed: transport or energy infrastructure presumed neutral can later fragment habitat or cause species decline, including legacy and linear infrastructure upgrades that were never evaluated for biodiversity outcomes during investment appraisal. This highlights the need for early biodiversity screening of presumed isolated projects and sectors (Section 2.2.1). Carbon dioxide removal (CDR) and geo-engineering remain a largely ungoverned frontier. Decision X/33 of the Convention on Biological Diversity (CBD) addresses climate-related geoengineering in general terms, but governance of biodiversity risks associated with rapidly growing private investment in specific applications, such as ocean-based CDR (mCDR), remains limited.

Box 3.1: Distinguishing Nature-Negative, Trade-off and Harmful-Subsidy Finance

To avoid conflating three analytically distinct categories, this chapter distinguishes:

- **(a) Nature-negative finance, broadly defined:** the full universe of public and private capital flows that degrade biodiversity regardless of climate objective – USD 7.3 trillion in 2023 (UNEP, 2026) – concentrated in sectors not primarily climate-finance sectors (industrials, fossil fuels, basic materials, real estate, consumer (non-)cyclicals).
- **(b) Trade-off (climate) finance:** the considerably smaller subset of (a) arising specifically from climate-related mitigation, adaptation or loss-and-damage investments – the subject of Sections 3.2–3.4.
- **(c) Environmentally harmful subsidies:** public fiscal support harmful to climate and biodiversity independently, not a form of climate finance. EHS reform under KMGBF Target 18 therefore represents a “double dividend” opportunity, not a subset of trade-off climate finance.

This distinction matters for how the finance figures below should be read and the policy levers most relevant to each category (see synthesis in Section 3.5).

Expanding climate-finance commitments coexist with, but are not the direct driver of, the persistent nature-negative flows in category (a); the two arise from largely different investment patterns and sectoral allocations, even where they intersect in specific high-risk activities examined in Sections 3.2–3.4. This broader tension reflects Dasgupta’s (2021) concept of impact inequality: humanity’s total demand on the biosphere – driven by population, consumption, and technology – exceeds its regenerative capacity. Earlier literature estimated nature-negative capital flows at USD 2.6–7 trillion annually (UNEP, 2023); the State of Finance for Nature (SFN) 2026 report has since quantified this more precisely at USD 7.3 trillion in 2023 (UNEP, 2026), the figure used consistently throughout this study – more than 30 times the USD 220 billion directed to NbS (UNEP, 2026).

Of the USD 7.3 trillion, public EHS account for an estimated USD 2.4 trillion annually – about one-third of total nature-negative flows – with the remaining USD 4.9 trillion comprising private capital in fossil fuels, basic materials, industrials and real estate (UNEP, 2026). Within public EHS, fossil-fuel support is the largest single component (~USD 1.1 trillion), followed by agriculture and water (each ~USD 0.41 trillion), with the remainder across transport, fisheries and other sectors (UNEP, 2026, drawing on Fossil Fuel Subsidy Tracker, 2025). This is broadly consistent with the Paulson Institute’s –estimate that agriculture, forestry, and fisheries subsidies alone reached roughly USD 840 billion in 2024 (Paulson Institute, 2025; IMF, 2023). Because EHS harm climate and biodiversity independently rather than constituting climate finance, their reform under KMGBF Target 18 – reducing harmful incentives by at least USD 500 billion per year by 2030 (CBD, 2022) – is domestic fiscal reallocation, analytically distinct from, and not a substitute for, the net new resource mobilization sought under Target 19 (CBD, 2022).

Safeguard effectiveness depends not only on design but on governance and implementation capacity at the level where decisions are actually made, including subnational jurisdictions responsible for land-use planning, permitting and enforcement (Section 3.4 develops this further). Concurrently, trade-off risks become significantly more acute where territorial governance and local institutional capacity are weak, as under-resourced authorities may struggle to monitor or enforce environmental and social protections.

Trade-offs are not only ecological: restrictions on land use, changes in production systems and displacement associated with climate-related projects can affect communities, women and other groups differently, particularly where they depend directly on common-pool resources for subsistence and care (Section 3.4 discusses rights-based and gender-responsive safeguards further). Some observers argue that avoiding trade-offs requires not only better project screening but structural reform of finance mechanisms so funding channels more directly to locally led projects. Chapter 4 addresses governance and access in more detail. A gender-responsive and intersectional analysis is therefore warranted – examining how finance impacts differ across intersecting characteristics such as gender, age, ethnicity and indigenous or local-community identity – consistent with CEDAW and KMGBF Targets 22 and 23 (UN Women, 2024).

Climate-motivated finance represents a comparatively small share of overall nature-negative flows, with its contribution to trade-off finance concentrated on specific instruments and sectors examined below: land-use mitigation (3.2), infrastructure and adaptation (3.3), and safeguard-implementation gaps (3.4). Reducing these trade-offs is not only about avoiding harm *ex post*: Section 3.5 synthesizes policy levers – integrated spatial planning, upstream environmental assessment, subsidy-reform pathways – applying across the instruments examined below. The

literature suggests approaches extending beyond a do-no-harm baseline toward integrated wellness, recognizing non-linearities and tipping points in ecosystem processes while treating ecological integrity as foundational to climate stability (Dasgupta, 2021).

3.2. Land-Use Climate Mitigation Risks: Carbon vs. Biodiversity

Land-use mitigation shows clear climate-biodiversity trade-offs, especially where rapid carbon gains override ecosystem integrity (IPCC, 2019; Seddon et al., 2021) – though land-based mitigation is not inherently harmful and can be designed to support ecosystems where these risks are actively managed. Four areas show how a narrowly climate-centric approach to land policy drives ecological harm: monoculture afforestation, low-integrity offsets, the Article 6.4 removals framework and the EU Carbon Removal Certification Framework.

3.2.1. Monoculture and the Carbon-centrism of Nature Policy

Mitigation strategies pursuing rapid carbon sequestration through monoculture afforestation overlook ecological requirements for structural complexity, native species diversity and landscape connectivity; plantations of fast-growing, non-native species reduce ecosystem resilience, alter hydrology and cause net biodiversity losses even while meeting short-term carbon targets (IPCC, 2019). The Land Gap Report finds the land area implied by current country pledges for forestry-based mitigation likely exceeds available suitable land, risking displacement of existing land uses and communities, and cautions against methodologies treating carbon in long-established, high-biodiversity forests as equivalent to carbon in newly planted monocultures given their differing ecological value and permanence (Dooley et al., 2022).

This reflects a broader over-prioritization risk: an exclusive focus on carbon flows ignores nature stocks – existing ecosystem extent, condition and functionality (TNFD, 2023). Converting biodiverse grasslands, savannas, or wetlands into plantations damages ecosystems that store substantial soil carbon in living and dead biomass and soil itself. These ecosystems support unique biota that forest cover cannot replace (IPCC, 2019), and protections for these carbon pools are already recognized under the Cancun Safeguards (Decision 1/CP.16). GEO-7 warns that scaling such land-use changes without safeguards undermines biodiversity goals and long-term climate resilience (UNEP, 2025).

Technical evidence supports native ecosystem restoration, landscape-scale planning, and long-term ecological monitoring over narrow carbon metrics to maintain ecosystem integrity (Seddon et al., 2021). Climate finance eligibility criteria that exclude projects that convert high-biodiversity non-forest ecosystems – peatlands, grasslands, savannas, freshwater and marine/coastal habitats - not only forests – for carbon sequestration could be considered in this regard (TNFD, 2023).

3.2.2. Carbon Offset Schemes: Implementation Failures and Structural Critiques

Low-integrity carbon-offset schemes promise inexpensive emission reductions but deliver weak or negative biodiversity outcomes, stemming from missing site-specific biodiversity baselines, inadequate leakage monitoring, and weak social safeguards, particularly around land tenure. Project developers engaging local communities for carbon rights, bypassing national authorities, create risks for ecosystems and the rights of indigenous peoples and local communities (Angelsen et al., 2012; Sunderlin et al., 2011). Developers secure long-term land and revenue control while local people face resource-use restrictions, dispossession or conflicts, and biodiversity becomes primarily a carbon asset (Angelsen et al., 2012).

Beyond specific implementation failures, a growing literature – and several reviewers – raise structural concerns about offsetting logic itself: whether biodiversity and carbon losses in one place and time can be meaningfully compensated by conservation gains elsewhere, given differences in temporal, ecological, and social contexts. Some nature-finance frameworks are accordingly excluding voluntary offsets pending the resolution of integrity and additionality concerns (UNEP, 2026). This study takes no position on whether offsetting as a category should be phased out; both implementation-level fixes and the structural critique point to the same near-term priority: eligibility criteria relying on offsets could apply rigorous, independently verified integrity standards rather than treating offset-based mitigation as equivalent to avoided impact.

Integrity standards extending beyond greenhouse-gas accounting – sound biodiversity baselines, equitable benefit-sharing, mandatory FPIC – have potential utility, though FPIC depends on functioning community governance and project funding cycles are not always compatible with genuine, inclusive consensus-building (Angelsen et al., 2012; TNFD, 2023; FAO, 2016). Emerging voluntary-market standards like the Core Carbon Principles address some issues, but uptake and enforcement remain uneven (ICVCM, 2024; VCMi, 2024). Scaling high-integrity jurisdictional-level REDD+ programs, such as the Architecture for REDD+ Transactions (ART) TREES standard, avoids many project-level risks by verifying emission reductions at jurisdictional scale, reducing leakage and grounding benefit-sharing in government-led processes (Angelsen et al., 2012).

3.2.3. Article 6.4 Mechanism: Safeguards, the Reversal Risk Buffer

Pool and Remaining Implementation Gaps

Under the Paris Agreement, the Article 6.4 mechanism establishes rules for the international transfer of mitigation outcomes, including removals (UNFCCC, 2024a). The Article 6.4 Supervisory Body has since adopted an appeal and grievance process (May 2024) and a mandatory Sustainable Development Tool (SD Tool, version 01.0), in force since 9 October 2024 (UNFCCC Article 6.4 Supervisory Body, 2024), requiring all activity participants to conduct an ex-ante Environmental and Social Safeguards Risk Assessment – including screening against the World Database of Key Biodiversity Areas and IUCN’s Global KBA Standard – and avoid adverse direct, indirect and cumulative habitat and biodiversity impacts. For land-based removals, the Reversal Risk Buffer Pool requires at least 20 percent of issued credits set aside against reversals such as fires or pest outbreaks (SBM, 2024).

This substantively strengthens earlier CDM-era practice: mandatory ex-ante KBA screening now addresses much of the risk that unconstrained land-based removals could incentivize high-biodiversity ecosystem conversion. Three implementation-stage gaps remain: the SD Tool’s general habitat-impact criteria lack removals- and CDR-specific biodiversity annexes, which the Supervisory Body has indicated it will develop; the practical stringency of “avoids adverse impacts” for afforestation on non-forest ecosystems depends on still-accumulating validation and verification practice; and effective independent compliance monitoring – not existence on paper – will determine effectiveness (Section 3.4 discusses this class of gap more generally). Strengthening Article 6.4 may focus less on new safeguards than on extending KBA-equivalent screening to non-forest high-biodiversity ecosystems in forthcoming removals annexes, building independent verification capacity, and monitoring the SD Tool’s application as the first cohort of land-based removals is validated (UNFCCC, 2024a). This governance process falls under the Paris Agreement’s institutional arrangements and cannot be determined solely by CBD decisions. Views differ on whether the Reversal Risk Buffer Pool should remain a mandatory

set-aside or move toward incentive-based design to avoid crowding out private investment; this remains for the Supervisory Body's continued technical work.

3.2.4. EU Carbon Removal Certification Framework (CRCF) and QU.A.L.ITY Criteria

The EU CRCF is among the first regulatory schemes defining high-quality-removal criteria and a certification system for public policy and voluntary markets (EU, 2024a), applying the QU.A.L.ITY principles – Quantification, Additionality, Long-term storage and SustainabILITY. While the sustainability pillar references environmental safeguards, it may not be stringent enough to prevent carbon-farming incentives from converting biodiverse grasslands and other non-forest ecosystems into biomass plantations – potentially requiring site-specific biodiversity assessments, ecosystem-appropriate baselines and a strong “no conversion of high-biodiversity ecosystems” rule within CRCF implementation (TNFD, 2023).

The CRCF illustrates both the potential and limits of carbon-centered certification: without adequate biodiversity metrics and clear exclusion criteria, even advanced removal schemes risk becoming vehicles for trade-off finance rather than genuine co-benefits (UNEP, 2025). High-integrity outcomes are associated with land-use mitigation eligibility criteria that exclude the conversion of high-biodiversity non-forest ecosystems (TNFD, 2023; FAO, 2016).

3.3. Infrastructure and Mal-adaptation Trade-offs

Climate-related infrastructure investments – renewable energy, linear infrastructure such as transportation, and coastal protection – generate significant trade-offs when siting and design ignore biodiversity (Bennun et al., 2021). These three sectors are illustrative, high-volume climate-finance categories with well-documented biodiversity interactions, not an exhaustive account; unplanned or poorly planned urban expansion raises related but analytically distinct concerns beyond this chapter's scope. Target 18 provides for the identification, elimination, phasing out, or reform of incentives harmful to biodiversity “in a proportionate, just, fair, effective and equitable way”, “starting with the most harmful incentives” (CBD, 2022, Decision 15/4, Target 18). The Kunming-Montreal Global Biodiversity Framework further provides for the necessary means of implementation, including financial resources, capacity-building and technology transfer (CBD, 2022, Decision 15/4). Parties have emphasized in submissions that reform proceeds within their own policy space.

3.3.1. Renewable Energy Siting and Key Biodiversity Areas (KBAs)

Rapid renewable-energy deployment is important for decarbonization but can generate substantial biodiversity trade-offs when poorly sited; similar siting risks apply to other infrastructure types, and renewable energy is discussed first as illustrative rather than uniquely problematic. Large-scale hydropower, wind and solar projects fragment habitats, alter hydrological regimes and cause direct wildlife mortality (Dasgupta, 2021; Marques et al., 2019); risk profiles are not equivalent across technologies – hydropower's impacts on river connectivity and freshwater ecosystems are generally more severe and less readily mitigated than wind or solar (Dasgupta, 2021; IPCC, 2019). These risks intensify near Key Biodiversity Areas, protected areas or critical ecological corridors. Hydropower dams can obstruct migratory pathways, disrupt sediment flows and cause floodplain/wetland habitat loss (Dasgupta, 2021; IPCC, 2019); large wind farms can cause significant functional habitat loss for soaring birds and bats along migration routes unless operators apply curtailment measures such as increased turbine cut-in speeds (Marques et al., 2019; OECD, 2024b).

