

Unlocking Private Finance for Nature as Infrastructure

A Public-Private Partnership











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The research and writing were led by Callum Douglas, working in close coordination with the authors:

- Asian Infrastructure Investment Bank (AIIB) Erik Berglöf, Chunping Xie, Zhe Fu, and Xiang Li
- European Bank for Reconstruction and Development (EBRD) Rachael Barza and Ben Peel
- Paulson Institute Deborah Lehr, Rose Niu, Terry Townshend, Li Zhu, Jinsui Song, Simon Zadek, and Eric Swanson

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Executive Briefing

Unlocking Private Finance for Nature as Infrastructure: A Public Private Partnership

Nature finance is fragmented, small-scale, and poorly matched to the systemic challenge of maintaining nature's resilience. A paradigm shift is proposed: treat nature as critical infrastructure and use Public Private Partnerships for Nature (PPPNs) to structure investment at scale. Building on structuring models and real-world case studies, this report shows that standardization is essential to reach scale. Three underused financial tools—guarantees, insurance, and biodiversity credits—can dramatically accelerate this shift. To unlock this financing model, governments and financial institutions, including Multilateral Development Banks, must act now to mainstream nature into economic systems and data, financial architecture, and sovereign development planning. The private sector is waiting for a signal that only governments can provide: the creation of the regulatory framework and incentives that reward those who protect and restore nature and penalize those who harm it. Without this, we will fail.



Henry M. Paulson Jr. Chairman Paulson Institute

At this critical crossroads, for essential action to happen at scale, governments must lead the way and set the rules that drive investment towards nature protection and restoration and away from damage and destruction. This work is not optional—it's foundational. Nature is not a luxury. It's not free. It's our support system. And it's disappearing before our eyes. We must act—not someday, not incrementally. Now.

Nature as Infrastructure

This report proposes a strategic reframing: Nature as Infrastructure (NAI) positions high-integrity ecosystems as governable, investable infrastructure—not only natural capital to be conserved, but also essential systems to be valued, financed, restored, and maintained. This unlocks access to the same pathways used for built assets: national infrastructure plans, blended finance, and PPP delivery. NAI presents both an opportunity to mobilize financing and a strategic shift, enabling long-term investment to deliver nature resilience outcomes. The investment in NAI secures the ecological foundations needed to deliver Nature-based Solutions (NbS), while enabling co-investment models that align public policy with private capital.

For nature-rich countries, this shift also unlocks new growth pathways by creating revenue streams through the bioeconomy.

From Projects to Platforms

Today's fragmented, ad hoc, and project-based approach to nature finance is not fit for purpose. It will not meet the Global Biodiversity Framework's financing targets, let alone unlock the much larger opportunity to scale investment in nature. A shift to systemic, scalable delivery platforms is needed, including the integration of nature into climate financing.

At the core of this shift is the need for governments to be willing to pay for nature resilience outcomes, locally and in recognition of their global benefits, just as they pay for gray infrastructure due to its productivity benefits. The report identifies Public-Private Partnerships for Nature (PPPNs) as core architecture to mobilize private capital for nature resilience. Like traditional infrastructure PPPs, PPPNs provide long-term contracts, risk sharing, and standardized structures, but applied to forests, wetlands, grasslands, and coral reefs. PPPNs can also be embedded within climate finance platforms to ensure integrated nature and climate solutions in development and fiscal strategies.

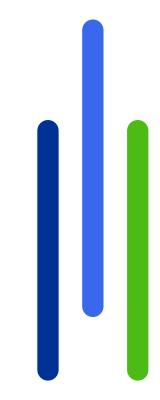
By linking returns to verified nature resilience outcomes, PPPNs create the bankable pipelines and offtake structures needed to mobilize institutional capital at scale and on affordable terms.

Making Nature Count in Finance

While PPPNs can certainly operate within existing governance and data frameworks, reaching their full potential requires a nature finance operating system built on data, valuation, regulation, and accountability, making nature visible in economic and financial decisions. That means integrating nature performance metrics into ratings, investment analysis, portfolio management, and corporate and financial disclosures.

When the value of nature is formally and effectively recognized in budgets and balance sheet accounts, it can compete fairly with gray infrastructure for capital. This could allow commercial banks and other financial institutions, which must be the accelerators of nature finance, to confidently structure and scale investments.







Unlocking the Next Generation of Financial Tools

A new generation of financial tools is emerging, boosting the bankability of nature investments. We spotlight three underused but high-potential tools that bring revenue-generating components, many requiring no public finance, and can be bundled into bankable structures. For investors, they offer clear cash flows, risk-sharing, and entry into high-integrity nature markets, especially within PPP-style platforms:

- Guarantees that improve credit quality, enabling banks and institutional investors to enter early with reduced exposure.
- Insurance, including parametric cover for ecosystems such as reefs and mangroves, sustainability-linked premiums tied to restoration, and sovereign protection bonds to close the protection gap.
- Biodiversity credits with regulated or corporate offtake—creating performance-based revenues that are measurable, certifiable, and unlock finance for conservation and restoration.

When bundled into PPPNs, these instruments enable deal structuring with revenue certainty, measurable outcomes, and risk-adjusted returns. Mobilizing capital at scale requires investment-ready platforms, owned by governments and anchored early by MDBs, insurers, and commercial banks through blended finance, aggregation, and underwriting.



Odile Renaud-Basso President European Bank for Reconstruction and Development

To scale investment in nature, we must build financial partnerships that deliver measurable outcomes. That means deploying the full suite of catalytic tools in ways that attract private capital and align public ambition with market expertise.

Sovereigns at the Center

Public finance systems must evolve to treat nature as a national asset. That means:

- Integrating nature into debt sustainability analysis and sovereign credit risk assessments.
- Embedding natural capital in national accounts, budgets, and macroeconomic planning.
- Designing fiscal codes and incentives so NAI and NbS are assessed on equal footing with gray infrastructure.

Redefining MDB roles

MDBs sit at the intersection of public ambition and private capital. To unlock nature finance at scale, shareholders must ensure that they:

- Commit to integrating nature into existing frameworks and scaling nature-positive investment, consistent with each institution's mandates and strategic priorities.
- Screen all infrastructure projects for NbS/NAI alternatives.
- Act as honest brokers of PPPNs, brokering agreements, de-risking policy volatility, and facilitating conflict resolution.
- Provide upstream support for regulation, procurement, and land tenure reform.
- Explore innovative financing instruments to catalyze and de-risk private investment in NAI.



Jin Liqun
President and Chair of
the Board of Directors,
Asian Infrastructure
Investment Bank

We must move beyond abstract concepts of nature protection and recognize ecosystems as infrastructure turning them into investable, highintegrity asset classes. MDBs have a critical role in realizing this shift by embedding nature into planning, finance, and governance at scale.





Aligning Global Incentives

Trade, investment, and subsidy regimes continue to reward nature destruction. Reform is urgently needed to:

- Phase out or reform harmful subsidies.
- Embed nature clauses in trade and investment agreements.
- Use tariffs, procurement, and tax tools to give competitive advantage to regenerative production, including initiatives led by indigenous people.

Equity as a Condition for Investment

Indigenous Peoples and Local Communities steward most of the world's biodiversity. Their rights are not just safeguards but preconditions for investment. Finance must:

- Legally recognize collective land tenure and ensure meaningful participation in decision-making (e.g., Free, Prior, and Informed Consent or similarly internationally recognized standards).
- Establish fair benefit-sharing frameworks and agreements for nature markets.

 Support Indigenous devised and led financial vehicles that channel capital directly to community priorities.

Respecting rights reduces legal and reputational risk, rewards and supports lasting stewardship of ecosystems, and expands the pipeline of investable projects.

An Agenda for Scaling Nature Financing

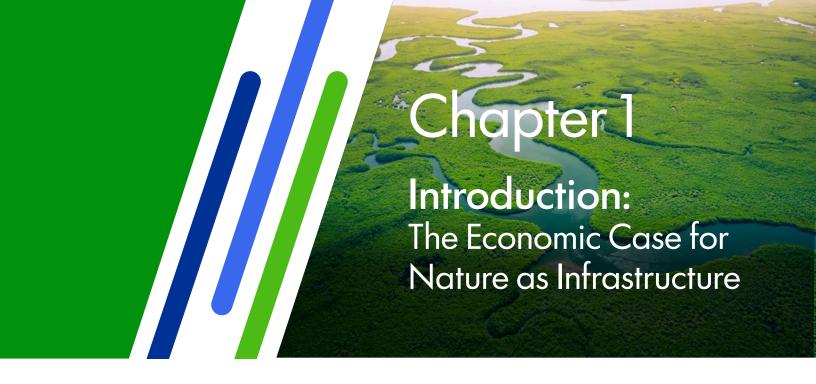
Together, the proposed reforms chart a sustainable path to mainstream nature in the global financial system: PPPNs as a core delivery model; natural capital in accounts and balance sheets; scaled instruments like guarantees and insurance; sovereign fiscal reform; MDB accountability; global trade and subsidy alignment; and equity at the foundation.

This is an ambitious but achievable agenda. Private capital has the potential to play a transformative role. Even modest reallocation of financing toward nature-positive investment would eclipse current public funding and unlock resilience dividends. By aligning public policy, private capital, and community stewardship, nature finance can be unlocked at scale and deliver resilient growth.

The Recommendations at a Glance

For these recommendations to be effective, governments must create the rules that will incentivize the private sector to shift investment. The recommendations build a roadmap for governments, investors, and MDBs to create investable pipelines, unlock new revenue streams, and embed nature into the architecture of finance and development.

- Establish PPPNs as a core delivery model to scale nature investment.
- Urgently build a foundational system that makes nature count (accounting, disclosure, balance sheets), including embedding nature in national accounts, sovereign finance, and fiscal systems.
- Govern nature markets with integrity to build trust and transparency.
- Mobilize catalytic financial instruments to drive private investment.
- Redefine MDB roles to anchor markets and unlock risk capital.
- Align trade, investment, and subsidies with nature resilience goals.
- Put rights and equity at the core of investable nature.



Box 1. A Note on Nature

Throughout this report, we use nature as an inclusive term covering ecosystems and the biodiversity within them—such as forests, wetlands, and marine habitats—and the services they provide, like water regulation, carbon storage, and food production. Biodiversity refers to the variety of life forms and is recognized by scientists as a central component of nature.

1.1 Interlinked Crises and the Role of Nature

Environmental, social, and economic challenges—such as nature and biodiversity loss, climate change, water and food insecurity, and public health risks—are deeply interconnected. These crises interact and reinforce one another, meaning that addressing them in isolation is not only ineffective but can also lead to counterproductive outcomes, including increased cost¹. According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), a peer organization to the better-known Intergovernmental Panel on Climate Change (IPCC), climate change is one of five drivers of change in the state of nature, alongside land and sea use change, resource use, pollution, and invasive alien species. The symbiotic relationship between these five drivers of change is underscored by the recognition that nature-based solutions (NbS) may provide around a third of the climate mitigation needed to keep global temperature increases in line with the Paris Agreement and can support climate adaptation.

Yet these interlinked crises expose a structural blind spot in our economic systems: the persistent undervaluation of nature as a foundational asset, the implication of which has been little to no investment to increase or preserve its value, which is a product of its resilience. The resilience of nature underpins its ability to continue to provide the flow of ecosystem services, such as the provision of water, pollination services from insects, and fertile soils, upon which households and businesses depend.

1.2 Shifting the Focus: From Nature-Based Solutions to Nature as Infrastructure

Box 2: What We Mean by Nature as Infrastructure (NAI)

Nature as Infrastructure (NAI) is a strategic reframing that positions ecosystems as critical, productive, investable public assets that deliver essential infrastructure-grade services. In this framing, nature and its biodiversity are thus not only the life-support system in which humans evolved, but also the foundational infrastructure layer on which societies and economies depend. Like roads or airports, it requires long-term planning, a capita- investment mindset (capex over opex), and the structuring and deployment of patient capital at landscape scale to manage and maintain its resilience.