Avoiding these trade-offs may require integrating biodiversity data and spatial-planning tools early in energy planning, including explicitly excluding KBAs and critical habitats from project pipelines and applying the mitigation hierarchy at landscape level (OECD, 2024b). GEO-7 identifies nature-positive infrastructure as a key transformation pillar (UNEP, 2025). Siting decisions also raise distributional and just-transition questions: access to renewable-energy benefits, and exposure to associated land-use-change costs, is frequently gendered and unevenly distributed across local and Indigenous communities (Section 3.4 discusses rights-based and gender-responsive safeguards further).

Emerging standards point toward nature-positive infrastructure integrating biodiversity outcomes into design and operation (IUCN, 2025b). For wind, good practice includes turbine-free buffer zones around key flyways and breeding colonies, curtailment protocols, and adaptive management based on post-construction monitoring (OECD, 2024b; Bennun et al., 2021). For solar PV, nature-inclusive and agrivoltaic designs combine elevated panels, vegetated understories with native species, habitat corridors, nest boxes and low-intensity grazing, with early evidence indicating higher plant and insect diversity than conventional ground-mounted parks (Ludzuweit et al., 2025; OECD, 2024b). Initiatives such as IUCN’s “Renewables for Nature” provide practical design criteria MDBs can promote through project preparation, policy dialogue and performance standards (Bennun et al., 2021; IUCN, 2025a).

3.3.2. Coastal Mal-adaptation and the “Triple Dividend”

Adaptation finance frequently prioritizes grey infrastructure – seawalls, breakwaters, levees – damaging or displacing coastal ecosystems including mangroves, seagrass beds and coral reefs, which provide more effective, flexible natural protection against storm surges and erosion, plus habitat, carbon storage and livelihood benefits (UNEP, 2023; Global Commission on Adaptation, 2019). When grey infrastructure undermines these natural buffers, it creates mal-adaptation, increasing long-term vulnerability and reducing adaptive capacity (Global Commission on Adaptation, 2019; TNFD, 2023). Coastal NbS – mangrove restoration, dune rehabilitation, reef protection, alongside dryland and urban NbS – deliver a triple dividend: avoided climate-impact losses, economic co-benefits and wider social and environmental gains, adding only around 3 percent to upfront infrastructure costs while yielding benefit-cost ratios of roughly 4:1 (Global Commission on Adaptation, 2019).

Ecosystem-based engineering on eroding mud coasts illustrates an alternative sequence to hard protection. The Building with Nature program in Demak district, central Java, does not plant mangroves directly on an eroding shore. It first constructs permeable dams that trap sediment along the shore, then restores a protective mangrove belt on the rebuilt muddy substrate and addresses the root causes of erosion by proposing aquaculture regimes that prevent soil subsidence, hydrological disturbance and damage to remaining ecosystems. Begun in 2014 with a systems analysis and implemented over five years with the government of Indonesia, communities and other local stakeholders through an adaptive master-planning process, with interventions scaled up on the basis of monitoring, the program is intended to improve coastal security for 70,000 people in Demak and to provide a long-term basis for sustainable coastal economic development. Its authors present the integrated approach as a sustainable, cost-effective and climate-adaptive solution that may change how the engineering community addresses erosion along tropical mud coasts; this study reports characterization without adjudicating it, noting that the program was in progress at the time of reporting (Winterwerp et al., 2016).

Adaptation windows in vertical climate and environmental funds, national budgets and other donors could apply an NbS-first principle – grey solutions only where NbS are technically infeasible or insufficient – recognizing that hybrid green-grey designs, rather than a strict either/or choice, will often be realistic in densely populated coastal areas where space and protection needs are most acute (UNEP, 2025). The central governance challenge is integrating strategic environmental assessment, spatial planning and the mitigation hierarchy early in project design to steer infrastructure toward synergistic rather than trade-off finance (OECD, 2025a; UNEP, 2025).

3.3.3. Adjacent Trade and Industrial Policy Instruments

Several trade and industrial-policy instruments intersect with the climate-biodiversity finance nexus but fall outside this chapter’s core scope: the EU Carbon Border Adjustment Mechanism (CBAM), the EU Deforestation Regulation (EUDR), and critical-minerals supply-chain governance linked to the energy transition. Each carries potential biodiversity implications – EUDR’s due-diligence requirements for deforestation-linked commodities, or critical-mineral extraction’s land- and water-intensive footprint for renewable-energy and battery supply chains – meriting dedicated technical analysis beyond this study’s scope, flagged as a priority area that future analytical work could usefully address (EU, 2023a).

3.4. Safeguards Implementation: The Gap Between Policy and Practice

Safeguard-framework implementation is examined in greater detail in the parallel technical study on biodiversity-finance safeguards requested under Decision 16/34, which assesses how guidance adopted in Decisions XII/3 and 14/15 has been operationalized, identifies good practices and barriers, and outlines opportunities for strengthening safeguards amid scaled-up finance.

Many trade-offs emerge not because safeguards are absent on paper but because they are weakly implemented. Safeguards are most effective when operationalized across the full project cycle – screening, due diligence, monitoring, grievance redress – rather than treated as a one-time design step. Institutional weaknesses are compounded in some contexts by regulatory capture and limited access to environmental justice, thereby constraining the practical effectiveness of safeguards even where they formally exist. Strengthening implementation is therefore a governance question as much as a technical or capacity one: it depends on accountability mechanisms accessible to affected communities, financial-flow transparency, and independent evaluation involving civil society and rights-holders. Four areas illustrate this gap: REDD+ safeguards, institutional capacity constraints in funds and MDBs, DNSH application, and corporate due diligence.

3.4.1. Cancun Safeguards and Safeguards Information Systems (SIS)

The Cancun Safeguards (Decision 1/CP.16) are the primary international standard ensuring REDD+ actions do not harm biodiversity or local rights, including Indigenous Peoples’ rights (UNFCCC, 2011b). These safeguards are binding for countries seeking results-based payments under the UNFCCC framework, understood to contribute to stronger outcomes than a purely voluntary standard; yet safeguards binding in principle remain only as strong as their accountability and enforcement mechanisms in practice, where there is widely acknowledged room for improvement (UNFCCC, 2011b). Brazil and Indonesia have established safeguards information systems and submitted summaries of how they address these safeguards (Brazil Ministry of Environment, 2018; Indonesia MoEF, 2023). Across REDD+ implementation more broadly, the adequacy of Free, Prior and Informed Consent processes and the protection of

indigenous peoples' and local communities' rights have been recurring focal points of independent review, reinforcing the case for treating FPIC and secure tenure as preconditions for results-based payments rather than procedural formalities (Angelsen et al., 2012).

Achieving meaningful FPIC remains challenging; some project proponents call it an “impossible dream” given the time and resources genuine consensus-building requires in complex local contexts (Angelsen et al., 2012).

Safeguards could extend beyond checklists to participatory processes, rights-based approaches and independent verification of biodiversity and social outcomes (FAO, 2016); GEO-7 highlights rights-based governance and the knowledge of indigenous peoples and local communities as critical enablers of successful environmental transformations (UNEP, 2025). Independent verification can draw on, rather than substitute for, Indigenous and local ecological knowledge: indigenous peoples and local communities are rights-holders and knowledge-holders, not only recipients of external verification.

Table 3.1 shows key biodiversity risks and corresponding safeguard and governance needs across selected activities and instruments.

3.4.2. Institutional Safeguards: Multilateral Development Banks and GCF Accreditation

MDBs and vertical climate and environmental funds have adopted sophisticated safeguard policies – the World Bank’s Environmental and Social Framework (ESF), the GCF’s Environmental and Social Management System (ESMS), and the IFC’s Performance Standard 6 on Biodiversity Conservation (World Bank, 2017; IFC, 2012). The GEF adopted its own Policy on Agency Minimum Standards on Environmental and Social Safeguards in 2011; subsequent evaluations of that policy and of the World Bank’s broader biodiversity engagement (World Bank, 2024) similarly identify persistent gaps between policy design and field-level implementation capacity. An independent evaluation of the GCF’s environmental and social safeguards and its Environmental and Social Management System found that environmental and social safeguard items generate the most interaction between the Secretariat and applicants during Stage I of accreditation, the completeness check: all applicant entities had open safeguard items raised during that stage, and 55.6 per cent still had open items at its close – the lowest clearance rate of the seven item themes assessed. The evaluation attributes this, in part, to the difficulty candidate entities face in introducing new policies or standards and closing gaps in institutional processes within the limits of Stage I engagement (GCF IEU, 2020).

These capacity constraints cause delays, cost escalation, and sometimes diluted safeguard requirements during design and implementation (GCF, 2024a; GEF, 2021b), often more pronounced at the subnational level, where land-use planning, permitting, and enforcement decisions are made. MDB experience suggests safeguards prevent the most egregious harm but are less effective at steering portfolios toward nature-positive outcomes, especially where biodiversity expertise is thinly spread across large institutions (WRI, 2024b; Neunuebel et al., 2025b). Closing this gap may require increased institutional capacity-building for DAEs and project proponents – including subnational entities – simplified but robust safeguard templates for smaller entities, and greater use of programmatic approaches embedding safeguards and biodiversity co-benefits at portfolio level.

3.4.3. Do-No-Significant-Harm and the Mitigation Hierarchy

DNSH is central to emerging sustainable-finance taxonomies, including the EU’s and ASEAN’s, requiring that activities contributing to one environmental objective (e.g., climate mitigation) do not significantly harm others, such as biodiversity or water (EU, 2020; ASEAN, 2025). DNSH is

a floor rather than a ceiling: the “significant harm” threshold sets a minimum bar for avoiding harm, materially lower than actively pursuing nature-positive outcomes – worth keeping in view when DNSH compliance is treated as sufficient rather than a starting point (WEF, 2024b). It operates through the mitigation hierarchy – Avoid, Minimize, Restore, Offset – prioritizing avoidance over compensation. At the Offset stage, habitat banking (also termed conservation or mitigation banking) has developed operational expertise relevant to biodiversity finance: England’s mandatory Biodiversity Net Gain (BNG) regime, in force for major developments since February 2024 and extending to nationally significant infrastructure from 2026, requires a minimum 10% biodiversity gain against a statutory metric, delivered on-site, through off-site habitat banks, or via purchased units, alongside comparable systems in the United States and elsewhere (IUCN, 2026). This experience is directly relevant to the credibility of the “Offset” step, though its lessons for international biodiversity-climate finance mechanisms remain to be systematically assessed.

In practice, environmental impact assessments (EIAs) often come too late in project cycles, after major siting and design decisions (GEF, 2021b), though well-designed early-stage tools such as fatal-flaw analysis can serve as effective upstream planning instruments when applied from project inception rather than only as downstream compliance barriers – functioning best as a foundational first step rather than a late-stage checkpoint. Where EIAs are applied late, this limits the “avoid” step’s practical application, leaving restoration and offsetting as primary options despite their greater technical uncertainties. Reducing trade-off risk means integrating DNSH and the mitigation hierarchy into early-stage spatial planning, sector strategies and financial-product design rather than treating them as downstream compliance (ASEAN, 2025; WEF, 2024b); GEO-7 and UNEA-7 emphasize upstream integration of environmental safeguards in infrastructure and energy planning (UNEA, 2025; UNEP, 2025).

3.4.4. Corporate Due Diligence: EU CSDDD and Supply-chain Integrity

Mandatory corporate due-diligence regimes broadly – not only the EU’s – can play an important role aligning private capital with biodiversity-positive supply chains; the EU’s CSDDD experience is examined as the most developed example, not the only relevant model. Corporate supply chains are a major channel through which climate-related investments drive land-use change, deforestation and habitat degradation. The EU Corporate Sustainability Due Diligence Directive introduces mandatory due diligence on environmental and human-rights impacts across global value chains (EU, 2024b; SCBD, 2025c), obliging large companies to identify, prevent and mitigate deforestation, ecosystem conversion and related human-rights violations in their supply chains (EU, 2024b).

This framework provides an important legal lever for aligning private capital with KMGBF Targets 5, 14 and 18, but effectiveness depends on reliable traceability systems and clear performance expectations (FAO, 2024; OECD, 2024b). Robust evidence on whether disclosure and due-diligence regimes actually shift private capital allocation, versus improving risk identification and pricing, remains limited (FAO, 2024; OECD, 2024b). Examples include product-level traceability in timber and commodities – piece-specific specifications and digital tracking to reduce waste and prevent illegally sourced wood entering supply chains (FAO, 2024).

If effectively implemented, CSDDD and similar regimes could transform potential trade-off finance into synergistic flows by linking corporate climate targets with deforestation-free, nature-positive sourcing requirements. However, the Directive’s scope and ambition have faced sustained pressure through corporate lobbying and the European Commission’s 2025 “Omnibus” simplification proposal; this has since been adopted as the Omnibus I Directive (EU) 2026/470,

in force since 18 March 2026 (Chapter 2, Section 2.6; Chapter 4, Section 4.6.2), confirming the scope-narrowing direction flagged here. Whether CSDDD delivers its intended biodiversity co-benefits will depend on whether its core due-diligence obligations survive this simplification largely intact (European Commission, 2025; EU, 2026).

3.4.5. Legal Basis: Safeguards as Human Rights Due Diligence

Underlying these implementation gaps is a broader legal-basis question. Biodiversity and climate finance operate within and are increasingly interpreted as States' existing human rights obligations. UNDRIP, the ICCPR, the ICESCR, CEDAW, and the UN General Assembly's 2022 resolution recognise the right to a clean, healthy and sustainable environment (UNGA, 2022, Resolution 76/300). Framing safeguards as human-rights due diligence – encompassing participation, accountability and access to remedy – reinforces, rather than duplicates, the technical safeguard gaps identified in Sections 3.4.1–3.4.4. This framing also reflects a basic distinction in human-rights practice – between duty-bearers, principally States (and other actors acting within their mandates), which carry the obligations, and rights-holders, including Indigenous Peoples and local communities and other affected groups – a distinction the report applies in preference to framing these groups solely as beneficiaries or stakeholders.

3.5 Synthesis: Approaches Identified for Managing Trade-off Finance

Certain trade-off patterns identified here warrant particular attention for COP17 review: conversion of high-biodiversity ecosystems for monoculture carbon mitigation (3.2.1); poorly sited renewable-energy or transport infrastructure in critical habitats or KBAs (3.3.1); and grey coastal infrastructure removing natural storm and erosion buffers (3.3.2).

Evidence from land-use mitigation, safeguard implementation, and infrastructure shows several approaches that reduce biodiversity trade-offs while maintaining climate objectives. Five strategic areas emerge, sharing common features: quality over quantity, with high-integrity interventions outperforming larger volumes of poorly designed projects; integration at the design phase rather than downstream mitigation; and independent monitoring strengthening accountability.

Effectiveness depends on institutional capacity (trained staff, adequate budgets, functioning grievance mechanisms) – necessary but not sufficient alone, since resourcing does not automatically translate into effective outcomes without complementary governance quality – alongside transparency enabling public scrutiny and meaningful participation of indigenous peoples and local communities, including women and youth, in design and monitoring. These approaches inform Chapter 4 options, particularly metrics and reporting (4.1), public finance alignment (4.2), and access mechanisms for indigenous peoples and local communities (4.4). The 2026–2027 period offers a strategic window for embedding them into NCQG implementation.

Recognition of existing ecosystem stocks alongside carbon flows. Mechanisms focused exclusively on carbon flows undervalue maintaining existing ecosystem stocks – intact forests, grasslands, wetlands, reefs (Dasgupta, 2021; Government of Brazil, 2025) – increasingly important since continued degradation risks converting some systems from net carbon sinks to net emitters, directly undermining mitigation goals (IPCC, 2019).

Options: Finance mechanisms rewarding ecosystem extent and condition together with – not instead of – emission reductions, since stock- and flow-based approaches are compatible and address different parts of the problem: flow-based incentives remain necessary to slow ongoing emissions from nature loss, while stock-based approaches protect the ecosystems generating those flows; valuation accounting for ecosystem services alongside carbon storage, drawing on

the IPBES Values Assessment (IPBES, 2022); stock-based metrics alongside flow-based carbon accounting, noting the UN's SEEA framework already encompasses both within a single system rather than as competing alternatives (UN, 2021).

The Tropical Forest Forever Facility – announced in connection with COP30 and currently being operationalized, and not established by a decision of the Conference of the Parties to the Convention – is intended to exemplify this approach, providing payments based on verified forest area rather than emission-reduction flows – rewarding forest countries where deforestation is already low for maintaining that outcome, complementing rather than duplicating jurisdictional REDD+ mechanisms, which instead incentivize reducing forest loss toward lower levels over time. Its environmental criteria are not yet finalized; based on currently available documents, they relate to deforestation rate and forest-loss/fire incidence rather than a fully biodiversity-specific stock metric (Government of Brazil, 2025). As of mid-2026, the TFFF remains in an early capitalization phase: announced contributions exceeded USD 6.7 billion at the close of COP30 in November 2025, and the TFFF Secretariat reported USD 6.5 billion in announced contributions from five investor countries in April 2026, against a USD 125 billion target (TFFF Secretariat, 2025b, 2026) (Chapter 2, Section 2.4.1 provides detailed, verified pledge figures).

A related methodological question raised in review concerns double accounting: where a single flow (e.g., TFFF forest-area-based payments) is reported against both climate and biodiversity finance targets, double-counting risks arise unless tracking systems clearly attribute flows to primary and secondary objectives using a common taxonomy. This study does not propose a specific accounting methodology, flagging the issue as a priority for Section 4.1's metrics work.

Integration of biodiversity criteria at early policy and design stages. Embedding biodiversity considerations upstream – at the policy, siting and design stage rather than as downstream, end-of-pipe mitigation – consistently distinguishes higher- from lower-integrity approaches. The pattern recurs across the mechanisms examined above: mandatory ex-ante Key Biodiversity Area screening under the Article 6.4 mechanism (Section 3.2.3), biodiversity criteria in the EU Carbon Removal Certification Framework (Section 3.2.4), early spatial planning in renewable-energy siting (Section 3.3.1), and the recurring finding that environmental impact assessments often come too late in project cycles to shape core siting and design decisions (Section 3.4).

Rights-based approaches including FPIC, tenure security and benefit-sharing. Documented low-integrity offset schemes and infrastructure conflicts underscore the importance of rights-based approaches: projects developed without meaningful FPIC and secure tenure arrangements lead to social conflicts, livelihood restrictions, and suboptimal biodiversity outcomes (Angelsen et al., 2012; FAO, 2016).

Options: (1) making FPIC a core requirement rather than optional safeguard, recognizing it depends on functioning community governance and that funding cycles are not always compatible with genuine consensus-building; (2) legal recognition and strengthening of the land tenure of indigenous peoples, local communities and family farmers, including women and youth, particularly through a gender and intergenerational lens; transparent, equitable benefit-sharing (e.g., minimum revenue shares, governance representation), illustrative rather than exhaustive; (3) direct finance access for indigenous peoples and local communities, reducing intermediary reliance; support for conservation and co-management led by them and family farmers; and (4) independent verification and adaptive management based on outcome monitoring, often limited or absent in current project cycles and meriting particular attention going forward. Territories of indigenous peoples and local communities show lower

deforestation and higher biodiversity outcomes, suggesting rights-based approaches align social equity and environmental effectiveness (WWF et al., 2021).

Evolution of safeguards from compliance tools to strategic portfolio guidance. Safeguards are increasingly applied not as one-time, project-level compliance checklists but as portfolio-level strategic guidance operating across the full investment cycle (Section 3.4). The shift is visible in the movement among multilateral development banks from “Do-No-Harm” baselines toward nature-positive portfolio alignment under the Common Principles for Tracking Nature Finance (Section 4.2.1), and in the treatment of Do-No-Significant-Harm as a minimum floor to build on rather than an end point (Section 3.4.3).

Reallocation of flows supporting activities with negative environmental impacts. Flows supporting activities with documented negative biodiversity impacts – estimated at USD 7.3 trillion annually (UNEP, 2026), the figure used consistently throughout this study – substantially outpace positive NbS investment.

Options: National inventories and fiscal impact assessments of incentives with negative environmental impacts, including but not limited to subsidies; time-bound reform roadmaps with phase-out or repurposing objectives set per national circumstances; stakeholder engagement to manage distributional impacts; explicit linkage between subsidy reform and investment in nature-positive alternatives, just-transition measures and social protection. Target 18 provides for reform “in a proportionate, just, fair, effective and equitable way”, “starting with the most harmful incentives” (CBD, 2022, Decision 15/4, Target 18), and the Framework provides for the necessary means of implementation, including financial resources, capacity-building and technology transfer. Parties, including Argentina and Brazil, have emphasized in submissions that subsidy reform does not substitute for the provision of new and additional financial resources under Target 19 and Articles 20 and 21 of the Convention; this study reports that position without adjudicating it. Jurisdictions undertaking subsidy reform show structured approaches combining inventories, political mandates, stakeholder processes and compensatory measures facilitate reform while maintaining social support (European Commission, 2022a).

Synthesis. These five approaches are interconnected and mutually reinforcing. Trade-off finance can be managed through governance systems integrating them, rather than treating biodiversity impacts as unavoidable side-effects of climate action. Implementation contexts, capacity requirements and political-economy considerations vary significantly across jurisdictions and instruments – including which of the three main climate-finance categories (mitigation, adaptation, or loss-and-damage response; see Box 2.1) the underlying finance falls under – as well as institutional capacity, stakeholder configuration, monitoring and enforcement resources, and alignment with national development priorities and KMGBF implementation strategies. Selection and sequencing of approaches remain for Parties to determine based on these contextual factors.

Chapter 4: Options for Aligning Finance Flows: Areas for Potential Consideration

Translating the assessment’s findings on synergies and trade-offs into actionable pathways requires attention to enabling conditions across the finance architecture. This chapter identifies options relevant to the critical 2026-2035 implementation window for the NCQG and 2026-2030 window for the KMGBF, including governance arrangements and implementation capacity across national and subnational levels. Options are organized around four themes: strengthening metrics and reporting to track biodiversity outcomes in climate finance (4.1); aligning public and multilateral finance with nature-positive pathways, including EHS reform (4.2); mobilizing private-sector engagement through innovative instruments and de-risking (4.3); and enhancing governance, including direct access for indigenous peoples and local communities (4.4). The chapter also examines critical timing considerations (4.5) and presents four illustrative cases (4.6). These options inform the seven Areas for potential COP consideration in Chapter 5.

4.1. Strengthening Metrics and Reporting Systems

Why this matters now. Strengthening metrics and reporting helps reveal how much climate-labeled finance is genuinely nature-positive and tracks progress toward KMGBF Targets 18 and 19 (CBD, 2022; OECD, 2024c). The core infrastructure already exists: OECD Rio Markers for climate mitigation, adaptation and biodiversity, CRS and TOSSD templates, and the headline/binary indicators for Targets 18 and 19 adopted under the KMGBF monitoring framework at COP-16 (SCBD, 2025a). The persistent challenge is less an absence of definitions or tagging categories than consistent application of existing guidance across national systems and its adaptation to domestic budget and reporting processes (OECD, 2024c). The Secretariat's own review of opportunities to strengthen biodiversity finance tracking, prepared for the seventh meeting of the Subsidiary Body on Implementation as document CBD/SBI/7/INF/20, similarly identifies fragmentation across custodians and reporting systems, inconsistent methodological coefficients, and domestic-level data and capacity gaps as the principal barriers to reliable tracking (SCBD, 2026b). While public and multilateral finance are central to this tracking challenge, private finance and blended instruments (Section 4.3) will also play a growing role and face parallel measurement gaps.

Throughout this chapter, “nature-negative,” “nature-positive” and “biodiversity-positive incentives” are used as descriptive, analytical categories drawn from cited literature, not terms with an agreed multilateral definition under the Convention; there is likewise no multilateral consensus on which specific subsidies constitute environmentally harmful subsidies, and figures cited under Target 18 carry this caveat.

At the national level, Parties, multilateral development banks, and other international public and private biodiversity finance providers could consider the following measures to strengthen metrics and reporting systems:

- Apply Rio Marker guidance consistently across public-finance and development-cooperation systems, drawing on OECD technical support for national statistical offices and line ministries (OECD, 2024c).
- Align NBSAP and NDC reporting on finance to optimize co-benefits and synergies, consistent with CBD/Recommendation SBI-6/1, including mechanisms to capture subnational and local-government contributions through platforms such as

CitiesWithNature, recognized in the Plan of Action provided in Decision 15/12 (CBD, 2022; UNFCCC, 2024b).

- Encourage national development banks and line ministries to apply consistent Rio Marker and CRS/TOSSD reporting conventions to the OECD DAC and national authorities (OECD, 2024c).

Potential approaches include:

- Inviting the OECD, regional development banks and MDBs to continue refining climate and biodiversity marker guidance – including the OECD’s completed climate-marker review and in-progress biodiversity- marker review – emphasizing national-level application support rather than new parallel tagging systems (OECD, 2024c).
- Considering, in the context of the KMGBF global review, how the Target 18/19 headline indicators adopted at COP16 can support more comparable reporting, and what, if anything, remains to be added (SCBD, 2025a).

Delivering Target 19 depends both on how much finance is mobilized and, separately, on how results are measured once deployed (CBD, 2022; OECD, 2024c) – two distinct tracking challenges. OECD development-finance tracking on amounts mobilized is comparatively mature; the harder gap is on results. Current systems treat climate and nature results separately: climate outcomes are measured in tonnes of CO₂-equivalent, while biodiversity lacks an agreed core outcome metric of comparable simplicity, creating comparability challenges across portfolios (TNFD, 2023; IPBES, 2024). The absence of gender-disaggregated indicators compounds this, limiting Parties’ ability to assess who benefits, who bears costs, and how decision-making power is distributed (UN Women, 2024).

At COP16, Parties adopted a KMGBF monitoring framework providing at least one indicator for every goal and target – including the headline and binary indicators for Targets 18 and 19 – for the seventh and eighth national reports (SCBD, 2025b); not every target has an adopted headline indicator, with some monitored through binary and component indicators; instruments such as the GBFF results framework are aligning project-level indicators with it, creating opportunities for greater coherence between national and international-finance tracking (GEF, 2025a).

The concept of isolated finance from Chapter 1 shows alignment involves managing nature-negative flows and identifying missed opportunities for joint outcomes across existing portfolios (OECD, 2019b; UNEP, 2023). For measurement, this means metrics distinguishing genuinely low-interaction activities from projects with significant biodiversity co-benefit potential (TNFD, 2023); emerging screening tools for infrastructure and urban development illustrate this in practice while revealing data and capacity constraints (UNECE, 2025).

GEO-7 and UNEA-7 call for improved environmental data and integrated monitoring as core enablers of systemic transformation, including better alignment of climate, biodiversity and pollution indicators (UNEP, 2025; UNEA, 2025a). Data and capacity constraints are most acute in three areas: baseline ecosystem-condition data in developing countries with limited monitoring infrastructure; standardized species-richness or habitat-connectivity proxies usable across project types; and technical capacity within national development banks to apply even existing Rio Marker guidance consistently. Strengthened metrics ensure NCQG-related finance and Article 6 mechanisms support real biodiversity gains rather than paper-based “co-benefits” (UNFCCC, 2024b; SBM, 2024); the TFFF’s satellite-based verification (Chapter 2, Section 2.4.1) and the Wildlife Conservation Bond’s outcome-linked structure (Chapter 2, Section 2.3.2)

illustrate how transaction design can incorporate biodiversity outcomes directly rather than treating them as secondary.

4.1.1. Integrated Biodiversity-climate Metrics

There is no multilaterally agreed-upon standard or definition for biodiversity credits. Methodological pathways for biodiversity crediting are still developing and, by necessity, differ from carbon MRV, since biodiversity outcomes are multidimensional and location-specific in ways a single equivalence unit (like CO₂-e) cannot capture (IAPB, 2024). Options include integrated metrics extending beyond tonnes of CO₂-equivalent to ecosystem extent, condition and resilience, building on the TNFD LEAP approach and IPBES nexus indicators (TNFD, 2023; IPBES, 2024). A growing number of governments are also measuring nature's "stocks and flows" through Natural Capital Accounting and SEEA-aligned national accounts, which may, over time, complement project-level indicators at the macro level (UN, 2021). These metrics can be disaggregated by finance category – mitigation, adaptation and loss and damage – to assess each unit of climate finance against its ecosystem-integrity contribution, not just carbon outcomes (UNFCCC, 2021; UNEP, 2023).

The KMGBF framing here extends beyond Targets 18 and 19: Targets 14 and 15 are also central to the Decision 16/34 Resource Mobilization Strategy, with corporate disclosure and nature-related financial risk (Target 15) discussed in Section 4.1.2. Consistent with an avoid-duplication principle, biodiversity criteria could be embedded within existing climate-finance and MDB procedures – eligibility, safeguards, MRV, reporting – rather than creating new standalone processes. Where this chapter refers to "verification," this may include third-party assurance, self-reporting against agreed indicators, or both; this study does not prescribe a single model.