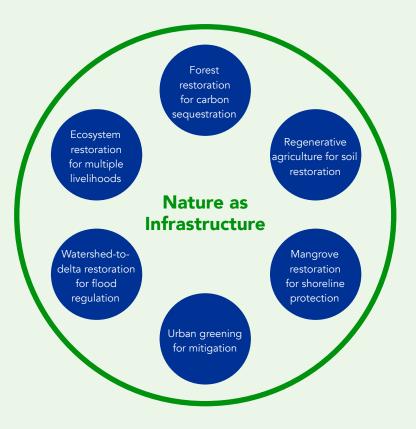
NAI extends, rather than replaces, the Nature-based Solutions (NbS)² agenda. NbS typically involves cost-effective, project-level interventions that leverage nature to address specific societal challenges (e.g., flood control, water access, climate adaptation). Despite delivering core infrastructure benefits, many NbS projects are still framed primarily as environmental or climate interventions. As a result, they are often excluded from sovereign and municipal infrastructure pipelines, limiting their integration into mainstream planning, budgeting, and financial systems.

NAI closes this gap by positioning high-integrity ecosystems as governable, investable infrastructure—not only natural capital to be conserved, but also essential systems to be financed, restored, and maintained. This unlocks access to the same pathways used for built assets: national infrastructure plans, blended finance, and PPP delivery. NAI is both a financing model and a strategic shift, enabling long-term investment to deliver nature resilience outcomes. This investment in NAI secures the ecological foundations needed to deliver NbS, while enabling co-investment models that align public policy with private capital.

Table 1: Comparing NAI and NbS				
Concept	Focus	Typical Framing	How NAI Advances the Concept	
NbS	Project-level use of nature to address societal needs	Often positioned as cost- effective or complementary; typically within environmental/ climate policy domains	Typically considered outside of traditional infrastructure planning and financial systems	
NAI	Recognition of high-integrity ecosystems and their long term resilience as core public infrastructure	Framed as investable and governable assets	Unlocks mainstream finance tools, public budgeting, and integrated planning	

Figure 1: How NAI and NbS interrelate

Nature as Infrastructure links ecosystem integrity to Nature-based Solutions outcomes



Nature-based Solutions (NbS)

Project-level interventions that address specific socio-environmental challenges (e.g. flood control, urban cooling, soil stabilization).

Nature as Infrastructure (NAI)

System-level approach that restores and manages ecosystems to deliver multiple enabling benefits derived from Nature-based Solutions (NbS).

In this report, NAI refers to a series of interventions across a landscape to enhance the resilience of nature using planning, financing, and program management approaches familiar to the development of conventional economic infrastructure in the built environment. Projects that qualify under this framing would include the planning, financing, and delivery of programmatic nature restoration interventions over a five-to-thirty-year period across a defined landscape, such as a watershed, forest area, or coastline, against a defined set of nature resilience target outcomes. They would explicitly leverage PPP governance, risk-sharing, financing, and program-delivery arrangements familiar to governments and market participants from the financing and delivery of economic and social infrastructure assets such as toll roads, airports, hospitals, and prisons.

1.3 The Global Biodiversity Framework: An Investment Mandate

With the aim of halting and reversing nature loss, the Kunming-Montreal Global Biodiversity Framework (GBF) was adopted by more than 190 countries in 2022. In February 2025, the GBF financing framework was agreed, aiming to mobilize US\$200 billion a year by 2030, including from private finance.

It is clear from the stress on government budgets and decreasing development aid and cooperation that new and additional funding for nature of the scale necessary will be extremely challenging, if not impossible, without leveraging private finance. However, the private sector will not direct investment into nature unless it is profitable to do so or unless they recognize their dependencies on nature and take action to minimize potential losses from value at risk. Governments, therefore, need to do much more to create the regulatory environment, frameworks, and incentives needed to align both public and private sector finance with the goals of the GBF.

This creates a financial imperative. Nature must be recognized and governed as a productive, investable asset.

1.4 The Nature-Economy-Finance Nexus

Investing in nature is no longer a moral preference. It's an economic necessity. With a devastating average 73% drop in vertebrate populations since 1970³, deforestation at the rate of 18 football fields per minute in 2024⁴, continued loss of wetlands, declining health of oceans and other natural capital, the nature on which business depends is in decline. These trends directly threaten the ecosystems that support agriculture, water, energy, and supply chains.

Nature resilience refers to the capacity of ecosystems to absorb disturbances without changing state and to regenerate and thus continue to provide the ecosystem services on which all societies and businesses depend⁵. This matters because all businesses have dependencies on nature. And behind business sits finance. Yet financial institutions (FIs) continue to fund activities that degrade

the natural capital on which their portfolios and portfolio returns depend. These ecosystem dependencies on clean water, pollination, and climate stability, for example, remain largely unaccounted for and unpriced in current financial models⁶.

This self-destructive blind spot in policy, business, and finance results in the overvaluation of financial returns and systemic mispricing of risk. As scientific evidence mounts that six of nine planetary boundaries have been breached at their critical thresholds, financial systems remain dangerously out of step with ecological realities⁷. Unless these dependencies on nature through value chains are better understood and factored into credit risk and valuation models, nature-related risks will remain hidden in business cash flows, balance sheets, and capital portfolios; and efforts to mobilize private finance for nature resilience will remain constrained.

1.5 Overcoming Barriers to Nature-Positive Finance

Beyond raising awareness lies the need to address barriers in the existing financial architecture and infrastructure that would provide the incentives, structures, and mechanisms to leverage private finance for nature.

The market failure is clear: Existing financial mechanisms typically fail to address nature-related risks and opportunities. Nature finance has still not scaled and has not been able to replicate with acceptable transaction costs. Mobilizing private capital for nature requires supply-side innovation in financial instruments and also credible and scalable demand-side models, where private actors actively pay for nature resilience outcomes because they recognize that this resilience underpins the resilience of business cash flows and portfolio returns.

The solution lies in pivoting the global economy towards one that values, uses, and invests in nature as a scarce productive asset by combining accounting, pricing, and policy measures that, in turn, drive financial innovations and investment decisions.

Multilateral Development Banks (MDBs) can serve as ecosystem enablers by providing policy support, pipeline development, and risk mitigation that make nature finance viable⁸.

1.6 Previewing the Way Forward

This report highlights the main recommended structures, mechanisms, and shifts in financial architecture required to incentivize and enable the private sector to step up in financing nature. These include national natural capital accounting, policy and regulatory alignment, and collaborative enabling ecosystems that allow commercial banks and financial institutions to act as accelerators of nature finance. PPPs for Nature (PPPNs) are introduced, adapting proven infrastructure financing models to NAI projects, and aligning private investment with the improved longterm public outcomes associated with nature resilience—including climate mitigation and adaptation and improved health and livelihoods. This report analyses PPP use cases and how they can be combined with financial mechanisms for greater success.

The nature finance innovation over the past five years and the increasing integration of nature-related risk into mainstream financial reporting frameworks signal the early institutional momentum of this effort. Getting this right will involve many actors and many policy and market developments, given the all-encompassing nature-economy nexus. The challenge is what to focus on, given development priorities, nature and climate priorities, and limited channels and resources to act. Alongside thematic sustainable finance instruments, three underdeveloped yet highpotential financial mechanisms to scale nature finance are highlighted as catalytic accelerators within a broader nature finance toolbox: insurance products, green guarantees, and biodiversity credits. These instruments address key bottlenecks in the nature finance ecosystem: lack of private demand signals, insufficient risk-sharing mechanisms, and the inability to insure long-duration ecological assets. Strengthening these tools can unlock

Box 3: The Evolving Nature Finance Landscape

Nature finance has rapidly moved from the margins to the mainstream of development and investment conversations. Driven by the convergence of climate, nature, and economic risk, dozens of mechanisms have emerged or evolved—including natural capital accounting, biodiversity and ecosystem credit markets, debt-for-nature swaps, green and blue bonds, performance-based instruments, blended finance vehicles, and supply chain insetting.

Yet despite this momentum, capital flows remain profoundly misaligned. According to UNEP (2023), nature-negative finance still outpaces nature-positive finance by a factor of more than 35 to 1. Fragmented tools, weak demand signals, and limited institutional capacity continue to constrain investment in nature resilience, particularly in emerging markets.

- Several developments are helping embed nature in the mainstream of policy and finance:
- New risk assessment and disclosure tools, led by the work of the Taskforce on Nature-related Financial Disclosures (TNFD), are elevating consideration of naturerelated issues in corporate and financial decision-making.
- Natural capital accounting is being applied to support planning, pricing, and fiscal reform.
- Credit markets for biodiversity and carbon are establishing price signals for ecosystem outcomes.
- Governments are progressing their National Biodiversity Strategy and Action Plans as a roadmap to achieve the goals of the GBF, including financing.
- Sustainable supply chains are adopting nature-positive sourcing standards and procurement requirements.
- Digital MRV tools are improving transparency, standardization, and trust in nature-based markets.

A New Toolbox—Still Under Construction

The nature finance landscape is expanding rapidly but remains early-stage and unevenly integrated. Many tools are still voluntary, fragmented, or difficult to scale. While MDBs and public institutions are beginning to play a stronger role, much of the investment architecture remains underdeveloped.



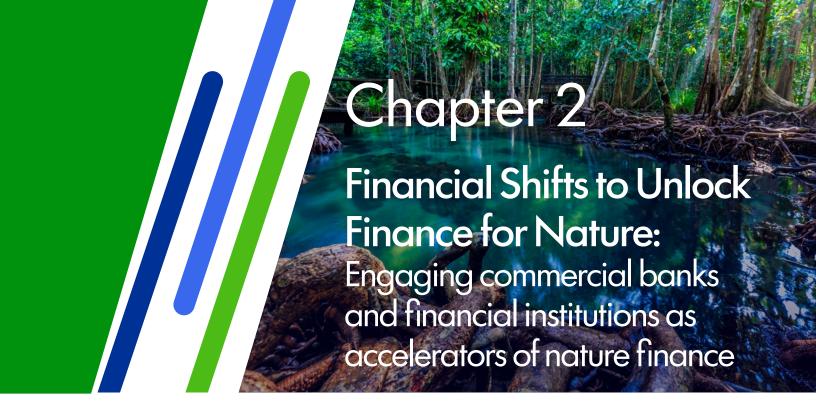
wider flows of private capital and catalyze uptake of other emerging instruments. The intention is not to narrow the agenda, but to accelerate progress where catalytic gaps remain.

In addition to scaling innovative finance mechanisms, it is important to address existing fiscal flows that undermine nature. Reforming and redirecting perverse subsidies—such as those supporting fossil fuel extraction, intensive agriculture, or overfishing—toward nature-positive outcomes is essential for efforts to restore natural capital. When nature is effectively valued on sovereign balance sheets, this reallocation becomes not only an environmental imperative but also a sound fiscal strategy.

Together, the themes covered in this report offer a roadmap for practical, investable solutions that can help close the nature and biodiversity financing gap and build a resilient nature-positive world.

Policy friction and market failures, such as recent setbacks in European Union sustainability regulations and the United States' withdrawal from the Paris Agreement under UNFCCC9, underscore that systemic integration of nature finance in global policy and regulatory arrangements remains challenging. These setbacks highlight the need for adaptable policies and global coalition that can navigate both the challenges and opportunities in nature finance.

They also highlight that more work needs to be done to educate the business community and financial sector that the case for proactive action and innovation on nature finance solutions should not be contingent on policy and regulatory certainty. Financial value is already at risk from the acceleration of climate change and nature loss. It is in the enlightened self-interest of business and finance to develop solutions and finance the regeneration of nature's resilience as a basis for mitigating potential value loss and to unlock new commercial opportunities.