At the operational level, multilateral funds and MDBs could converge on a minimum core set of biodiversity indicators for NbS and ecosystem-based adaptation projects. These could include changes in natural-habitat extent, species-richness proxies, and stewardship area held by indigenous peoples and local communities. Such convergence could improve comparability of reported outcomes across institutions and strengthen the evidence base for future finance decisions. These indicators could link to KMGBF Targets 1, 2, 8, 11 and 18 (CBD, 2022; GEF IEO, 2025). Harmonized metrics enable comparison of biodiversity contributions across climate funds and the identification of where trade-off finance remains prevalent. Parties may use a small, shared set of climate-biodiversity tags to identify where public and development-cooperation portfolios already support Targets 18 and 19, and where gaps remain (OECD, 2024c; CBD, 2022).

4.1.2. Alignment of Financial Disclosures and Double Materiality

Voluntary frameworks such as TCFD and TNFD have advanced corporate and financial reporting on climate and nature risks; not all frameworks share the same materiality scope, however – the ISSB's IFRS S1/S2 standards use a financial-materiality basis, while TNFD applies a double-materiality lens covering both how nature loss affects firms and how firms affect nature (TCFD, 2017; TNFD, 2023; ISSB, 2023). Evidence that disclosure alone shifts capital at scale remains mixed; GEO-7 argues mandatory regimes are more likely to do so than voluntary ones, but this is a contested empirical question rather than a settled finding (UNEP, 2025).

As of April 2026, the ISSB decided against a standalone nature standard or amending IFRS S1/S2 directly, instead developing nature-related disclosure guidance as a non-mandatory IFRS Practice Statement drawing on the TNFD framework, complementing S1/S2 without altering

their requirements; an exposure draft is targeted for October 2026, timed for COP17 (ISSB, 2026). TNFD will complete the remaining technical work by Q3 2026 and then pause further guidance development, transitioning to support for ISSB implementation (TNFD, 2025a). Because the Practice Statement is non-mandatory by design, individual jurisdictions retain the choice of whether to mandate its application – meaning the mandatory/voluntary distinction will continue to depend on jurisdiction-level decisions rather than the ISSB standard itself (ISSB, 2026).

Three directions are relevant for the COP: the potential utility of a small core of indicators for both public-finance and disclosure reporting and taxonomies, as a complementary alignment mechanism; the benefits of phased implementation for developing-country feasibility; and disclosure's role in redirecting finance away from nature-negative activities, understood as a contested but plausible mechanism rather than a proven one (TNFD, 2023; WEF, 2024a). A potential next step, currently explored in scoping work linking the ENCORE and ESVD databases, is assessing whether ecosystem-services valuation can help translate qualitative dependency insights into an indication of economic exposure – sometimes described as an ecosystem services value at risk. The purpose is not to price nature, but to make the magnitude of dependencies more tangible for financial and policy actors and to assign values to the stakeholders who bear them, particularly with respect to the systemic and macro-critical risks discussed in this study. This is an emerging area of methodological development rather than established practice, and no results are yet available. The ISSB's ongoing work to incorporate TNFD-based guidance into its Practice Statement, and its October 2026 public consultation, offer an opportunity for CBD Party perspectives to inform the guidance's final form (ISSB, 2026).

Seven priority areas emerge in which enhanced coordination between biodiversity and climate finance can accelerate progress toward both the KMGBF and the Paris Agreement, addressing distinct yet interconnected challenges: transparency frameworks, finance integration, subsidy reform, public finance alignment, safeguards, access for indigenous peoples and local communities, and loss and damage responses. These areas reflect finance flows, institutional mandates, and policy windows during the period leading to 2030, reflecting both immediate foundational actions (2026-2027) and sustained implementation through 2030.

4.1.3. Strengthening Domestic Financial Architecture

To fulfill Target 14's mainstreaming mandates and Target 19's mobilization goals, domestic public funding tracks may need to transition from fragmented, project-based budget cycles toward an integrated macro-fiscal framework. The operational backbone is institutionalising National Biodiversity Finance Plans. Developed systematically using the UNDP BIOFIN methodology, NBFPs are not isolated technical assessments but the primary vehicle translating NBSAPs' qualitative ecological targets into quantified, investable financial roadmaps through a sequential Biodiversity Expenditure Review (BER), Financial Needs Assessment (FNA), and localized Resource Mobilization Strategy (UNDP, 2018). Over 130 developing countries are currently developing, updating, or implementing NBFPs under Target 19(b), alongside a growing number of developed countries including Belgium and Finland (BIOFIN, 2025). Translating GBF implementation into investable pipelines – including nature-positive value chains and green infrastructure – depends on national investment planning identifying specific, place-based opportunities rather than aggregate targets alone (see also Section 4.4.2).

Table 4.1 presents seven priority areas with indicative sequencing across three implementation phases, offered as options for Parties' consideration, consistent with this study's role as technical input rather than negotiated text; nothing here should be read as prejudging which actors or

governance bodies are competent to act in a given area. These areas could be considered as a possible framework for biodiversity finance-related actions going forward.

Table 4.1: Priority Areas for Biodiversity-Climate Finance Alignment to 2030

Priority Area	Short-term: Foundations	Medium-term: Implementation	Long-term: Scaling
Area 1: Transparency & Nature-Related Disclosure	Establish core biodiversity-climate indicators; pilot double materiality reporting frameworks	Reporting frameworks continue to emerge across jurisdictions, building on existing regimes such as the EU's ESRS; the ISSB's forthcoming nature-related Practice Statement (Section 4.1.2) may support further convergence	Full biodiversity MRV integration in climate finance; mandatory disclosure requirements operational in a growing number of jurisdictions
Area 2: Integrate Biodiversity into Climate Finance	NCQG implementation guidance embeds biodiversity criteria; MDB strategies formally align with KMGBF targets	Climate funds mainstream biodiversity co-benefit monitoring; NbS share of adaptation finance grows above current GCF portfolio levels (45–47%; Chapter 2, Section 2.3), tracked with rigorous indicators	High-integrity NbS scales further within adaptation finance; full compliance with both Do No Significant Harm (DNSH) and substantial-contribution criteria (e.g., under the EU Taxonomy/CSRD-ESRS framework) across climate portfolios
Area 3: Accelerate EHS Reform (Target 18)	Complete national EHS inventories; develop time-bound reform plans with stakeholder consultation	Implement phased EHS reform; pilot fiscal repurposing mechanisms toward nature-positive outcomes	Repurpose a share of EHS savings toward biodiversity conservation, per national circumstances; accelerate reform in key sectors
Area 4: Align Public Finance with Nature-Positive Goals	Adopt green budgeting tools; develop DNSH criteria for public expenditure review	Apply harmonized green taxonomies; mainstream DNSH in infrastructure procurement	Achieve growing SOE nature-positive alignment; full DFI biodiversity integration with verification
Area 5: Strengthen Safeguards in Climate Instruments	Enhance Article 6.4 biodiversity safeguards, building on existing provisions (Chapter 3, Section 3.2.3); establish rights frameworks for indigenous peoples and local communities in carbon markets	Make ecosystem integrity criteria operational; require mandatory biodiversity impact assessments	Enforce no-net-loss standards for high-value ecosystems; verify corporate net-zero plans against biodiversity impacts

Area 6: Scale Direct Access for Indigenous Peoples, Local Communities, Women and Youth	Establish dedicated direct access windows; strengthen land tenure security and FPIC frameworks	Direct access for these groups reaches 10% of climate fund portfolios (benchmarked against GEF/GBFF targets and the TFFF's 20% benefit-sharing design for indigenous peoples and local communities, Chapter 2, Section 2.4.1), designed and implemented in coordination with national governments consistent with each Party's domestic legal frameworks for recognizing their rights and institutions; scale jurisdictional REDD+ with benefit-sharing	Achieve transformational direct access for these groups (20% of portfolios); channel USD 1+ billion annually through mechanisms led by indigenous peoples and local communities
Area 7: Embed Ecosystem Integrity in Loss and Damage Responses	Operationalize the FRLD with attention to ecosystem-integrity dimensions, consistent with its cooperation-and-facilitation basis (non-liability, non-compensation) under Article 8 of the Paris Agreement	Integrate biodiversity safeguards in FRLD-supported responses; prioritize nature-based recovery over grey infrastructure where appropriate	Mainstream ecosystem restoration in loss-and-damage implementation; scale recovery approaches led by indigenous peoples and local communities

***Note:** Indicative timeframes reflect institutional policy windows and capacity-building trajectories but should be understood as flexible, recognizing differing national circumstances and institutional capacities. Parties are encouraged to adjust sequencing to reflect their own context and readiness.*

These seven areas operate in parallel with staggered emphasis reflecting institutional readiness and policy windows: Areas 1, 5 and 7 would benefit from early institutional action in 2026-2027 to establish measurement, governance and funding frameworks; Areas 2, 3 and 4 represent sustained transformation throughout 2026-2030; Area 6 scales progressively from pilot modalities to transformational funding levels.

Implementation may draw on coordinated action across multiple institutional actors – CBD Parties, GCF, GEF, MDBs, UNFCCC bodies, the FRLD, private financial institutions, standard-setters such as ISSB, market-led frameworks such as TNFD, and indigenous peoples and local communities – each acting within its own mandate; nothing here presumes CBD COP authority to direct bodies outside its competence, and each institution's role remains for it to determine through its own governance. This could be strengthened by collaborative contributions among relevant actors, within their own mandates, to identify potential contributions and report them through existing mechanisms, recognizing that not all seven areas will be equally actionable for all actors. Strengthening CBD-UNFCCC coordination on finance is noted as a possible direction, not a proposal prejudging UNFCCC Parties' own decisions.

The 2026-2035 NCQG period and 2026-2030 KMGBF period are identified in several assessments as a significant window in which institutional decisions will shape whether

expanded climate finance supports or undermines biodiversity outcomes. Early action on these priority areas can help ensure climate-finance scale-up drives nature-positive outcomes rather than adding pressure on biodiversity (Dasgupta, 2021; UNEP, 2025).

4.2. Aligning Public and Multilateral Finance¹²

Public and multilateral finance will shape whether the NCQG delivers synergistic or trade-off outcomes for biodiversity (UNFCCC, 2024b; UNEP, 2023); the non-binding USD 1.3 trillion Baku to Belém Roadmap call – a COP29/COP30 Presidencies initiative, not a decided COP text – is referenced descriptively, not as an obligation beyond Decision 1/CMA.6. MDBs, IFIs and global funds can de-risk nature-positive investments and support countries in reforming incentives, including EHS, consistent with KMGBF Target 18 (CBD, 2022; IMF, 2023). Domestic public-finance mainstreaming – budget tagging, procurement rules and the NBFPS discussed in Section 4.1.3 – complements the multilateral-level options below.

4.2.1. Mainstreaming Nature in Multilateral Development Banks and International Financial Institutions

MDBs are moving from “Do-No-Harm” to nature-positive alignment through the Common Principles for Tracking Nature Finance and emerging nature-finance tracking methods (MDBs, 2025). To consolidate this shift,:

- Requesting MDBs to integrate nature-related risks and opportunities into macro-fiscal diagnostics, country partnership frameworks and climate-related public-expenditure reviews, with biodiversity as macro-critical (Neunuebel et al., 2025a; WRI, 2024a)
- Encouraging MDBs to adopt portfolio-level targets for nature-positive investments and report annually on contributions to KMGBF Targets 14, 18 and 19 (CBD, 2022; OECD, 2024c)

Consistent with GEO-7, MDBs may apply DNSH and the mitigation hierarchy in climate operations, using the safeguards guidance in Section 3.4.3 to prevent mitigation and adaptation investments from undermining ecosystems and the rights of indigenous peoples and local communities. Nature-finance tracking criteria and taxonomies could also be assessed against internationally recognized human-rights standards, consistent with the human-rights due-diligence framing in Section 3.4.5.

4.2.2. Reforming and Repurposing Harmful Subsidies

Achieving KMGBF Target 18 – a reduction of at least USD 500 billion per year in harmful incentives by 2030, distinct from Target 19’s resource-mobilization goal (CBD, 2022) – is identified in several assessments as important for scaling synergistic finance. EHS in fossil fuels, agriculture, and fisheries are estimated at approximately USD 2.4 trillion annually, within the broader USD 7.3 trillion in total nature-negative finance flows (UNEP, 2026; Fossil Fuel Subsidy Tracker, 2025) – a figure used consistently throughout this study (Chapter 2, Section 2.2.2).

¹² **Note on terminology:** this study uses “alignment” in its ordinary, descriptive sense (financial flows and policy objectives moving in a mutually reinforcing direction), consistent with Decision 16/34 and other CBD documents, not as a term implying external conditionality inconsistent with the Convention’s national-ownership and CBDR-RC principles.

Potential approaches to environmentally harmful subsidy (EHS) reform include:

- Conducting national EHS inventories and developing time-bound reform plans to prioritize the elimination of subsidies that drive habitat loss, over-exploitation and high emissions (Matthews & Karousakis, 2022; UNEP, 2023).
- Repurposing a share of EHS savings, according to national circumstances, towards nature-based solutions, indigenous peoples and local communities-led conservation, just-transition measures and social protection – with attention to the gender-differentiated impacts of reform to avoid disproportionate burdens on low-income women or unpaid care work (UNEP, 2023; UN Women, 2024).
- Aligning EHS reform with climate, biodiversity, social and SDG objectives through technical assistance and political-economy analysis, drawing on lessons from international organizations and other Parties (Matthews & Karousakis, 2022; OECD, 2025a).

4.3. Innovative Financing and Private Sector Engagement

Innovative instruments and nature-related markets – co-financing structures, credit enhancement and de-risking mechanisms, guarantees, and other blended-finance vehicles, not only standalone credit markets – may help close the biodiversity finance gap if designed with high integrity and strong safeguards, as GEO-7 and recent biodiversity credit pilot analyses show (UNEP, 2025; NatureFinance, 2024).

4.3.1. Scaling High-Integrity Nature Markets

Emerging biodiversity credit markets and other nature-outcome instruments complement public finance and regulatory measures but do not replace them (NatureFinance, 2024; IAPB, 2024). A substantial critical literature raises concerns, including the risk that offset-style claims imply biodiversity loss in one location can be equivalently compensated elsewhere – not well supported by ecological science given many ecosystems’ site-specific, often irreplaceable character; that reducing complex ecological functions to standardized, tradable units treats as commensurable what is ecologically non-equivalent; and that scaling private nature-market finance could crowd out rather than complement public finance where private interests diverge from conservation priorities (Apostolopoulou & Adams, 2017; zu Ermgassen et al., 2019). Civil society organizations, including signatories to a joint statement issued ahead of COP16, oppose biodiversity offsetting and crediting outright and call instead for eliminating environmentally harmful financial flows, reforming perverse incentives, strengthening territorial rights and expanding direct access for Indigenous Peoples and local communities (Global Forest Coalition et al., 2024). Views on these instruments therefore differ, and no multilaterally agreed standard exists. This study treats biodiversity credit markets as one instrument among several, not a substitute for public finance, EHS reform and rights-based conservation policy discussed elsewhere. Building on existing frameworks – the Biodiversity Credit Alliance (BCA), International Advisory Panel on Biodiversity Credits (IAPB) and World Economic Forum’s High-Level Principles (2025) – Parties and standard-setters may consider differentiated pricing, buyer segmentation, and emerging demand for bundled biodiversity-and-carbon credit structures as the market develops (BCA, 2026).

Empirical evidence on the scale and distribution of one nature-market segment has recently become available. An assessment of 81 blue carbon projects covering 2,003,443 hectares reports committed emission reductions of approximately 20.4 MtCO₂e per year, some 2 per cent of the segment’s estimated potential and finds that 6.96 million blue carbon credits were issued

between 2014 and March 2025, of which 3.65 million were retired; such credits account for 0.35 per cent of all voluntary-market credits and 0.91 per cent of nature-based-solution credits (Farahmand et al., 2025). Issuance is highly concentrated: a single project, Delta Blue Carbon–1 in Pakistan’s Indus Delta, is the largest to date at 350,000 hectares, and Pakistan accounts for 69 percent of credits issued, and Pakistan, India, Senegal and Indonesia together for roughly 90 percent. Of the 1,109,210 credits whose buyers could be traced, more than 97 percent were purchased by entities in developed and high-income countries; source countries average a Human Development Index of 0.645 against 0.917 for purchasing countries, and the weighted average price of USD 26.96 per credit compares with roughly USD 54.3 for regulated carbon in the buying jurisdictions. Around 20 percent of credits are acquired by resellers whose final buyers and prices are not disclosed. The authors characterize this differential as a sale below real value and call for transparent, regulated pricing; this study reports that assessment without adjudicating it. They further note that the median project duration of 30 years covers 30 percent of the 100-year permanence period typically required, which may depress valuation.

Options in this area include supporting rigorous technical criteria for units of biodiversity outcome (e.g., habitat-quality and connectivity indices), aligned with IAPB and BCA (IAPB, 2024; BCA, 2026; Wauchope et al., 2024). Nature markets could be co-designed with indigenous peoples and local communities, including women and youth, with clear land-tenure recognition, FPIC and dedicated benefit flows like minimum revenue shares or governance seats – conditions actively enabling durable synergistic outcomes, not only mitigating risk (WWF et al., 2021; Government of Brazil, 2025). Biodiversity-credit schemes are best treated as complementary to, not substitutes for, EHS reform as complementary to, not substitutes for, EHS reform, public NbS funding and rights-based conservation policies (UNEP, 2023).

4.3.2. Blended Finance and De-risking Mechanisms

Blended finance can crowd in institutional and private capital for NbS, particularly in frontier markets with high perceived risks (GCF, 2023; NGFS, 2023c). Public funds such as the GCF and GEF can act as green-market accelerators, providing first-loss equity, guarantees, and concessional credit to de-risk NbS and ecosystem restoration projects (GCF, 2023).

Jurisdictional programs such as the TFFF operate through their own dedicated capital-markets structure rather than GCF/GEF blended-finance windows (Chapter 2, Section 2.4.1), while REDD+ programs draw on a mix of blended public finance and dedicated results-based payment facilities (World Bank, 2021b). GEF’s Scientific and Technical Advisory Panel (STAP) has issued guidance emphasizing that blended finance instruments do not automatically deliver global environmental benefits and require deliberate structuring to do so (STAP, 2023).

Domestic public vehicles serve a similar function outside the multilateral system. China’s National Green Development Fund, established with a total scale of RMB 88.5 billion, operates on a stated model of government guidance, market principles and public participation, and is intended to channel private capital toward fields with strong environmental externalities, including environmental protection and pollution prevention and control, ecological restoration and territorial greening, energy and resource conservation, green transport and clean energy, with an initial focus on the Yangtze River Economic Belt (Ministry of Finance of China, 2026). The fund’s allocation across those fields is not reported in that source, so its contribution to biodiversity-specific outcomes cannot be assessed here – the same distinction between eligibility and allocation drawn in Box 4.4.

Supporting issuance of high-integrity blue bonds, sustainability-linked bonds and debt-for-nature swaps with enforceable conservation conditionality remains relevant (TNC, 2021; IDB, 2026),

though private-conservation- finance narratives have at times overestimated what capital markets can realistically deliver, given blended-finance and biodiversity-market projections that have not materialized at the scale initially forecast (Colchester, 2023). MDBs and DFIs may further reduce risk through political risk insurance, local-currency facilities, and technical assistance for pipeline development in nature-dependent sectors such as agriculture, forestry, fisheries, and tourism (WRI, 2024b). Public and private finance play distinct roles: public finance is often critical for restoring baseline ecosystem conditions, while private finance more readily supports the ongoing maintenance and stewardship of already restored or functioning ecosystems.

4.4. Governance, Institutional Arrangements, and Access for Indigenous Peoples and Local Communities

Governance reforms can help climate and biodiversity finance align at national and sub-national levels, including through jurisdictional approaches implemented by subnational governments responsible for land-use and ecosystem governance, and by ensuring that indigenous peoples and local communities, including women and youth, can access and shape financial flows (WWF et al., 2021; Rainforest Foundation Norway, 2021).

4.4.1. Enhancing Direct Access for Indigenous Peoples and Local Communities

Territories of indigenous peoples and local communities contain a large share of the world's remaining intact ecosystems, and biodiversity declines more slowly there than in comparable non-indigenous areas (IPBES, 2019; see Chapter 2, Section 2.5). Yet organizations led by indigenous peoples and local communities directly receive well under one per cent of international climate-related ODA, and channel under 3 per cent of biodiversity-related official development finance by some estimates (OECD, 2023; WWF et al., 2021; Rainforest Foundation Norway, 2021). Parties and funds may explore expanding direct-access modalities and small-grant windows for organizations led by indigenous peoples and local communities, including women and youth, using models such as the GEF Inclusive Conservation Initiative. This includes growing emphasis on their leading project design and governance directly – including seats on governance and investment committees – rather than functioning solely as intermediary-managed beneficiaries (GEF, 2021a; GEF IEO, 2025; IIED, 2025). It also includes treating secure land tenure, FPIC and equitable benefit-sharing as core eligibility criteria rather than optional co-benefits, alongside investment in their own self-governance and tenure-recognition capacity so they can exercise FPIC in practice rather than as a procedural checkbox (FAO, 2006; TNFD, 2023).

These measures align with GEO-7's emphasis on rights-based governance and leadership by indigenous peoples and local communities as critical enablers of environmental transformation (UNEP, 2025). Direct-access approaches are intended to operate within, rather than outside of, Parties' authority over resource mobilization under the Convention, consistent with the sovereignty-compatible framing established in Chapter 2, Section 2.5 (Article 20 CBD; Decision 16/34's national/subnational-ownership provisions); direct access itself remains agreed CBD language (Decision 16/34, para. 14).

Family farmers, who manage a substantial share of global agricultural land and can deliver biodiversity, soil-health and climate-resilience co-benefits through agroecological practice, are a related constituency whose finance access merits attention in complementary agricultural-finance policy (FAO, 2021). This section's direct-access analysis retains its focus on indigenous peoples and local communities, consistent with the CBD mandate under Decision 16/34 and KMGBF Targets 22 and 23. Governance that is inclusive of indigenous peoples and local communities is

addressed further in Section 2.3, on accreditation and access barriers, in Section 2.4.1, on benefit-sharing design under the Tropical Forest Forever Facility, and in Table 2.1.

4.4.2. Cross-Convention Integration and Jurisdictional Approaches

Aligning NDCs, NAPs and NBSAPs at the jurisdictional level reduces fragmentation and supports integrated landscape and seascape planning (CBD, 2022; IPBES, 2024); translating this into investable pipelines depends on the national investment planning discussed in Section 4.1.3. International coordination could support Parties in establishing landscape-level financing facilities or jurisdictional platforms, enabling national and subnational actors to jointly plan and co-finance climate, biodiversity and development investments across a shared ecological unit such as a river basin or forest landscape. Implementation could proceed through programs such as an international forest fund, jurisdictional REDD+ and coastal nature-based solutions programs (Angelsen et al., 2012).

A joint CBD-UNFCCC technical group on finance would improve coherence between NCQG implementation, KMGBF Target 19 monitoring and post-2030 development-goal design. This is a cross-convention option rather than a proposal within CBD's sole competence to establish and would require a mandate from Parties to both conventions, with the respective Secretariats providing technical and administrative support rather than independent authority to convene such a body (UNFCCC, 2024b; United Nations, 2023). Such arrangements help ensure that decisions on infrastructure, land-use, and adaptation investments systematically consider biodiversity and the rights of indigenous peoples and local communities, reducing the risk that climate finance becomes trade-off finance (UNEP, 2025).

4.5. Sequencing and Significant Windows (2026-2035)

The 2026-2035 period for the NCQG and 2026-2030 for the KMGBF are identified in several assessments as periods during which key institutional design choices for both frameworks will shape how climate and biodiversity finance interact for years afterward (CBD, 2022; UNFCCC, 2024b). Sequencing considerations include:

- Embedding biodiversity co-benefit targets and EHS-reform commitments into NCQG implementation plans, NDC 3.0 updates and national climate-finance strategies by 2027 – through project appraisal criteria, consistent Rio Marker tagging (Section 4.1), and inclusion in national monitoring indicators – while recognizing NDC 3.0 timelines leave limited room to formally embed new EHS-reform commitments before 2027, with implementation possibly phasing in over the following NDC cycle (UNFCCC, 2024b).
- Strengthening Article 6.4 biodiversity safeguards, CRCF sustainability criteria and DNSH rules before large-scale carbon-removal and infrastructure pipelines lock in land-use patterns, building on the biodiversity safeguards already established for Article 6.4 (Chapter 3, Section 3.2.3) rather than presenting these as absent (SBM, 2024; EU, 2024a).
- Scaling up INDIGENOUS PEOPLES AND LOCAL COMMUNITIES, women and youth direct-access and rights-based NbS programmes – building on the Locally Led Adaptation principles discussed in Chapter 2, Section 2.2.2 – ensuring a meaningful share of tripled adaptation finance flows through locally led, ecosystem-based approaches (UNFCCC, 2021; GEF, 2021a), which in turn depends on transparent, inclusive governance structures – both internationally and nationally – allowing public oversight of investment decisions and limiting the risk of narrow capture by any single set of interests.

Together, these options aim to strengthen and better align the financial architecture so that climate-finance scale-up under the NCQG – including the non-binding USD 1.3 trillion call – reinforces rather than erodes ecological foundations, consistent with the risk framing set out earlier (Section 4.2) rather than asserting a documented instance of erosion (Dasgupta, 2021; UNEP, 2025).

4.6. Illustrative Cases and Enabling Reforms for Aligning Climate and Biodiversity Finance

Four illustrative cases demonstrate how different parts of the enabling environment align climate and biodiversity finance in practice:

- Sovereign debt conversions creating fiscal space for conservation and climate resilience
- Mandatory corporate disclosure under the EU CSRD embedding biodiversity into climate-related financial reporting and investment decisions
- Cross-cutting lessons from EU EHS reforms informing KMGBF Target 18 implementation
- Sovereign green bonds gated by a national taxonomy, channeling budgetary expenditure toward biodiversity conservation alongside mitigation and adaptation

These cases are based on publicly available information and are presented for illustrative purposes only; they do not imply endorsement or formal validation by the entities mentioned. A broader critical literature on the “financialisation” of conservation argues that market-based and voluntary instruments have, in aggregate, underperformed relative to public regulatory and grant-based approaches at delivering biodiversity outcomes, and that governance quality – not instrument type alone – determines outcomes (Spash & Hache, 2022; Bigger et al., 2021). The cases below illustrate what well-governed instances of these instrument types can achieve, not a claim that market-based instruments perform well on average.

4.6.1 Illustrative Case 1 – Sovereign Debt Conversion for Nature

Illustrative Case 1 shows how innovative debt instruments create fiscal space for conservation in highly indebted countries when conservation conditionality and governance are strong.

Box 4.1: Sovereign Debt Conversion for Nature

In November 2021, Belize’s USD 553 million “superbond” (30 percent of public external debt, 8.5 percent interest) strained resources needed for healthcare, education and hurricane recovery, while the Mesoamerican Reef faced degradation from overfishing, coastal development and climate change; marine protection covered 16.5 percent of ocean territory, below recommended levels for ecosystem resilience (BZBIC, 2023).

In November 2021, the Government of Belize, The Nature Conservancy (TNC), and the United States International Development Finance Corporation (DFC) closed a debt-for-nature conversion, facilitated by Credit Suisse. Belize repurchased its USD 553 million Superbond at a 45 percent discount, financed through a USD 364 million Blue Loan extended by the Belize Blue Investment Company, a TNC subsidiary. DFC credit enhancement, including political risk insurance, allowed the loan to be funded through highly rated blue bonds syndicated to institutional investors. The conversion reduced Belize’s debt stock by an estimated USD 189 million and generated USD 180 million in conservation funding over 20 years; implementation runs to 2041 (IDB, 2025).

Transaction structure: Superbond USD 553M repurchased at a 45 per cent discount; Blue Loan USD 364M; debt-stock reduction approximately USD 189M; conservation funding USD 180M over 20

years, comprising a USD 23.5M pre-funded endowment projected to grow to about USD 92M by 2041 – its market value stood at approximately USD 20M on 31 March 2023 – and average annual disbursements of about USD 4.2M (IDB, 2025; BZBIC, 2023).

Conservation streams are managed through the Belize Fund for a Sustainable Future, which disburses 40 percent of funds to government agencies through a Government Strategic Allocation and at least 40 percent to non-governmental organizations, academia and local communities through a competitive Grant Awards Program; the pre-funded endowment is designed to sustain conservation beyond the twenty-year commitment period (IDB, 2025). Conservation conditionality was non-negotiable – Belize committed to expand Biodiversity Protection Zones to 30 percent of its ocean under an eight-milestone schedule written into the Conservation Funding Agreement. The first three milestones were complete as of 31 March 2023: Milestone 1 gazette 1,295.60 km² of new protection zones, bringing legally protected ocean to 20.3 percent, and the marine spatial planning process was launched in October 2022 (BZBIC, 2023).