2.1 From Innovation to Systemic Scale: Why Banks and Fls Must Lead on Nature

There has been growing momentum in the development and implementation of finance instruments and mechanisms that link returns to nature-positive outcomes. UNEP-FI reports that private capital flows from banks and investors into nature-related activities grew from US\$9.4 billion in 2020 to US\$102.1 billion in 2024—an eleven-fold increase ¹⁰. Despite this progress, uptake remains uneven and is minimal when compared to the US\$24 trillion of capital invested in private markets globally¹¹. Many financial mechanisms depend on supportive regulation, legal certainty, functioning markets, and institutional collaboration to reach maturity.

The scale, market access, and influence over capital allocation of commercial banks and financial institutions give them a unique capacity to drive systemic change and accelerate investment in nature. While institutional investors provide the bulk of long-term infrastructure finance, especially in advanced economies and emerging markets, commercial banks play a critical early-stage role in structuring deals, bridging capital gaps, and enabling institutional entry. However, a reconfiguration of the financial architecture and infrastructure that shapes how banks assess risk, allocate capital, and interpret regulatory signals is required if this potential is to be unlocked.

This chapter examines the systemic shifts needed to embed nature into the financial system, recognizing it as both a material risk and a strategic asset with long-term value. It outlines the legal, institutional, regulatory, and accounting reforms required to scale nature finance. Emerging case studies reflect what is possible.

Box 4. How the System Fits Together: A Pathway for Scaling Nature Finance

Scaling nature finance requires a systemic approach with both new capital and new foundations for how we value, structure, and deliver investment in nature. This report adopts a layered framework to show how different pieces must work together as an integrated whole.

Layer 1: Rules and Valuation

The foundation for nature finance lies in clear accounting, legal recognition, and aligned fiscal policy. This includes tools such as SEEA-EA, Gross Ecosystem Product (GEP), and disclosure frameworks such as TNFD and ISSB, which are enabled by relevant GBF targets.

Layer 2: Demand Drivers

Markets emerge when there is credible, consistent demand. This includes compliance and voluntary credit markets, green procurement, corporate offtake agreements, and payment for ecosystem services (PES).

Layer 3: Market Infrastructure and Pipeline

Investable projects depend on methodologies, registries, MRV systems, and bankable project pipelines. These mechanisms ensure credibility, comparability, and scale.

Layer 4: Delivery Models—PPPNs

Public-Private Partnerships for Nature (PPPNs) offer a replicable structure for financing nature as infrastructure. They create legal and financial scaffolding to align public goals with private delivery and investment.

Layer 5: Financial Tools

Guarantees, insurance, and biodiversity credits act as accelerators—improving bankability, managing risk, and creating durable revenue streams. Bundled into PPPNs, they unlock scalable investment platforms.

2.2 Challenges to financing nature

Despite significant advancements, several challenges remain that hinder the adoption of nature-positive investments by financial institutions. It is important to understand these challenges as we examine the shifts needed to overcome them.

Table 2: Challenges to financing nature			
Challenge	Explanation		
Risk perception	Perceived higher risks due to uncertainties in returns and lack of standardized valuation methods for ecosystem services. Low capacity in this area compounds the problem		
Regulatory uncertainty	While clear regulatory frameworks are still in development and incentives for nature-related investments are also lacking, banks struggle to allocate significant resources to these projects. Without taxonomies on nature, it can be challenging for investors to align		
Data and measurement gaps	Limited availability and sharing of reliable, high-quality data on nature and ecosystem services hampers the ability to assess and manage risks effectively		
Investment characteristics	Investment amounts are often small and complex. Finding comparable data can be difficult, given that many projects are financed by a combination of different instruments. Complex financing arrangements can lead to high costs, while traditional financial models prioritize short-term returns rather than long-term environmental benefits		

2.3 Shift 1: Mainstreaming Natural Capital Valuation and National Accounting Integration

Integrating natural capital into national accounting frameworks is a fundamental step toward recognizing the economic value of ecosystems. Initiatives like the World Bank's natural capital accounting programs advocate for the inclusion of environmental assets and ecosystem services in national economic accounts to assess the sustainability of growth, inform fiscal policy¹², and align investment flows with nature-positive outcomes.



As governments begin to account for nature on sovereign balance sheets, new opportunities for public-private collaboration could emerge. This repositioning allows banks and FIs to recognize the asset value of ecosystems and the liabilities of degradation, creating a clearer economic case for nature-positive asset allocation.

An example is China's implementation of Gross Ecosystem Product (GEP), which measures the value ecosystems contribute to human welfare and sustainable development¹³. Banks are already beginning to act on this data: Bank of Jiangsu issued a RMB 500 million¹⁴ (US\$70 million) credit line for the Dongtai Tiaozini Wetland restoration project using projected increases in GEP as partial collateral. In practical terms, this means that anticipated gains in ecosystem service value were formally assessed and used to justify the loan, supplementing traditional financial metrics like land value or government guarantees.

To enable these models at scale, in line with GBF Target 15, governments and international financial institutions should move beyond standalone natural capital accounts toward an integrated accounting framework that connects ecological science with public finance and capital markets. This end-to-end system should align spatial nature data with internationally recognized natural capital accounting standards such as SEEA-EA, integrate with financial disclosures under frameworks like TNFD, and embed

nature-related assets into both corporate and sovereign balance sheets. These accounting entries give the legal and policy certainty needed to influence financial decisions, from credit rating and debt frameworks to investment asset allocation, enabling banks to assess nature-related risks and opportunities consistently across jurisdictions. This also underpins other financial instruments by quantifying ecological value, enabling outcome-based finance, and enabling PPP models like PPPNs to scale.

Embedding natural capital in financial systems must be governed responsibly to avoid unintended negative impacts, including for Indigenous Peoples and Local Communities (IPLCs) and indeed for nature. A rights-based approach, as advocated by UNEP FI, recognizes the land, resource, and data sovereignty¹⁵ of IPLCs and their role as stewards of biodiversity. Ensuring meaningful participation in decision-making, as agreed and reinforced in the GBF outcomes of COP16¹⁶, is essential.

Integrating the value of nature into national accounts provides the macroeconomic basis for fiscal realignment, credit reform, and investment in nature. This shift supports commercial banks by offering greater legal, fiscal, and policy certainty around nature-related investments. At the same time, natural capital valuation can be practiced by banks to make better investment decisions.

Case Study 1

The Green Wealth of Nations—Leveraging Natural Capital Accounting to Improve Creditworthiness and Investment Flows in Africa

The Green Wealth of Nations¹⁷ report by the African Development Bank (AfDB) presents a compelling case for integrating natural capital into the system of national accounts in Africa. It demonstrates that valuing and accounting for ecosystem services not only enhances sustainability but also improves macroeconomic indicators such as GDP, debt-to-GDP ratios, credit ratings, and investment risk profiles of countries.

Increased valuation of renewable natural capital is linked to lower borrowing costs for B-rated countries, many of which are in Africa. Incorporating natural capital into systems of national accounts can enhance a country's sovereign credit profile and attract nature-positive investment.

The policy report advocates for mandatory valuation of natural capital and implementing standardized accounting systems using SEEA, funding technical assistance and pilot projects, helping develop the infrastructure to support national statistical offices, and supporting the revaluation of GDP to reflect Africa's natural wealth.

The report finds that natural capital accounting can strengthen environment, social, and governance risk assessment and support more accurate pricing of nature-related risks and opportunities. It also highlights that improved valuation of natural assets can enhance the credibility of sovereign credit profiles, particularly for countries with significant but undervalued ecological wealth. In addition, the report shows that robust valuation frameworks are essential for underpinning emerging nature markets—such as biodiversity credits—by ensuring investments are grounded in measurable ecological value.

Central African Republic Congo, Rep. of DRC Gabon Cameroon Mozambique Angola Uganda Zambia Côte d'Ivoire		Justed GDP US\$ billion) US 10.56 18.46 86.07 25,73 49.43 19.93	8.11 4.95 19.62 4.62 4.49 1.52 7.81	330.81 36.63 29.54 21.86 9.99 8.27 6.40
Congo, Rep. of DRC Gabon Cameroon Mozambique Angola Uganda Zambia Côte d'Ivoire	3.51 6.44 1.12 4.94 8.41 22.02	18.46 86.07 25,73 49.43 19.93	4.95 19.62 4.62 4.49 1.52	36.63 29.54 21.86 9.99 8.27
DRC Gabon Cameroon Mozambique Angola Uganda Zambia Côte d'Ivoire	6.44 11.12 4.94 8.41 22.02	86.07 25,73 49.43 19.93	19.62 4.62 4.49 1.52	29.54 21.86 9.99 8.27
Gabon 2 Cameroon 4 Mozambique 1 Angola 1 Uganda 2 Zambia 2 Côte d'Ivoire 7	11.12 4.94 8.41 22.02	25,73 49.43 19.93	4.62 4.49 1.52	21.86 9.99 8.27
Cameroon Mozambique Angola Uganda Zambia Côte d'Ivoire	4.94 8.41 22.02	49.43 19.93	4.49 1.52	9.99 8.27
Mozambique Angola 1 Uganda Zambia Côte d'Ivoire	8.41 22.02	19.93	1.52	8.27
Angola 1 Uganda 2 Zambia 2 Côte d'Ivoire 7	22.02			0.27
Uganda Zambia Zambia Zoĉte d'Ivoire 7		129.83	7.81	6.40
Zambia 2 Côte d'Ivoire 7	7.57			0.40
Côte d'Ivoire		49.35	1.78	3.75
	9.12	30.18	1.06	3.64
Tanzania 7	0.32	72.21	1.89	2.69
	3.53	75.47	1.94	2.64
Ethiopia 1	20.36	122.56	2.20	1.83
Nigeria 4	77.38	481.04	3.66	0.77
Others 1,0	910.42	1,910.29	-0.13	-0.01
Total 3,0	25.63	3,091.72	66.10	2.18

For example, Africa is replete with several ecosystem services, such as carbon sequestration and coastal and watershed protection, which also provide economic value. Yet the value of these services is either underestimated or not captured altogether. Proper valuation of such services could be transformational.

The Democratic Republic of Congo (DRC), for instance, possesses substantial natural capital stock capable of generating significant domestic revenue to finance its development, including in physical infrastructure assets. The country is home to the majority of the Congo Basin's forests, with climate service value—inclusive of carbon sequestration—estimated, net of deforestation, at more than US\$30 billion. The Basin¹⁸ represents about 70% of the continent's total forest cover and is a habitat for some of the world's largest biodiversity. With about 46 billion metric tons of carbon in the region's vegetation cover¹⁹, the Congo Basin represents considerable opportunities for sustainable investment.

The World Bank (2022)²⁰ estimates that the presence and functioning of mangroves prevent over US\$65 million annually in flood damage in West Africa alone. The AfDB (2024)²¹ estimated that Africa's GDP in 2022 could reflect significantly higher value if carbon sequestration services were priced and integrated into national accounts—a step that current market structures do not yet support²² (see Table 3).

2.4 Shift 2: Increased Policy, Regulatory, and Fiscal Alignment

To unlock private capital investment in nature at scale, the broader policy environment must send consistent and credible signals. This requires removing harmful incentives, aligning fiscal policy and regulatory frameworks with nature-positive goals, and embedding nature-related risks and opportunities into financial governance. When underpinned by strong legal and institutional infrastructure, this combination of efforts can reshape how banks assess value, price risk, and allocate capital.

2.4.1 Subsidy Reform and Investment Signals

Governments play a central role in influencing capital flows through fiscal policy. Phasing out environmentally harmful subsidies and reorienting public spending toward nature-positive outcomes can help correct market distortions and improve the competitiveness of ecosystem restoration and nature investments. This directly supports Target 18 of the GBF²³.