Conservation funding is administered by the Belize Fund for a Sustainable Future, an independent conservation fund that made its first disbursements in December 2022, governed by a nine-member board comprising four government and five non-government directors drawn from academia, fisheries, tourism and non-governmental organizations. By 31 March 2023 the Fund had committed approximately USD 7.6 million: some USD 277,000 disbursed in December 2022 to five members of the Belize Marine Protected Areas Network, and USD 7.3 million allocated under its first call for proposals to six non-governmental institutions through the Grant Awards Program and six government agencies through the Government Strategic Allocation, disbursing on a fixed schedule through October 2025 (BZBIC, 2023). Enforcement does not rest with the board: the Conservation Funding Agreement carries a cross-default provision with the Blue Loan, so failure to meet conservation commitments triggers the same consequences as a payment default, and failure to achieve conservation milestones results in penalty payments (IDB, 2025). Public reporting on the transaction to date documents progress against its conservation milestones rather than ecosystem-condition outcomes. As of March 2023, the program's stated near-term priorities were completion of Milestone 4 – expansion of Biodiversity Protection Zones to 25 percent of Belize's ocean by November 2024 – together with the Belize Fund's strategic vision and financial plans, partnerships supporting capacity-building, outreach and science, and the administrative systems underpinning the program (BZBIC, 2023). That report is prepared by the Belize Blue Investment Company, the lender under the Blue Loan Agreement and a subsidiary of The Nature Conservancy, and its contents are therefore self-reported by a party to the transaction rather than independently verified. Independently published monitoring of biodiversity outcomes – fish stocks, coral condition, habitat extent – is not yet available for this transaction: as of 31 March 2023, the Belize Fund was still developing the monitoring and evaluation framework intended to aggregate results across funded projects (BZBIC, 2023). This is an evidence gap relevant to assessing debt-for-nature conversions more generally.

The model has proven replicable: Gabon restructured USD 500 million for rainforest protection in 2023, and Ecuador secured USD 656 million for Galápagos conservation the same year, showing that conservation-linked debt restructuring has moved from experimental to mainstream development finance – though success requires a high debt burden, global biodiversity significance and sufficient creditworthiness for refinancing together. Civil society critiques caution that transaction terms are not always fully transparent, creditor banks and intermediaries can capture a significant share of value created, and conservation commitments have sometimes proven weaker or less enforceable than headline debt-relief figures suggest, with specific concerns about inadequate local-community consultation in the Belize case linked to Target 3 protected-area expansion (CFFA-CAPE et al., 2023); further literature on the environmental and financial impact of such swaps continues to develop. This case is presented as a comparatively well-governed transaction with independent oversight, not as evidence that all debt-for-nature swaps achieve similar outcomes.

Sources: The Nature Conservancy, 2021; BZBIC, 2023; IDB, 2025; CFFA-CAPE et al., 2023.

This case demonstrates how sovereign debt conversions advance KMGBF Targets 18 and 19 by linking debt sustainability to nature-positive investment and repurposing fiscal space toward NbS and indigenous peoples and local communities-relevant conservation, consistent with Areas 2 and 3.

4.6.2 Illustrative Case 2 – EU CSRD and Biodiversity Disclosure

Illustrative Case 2 demonstrates how mandatory, standardized disclosure and double-materiality reporting embed biodiversity considerations into corporate strategy and shift private capital away from nature-negative activities.

Box 4.2: EU CSRD and Biodiversity Disclosure

When the EU adopted its Corporate Sustainability Reporting Directive in November 2022, it established the world's first mandatory biodiversity disclosure regime. The EU subsequently revised the framework through the Omnibus I Directive (EU) 2026/470, which entered into force on 18 March 2026, substantially narrowing the mandatory CSRD scope while retaining the core disclosure architecture.

The revised framework narrows scope and applies differently to EU and non-EU entities. From financial years beginning 1 January 2027 (reporting 2028), mandatory biodiversity disclosure under ESRS E4 applies to “wave-one” EU undertakings exceeding both EUR 450 million net turnover and 1,000 employees, and to non-EU issuers on EU-regulated markets meeting equivalent thresholds; enterprise-level reporting for non-EU parent groups with substantial EU turnover follows in 2028 (reporting 2029), with somewhat different scoping tests for non-EU groups.

Standards: the ESRS were established by Commission Delegated Regulation (EU) 2023/2772 (EU, 2023b). On 3 July 2026 the Commission adopted a Delegated Regulation amending that instrument to simplify certain standards, together with a second Delegated Regulation establishing sustainability reporting standards for voluntary use by undertakings protected by the value chain cap, taking account of EFRAG's technical advice and of a call for feedback issued on 6 May 2026 (European Commission, 2026a, 2026b, 2026c, 2026d). Both acts are transmitted to the European Parliament and the Council for a scrutiny period of two months, extendable by a further two, and neither is in force until published in the Official Journal. The revised standards are therefore adopted but neither applicable nor in force, whereas the scope-narrowing effected by Omnibus I already is. The value chain cap limits the information that CSRD-reporting companies may require from smaller undertakings in their value chains – a constraint of direct relevance to the biodiversity value-chain disclosures required by ESRS E4.

The revised ESRS reduce mandatory datapoints by more than 60 per cent, and the total number of datapoints by more than 70 per cent, through emphasis on materiality, fair presentation and a streamlined “top-down” double materiality assessment – double materiality itself is retained as a core principle, not replaced by single financial materiality, while interoperability with ISSB reporting boundaries improves (e.g., allowing either financial-control or operational-control GHG accounting) (EFRAG, 2025; European Commission, 2026a, 2026b). ESRS E4 (EU, 2023b) still requires disclosure of biodiversity impacts across value chains – land-use change by ecosystem type, threats to IUCN Red List species, pollution loads affecting ecosystems, and impacts on Key Biodiversity Areas – alongside dependencies on ecosystem services like pollination, water regulation and soil fertility that create business-continuity risks.

Mandatory status distinguishes ESRS E4 from voluntary frameworks: disclosures in scope face external assurance, creating legal accountability. Whether mandatory biodiversity disclosure, as distinct from climate disclosure, measurably redirects capital is not established by the sources cited here and remains an open empirical question.

Implementation challenges remain substantial: unlike climate’s standardized CO₂-equivalent, biodiversity lacks universal metrics; supply-chain data remains weak, particularly for tier-2 and tier-3 suppliers in agriculture and materials sourcing. The directive’s mandatory character for in-scope companies nonetheless creates market pressure voluntary initiatives alone have not achieved, even as scope reduction narrows how many companies that pressure reaches.

Sources: EU, 2022; EU, 2023b (Delegated Regulation (EU) 2023/2772); EU, 2026 (Omnibus I Directive (EU) 2026/470); EFRAG, 2023, 2025; European Commission, 2026a, 2026b, 2026c, 2026d.

This case illustrates how mandatory disclosure architecture can create structural conditions for biodiversity-related transparency; it does not itself provide strong empirical evidence of impact on capital allocation, and the significant scope-narrowing since 2022 is a material qualification to any claim of transformative effect – some observers question whether a regime this substantially reduced can still deliver its original ambition. This study presents the case descriptively rather than as a proven model, consistent with KMGBF Targets 14, 18 and 19’s transparency and finance-alignment aims (Areas 1 and 5).

4.6.3 Illustrative Case 3 – Cross-cutting Lessons from EU EHS Reform for KMGBF Target 18

Illustrative Case 3 draws on experiences reforming environmentally harmful subsidies in the EU, which offer practical lessons for operationalizing Target 18 in different national contexts, emphasizing structured processes, clear mandates and sustained political engagement over one-off technical studies (European Commission, 2022a; OECD, 2005). The EU’s experience also shows such reforms face sustained political contestation, particularly where food security and rural-economic dependency intersect; the current geopolitical environment – marked by renewed attention to food security and trade dependencies – may make comparable reforms more contested elsewhere than the EU’s own multi-year, negotiated path suggests, and this case does not imply that reform is straightforward in different political-economy contexts.

Box 4.3: Cross-cutting Lessons from EU EHS Reform for KMGBF Target 18

The EU’s Common Agricultural Policy (CAP) has long directed a substantial share of the Union budget to agricultural support. Coupled payments tied to production volumes have been associated with soil degradation, nitrate pollution of groundwater, and long-term declines in farmland biodiversity. The 2023-2027 CAP reform introduced “eco-schemes”, which pay farmers for environmental practices rather than production volumes. Impetus for reform of environmentally harmful subsidies in Europe increased following the adoption of the Paris Agreement internationally and the European Green Deal at EU level (European Commission, 2022a), while sustainable-finance taxonomies embedded do-no-significant-harm criteria requiring that activities advancing one environmental objective, such as climate mitigation, do not significantly harm others, including biodiversity (EU, 2020).

Rather than eliminating agricultural subsidies – a politically difficult proposition in rural constituencies – policymakers repurposed them. Member states design their own eco-schemes around national priorities, so that payment rates, eligible practices and environmental ambition vary across the Union.

Lessons for global Target 18 implementation include public transparency, supported by national and international databases of environmentally harmful subsidies that make the scale and distribution of support visible; gradual sequencing, with extended negotiation and phased implementation giving affected sectors time to adjust; and setting payments and compensation measures at levels that cover compliance costs and provide an incentive margin, which reduces opposition by ensuring economic viability.

Green budgeting embeds recurring environmental review in normal budget cycles, but the Commission's own country assessment shows that review is not reform. France has reported environmental fiscal expenditure annually since 2006 and introduced green budgeting following the OECD's Paris Collaborative on Green Budgeting in 2017: the methodology was prepared in 2019 by the Inspection Générale des Finances and the Conseil Général de l'Environnement et du Développement Durable, and the first green budget, applying the modified methodology, was published in 2020 as an annex to the 2021 finance bill, publication being an annual requirement thereafter. It analyses all fiscal and budgetary expenditure against six environmental criteria and classifies each item as favorable, unfavorable or neutral; in 2020, of EUR 52.8 billion in expenditure affecting the environment, EUR 38.1 billion was classified favorable, EUR 4.7 billion as neutral and EUR 10 billion as unfavorable, the largest unfavorable items relating to transport and fuel. Finland, Ireland, Italy, Germany and Sweden operate comparable systems. The Commission records that green budgeting serves only to evaluate and inform: it does not offer reform suggestions, does not publish a list of environmentally harmful subsidies, and does not require their reform; classification as unfavorable does not imply that an expenditure must be eliminated or reformed. As of that assessment, green budgeting had not yet been used to reform environmentally harmful subsidies in France, with few or no examples of accompanying compensation measures (European Commission, 2022c, Annex 3). Tagging is therefore a precondition for reform under Target 18, not an instance of it.

Challenges persist. Because eco-schemes began operating only in 2023, evidence on the consistency of enforcement across member states, on the environmental ambition of individual national schemes, and on outcomes for farmland biodiversity was not available at the time of writing; member-state annual performance reports and the Commission's evaluation program are the appropriate sources as that evidence accumulates.

Member-state experience demonstrates the fiscal potential of repurposing: reallocating support from harmful coupled payments toward agri-environment and organic farming links Target 18 (harmful subsidy reduction) directly to Target 19 (resource mobilization), showing these to be complementary fiscal levers rather than separate technical workstreams.

For developing countries, adapting this model would require attention to administrative feasibility: verification proportionate to institutional capacity, practice-based rather than outcome-based payment criteria, and repurposing to support smallholders alongside environmental services. These are design considerations for Parties rather than findings of the sources cited.

Sources: European Commission, 2022a, 2022b, 2022c. Note: this box describes the architecture and sequencing of EHS and CAP eco-scheme reform. It does not report scheme-level payment rates or environmental outcomes.

The case offers practical options for operationalizing KMGBF Target 18 through structured, recurring EHS reform and green-budgeting processes that reallocate harmful subsidies toward NbS, just-transition measures and biodiversity-positive incentives, reinforcing Areas 2 and 3 of this assessment.

4.6.4 Illustrative Case 4 – Sovereign Green Bonds and Taxonomy-Gated Eligibility

Illustrative Case 4 shows what a national taxonomy admits, what a sovereign issuer then finances, and how far the two diverge when allocation is reported.

Box 4.4: China's Sovereign Green Bond – Eligibility, Allocation and Disclosure

China's Ministry of Finance published a Sovereign Green Bond Framework in February 2025 (Ministry of Finance of China, 2025), under which proceeds finance eligible green expenditures drawn from the Ministry's fiscal budget. Eligible categories reported for the framework include climate change mitigation and adaptation, natural resource conservation, pollution prevention and control, and biodiversity conservation (Climate Bonds Initiative, 2025). The inaugural issuance was priced on 2

April 2025 and listed on the London Stock Exchange's International Securities Market and on the Stock Exchange of Hong Kong: two RMB 3 billion tranches, three-year at 1.880 percent maturing April 2028 and five-year at 1.930 percent maturing April 2030 (Ministry of Finance of China, 2026).

The Ministry's Sovereign Green Bond Information Disclosure, published in May 2026 and accompanied by third-party independent verification, reports that the full RMB 6 billion was allocated, and that it was allocated entirely to one category: pollution prevention and control, specifically air pollution prevention and control, across 1,096 projects, mapped to the Green Finance Endorsed Project Catalogue (2025 Edition). Of the total, RMB 3 billion supported coordinated control of fine particulate matter and ozone – clean-energy retrofitting (RMB 0.7 billion), volatile organic compound management (RMB 1.9 billion) and ultra-low emission retrofitting in the waste sector (RMB 0.4 billion) – and RMB 3 billion supported atmospheric environmental governance and management. Reported outputs include support to 575 enterprises for VOC treatment, 32 for waste-sector retrofitting, 60,000 rural households shifting to electric heating, 1,236 air-quality monitoring stations, and reductions of 41,000 tonnes of particulate matter, 11,000 of sulphur dioxide, 8,000 of nitrogen oxides and 7,000 of VOCs (Ministry of Finance of China, 2026).

Three features bear on Targets 14 and 19. First, biodiversity conservation is an eligible category of this framework and receives none of the proceeds of its first issuance. Eligibility is permission, not an allocation; only the allocation report reveals which permission was used. Second, the disclosed expenditures span fiscal years 2022 to 2025 and form part of the central air-pollution control special fund, into which RMB 158.5 billion was invested during the fourteenth Five-Year Plan. The bond therefore refinanced expenditure already provided for in the budget, changing the funding source rather than the composition of spending. Third, the allocation is legible only because the Ministry published it at project-category level with independent verification. The finding in this box exists because the disclosure exists.