The following table outlines policy actions that influence investment in nature by shifting financial incentives and creating demand for ecosystem outcomes, encouraging banks and institutional investors to commit to long-term financing of ecosystem-based projects. With environmentally harmful subsidies estimated at US\$2 trillion per year²⁴, the potential impact is immense, though competing interests make it challenging.^{25,26,27}

Table 4: Policy action for subsidy reform			
Policy Action	Impact on Nature Finance		
Remove perverse incentives (e.g., fossil fuel subsidies)	Improves relative competitiveness of sustainable forestry, restoration, and regenerative farming		
Create compliance-driven demand (e.g., offset markets, mandatory disclosures)	Enables ecosystem service providers to generate revenue and repay investors		
Strengthen reputational/accountability drivers	Builds long-term demand for nature outcomes		
Restructure subsidies to fund green incentives	Sends clear market signals that nature-positive investments will be rewarded by freeing fiscal space for reforestation, watershed protection, and biodiversity credits		
Align tax and procurement with biodiversity goals	Encourages institutional investors and banks to enter long-term nature-linked markets by offering direct financial benefits to nature-aligned projects		

Case Study 2 IDB—Aligning Fiscal Policy with Nature-Positive Investment

The Inter-American Development Bank (IDB) provides a strong example of how development finance institutions (DFIs) can support governments in aligning fiscal policy with biodiversity and natural capital goals. As part of its 2024-2025 Natural Capital and Biodiversity Mainstreaming Action Plan²⁸, the IDB will work with client countries to integrate natural capital into national development planning, infrastructure investment, and public financial management systems. This includes supporting policy reforms that can impact biodiversity, improving the alignment of public spending and nature-positive outcomes. Given that annual public expenditures in IDB borrowing member countries collectively exceed hundreds of billions of dollars, even incremental shifts toward biodiversity and ecosystem resilience have the potential to mobilize resources at a scale far surpassing traditional conservation finance. By supporting governments in developing green public financial management systems and integrating nature into infrastructure planning, the IDB helps governments create more predictable, investable environments for NbS. This gives commercial banks clearer signals that nature-positive investment is supported by public policy and finance.

2.4.2 Embedding Nature into Financial Regulation

In complement to fiscal realignment, regulatory frameworks are evolving to embed nature into financial decision-making through the growing integration of nature risk into disclosure regimes, financial supervision, and reporting standards. Incorporating nature-related financial risks into capital adequacy, stress testing, and risk modelling enables banks to internalize the financial implications of biodiversity loss and ecosystem degradation in their capital allocation decisions.

The TNFD provides a framework for assessing and reporting dependencies, impacts, risks, and opportunities related to nature. Its ongoing work with the International Sustainability Standards Board (ISSB)²⁹, GRI, and others aims to embed nature-related disclosures into mainstream global corporate reporting, building on the model established by the Task Force on Climate-related Fin```ancial Disclosures (TCFD). As adoption grows, these standards have the potential to drive convergence and move disclosure from a voluntary initiative to a mainstream requirement. In addition, as financial regulators increasingly recognize the material risks posed by nature loss to financial stability, these frameworks could drive the standardization of how businesses report on nature risks, creating a clearer link between environmental and financial performance.

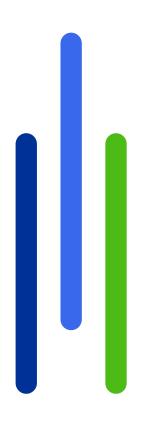
For regulatory advances to be effective, they must be implemented consistently across financial institutions, supported by internal systems, metrics, and culture. Regulators should progressively mandate nature-related transition plans, shifting portfolios away from nature-negative assets.

These frameworks depend on a solid legal foundation³⁰ with clear rules for land tenure, asset ownership, and ecosystem service rights, as well as the institutional capacity to implement and enforce legal and regulatory frameworks. Robust frameworks present nature risks as more real, enforceable, and financeable,³¹ giving greater confidence to regulators, investors, and banks.

Case Study 3 EBRD's Nature-Related Disclosure Leadership

MDBs such as the European Bank for Reconstruction and Development (EBRD) are supporting this shift by helping clients align with global standards, implement technical guidance, and improve biodiversity-related data sharing. As part of its 2023 Approach to Nature³², the EBRD committed to disclosing nature-related information aligned with global standards such as TNFD. The EBRD is also supporting its clients, including commercial banks, to report on their nature impacts and dependencies. This includes technical guidance on disclosures and sharing biodiversity baseline data through the Global Biodiversity Information Facility (GBIF). By working collaboratively with other MDBs on definitions and principles, the EBRD is helping create a more coherent and consistent disclosure ecosystem, supporting the integration of nature into investment decision-making.





2.5 Shift 3: Collaborative Infrastructure for Scaling Nature Finance

While progress in integrating nature into financial regulation and disclosure is promising, evidence of material shifts in capital allocation remains limited. Even in carbon markets, where disclosure is more advanced, links to financial performance are modest and often short-term. For nature, which is less standardized and less monetized, this gap is even more pronounced. A credible nature finance agenda must therefore combine disclosure reform with stronger incentives, regulatory pressure, and investable project pipelines. Collaborative infrastructure forged through partnerships between MDBs, public development banks, philanthropic capital, and governments can address this and transform policy ambition into bankable projects. This enabling ecosystem is vital to incentivize commercial banks and Fls, which often require derisked environments, clear project pipelines, and standardized market structures to be active accelerators of nature finance.



Case Study 4 Leveraging Tourism for Nature Finance in Guizhou Province, China

This case shows how ecosystem conservation, supported by PPPs, can drive revenue streams and boost local economic growth.

Guizhou Green Expo Park (Duyun City)33

A PPP launched in 2020, the 396-hectare Green Expo Park was developed with around RMB 2.8 billion (US\$400 million), of which 25% came from private capital. The park features thematic gardens from across China, with 58% green space, 22% water, and 92% waste recycling. In its first year, it drew 1.2 million visitors, created 560 new jobs, and boosted regional tourism revenue by 34%, revitalizing the local economy. While private participation was modest, this PPP model highlights how public capital can mobilize institutional design and sustainability infrastructure with measurable economic dividends.

2.5.1 Multilateral Development Banks as Enablers of Nature Finance

MDBs and DFIs are essential enablers of nature finance, providing risk-sharing tools, building collaborative project pipelines, building common taxonomies, and aligning public and private actors. These functions are foundational to PPPN models, which are examined in detail in Chapter 3. What follows are illustrative examples of how MDBs are already supporting collaborative infrastructure for nature finance across regions.

Case Study 5 EBRD Enhancing Biodiversity in Central Asia

The EBRD is supporting biodiversity integration in infrastructure pipelines across Central Asia. One example is the Fayzobod Water and Wastewater Project in Tajikistan, financed with a €1.8 million sovereign loan from EBRD and co-financed by a €2.6 million Swiss government grant. The project will³⁴:

- Provide reliable access to safe drinking water for 33,000 residents in Fayzobod city.
- Extend clean water services to 13 villages (approx. 19,700 people).
- Connect 5,400 new customers to wastewater treatment.
- Reduce water losses to 25–30% and cut energy use by shifting from pumped to gravity-fed supply.
- Reduce contamination in the Loyak and Elok rivers, lowering health risks and supporting ecosystem resilience.

Beyond financing, EBRD delivered technical assistance, feasibility studies, tariff reform, and corporate governance support, ensuring financial viability alongside environmental gains. The project demonstrates how MDB financing can simultaneously advance biodiversity, climate resilience, and essential service delivery.

Case Study 6 The African Development Bank Championing NatureBased Solutions in Africa

AfDB has been a strong advocate for NbS to enhance climate resilience in Sub-Saharan Africa. During the UNCBD COP16, AfDB emphasized the importance of NbS in bolstering climate resilience and outlined strategies to promote their adoption³⁵. AfDB's approach includes working with national governments to align regulatory frameworks, public procurement policies, and fiscal instruments with nature-positive outcomes.

AfDB also stressed that investing in NbS can generate triple wins: improved ecosystem services (e.g., watershed protection, soil fertility), stronger climate resilience for vulnerable communities, and reduced fiscal pressure by lowering disaster recovery costs.

This case illustrates how NbS can move from pilots to national development strategies. In addition, AfDB helps create an enabling environment that encourages private sector investment in conservation and restoration projects. This additional private sector investment is critical. The World Bank reports that US\$21 billion was committed across almost 300 NbS projects in sub-Saharan Africa between 2012 and 2023³⁶, a fraction of what would be needed to meet climate and nature goals.

2.5.2 Building Nature Markets

A critical area where collaborative infrastructure is evolving is in the development of nature markets. Nature markets—including carbon credits, biodiversity offsets, and biodiversity credits—create investable revenue streams by translating ecosystem functions into cash flows that support nature conservation, restoration, and resilience.

Box 5: A Broader View of Nature Markets

The Taskforce on Nature Markets defines nature markets as the full range of rules, institutions, and transactions through which nature is valued, priced, and exchanged—across both the real economy and financial system. This includes not only biodiversity and carbon credits, but also commodity flows (like timber, seafood, and water), sovereign debt instruments, data rights, and nature-linked derivatives.

Framing nature markets this way reveals both opportunity and risk. On one hand, well-designed markets can align economic incentives with ecosystem restoration. On the other hand, they may reinforce extractive dynamics if pricing focuses only on tradeable aspects of nature or excludes the governance rights of IPLCs under international law. As MDBs and regulators support market development, their role in piloting methodologies, funding verification, and building institutional capacity is critical to ensure integrity, inclusion, and real conservation outcomes and to enable financial instruments to scale.

By building collaborative infrastructure, MDBs help turn policy reforms and natural capital valuation into investible structures. Their role is vital for aligning financial flows with the goals of the GBF, particularly in countries where commercial markets are just beginning to emerge. For commercial banks and FIs, this infrastructure provides the conditions to lend, invest, and innovate in ways that protect and restore nature.

Case Study 7 IDB: Launching Amazonia Bonds for Conservation

The IDB has initiated the development of Amazonia bonds to support green and social initiatives in the Amazon region. In June 2024, in collaboration with the World Bank, IDB Invest issued a 50 million Brazilian real (US\$9 million) bond, with proceeds financing projects that provide sustainable alternatives to logging and agriculture, thereby conserving the rainforest. This initiative is expected to pave the way for future Amazonia bonds, creating a model for financing ecosystem services. By establishing guidelines for the use of proceeds and sustainability targets, IDB is working to create a credible and transparent market for ecosystem services that can attract private investment³⁷.

Box 6: Biodiversity Credit Instruments—Emerging Tools to Scale High-Integrity Nature Finance

What Are Biodiversity Credit Instruments?

The term "biodiversity credit instruments" broadly refers to market-based units that represent measurable, positive outcomes for biodiversity, such as species recovery or ecosystem restoration. Unlike carbon credits, they are typically non-fungible and tied to a specific site or ecological baseline.

"Voluntary biodiversity credits are typically structured as contribution claims, rather than offsetting instruments. They do not compensate for biodiversity loss elsewhere but represent measurable investments in positive conservation outcomes." —BCA Definition

Table 5: Distinct from Carbon Credits			
Aspect	Carbon Credits	Biodiversity Credits	
Market model	Global, fungible, offset-based	Localized, non-fungible, contribution-based	
Metric	Tons CO2e	Ecosystem condition/species metrics	
Fungibility	High	Low	
Primary use	Offsetting (compliance/voluntary)	Conservation, restoration, stewardship	
Investment model	Transactional, short-term revenue	Infrastructure-style, outcome-based returns	

Some projects may bundle carbon and biodiversity credits, enabling joint issuance with dual revenue streams and shared monitoring systems. However, structural differences remain, particularly in market function and regulatory treatment.

Use Cases and Market Archetypes

Biodiversity credit instruments span distinct types with unique policy and financial structures:

- National/Subnational Compensation Markets, e.g., US Mitigation Banking³⁸
- Contractual Compliance Markets, e.g., England's Biodiversity Net Gain³⁹
- Supply Chain Finance Models, used by agribusiness and food companies
- Asset Protection Markets, to safeguard ecosystems critical to infrastructure or financial assets
- Voluntary Contribution-Based Credits, e.g., Terrasos in Colombia

How Biodiversity Credits Support Nature Markets

Biodiversity credits translate ecosystem restoration and stewardship into marketable outcomes. They enable standardized outcome-based payments, measurable units to structure PPPs and blended finance, early investment opportunities through offtake models, and enhanced investor confidence through traceability and monitoring. They help build trust in nature markets by embedding scientific credibility, community safeguards, and governance into the financing of ecosystem services.

Challenges

While biodiversity credits present a promising avenue for conservation finance, their development faces notable challenges. Verification and transaction costs can be substantial due to the site-specific and multidimensional nature of biodiversity outcomes, requiring long-term monitoring and bespoke assessments⁴⁰. Ethical concerns also arise regarding the commodification of biodiversity and its potential to marginalize IPLCs. Ensuring meaningful participation of Indigenous Peoples, equitable benefit-sharing, and inclusive governance is essential. Some stakeholders also question whether credits offer better value than direct conservation funding⁴¹. As such, biodiversity credit systems must demonstrate additionality, transparency, and impact, and be designed to complement—not displace—direct investment in nature protection.

Box 6: Biodiversity Credit Instruments—Emerging Tools to Scale High-Integrity Nature Finance (Continued)

Snapshot Examples

Terrasos⁴² (Colombia)

Terrasos is an environmental services firm that develops habitat banks (privately financed and managed conservation areas that generate biodiversity credits under national regulation). Habitat banks issue biodiversity credits that protect or restore 10 m² of ecosystem area for a minimum of 30 years. These credits are 100% traceable, standardized, and independently verified, with both regulatory and voluntary buyers.

US Mitigation Banking⁴³

Under the Clean Water Act, this federally regulated system requires developers to purchase wetland or stream credits when impacting aquatic resources. It is the largest biodiversity offset market in the world, with established pricing, methodology, and oversight. In some cases, credits are allocated through competitive conservation auctions, helping match supply and demand more efficiently and transparently.

Guidance from the International Advisory Panel on Biodiversity Credits (IAPB)

The IAPB has established principles to ensure highintegrity biodiversity credit markets⁴⁴:

- No international offsetting: Credits must be localto-local and like-for-like, reflecting the ecological uniqueness of biodiversity.
- No secondary markets: To protect traceability and ecological outcomes, IAPB discourages reselling of credits.
- Credit issuance must reflect additional, verifiable biodiversity gains, not the avoidance of harm.
- Inclusive governance and FPIC are critical, especially where IPLCs are stewards.
- Independent oversight and robust MRV standards are essential to uphold integrity.

These principles help differentiate biodiversity credits from carbon instruments, ensuring they serve genuine conservation purposes aligned with ecological realities.

2.6 Enablers andStrategic Priorities forScaling Nature Finance

This chapter has outlined the structural reforms needed to enable commercial banks and institutional investors to become accelerators of nature finance. Progress depends on three interconnected priorities:

- Mainstreaming Natural Capital Valuation: Integrating nature into national accounts and fiscal policy strengthens investment signals and improves risk assessment.
- 2. Policy, Regulatory, and Fiscal Alignment: Embedding nature risk in financial supervision and reforming subsidies shifts capital toward nature-positive outcomes.
- 3. Collaborative Infrastructure: MDBs, governments, private sector actors, and communities must co-develop investment pipelines, standards, and blended finance platforms.

These shifts are mutually reinforcing and can be brought together through PPP models that link accounting reforms, policy, and finance. The next chapters outline how practical tools like guarantees and insurance can operationalize these shifts within scalable PPP structures.

Chapter 3 Public-Private Partnerships Models for Financing Nature

3.1 Introduction

As this report covers, nature underpins the global economy by delivering ecosystem services essential to human well-being and productivity, yet despite providing infrastructure-like value, nature is rarely treated as such in policy, planning, or investment frameworks. As a result, nature remains chronically underfunded, excluded from institutional investment portfolios, and unsupported by legal or financial frameworks that govern long-term investment. This chapter explores how the NAI framing can inform effective financing models for nature, particularly through PPPs, well-established tools for delivering infrastructure without excessive fiscal burden. The chapter also outlines enabling conditions and institutional frameworks for public-private collaboration, aligning regulation and public capital with private-sector innovation and financing. By leveraging private capital, expertise, and delivery models, PPPs can help scale investment into nature for sustainable management and restoration.

3.2 Nature as Infrastructure—A Strategic Reframing

As discussed in Chapter 1, like economic and social infrastructure—such as toll roads, airports, hospitals, and schools—nature delivers a wide range of ecosystem services that underpin the resilience of our societies and economies. They often do so with greater efficiency and a wide range of associated benefits for economic productivity, human health, as well as climate mitigation and adaptation⁴⁵. Nature degradation is thus not just an environmental issue but a systemic economic and financial risk, making investment in nature a strategic imperative.

Recognizing ecosystems as productive infrastructure-grade assets places them at the center of sustainable development and requires integration into national planning, budgeting, and investment processes. This shift calls for integrated systems thinking across planning, engineering, and finance, improving cost-effectiveness, building resilience, and delivering climate adaptation outcomes, especially in vulnerable regions.

Framing nature as infrastructure opens the door to applying established infrastructure financing models to nature, including the use of PPPs to scale investment in nature resilience. The PPP model offers lessons for structuring long-term, cost-effective public-private collaboration to achieve nature-resilience outcomes of broad public benefit to society.

Scaling NAI finance requires both increased funding and improved financial structuring. Instruments like green bonds and biodiversity credits have gained traction but remain fragmented and insufficient to mobilize the

US\$200 billion annually needed by 2030.⁴⁶ More scalable models are needed, and this is where infrastructure finance, particularly PPPs, offers critical tools.

3.3 Public-Private Partnerships: A Proven Model

PPPs have long served as a mechanism for delivering infrastructure projects where governments seek to mobilize private capital and expertise to design, build, operate, and maintain public assets. At their core, PPPs offer a structured framework for sharing risks, responsibilities, and returns between the public and private sectors. Backed by decades of legal and regulatory development across multiple countries and regions with established PPP frameworks⁴⁷, these models have proven effective in attracting institutional capital⁴⁸, ensuring long-term asset maintenance, and delivering outcomebased performance⁴⁹. These same characteristics make PPPs particularly well-suited and attractive to addressing the complex challenges associated with financing nature. For example, commercial bank financing is on the retail side and with shorter maturity, while major infrastructure projects require long-term capital. Thus, PPPs can offer a strategic delivery framework and structural foundation to deploy guarantees, outcome-based payments, nature credits, and blended finance in coordinated ways to create investable projects.

PPPs can also serve as a strong governance tool, providing a clear framework for defining the division of labor between the public and private sectors. In the context of nature, this means structuring contracts that allocate responsibilities, manage risk, and align incentives around long-term outcomes. For example, the public sector may commit to outcome-based payments linked to nature restoration goals, while private partners coordinate delivery consortia, manage performance, and maintain nature assets. This structured approach enables investment in NAI while ensuring accountability and shared ownership of outcomes.

A PPP for nature (PPPN) would apply the same logic to nature restoration and conservation, aligning public-interest outcomes with private-sector delivery capacity and capital, underpinned by long-term contracts and measurable results. The long-term financing tenor associated with conventional PPP projects is also appropriate in the nature context, given the timeline for

nature restoration and the need for surety of committed long-term capital to match nature's timeline.

PPPNs would adapt the conventional project finance model to invest in nature restoration over long time horizons and, in contrast to Nature-based Solutions (Nbs), which are project- or site-specific, at a landscape scale⁵⁰. As has been shown to be the case with conventional economic PPP projects, however, they would not be universally applicable. Where full commercial viability exists, or where public investment alone can achieve restoration outcomes, simpler financing models may suffice. PPPNs are likely to be most relevant where nature restoration or conservation cannot attract private capital on its own, and where public budgets alone are insufficient. In these contexts, PPPNs could provide a structured way to blend finance, manage performance,

Box 7: MDBs as Enablers of PPPs for Nature

As with their role in supporting nature finance more broadly, MDBs play a catalytic role in enabling PPPNs. By helping governments and private financiers share risk, build pipelines, and align incentives, MDBs can make NAI investable at scale by:

- De-risking: MDBs deploy guarantees, insurance, and concessional tranches to absorb early-stage risk, making PPPNs attractive to commercial banks and institutional investors otherwise deterred by long time horizons or untested revenue streams.
- Developing bankable PPP pipelines: MDBs fund feasibility work and provide technical assistance to help governments and sponsors structure contracts for ecosystems, clarifying roles, revenue models, and performance metrics.
- Aligning policy and regulation with PPPNs:
 MDBs support subsidy reform, embed nature in
 procurement rules, and establish legal frameworks
 for ecosystem services, creating predictable
 environments where PPPNs can thrive.
- Ensuring integrity and equity: MDBs promote standards for monitoring, disclosure, and safeguards to ensure PPPNs deliver high-integrity outcomes and share benefits fairly with IPLCs.

and scale investment by linking outcome payments, restoration delivery, and revenue innovation within a formal governance framework.

With an emphasis on collaboration and inclusive governance, one important feature of PPPNs is that they should not involve large-scale land acquisitions nor transfer ownership of land or ecosystems to private actors. The focus should be on mobilizing and coordinating nature restoration and resilience interventions in collaboration with existing landowners and stewards. This helps safeguard against concerns that, without the right governance in place, the commodification of nature could accelerate the transfer of land and resources from IPLCs⁵¹. It also helps ensure that existing landowners and stewards are principal beneficiaries to the extent that improvements in the resilience of their landholdings within the landscape would be reflected in improvements in land values over time.

3.4 The Government Investment Case: Appreciating Natural Capital

Unlike built infrastructure, which depreciates over time, natural capital has the potential to increase in value through regeneration and sustainable use. As ecosystem health and resilience improve over time, underlying land values are likely to improve, not least because the improved capacity of the land or sea space to generate more and/or higher quality economic value from its provision of ecosystem services such as clean water, soil fertility, flood protection, carbon sequestration, and climate resilience. These restored ecosystems also generate significant co-benefits. For instance, every EUR 1 invested in nature by the European Commission yields a return of between EUR 8 and EUR 38 thanks to the broader benefits delivered through ecosystem services that support food security, human health and well-being, and climate mitigation and adaptation.⁵² Such high returns make a compelling investment case for governments, especially when considering long-term fiscal sustainability.

As covered in Chapter 2, natural capital accounting frameworks are evolving to help governments and corporations understand and capture these values.

3.5 The Private Sector Case: Revenue and Returns

While PPPNs in some contexts, particularly developed market economies, may include payments by governments for nature resilience outcomes, recognizing their public good value alongside private sector revenue streams, this will not likely be possible in most countries, and especially in fiscally constrained contexts. Instead, in these contexts, PPPNs must be exclusively built around private-sector revenue streams, including corporate offtake of credits, sustainable commodity markets, and nature-linked services. Public funds should focus on creating the conditions for these flows to emerge through regulation, risk mitigation, and early-stage support.

For investors, PPPNs offer familiar financing mechanisms structured long-term contracts with government counterparties—alongside new revenue streams:

- Government Service Payments: Core revenues are tied to contracted delivery of nature resilience outcomes.
- Carbon Credits: Projects involving reforestation or soil regeneration generate verifiable credits with rising market demand⁵³.
- Biodiversity Credits: Emerging markets for speciesand habitat-restoration credits provide additional income.
- Commercial Use Rights: Limited, regulated activities such as eco-tourism or agroforestry can offer supplementary cash flows.

Blended finance can further improve project bankability, with philanthropic or concessional capital absorbing early-stage or outcome risks⁵⁴. Transparent differentiation between commercially viable elements and those requiring public or concessional support is essential for building trust with investors and aligning expectations across stakeholders.

A growing number of MDB initiatives are showing how commercial banks can be mobilized as accelerators of nature finance. The AIIB Nature Finance Accelerator Program (NFAP) provides one such model, using programmatic on-lending and partnership structures to build pipelines and revenue streams at scale.