The following observation is analytical; the disclosure makes no such claim. The expenditures fall within the pollution-reduction domain of KMGBF Target 7 rather than the resource mobilization addressed by Target 19: the disclosure reports emission reductions and makes no claim about biodiversity outcomes. Whether pollution abatement of this kind should be counted as biodiversity-related finance is precisely the classification question set out in Section 1.2, and this issuance is a clean instance of it – an instrument that may be counted as green finance, as climate finance and as pollution-reduction finance, and not as biodiversity finance.

Sources: Ministry of Finance of China, 2026; Climate Bonds Initiative, 2025.

Note: framework category names are as reported by the Climate Bonds Initiative; the audit has not read the framework text. Issuance terms, allocation, project counts and environmental indicators are taken from the Ministry's Information Disclosure and its third-party verification appendix.

For Parties designing Target 19 instruments, the case separates three things that are often conflated. A taxonomy determines what may be financed. An issuance determines what is financed. An independently verified allocation report is what allows anyone to tell the difference. China's first sovereign green bond was fully allocated and directed wholly to air quality; a taxonomy naming biodiversity conservation did not by itself move a single renminbi toward it. Instruments of this kind are available to Parties outside the European regulatory architecture, and their contribution to Target 19 will be readable only when accompanied by allocation reporting of this quality.

Chapter 5: Conclusion and Path Forward

This assessment has examined how the NCQG-driven expansion of climate finance may affect biodiversity outcomes: the scale-up presents both significant opportunities and material risks, depending critically on the approaches Parties take to embedding biodiversity considerations into climate-finance architecture, implementing subsidy-related reforms under KMGBF Target 18, and designing mechanisms involving Nature-based Solutions and indigenous peoples and local communities. This concluding chapter synthesizes cross-cutting lessons (5.1), examines implications for KMGBF Targets 18 and 19 (5.2), presents seven Areas that may inform COP deliberations over 2026–2030 (5.3), and identifies opportunities for cross-convention collaboration (5.4) and longer-term integration into post-2030 sustainable development frameworks (5.5).

5.1. From Fragmented Flows to Integrated Outcomes

Biodiversity and climate finance operate through fragmented channels that do not constitute a coherent response to biodiversity loss and climate change (CBD, 2022; UNEP, 2023). Tracked biodiversity-relevant flows of approximately USD 124–143 billion per year fall far below the estimated USD 700 billion annual need (Deutz et al., 2020; UNEP, 2023). The NCQG sets a goal of at least USD 300 billion per year for developing countries by 2035, drawn from public and private sources (bilateral and multilateral, including alternative sources) (UNFCCC, 2024b, Decision 1/CMA.6). The NCQG is significant, but limited to what developed countries commit toward developing-country climate action. Domestic public finance across all countries represents a far larger funding pool than international flows (Dasgupta, 2021; UNEP, 2025). Synergy enhancement and trade-off elimination through domestic fiscal policy – green budgeting, subsidy reform, mainstreaming biodiversity into sectoral spending – can mobilize substantially more capital than international transfers alone.

Achieving Targets 18 and 19 therefore depends equally on domestic policy realignment as on international commitments. The total scale available for biodiversity-climate alignment comprises domestic budgets across all countries, international climate commitments, and tracked biodiversity finance. Leverage points exist at all three levels, making integration of synergistic finance and elimination of trade-offs a fundamentally domestic fiscal challenge, not primarily an international one.

Biodiversity inaction and substantial GDP losses under ecosystem-collapse scenarios show that biodiversity loss is a macro-critical fiscal risk, undermining national debt sustainability and global economic stability (see Box 1.1). Public and private nature-negative financial flows were estimated at approximately USD 7.3 trillion in 2023, including around USD 2.4 trillion in environmentally harmful subsidies and USD 4.9 trillion in private capital toward nature-negative activities (UNEP, 2026) – the figures used consistently across this study (Chapter 2, Section 2.2.2) – representing more than an environmental problem: a profound economic misallocation reinforcing the “impact inequality” described by the Dasgupta Review (UNEP, 2026; IMF, 2023; Dasgupta, 2021).

With falling ODA, rising debt burdens and shifting geopolitical priorities, rapidly increasing net public funding is difficult, making efficient use of existing and future finance flows strategically essential (OECD, 2026b; UNCTAD, 2025a). Finance ministries are increasingly engaging with this agenda as strategic actors operating within their own institutional logic and constraints, not merely recipients of external guidance; the Coalition of Finance Ministers for Climate Action (CFMCA) – now over 100 member countries, engaging directly on nature-related fiscal risk

through joint initiatives with the Network for Greening the Financial System – illustrates that quality-over-quantity framing resonates most when embedded within core public financial management systems (budgeting, procurement, debt management) rather than presented as an add-on (CFMCA, 2026; NGFS & CFMCA, 2025). The quality, coherence, and risk management of finance are as important as aggregate volumes, not secondary considerations.

Several analyses emphasize a shift from viewing biodiversity finance as an environmental “cost” to seeing it as a strategic hedge against systemic economic collapse – redirecting nature-negative expenditure toward synergistic pathways such as high-integrity NbS and conservation led and shaped by indigenous peoples and local communities that safeguard both climate and ecological foundations of the global economy. Indigenous peoples and local communities’ leadership extends beyond project implementation to design and governance itself, consistent with the direct-access and rights-based framing established in Chapter 2, Section 2.5 and Chapter 4, Section 4.4.1; strengthening this dimension is a priority throughout this assessment, not a peripheral consideration.

The same financial instruments generate either synergies or trade-offs depending on design, safeguards and governance; the relationship also runs the other way, as biodiversity outcomes shape the durability and risk profile of climate investments – ecosystem degradation can undermine the physical basis for nature-based mitigation and adaptation gains already achieved. High-integrity NbS – meeting recognized design, safeguard and monitoring standards (Box 2.1), consistent with the UNEA Resolution 5/5 definition under which biodiversity benefit is a required, defining feature rather than an optional co-benefit – supports mitigation and adaptation alongside its defining biodiversity outcomes, while poorly sited renewables, monoculture plantations and grey coastal infrastructure undermine ecological integrity (UNEA, 2022; UNEP, 2023; IPCC, 2019). Recent macro-economic assessments of ecosystem tipping points reinforce work by central banks, finance ministries and IFIs framing nature loss as a macro-critical risk for the global economy and financial system (IMF, 2024; NGFS, 2023b; Jourde & Moreau, 2025; Systemiq & International High-Level Expert Group on Natural Capital, 2025), consistent with Paris Agreement Article 5.1’s recognition of sinks and reservoirs including forests – intact ecosystems are directly relevant to the Agreement’s own objectives, not an externality to climate policy (UNFCCC, 2015b, Article 5.1).

A large volume of flows is currently classified as “isolated” – pursuing climate, biodiversity or development objectives with limited explicit attention to their interactions. Some are genuinely low-interaction; others reflect missed opportunities to incorporate NbS, climate-risk information or biodiversity safeguards into project design (Section 2.2.1). How institutions and Parties approach this presumed isolated space – as largely neutral or as a source of context-specific synergies – will influence whether overall finance trajectories support or undermine KMGBF biodiversity outcomes, depending on the same synergistic/isolated/trade-off framework introduced in Chapter 1 and applied throughout (Sections 2.2.1, 4.1.1).

GEO-7 and UNEA-7 call for systemic transformations that address climate change, biodiversity loss, and pollution, and, with them, the need to realign all financial flows with a nature-positive trajectory (UNEP, 2025; UNEA, 2025a).

5.2. Implications for the KMGBF Targets 18 and 19

This analysis has direct implications for implementing Target 19 (resource mobilization) and Target 18 (reforming harmful incentives).

On Target 19, the NCQG and related commitments provide a historic opportunity to close a substantial share of the biodiversity finance gap, optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises as called for in Target 19(e), if biodiversity safeguards and co-benefit metrics are embedded in national climate-finance strategies, fund mandates and MDB portfolios from the outset (CBD, 2022, Target 19(e); UNFCCC, 2024b). Without such integration, climate-finance scale-up risks under-delivering for biodiversity and, in some cases, exacerbating degradation through trade-off finance – a risk this assessment documents throughout (Chapter 3) rather than asserts without basis (UNEP, 2023; IPCC, 2019). OECD tracking shows biodiversity-specific international flows on a trajectory that could approach the USD 20 billion Target 19a benchmark by 2025 (OECD, 2025a), though this progress remains fragile given declining ODA and stalled private finance mobilized by public development finance. Target 19 focuses primarily on mobilizing and aligning additional finance for biodiversity, including through climate-finance scale-up (CBD, 2022) – squarely within the Convention’s own mandate, including its explicit climate-synergies element (e).

On Target 18, reforming and repurposing environmentally harmful subsidies is a major structural lever for climate and biodiversity alignment, with potential fiscal space far exceeding current international biodiversity-finance flows (IMF, 2023; Koplow & Steenblik, 2024). Target 18’s text addresses two related but distinct elements: eliminating, phasing out or reforming subsidies harmful to biodiversity, substantially and progressively reducing them by at least USD 500 billion per year by 2030, and scaling up positive incentives for biodiversity conservation and sustainable use (CBD, 2022, Target 18) – treated here as two elements of a single target rather than a dimension of Target 19, whose domain remains broader resource mobilization beyond incentive redesign. The Nature Conservancy’s accompanying analysis of the Dashboard finds only incremental increases in biodiversity-positive incentives and limited progress in scaling national harmful-subsidy assessments (TNC, 2025), indicating a need for COP attention to implementation tools and timelines (Defra & TNC, 2025; TNC, 2025). Linking EHS reform to NbS investment, just-transition measures – compensatory support and phased timelines for affected workers and communities (Chapter 4, Sections 4.2.2 and 4.6.3) – and indigenous peoples and local communities-led conservation simultaneously reduces nature-negative incentives and expands funding for nature-positive activities (OECD, 2025b; UNEP, 2023).

Recent work for the European Commission and CBD Parties, and guidance addressed to governments by business coalitions, associates successful EHS reform with four elements: (i) a national inventory or “catalogue” of EHS with basic impact and fiscal data; (ii) clear political mandates or roadmaps with time-bound phase-out objectives; (iii) structured stakeholder processes managing distributional impacts; and (iv) explicit linkages between subsidy reform, green fiscal reform and positive incentives for NbS and biodiversity-friendly practices (European Commission, 2022a, 2022c; OECD, 2005; Business for Nature, 2023). Annex 3 of that study contains case studies for several member states; four illustrate the range.

- Italy has published a Catalogue of Environmentally Friendly and Environmentally Harmful Subsidies regularly since 2017, four editions to date, mapping both favorable and harmful subsidies and setting out methodologies for their quantification; the resulting reform work was supported by an OECD technical assistance project for the Ministry for Ecological Transition and the Ministry of Economy and Finance, funded by the European Commission. Earlier reform attempts were limited by the absence of political consensus and by changes in government; a stepwise phase-out has since been launched, a plan to remove environmentally harmful subsidies is under evaluation, and the first five fossil-fuel subsidies have been eliminated.

- France operates green budgeting that evaluates and informs but publishes no list of environmentally harmful subsidies, does not require reform, and had not been used to reform them at the time of that assessment (European Commission, 2022c, Annex 3; see Section 4.6.3).
- Lithuania has attempted reform repeatedly without completing it: identifying harmful subsidies and developing a methodology to do so entered the National Reform Program in 2013 and a methodology study was commissioned in 2014, though its use in subsequent initiatives is not established; the Government Program endorsed in December 2020 contains a Green Tax Reform initiative addressing fossil-fuel subsidies, with tax reliefs under review by an interinstitutional working group; and a 2019 draft national air-pollution plan proposing higher excise duties on diesel, coal, coke and lignite was superseded by a version approved without those measures.
- Slovakia has bound reform to a deadline: its Environmental Strategy to 2030, published in 2019, commits to phasing out all environmentally harmful subsidies by the end of 2030; efforts to end support for brown coal began in 2017 following pressure from EU authorities; a government decision of December 2018 set termination of subsidies to brown-coal energy generation by 2023; and the case study reports that completion may precede the 2030 deadline. A green fiscal reform of transport taxation remains under consideration, while registration-tax reliefs and favorable depreciation for electric vehicles have been introduced. Inventories, methodologies and green budgeting are preconditions for reform rather than evidence of it. Where political consensus has formed, as in Italy, the inventory has enabled first eliminations; where it has not, tagging has produced none, as in France, and drafted measures have been removed before adoption, as in Lithuania. Slovakia, which combined external pressure, a dated government decision and a strategy deadline binding all such subsidies, has moved furthest. The binding constraint on Target 18 is the durability of the political mandate, not the availability of a method; the instruments that sustained mandates in these cases were a fixed date, an external commitment, and a decision taken at the level of government rather than at the level of ministry.

Together, efforts to advance Targets 18 and 19 influence both sides of the biodiversity-finance equation: resource-mobilization measures that do not address harmful subsidies risk being overshadowed by nature-negative flows, while EHS reform without scaled-up positive finance will not deliver the restoration and protection envisioned in the KMGBF (CBD, 2022; Dasgupta, 2021). These interactions are particularly relevant for the first global review of collective KMGBF implementation progress at COP17 in 2026, drawing on seventh national reports (SCBD, 2025b), and the second review at COP19 in 2030, aligned with the 2030 deadline for most targets – both providing key milestones for assessing progress under Targets 18 and 19.

5.3. Areas Identified for Potential Consideration by the Conference of the Parties to 2030

The period 2026-2030 is significant for consolidating institutional architecture for both the KMGBF and NCQG (CBD, 2022; UNFCCC, 2024b). Seven areas merit consideration, detailed further in Chapter 4, presented in sequence rather than ranked priority; determining relative priority is a matter for Parties, though Table 4.1's phased short-/medium-/long-term structure offers one basis for sequencing toward higher-readiness, lower-cost actions first.

Area 1 – Synergy between biodiversity, climate and development finance. Embedding biodiversity objectives, indicators and safeguards into climate and development finance architecture, MDB strategies and multilateral climate-fund operations influences how expanding climate finance contributes to KMGBF Targets 18 and 19, just as demonstrating concrete biodiversity co-benefits for climate outcomes offers a direct route to mutual gains on an equal footing (CBD, 2022; UNFCCC, 2024b). This is not a proposal to renegotiate the NCQG’s own terms; it concerns how biodiversity-relevant data can inform UNFCCC tracking and implementation processes, and how MDB and fund practice can embed biodiversity within existing mandates. Such synergies cannot substitute for the provision of new, additional, predictable and adequate international financial resources under KMGBF Target 19 and Articles 20 and 21 of the Convention, which require developed country Parties to provide new and additional financial resources with due regard to the need for predictability and adequacy of funding flows (CBD, 1992, Articles 20-21); synergistic finance and dedicated biodiversity resource mobilization are complementary, not substitutable, channels. Further options are in Sections 4.1 and 4.2.