Case Study 8 AllB Nature Finance Accelerator Program

Case Overview

The AIIB Nature Finance Accelerator Program (NFAP) proposes a programmatic approach to scale up investments in NAI, nature conservation, and NbS. Under the NFAP, AIIB will provide on-lending facilities to partner banks that are leaders in the green finance area and front-runners for the nature and biodiversity agenda, thereby expanding these banks' nature financing capacity to deliver impact at scale. The partner banks will identify, prepare, and financially structure nature-related subprojects aligned with an internationally recognized nature finance taxonomy. The program will target the bankable nature-related subprojects with measurable nature impacts and climate co-benefits, as well as leverage capital from private sources. To pilot the NFAP, AIIB proposes to work with the Bank of Jiangsu and Bank of Huzhou as partner financial institutions, and Tencent to mobilize private capital and catalyze nature finance.⁵⁵

Key to Success: Complementarity between Partners

The success of scaling nature finance hinges on the complementary roles of various partners in the NFAP.⁵⁶

AIIB

- Financially, AllB's investment through on-lending will improve the asset-liability profile of partner financial institutions, which would help catalyze more private capital for the development of nature finance.
- As an MDB, AllB has the expertise to support
 the alignment of projects with an internationally
 recognized nature finance taxonomy. MDBs are
 instrumental in developing taxonomies, metrics, and
 safeguards for nature-positive investments. Together
 with nine other MDBs, AllB is a member of the MDB
 Nature Heads and Nature Technical Working Group.
 MDBs will launch the Common Principles on Nature
 Finance and the Joint MDB Nature Finance Taxonomy
 at COP30.
- Moreover, AIIB can enhance the environmental and social capacity of local partner financial institutions and transfer nature finance knowledge broadly. Over the years, AIIB has accumulated knowledge and made progress on its journey to advance in nature finance. In 2023, the Bank introduced the concept of Nature as Infrastructure (described in Chapter 1). To date, the Bank has also prepared multiple greengray infrastructure projects in which NbS have been incorporated into the project design.⁵⁷

Bank of Jiangsu and Bank of Huzhou (local partner financial institutions)

- Local partner financial institutions can leverage the informational advantages in the local market and expertise accumulated through nature finance operations to identify, prepare, and financially structure nature-related subprojects. For example, Bank of Huzhou has had green financing at the center of its business since 2016, when Huzhou city became a national green finance reform pilot zone. The city has 47,800 hectares of wetland and over 48% of forest coverage. Green loans made up 31.3% of total loans outstanding in Huzhou at the end of 2023, nearly three times higher than the national average.⁵⁸
- Moreover, the successful maintenance of nature projects such as afforestation relies heavily on the support from local communities, in which local partner financial institutions can play an important role. Not only are they affected by land resettlements, but most likely they are employed to work on irrigation and other maintenance jobs in nature restoration.

Tencent (knowledge partner)

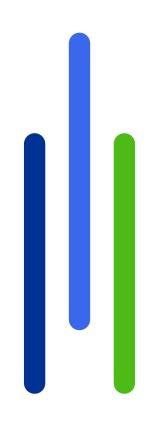
 Tencent will provide technical assistance grants to enhance the design, implementation, and monitoring of the program. It will also explore opportunities to purchase nature-based carbon credits, track nature and biodiversity benefits, etc.



Conclusion: A Generalized Model of Nature Finance Accelerator

Figure 2: A Diagram Illustration of Nature Finance Accelerator MDBs/DFIs Mobilize Provide financing Ensure investments alignment with nature finance taxonomies Private Provide Capital Financing Capacity building and knowledge sharing Mobilize Other Partner Replicate Local Partner Financial Identity Institutions Financial Prepare in Different Institutions Knowledge Structure Markets Partner and finance nature-related Enhance the design, subprojects implementation, monitoring Sub-project 1 Sub-project 2 Sub-project n

To summarize, **Figure 1** provides a generalized model based on the AIIB NFAP. First, MDBs/DFIs can provide financing, ensure alignment of investments with international nature finance taxonomies, build capacity, and share knowledge in the nature financing space. In addition, the local partner financial institutions can leverage the informational advantages in the local market and expertise accumulated through nature finance operations to identify, prepare, and financially structure nature-related subprojects. Furthermore, the appropriate knowledge partners can enhance the design, implementation, and monitoring of the nature-positive investments. **This programmatic approach, based on the complementary roles of various partners, can be replicated with the other partners in different markets, indicating a potential model of a powerful lever for nature finance and private-sector mobilization.**





3.6 Toward a New Asset Class

The vision behind positioning nature as an infrastructure class is to make it investable by explicitly valuing its critical role in sustaining economies and human well-being. This paradigm is gaining traction in 2025 with major financial institutions⁵⁹⁶⁰ advancing efforts to classify nature as an investible asset class.

The enabling architecture to support this is partially in place. Global PPP frameworks provide a model for collaboration; measurement and metrics frameworks for quantifying and tracking the uplift in nature resilience over time are now being piloted; natural capital accounting standards help quantify value; biodiversity credit systems are being piloted, and outcome-based payment models are becoming more widespread. Now these tools must be integrated into coherent, scalable investment vehicles. Success will depend on coordinated government support, clear regulatory signals, and private sector incentives that reward measurable ecological outcomes. In doing so, nature can move into the mainstream of infrastructure investment.

This chapter has outlined the strategic case for PPPNs as a viable delivery platform for scaling investment in nature. By clearly defining institutional roles, structuring long-term risk-sharing arrangements, and linking financing to performance outcomes, the PPPN model offers the governance framework required to operationalize a range of nature finance instruments and blended finance structures.

The chapters that follow will highlight the complementary tools that can help scale nature finance.



4.1 Introduction: De-risking Nature Finance Through Guarantees and Insurance

While a range of financing instruments are emerging to support nature-positive investment, guarantees and insurance are especially critical due to their catalytic impact on private capital mobilization and risk management. They are currently underutilized, particularly in the nature context, yet offer outsized potential to bridge financing gaps, unlock blended finance, and protect long-term project viability—especially in high-risk markets. They are also highly relevant for PPPNs, where blended finance is critical, risks are often high, and long-term performance needs to be protected. For these reasons, this chapter focuses on guarantees and insurance as two priority tools to scale nature finance.

Investments in nature remain underfunded due to real and perceived risks, from policy and regulatory uncertainty to performance risks and the public-good nature of ecological benefits, that deter private capital investments in these assets.

Guarantees and insurance provide two complementary tools to address these barriers. Guarantees mitigate exante risks by enhancing credit quality, reducing capital costs, and therefore mobilizing investment—particularly in emerging and frontier markets. Insurance mitigates ex-post risks, protecting nature assets and financial flows from shocks such as floods, droughts, or fires. Together, these mechanisms can help to reduce volatility, enhance investor confidence, and align incentives for long-term stewardship of nature as infrastructure.

Both instruments can be embedded into broader financing platforms—from sovereign bonds to blended funds—and are especially well-suited for use in PPPNs. In these models, guarantees can secure long-term payments or project performance, while insurance protects against delivery risks and incentivizes nature-positive outcomes. Specific examples of these integrations are explored in Chapter 5.

This chapter outlines how guarantees and insurance can be deployed to scale private capital for nature. It presents current instruments, emerging innovations, and policy recommendations to embed these tools in national and international nature finance strategies.

By reducing investment risk, stabilizing cash flows, and reinforcing accountability for ecological performance, guarantees and insurance can play a catalytic role in closing the nature finance gap and accelerating investment in nature as infrastructure.

4.2 Guarantees to De-risk Investments in Nature

Emerging markets and developing economies (EMDEs) face high capital costs for nature-positive investments due to political, financial, and technical risks. Guarantees can help by absorbing part of these risks and lowering the cost of capital. They have consistently mobilized more private capital per unit of public funding than other traditional instruments. According to the OECD, between 2016 and 2021, guarantees leveraged 19% of all private finance mobilized by developed country public funding, compared to 16% for syndicated loans and 9% for credit lines.

Yet despite their potential, guarantees remain underused in MDB and DFI portfolios. (OECD, 2023). They represent only a small share of commitments, and according to the World Bank, only 5-10% of global guarantee instruments target EMDEs. Barriers include complex structuring, regulatory uncertainty, lack of bankable obligors, thin data on defaults and recoveries, and high costs for hedging foreign exchange risk. Institutional incentives within MDBs, which often favor direct lending over risk-sharing, also contribute to underuse.

In a PPPN context, guarantees can:

- Cover payment risk—backstopping government service payments or outcome-based contracts tied to verified nature outcomes.
- Enhance revenue stability—ensuring offtake obligations in biodiversity or carbon credit markets, providing a minimum price floor.
- Reduce policy and regulatory risk—guaranteeing performance continuity if regulatory regimes or subsidy schemes change.
- De-risk blended capital structures—providing first-loss protection for institutional investors or local banks lending into restoration projects.

Reform and innovation are needed to unlock the full priorities of guarantees. *Scaling Up Green Guarantees*, the flagship report of the Green Guarantee Group (GGG), a multistakeholder initiative⁶¹, outlines four key recommendations across areas where action is most needed:

1. Streamlining regulation

Guarantees are most effective when they reduce a bank's risk-weighted assets under the Basel Framework, which sets international rules for how much capital banks must hold against different types of risk, including credit risk. Updating the list of eligible MDBs, clarifying how partial guarantees are treated, and harmonizing standards for risk-sharing across institutions could improve uptake.⁶²

2. Supporting the development of local markets

Foreign exchange (FX) risk is a major barrier to mobilizing domestic private capital in these markets. Innovative solutions like the Currency Exchange Fund (TCX) can help, though costs remain high. An additional example is the EBRD SME Lending Program, which uses first-loss guarantees to deliver over \$1.1 billion in local currency lending to date. Scaling up currency risk hedges, including donorbacked and first-loss facilities, could help reduce costs. Accompanied by guarantee providers offering guarantees denominated in local currency, this would enable the use of guarantees to de-risk local currency investments.⁶³

3. Data transparency and knowledge sharing to improve risk pricing

Pricing guarantees remains difficult in the absence of reliable benchmarks. Expanding existing databases such as the Global Emerging Markets Risk Database (GEMs) to include guarantee-specific data on defaults, recoveries, and pricing improves efficiency and confidence.⁶⁴

4. Enhancing national guarantee institutions and regional collaboration

Aggregating projects into larger, regional vehicles can reduce transaction costs and create 'bankable obligor entities' (project aggregators or special-purpose vehicles with sufficient credit quality and scale to qualify for guarantees or attract institutional investors). AfDB's Green Investment Program for Africa is one such model—regional approaches could be scaled further, supported by MDBs and DFIs.⁶⁵

Guarantees are not a silver bullet. They are complex to structure, costly in some contexts, and under-

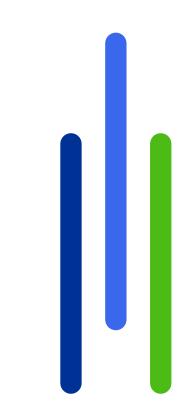
incentivized within MDB balance sheets. But with strategic reforms such as streamlined regulation, deepening local markets, improving data transparency, and scaling regional solutions, they can play a role in mobilizing both international and domestic private capital for nature-positive investments. While most existing guarantee programs have so far focused on economic infrastructure, their structures are directly transferable to nature finance, for example, to support long-term restoration concessions or ecosystem service contracts. A transferable model is summarized in Annex 1 (InfraCredit Nigeria).

4.3 Innovative Insurance for Nature

While guarantees address ex-ante risks and catalyze capital flows into nature-positive investments, insurance serves as a complementary mechanism by managing ex-post risks and incentivizing resilience. It protects nature assets, de-risks sovereign balance sheets, and reinforces ecological performance. Together, guarantees and insurance can span the full investment lifecycle—from early-stage project bankability to long-term delivery, maintenance, and fiscal protection. This section explores how innovative insurance tools can advance NAI and deepen private sector participation.

A vicious cycle of an "insurability crisis" is emerging at the intersection of climate change, ecosystem collapse, and growing fiscal pressures. As climate and nature-related disasters intensify, insurance markets are retreating from high-risk regions, leaving governments, households, and businesses exposed to escalating financial losses. In many low- and middle-income countries, insurance penetration remains below 1% of GDP, forcing states to act as insurers of last resort, often without the fiscal space to do so. This widens the protection gap (the difference between total economic losses and the portion that is insured) and weakens sovereign credit profiles, compounding the climate and debt crises and curtailing vital funding for NAI.

Insurance offers a powerful but underutilized lever to reverse this dynamic. It can stabilize revenue flows, reduce sovereign risk, and incentivize investments that lower long-term exposure to natural hazards. NAI, such as forests, wetlands, and reefs, can mitigate physical risk, but they too require protection and de-risking to attract private capital. Insurance and NAI are therefore mutually reinforcing: Insurance can help enhance NAI investment, and NAI can improve long-term insurability of climate-vulnerable sectors.





This chapter outlines three solution pathways to embed insurance into the nature finance agenda:

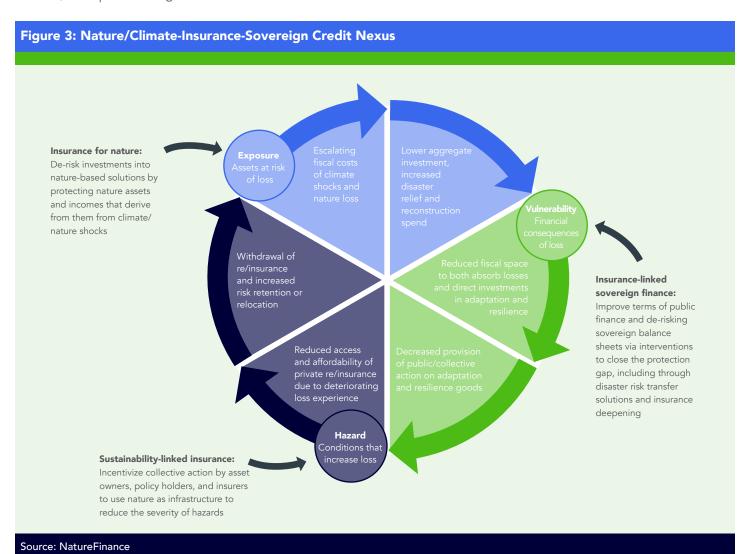
- Insurance for Nature: Traditional and parametric insurance products can protect natural assets, markets, and livelihoods—covering forests, coral reefs, agroforestry, and nature-based enterprises.
- Sustainability-Linked Insurance: New performancebased models (e.g., KPI-linked premiums or subsidies) can reward investment in NAI by reducing premiums, supporting aggregation, and overcoming free-rider effects.
- 3. Protection Gap Instruments: Embedding insurance targets into sovereign financing—such as sustainability-linked bonds—can elevate insurance deepening as a fiscal and credit strategy, aligning policy, nature outcomes, and market incentives.

Insurance for nature can be categorized into three clusters, as depicted in Figure 3.

These three clusters represent key pathways to leverage the sector's underwriting role in nature finance. While re/insurers' vast source of capital and risk expertise also support nature through investment and modeling, this chapter focuses specifically on insurance products, considering both existing case studies and emerging structures that could be piloted.

1. Insurance for nature

A wide array of insurance products can be deployed to support NAI by protecting nature assets and the markets and livelihoods that depend on them. They include both indemnity and parametric instruments, where the former pays out on claims of actual losses experienced by a policyholder, and the latter is triggered by chosen parameter breaching a predefined threshold. Although most are in the property segment, casualty, life, and health insurance can also come into play—for instance, in incentivizing nature stewards to engage in nature-positive



economic activities. Insurance products already cover forests, reefs, crops, and nature credits. Key use cases are highlighted in Annex 2.

2. Sustainability-linked re/insurance instruments

Sustainability-linked re/insurance (SLI) agreements are a nascent but promising innovation, modeled on sustainability-linked bonds (SLB) and loans (SLL). In SLI contracts, insurance premiums are linked to predefined sustainability targets, which are tracked through key performance indicators (KPIs) (e.g., reforestation rates or biodiversity indicators). Policyholders, ranging from large agri-business to smallholders, receive premium discounts (step downs) for achieving targets, or penalties (step ups) if they fall short. These measures can be implemented at both the primary insurance and reinsurance levels.

Whereas corporate and sovereign SLBs and SLLs issuance has totaled over US\$47 billion and US\$2 trillion, respectively, between 2021 and 2024⁶⁶, the SLI market is in its infancy. Only one pilot SLI contract has been written so far by the Swiss Federal Railways (SBB) in 2024 (see Box 8).

Unique opportunities for NAI arise from KPIs tied to nature outcomes. The SBB transaction targeted the railway's CO2 emissions, but future deals could target the adaptation- and resilience-enhancing outcomes of NAI investments. Where these significantly mitigate the physical hazards and expected losses of an exposed asset, such as a commercial forest or residential property in the wildland-urban interface, the financial gains from resilience can be captured through lower insurance premiums. For example, Willis Towers Watson, in partnership with The Nature Conservancy (TNC), launched a Wildfire Resilience Insurance coverage for a private homeowners' association in California, which demonstrated a 41% reduction in premiums for communities implementing ecological forest management, and showed how proactive nature stewardship can reduce risk and unlock financial savings.68

Such resilience co-benefits are a core part of NAI's value proposition and are also key to addressing the insurability crisis. Re/insurers may be less inclined to withdraw from an exposed territory or line of business if they have credible assurances that actions are being taken to contain hazards.

Box 8: Swiss Federal Railways Sustainabilitylinked Reinsurance Pilot

In late 2024, the Swiss Federal Railways (SBB), through its direct captive insurer SBB Insurance AG, launched the first-ever sustainability-linked reinsurance pilot. The contract links its insurance premiums to the company's mitigation targets, which aim to reduce operational greenhouse gas (GHG) emissions by 50% by 2030 and become net zero by 2040 through a transition to renewable energy, greater energy efficiency, and electrification. Achieving the targets will trigger a premium discount and payment from the captive reinsurers, AXA XL, Zurich Insurance, and Helvetia Insurance. Missing the targets results in an additional premium penalty. The size of the discount/premium has not been disclosed. If the pilot is successful, the plan is reportedly to expand the concept to all property and casualty reinsurance contracts purchased by SBB's captive from 2026.67

Yet several barriers inhibit scale:

- Short-term policy cycles that make KPI tracking difficult.
- Complexity of measuring nature-related KPIs (e.g., soil health, biodiversity).
- Free-rider effects, where resilience benefits extend beyond the insured party.

SLI can address these by generating guaranteed outcome-based payments separate from actuarial repricing. Reinsurers, for example, can embed KPI-linked terms into treaties spanning multiple insurers and jurisdictions, pooling risk and distributing incentives more equitably.

Where premium savings are uncertain or too delayed to incentivize action, subsidies offer a complementary approach. Brazil's Rural Insurance Premium Subsidy Program covers up to 40% of premiums for crops, cattle, forestry, or aquaculture⁶⁹, providing predictable incentives for farmers. Actions by the policyholder, such as adopting regenerative agriculture practices under a crop insurance coverage, would be rewarded by higher subsidies against verified outcomes—in addition to potential premium reductions for the risk-



reducing qualities of regenerative agriculture. Pepsi has piloted a similar scheme in Illinois, subsidizing crop insurance premiums for farmers adopting regenerative practices while securing carbon credits from the transition.⁷⁰

Insurance principles can also apply to surety and performance bonds and guarantees: In Colombia, project developers are required to offset impacts through ecosystem restoration, often using credits issued by habitat banks. Timing mismatches—between the damage, the credit generation, and the funding—create risk. Surety insurance can guarantee delivery and safeguard against defaults.

3. Protection gap

The protection gap—the difference between total economic losses from climate and nature-related hazards and the portion covered by insurance or other risk-transfer instruments71—is estimated at 90%. As climate and nature shocks intensify and (disaster72 outlays are estimated to grow 5-7% globally each year), households, businesses, and governments (often acting as insurers of last resort) absorb mounting losses, straining fiscal space and weakening sovereign credit profiles.

Closing this gap is critical for climate adaptation and fiscal stability. NAI plays a critical role in both: reducing risk exposure (e.g., mangroves, forests, and wetlands) and enabling access to affordable risk finance.

Policy levers and financing instruments include risk control measures such as ecosystem restoration

and diversification, and risk financing tools such as catastrophe bonds, climateresilient debt clauses, and macroinsurance facilities (see Annex 3). Insurance deepening strategies—from product bundling and premium subsidies to insurtech and regulatory reform—can target the bioeconomy and expand uptake (see Annex 4).

Beyond project-level applications, the protection gap can be elevated as a public policy priority for key stakeholders to coalesce behind. The clear link to sovereign creditworthiness makes the protection gap a compelling target to pursue from a public financial management standpoint. Embedding protection gap KPIs into sovereign financing instruments such as sustainability-linked bonds or loans offers governments a way to align climate and nature goals with insurance market development, and an additional incentive to invest in NAI as a hazard-reduction intervention to improve access and affordability of insurance.

4.4 Conclusion: De-risking Nature Across the Investment Lifecycle

Guarantees and insurance, when deployed together, offer a powerful, complementary strategy to scale nature-positive investment. Guarantees address upstream risks by enhancing credit quality, enabling local currency lending, and crowding in private capital—particularly in emerging markets. Insurance manages downstream risks by protecting assets, stabilizing fiscal outcomes, and embedding incentives for proactive ecological stewardship.

Both instruments are essential to unlocking finance for NAI. They can be embedded within PPPNs, sovereign financing, and blended structures to reduce volatility, align stakeholder incentives, and reinforce delivery of measurable nature outcomes. Importantly, they help reposition nature from a liability to a productive, investable asset.

The next chapter explores how these tools can be operationalized within PPPNs, providing practical models to mobilize capital, manage risk, and deliver resilience at scale.



5.1. The Role of Public-Private Partnerships

PPPs for Nature (PPPNs) offer a flexible framework for mobilizing private capital into nature-positive investments. This chapter examines how PPPNs can be structured and integrated with financial tools such as biodiversity credits, insurance, and guarantees to attract a broader pool of capital. These PPP models define clear roles, responsibilities, and risk-sharing and revenue arrangements across public and private actors, allowing for tailored approaches to conservation and restoration at scale.

Table 6: The PPP for Nature (PPPN) Model			
PPPN Component	Description		
Government Role	Project proponent, possible co-financier, outcome payor, and provider of enabling planning, regulatory approvals, and policy frameworks. Defines nature resilience objectives (e.g., water quality, tree cover, species recovery) and commits to long-term performance-based outcomes		
Project Delivery SPV (DeliveryCo)	Private consortium (e.g., NGOs, scientists, land managers) responsible for coordinating restoration, stakeholder engagement, and onsite delivery of ecological outcomes		
Landscape-Scale Focus	Projects span entire ecosystems or watersheds, often requiring cross-jurisdictional and multi-tenur collaboration to achieve large-scale, durable nature outcomes		
Structured Finance	Institutional investors provide capital, de-risked by government off-take agreements and potentially supplemented by revenues from carbon markets, biodiversity credits, or ecosystem service payments		
Performance-Based Payments	Contracts link payments to the delivery of specific, independently verified ecological KPIs, aligning financial incentives with ecological success		

The PPPN structure is well-suited to managing this blend of revenue-generating and non-commercial elements. Importantly, PPPN structures are funding-source neutral. Revenue may come from public budgets, regulated or voluntary nature markets, or blended models, allowing for adaptable roles for governments, MDBs, and private Fls. MDBs, for example, can play a critical role in rebalancing often asymmetrical PPPN arrangements by supporting fair contract negotiation, reducing political risk, and ensuring that environmental and social safeguards are upheld. By delineating responsibilities and aligning financial flows across public and private actors, PPPNs create a coherent delivery framework. This enables outcome-based contracts for commercially viable services while accommodating public or blended finance to support components that serve broader societal or environmental objectives.