Area 2 – Support for the implementation of Target 18 on harmful incentives, including environmentally harmful subsidies. Evidence on the scale and composition of nature-negative incentives shows that inventories of harmful incentives (not limited to subsidies), green-budgeting tools and structured reform processes inform national efforts to reduce harmful incentives and repurpose fiscal space (UNEP, 2023; OECD, 2025b), consistent with Target 18’s own framing addressing harmful incentives broadly, with subsidies one significant category. Related approaches are in Section 4.2.

Area 3 – Alignment of public finance flows with nature-positive pathways. Green budgeting, DNSH principles and nature-positive screening show entry points for aligning public budgets, state-owned enterprises and development-finance institutions with KMGBF targets (OECD, 2025a; EU, 2020); many of the same design principles, with adaptation, are also relevant to private finance and blended instruments (Chapter 4, Section 4.3). Options are in Sections 4.2 and 4.3.

Area 4 – Quality standards and safeguards for climate-related instruments. Findings on trade-off finance show the role of safeguards, exclusion criteria, and indigenous peoples and local communities, women and youth rights provisions in shaping biodiversity outcomes in carbon markets, Article 6 mechanisms, renewable-energy and adaptation investments (IPCC, 2019; UNEP, 2023), presented as options informed by evidence under this assessment’s own CBD-mandated scope, not an assessment of other conventions’ mandates. Avenues for strengthening are in Section 4.4.

Area 5 – Transparency and nature-related disclosure frameworks. This area addresses KMGBF Target 15, which calls on Parties to enable and encourage businesses and financial institutions to monitor, assess and disclose their biodiversity-related risks, dependencies and impacts (CBD, 2022, Target 15); consistent with its Second-Layer, systemic-governance role in this study’s framework, Target 15 is treated here as the enabling architecture that embeds private-sector accountability, corporate value-chain risk tracking, and double-materiality disclosure into public and private decision-making, rather than as a direct capital lever in its own right.

Convergence – understood as greater alignment rather than identical treatment of necessarily distinct frameworks – around core climate-biodiversity indicators is emerging but remains partial. TNFD and standard-setting bodies have defined a common architecture for nature-related

risk reporting, yet biodiversity indicators remain more context-specific and less standardized than climate indicators. TNFD's own tracking shows more than 733 organizations, representing approximately USD 22.4 trillion in assets under management, committed to report in line with its recommendations as of late 2025 (TNFD, 2025b); the ISSB has signaled its forthcoming nature-related disclosure guidance, expected as an exposure draft in October 2026 timed for COP17, will substantially incorporate the TNFD framework (Chapter 4, Section 4.1.2).

This adoption-commitment figure sits in contrast to actual disclosure practice: the IPBES Business and Biodiversity Assessment finds that less than 1 percent of publicly reporting companies currently mention their biodiversity impacts in their reports, though the report also notes that this share is growing rapidly from a low base (IPBES, 2026). Ample evidence, including the recent IPBES Business and Biodiversity Assessment, shows sufficient material already exists for finance to map and disclose impacts, dependencies, risks and opportunities (IPBES, 2026). Robust monitoring of whether finance delivers claimed co-benefits is at least as important as volume or source. Issues and options are in Sections 4.1 and 4.3.

Area 6 – Access mechanisms for indigenous peoples and local communities, women and youth, family farmers and smallholder producer organizations, and subnational jurisdictional approaches. Indigenous peoples and local communities hold distinct legal status and rights under international law and CBD practice; the CBD's COP15 decision on traditional knowledge terminology (Decision 15/21) reflects ongoing attention to precise usage, and this study uses "indigenous peoples and local communities" as a combined term of convenience while recognizing the underlying distinction (CBD, 2022, Decision 15/21). Experience with finance mechanisms led by indigenous peoples and local communities, as well as jurisdictional mechanisms, shows the importance of tenure security, FPIC and equitable benefit-sharing for durable outcomes (GEF, 2021a; GEF IEO, 2025). This assessment finds access mechanisms alone insufficient: durable outcomes depend on indigenous peoples and local communities holding genuine governance authority – design leadership, budget control and monitoring oversight – rather than serving as implementation partners within externally designed programs (Chapter 2, Section 2.5; Chapter 4, Section 4.4.1). This includes a specific accountability dimension for the GEF: its own target that at least 20 percent of GBFF resources reach indigenous peoples and local communities, and whether resulting projects are genuinely locally led rather than only locally implemented, remain areas lacking independent, systematically published monitoring (Chapter 2, Section 2.3.1; Chapter 4, Section 4.1.3). Related design features are in Sections 4.4 and 4.6. Longer-term, lessons from these mechanisms could inform how future global sustainable development goals reflect biodiversity, the rights of indigenous peoples and local communities, and climate-finance alignment.

Area 7 – Integrate biodiversity into loss and damage governance and finance. Recent discussions on the FRLD and related arrangements highlight the relevance of ecosystem collapse and species extinction as significant losses with both economic and non-economic dimensions – including, for indigenous peoples and local communities specifically, cultural, spiritual and linguistic losses tied to ecosystem and territorial integrity (UNFCCC, 2024b; IPCC, 2019).

This assessment does not propose replicating the UNFCCC loss-and-damage architecture within the CBD, which operates under a distinct legal and institutional context. Rather, it identifies options for coherence:

- **FRLD Guidance.** Recognize non-economic dimensions of ecosystem loss, consistent with Article 8's cooperation-and-facilitation basis (non-liability, non-compensation).

- **Governing Instruments & Funding Windows.** Integrate biodiversity safeguards and nature-based recovery. Prioritize restoration of natural buffers and avoid grey infrastructure. Governance instruments alone will not resolve underlying drivers of ecosystem loss.
- **Loss & Damage Standards.** Align loss and damage standards – safeguards, the rights of indigenous peoples and local communities and women/youth, tenure, FPIC, benefit-sharing, biodiversity indicators – with Areas 3–6 across climate-finance architecture.

5.4. Opportunities for Cross-convention Collaboration

Delivering these priorities – scaling and aligning finance for Targets 14, 15 and 19, implementing Target 18 EHS reform, aligning public finance, strengthening safeguards, enhancing transparency, and expanding access for indigenous peoples and local communities, women and youth and jurisdictional approaches – may benefit from closer CBD-UNFCCC coordination and from engagement with MDBs, other international financial institutions and donors. The 2024 and 2025 ODA cuts and mixed outcomes at recent COPs and UNEA-7 show global environmental governance is under strain precisely when systemic transformations are most important (UNEA, 2025; UNEP, 2025; OECD, 2025a), which strengthens the case for coordination and for clearer expectations on aligning all finance with nature-positive pathways. Given the shared objectives of the KMGBF and Paris Agreement, options for enhanced collaboration on finance include:

- Assessing whether existing coordination mechanisms could improve coherence between NCQG implementation and Target 19 monitoring. Two are available: the terms of reference of existing climate-biodiversity finance working groups could be extended, and the Joint Liaison Group of the Rio Conventions, established in 2001 by the secretariats of the CBD, the UNFCCC and the United Nations Convention to Combat Desertification (UNCCD), could be used. A new joint technical working group would warrant consideration only if these prove insufficient and would need to demonstrate clear additionality and avoid duplicating the CFMCA's existing work engaging finance ministries on nature-related fiscal risk (Chapter 4, Section 4.1; CFMCA, 2026). Any joint arrangement would require decisions by both the CBD and the UNFCCC COPs. Coordination of this kind could also inform the design of successor frameworks to the Sustainable Development Goals (Section 5.5; UNFCCC, 2024b; United Nations, 2024).
- Coordinated guidance on NbS quality criteria, safeguards, and the rights of indigenous peoples and local communities, building on existing work underway – including the CBD Secretariat's forthcoming peer review of the Supplement to the Voluntary Guidelines for Ecosystem-based Adaptation (SCBD, 2026c, forthcoming) and relevant UNEA processes – alongside complementary market-facing frameworks such as TNFD and GEO-7 (UNEA, 2025a; TNFD, 2023; UNEP, 2025).
- Strengthened, interoperable disclosure regimes at financial institutions, underpinned by credible reporting frameworks and metrics, to reduce reporting friction and accelerate capital allocation toward nature-positive activities, including through strengthened institutional capacity within central banks and supervisory authorities for assessing nature-related financial risk (CDP, 2025).

Such collaboration may reduce duplication, clarify expectations, and send a stronger, unified demand signal for nature-positive climate finance (CBD, 2022; WEF, 2024c).

5.5. Opportunities from Developing New Global Sustainable Development Goals

Should global sustainable development goals beyond 2030 be developed, this would present an opportunity – not a certainty this study presumes – to reflect lessons from KMGBF implementation and efforts to align climate and development finance with biodiversity outcomes (OECD, 2026b). This is offered as forward-looking input should such a process arise, consistent with this study’s role as technical assessment rather than a proposal for CBD engagement in a specific future negotiation. Experience with access mechanisms for indigenous peoples and local communities, jurisdictional approaches and integrating biodiversity into climate finance can shape how nature, climate and social considerations are addressed after 2030 (CBD, 2022).

Three lessons from this assessment are especially relevant for future global goal setting, should the opportunity arise:

- **Centering rights-based, human-rights-based and indigenous peoples and local communities-led and family farmer-led approaches.** Recognizing indigenous peoples and local communities, including women and youth, and family farmers as rights-holders and key stewards of biodiversity can be a core organizing principle of any post-2030 framework, reflecting evidence that their lands host a large share of remaining intact ecosystems but receive limited direct finance (Rainforest Foundation Norway, 2021; WWF et al., 2021). Without the explicit integration of human rights, environmental justice, and the effective participation of indigenous peoples and local communities, women, youth, and marginalized groups, expanded climate finance risks reproducing structural inequalities rather than resolving them (BCA, 2023; Muller & Robins, 2022). The Baku to Belém Roadmap’s recognition of the centrality of smallholder and family farmers to resilient, low-carbon agriculture, and of just-transition principles for workers, women, and indigenous peoples and local communities, offers a relevant precedent for future frameworks (UNFCCC, 2025b). Future goals could include explicit indicators on land-tenure security, FPIC implementation, and the share of finance reaching indigenous peoples and local communities-led organizations directly. While this report uses the standard CBD umbrella term ‘Indigenous Peoples and Local Communities’, it recognizes that they represent distinct groups with differing rights frameworks, traditional ecological knowledge systems, and degrees of governance influence.
- **Hard-wiring nature into macroeconomic goals.** Future goals can recognize biodiversity, ecosystem integrity and environmental limits as foundational to poverty reduction, food security and economic stability, building on the Dasgupta Review’s “impact inequality” framing, GEO-7’s systemic-transformation narrative, and KMGBF Target 14’s mainstreaming mandate (Dasgupta, 2021; UNEP, 2025; CBD, 2022, Target 14) – meaning explicit targets aligning public and private finance with nature-positive pathways, including EHS reform and scaling NbS (OECD, 2025b).
- **Integrating finance architecture into goal design, with safeguards against double counting.** The next framework could be more finance-aware, with specific targets and indicators on climate and biodiversity finance volumes, quality and alignment, drawing on KMGBF Targets 18 and 19, the NCQG and emerging taxonomies, disclosure standards and safeguards (CBD, 2022; UNFCCC, 2024b; OECD, 2025b), with clear methodological guidance to avoid double-counting flows serving both objectives,

consistent with the risk identified in Section 2.2.1, ensuring clear expectations for fiscal policy, public investment, MDB operations and private capital flows.

This emerging discussion is noted here as a matter this assessment's evidence base may usefully inform, should Parties choose to draw on it (CBD, 2022; United Nations, 2024). Future frameworks could treat climate, biodiversity, pollution and finance not as separate pillars but as interconnected dimensions of a single safe and just operating space, institutionalizing the integrated approach emphasized throughout (UNEP, 2025; WEF, 2024a).

5.6. Concluding Reflections

Several analyses describe the NCQG-driven expansion of climate finance as a juncture at which it could either support a climate-resilient, nature-positive development trajectory or entrench nature-negative investment under a green label (Dasgupta, 2021; UNEP, 2025) – a framing used here because it captures the biodiversity-climate finance relationship more precisely than a simple “scale-up” narrative. The outcome depends on how quickly Parties and institutions reform harmful incentives, embed biodiversity metrics and safeguards into climate-finance architecture, and scale high-integrity NbS and indigenous peoples and local communities-led conservation within national development strategies (CBD, 2022; UNEP, 2023); these dimensions are documented throughout this assessment (Chapters 2–4), while the NCQG's own scale and structure are governed by Decision 1/CMA.6 rather than the sources cited here for the biodiversity-finance dimension.

With falling ODA, high and in some cases rising debt burdens, and contested environmental policies in several developed countries, rapidly increasing net public finance at scale is difficult under current fiscal trajectories (OECD, 2026b; UNCTAD, 2025a). This constraint is not necessarily fixed: some analyses suggest that domestic public revenue for sustainable development and environmental priorities could be expanded through fiscal reforms, including progressive taxation on high-net-worth individuals and capital, provided administrative and cross-border enforcement challenges are addressed (UN DESA, 2024). Under current constraints, however, many assessments emphasize that approaches tapping synergies and avoiding harm are central to scenarios achieving Targets 18 and 19 (OECD, 2026b; UNCTAD, 2025a); the quality, coherence and resilience of finance flows – including the grants/loans balance, safeguard integrity and EHS reallocation – are at least as important as aggregate volume (UNFCCC, 2024b; OECD, 2025a, 2025b).

The 2026-2030 period represents a critical implementation window for the KMGBF, during which institutional choices on finance will have lasting effects (CBD, 2022; UNFCCC, 2024b), including through jurisdictional programs implemented by subnational governments and territorial authorities. Analyses of ecosystem-service collapse scenarios suggest closing the approximately USD 700 billion annual biodiversity-finance gap can be framed as a fiscally prudent response to much larger potential macroeconomic losses (World Bank, 2021a; Dasgupta, 2021).

The path forward may involve a gradual shift from voluntary commitments toward mandatory, high-integrity frameworks – strengthened disclosure regimes and long-term nature-finance facilities – prioritizing the direct inclusion of indigenous peoples and local communities, women and youth, and strong safeguards (EU, 2024b; Government of Brazil, 2025; GEF, 2021a). Progress on KMGBF implementation is associated with narrowing the impact inequality by reducing nature-negative flows and increasing the share of climate finance delivering measurable biodiversity outcomes (Dasgupta, 2021; UNEP, 2025; Muller & Robins, 2022).

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