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PPPNs can also be nested within existing multilateral and bilateral nature and climate finance platforms, such as the Green Climate Fund's results-based payment programs, IFC's blended finance facilities, or AIIB's Nature Finance Accelerator. Integrating PPPN frameworks into these platforms would align risk-sharing tools, performance standards, and capital mobilization pathways—ensuring complementarity rather than duplication across global initiatives.

For PPPNs to be effective, they should meet core criteria:

- Capital primarily from private investors, with public funds used strategically for de-risking.
- Revenue linked to private demand, through credits, procurement contracts, or ecosystem service fees.
- Public sector role as enabler, creating rules, policies, and safeguards rather than long-term subsidies.
- Designs that are replicable and cost-efficient, to scale beyond pilots.

From Build-Operate to Restore-Operate

Traditional PPP models such as Build-Operate-Transfer (BOT) would be adapted into structures that incorporate nature restoration. In the following table, each 'R' for Restore replaces a 'B' for Build as featured in a traditional PPP model.

Table 7: PPPN Structures

Design-Restore-Operate (DRO)

Design-Restore-Finance-Operate (DRFO)

Restore-Operate-Transfer (ROT)

Restore-Transfer-Operate (RTO)

Rather than being rigid contract templates, these can be flexible frameworks for structuring risk-sharing, delivery, and outcome-based payments. They retain the contractual discipline and investor assurance of conventional PPPs, while accommodating the specific requirements of NAI interventions where restoration replaces construction, and nature KPIs serve as the basis for performance monitoring.

5.2. Integrating Financial Instruments within PPPNs

In practice, PPPNs combine multiple cash flow sources—including government outcome payments, regulated or voluntary credit offtake, and ancillary revenues from sustainable production or tourism—under a structured finance approach that mirrors traditional PPP models. MDB-backed guarantees and insurance can underwrite performance and sovereign risk, while blended finance layers (e.g., concessional or first-loss tranches) improve credit quality and mobilize institutional capital. Clear, standardized payment mechanisms and escrowed

outcome flows (pre-funded outcome payments held in trust and released upon verified delivery) are critical to ensure revenue predictability and scalability.

PPPNs can combine instruments to de-risk and diversify revenues, turning fragmented project cash flows into investible structures. They can be integrated into a single platform, aligning public and private capital with verifiable ecological outcomes. Key tools include:

- Guarantees: provide credit enhancement by covering part of the repayment risk, lowering capital cost, and enabling banks to extend longer-term finance (see Chapter 4).
- Insurance: protects against natural and financial shocks—for example, parametric insurance covering storm damage to reefs or mangroves—making long-term ecological investments more bankable (see Chapter 4).
- Nature credits: biodiversity or carbon credits create performance-based revenue streams linked to measurable ecosystem outcomes (see Chapter 2).

Demand-side financing mechanisms, such as offtake agreements for nature credits, are critical components of a viable PPPN. These models work best when corporate buyers commit in advance to purchasing verified nature outcomes. For example, the LEAF Coalition case study in this chapter shows how participants serve as buyers of jurisdictional carbon credits, enabling forest nations to access predictable performance-based payments. Similar structures could be developed for biodiversity credits, watershed services, or regenerative agriculture outcomes, creating new roles for corporates as purchasers of nature performance.

Scaling PPPNs requires coordinated action across public, private, and development actors. Table 8 outlines key barriers and the roles that different actors can play in addressing them.

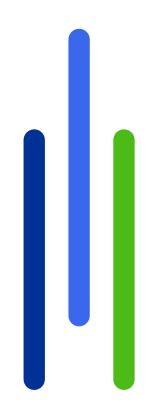


Table 8 Key Barriers to Scaling PPPNs and How to Address Them			
Barrier	Description	Solutions from public and private actors	
Weak or fragmented revenue streams	Uncertain or one-off cash flows from credits, tariffs, and buyers	Governments create demand (e.g., regulation, procurement); corporates commit to offtakes; MDBs and FIs structure revenue aggregation	
High early-stage risk	Long lead times, high preparation costs	MDBs and philanthropies provide first-loss or preparation funding; governments streamline permitting; FIs co-invest once risk is mitigated	
Legal and regulatory uncertainty	Credits, tenure, and benefit-sharing are unclear	Governments clarify frameworks; MDBs provide technical support; IPLCs gain legal recognition and access to justice	
Limited replicability	Bespoke projects hider scaling	MDBs and donors develop standard templates; developers adopt replicable models	
Low private demand for nature outcomes	Few buyers for nature outcomes	Governments mandate sustainable procurement or offsets; FIs act as anchor buyers; MDBs facilitate blended instruments and matchmaking platforms	
Power imbalances and weak local capacity	Local actors leverage, knowledge	MDBs and governments support capacity-building, inclusive governance; sponsors ensure transparency and equitable benefit-sharing	

5.3. Linking Case Studies to PPPN Variants

The PPPN models presented above are optimally applied where revenue streams are uncertain, capital is scarce, and coordination is complex.

The following case studies illustrate how PPPN variants adapt conventional infrastructure contracts to the restoration and management of natural assets and how different instruments can enhance effectiveness.

Table 9: Mapping Case Studies to Restore-Operate PPP Variants		
Case study	PPP variant	Key structural features
LEAF Coalition	DRO (Design-Restore- Operate)	Jurisdictional scale; public-private design of REDD+ programs; corporate buyers fund verified outcomes via credit purchases; limited financial structuring
Tropical Forest Forever Facility (TFFF)	DRFO (Design-Restore- Finance-Operate)	Fund-level blended finance structure; multi-credit revenue streams; extensive private capital mobilization through guarantees, insurance, and long-term fund management
Terrasos Habitat Banks	ROT (Restore-Operate- Transfer)	Project-level biodiversity offset banking; private equity and debt finance; regulatory-driven offset plus voluntary contribution demand; long-term restoration and site management with potential transfer of obligations
Guangzhou Urban Cooling PPP	ROT/DRFO	City-integrated NbS; private BOT lease revenues; municipal green bond; incentive platforms; prospective ecological compensation



Case Study 9

The LEAF Coalition—A Scalable Public-Private Investment Model for Forest Conservation

Table 10: PPP Snapshot: LEAF Coalition			
Element	Detail		
PPPN variant	Design-Restore-Operate (DRO)		
Scale	Jurisdictional (national and subnational REDD+ programs)		
Public role	Donor governments provide advance payments and policy support; forest governments implement jurisdictional forest governance and emission reduction strategies		
Private role	Corporates act as off-takers of verified emissions reductions; financial institutions (prospectively) support with credit/insurance solutions		
Revenue	Sale of high-integrity REDD+ carbon credits through performance-based agreements		
Instruments	Advance payments, ERPAs, third-party verification, potential for guarantees, and parametric insurance		
Key feature	Aggregator platform (Emergent) facilitates demand coordination and jurisdiction-wide credit contracting under high-integrity standards		

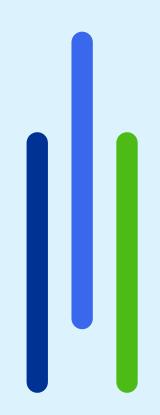
The LEAF Coalition⁷³ (Lowering Emissions by Accelerating Forest Finance) illustrates a Design-Restore-Operate (DRO) variant applied at the national and subnational scale. It connects forest nations with donor countries, corporate buyers, and non-profit organizations through jurisdictional REDD+ programs, generating high-integrity carbon credits.

LEAF has mobilized over US\$1 billion in committed finance, with participating governments committing to large-scale forest protection and restoration, while private buyers (including over 30 major corporations⁷⁴) pre-purchase credits. Agreements span multiple tropical forest nations with over 2.5 million hectares of forest under proposals. This creates predictable, performance-based revenue streams, allowing forest nations to plan and implement restoration programs with confidence.

Emergent, a US-based non-profit, acts as a transaction intermediary and special-purpose PPP platform, aggregating demand, standardizing contracts, managing verification processes, and reducing transaction costs for both buyers and sellers.

LEAF demonstrates how PPPNs can channel corporate demand into jurisdiction-wide conservation. While LEAF's current private sector participation focuses on credit offtake, Emergent has indicated interest in exploring involvement from investors to support complementary financing solutions⁷⁵.

Table 11: LEAF Risk Allocation and Risk-Sharing Features		
Risk Type	Mitigation mechanism	
Policy and governance	Governments commit at jurisdictional level; independent verification provides credibility	
Revenue/demand	Advance corporate payments under long-term offtake agreements, creating predictable returns	
Performance	Results-based contracts link payments to verified emissions reductions	
Early-Transaction Liquidity	Donor-backed floor prices serve as a form of partial first-loss protection	
Market credibility	Standardized contracts and methodologies ensure integrity and investor confidence	





Case Study 10 The Tropical Forest Forever Facility—A PPP Blueprint for Biodiversity and Forest Conservation

Table 12: PPP Snapshot: Tropical Forest Forever Facility (TFFF) if Implemented as PPPN			
Element	Detail		
PPPN variant	Design-Restore-Finance-Operate (DRFO)		
Scale	Multi-country landscape and regional fund-level structure		
Public role	Host governments commit to forest protection, tenure clarity; donors provide concessional tranches; MDBs and DFIs provide first-loss or concessional capital, guarantees, liquidity backstops.		
Private role	Pension funds, insurers, banks, and corporates invest in layered capital stack or purchase environmental credits		
Revenue	Investment returns that fund annual conservation stipends to jurisdictions; potential for carbon credits, biodiversity credits, ecosystem service payments, conservation-linked contracts, and ecotourism or supply chain benefits		
Instruments	Blended finance with first-loss guarantees, credit enhancements, political and parametric insurance, and liquidity facilities		
Key feature	Structured finance facility combining public guarantees and private capital with long-term multi-credit revenue streams managed through a dedicated SPV		

The TFFF⁷⁶ is an emerging investment platform that has great potential to mobilize large-scale, patient capital for tropical forest protection⁷⁷. The concept targets US\$125 billion, with an intended launch around COP30. With the right structuring, it could pool capital from donors, MDBs, and institutional investors into a single vehicle, allocating finance across jurisdictions and spreading nature and political risks. By bundling diverse projects, the facility has the potential to reduce transaction costs and create a more attractive proposition for commercial capital. The current model envisions providing forest nations with steady annual payments—estimated at US\$4 billion, with a floor share (e.g., \geq 20%) directed to IPLCs⁷⁸—financed through a blended pool of donor contributions, institutional investment, and corporate demand for verified nature credits. In return, participating countries would commit to maintaining and protecting their tropical forests.

Structured as a PPPN-aligned platform, TFFF could combine several complementary revenue streams, including carbon and biodiversity credits, alongside conservation-linked payments and sustainable supply chain revenues. Donor governments and philanthropies might provide concessional or firstloss capital to derisk early years, while MDBs could supply guarantees and insurance products. Pension funds and institutional investors are ideal for TFFF's long-term capital needs, and they could provide long-term patient capital through debt or equity investments



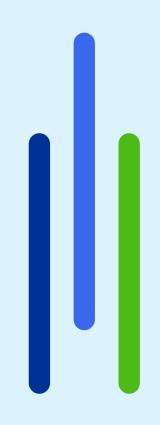
aligned with sustainable returns and ESG objectives.

Commercial banks and asset managers could contribute market-rate capital for lower-risk tranches, attracted by partial guarantees and stable long-term revenue flows.

Corporates (both compliance and voluntary buyers) could purchase nature credits generated by forest conservation efforts, while private insurers and risk managers offer insurance products to address operational and natural hazard risks. China and several G20 members have signaled interest in engaging the platform, underscoring its potential to crowd in both sovereign and private participation.

If the facility's governance could be anchored by a dedicated fund platform or SPV, ensuring transparency, standardized contracts, and thirdparty monitoring, TFFF could operate as a Design-Restore-Finance-Operate (DFRO) PPPN and serve as a replicable blueprint for large-scale PPPNs. It demonstrates how structured finance, strong governance, and integrated revenue models can align investor needs with global conservation goals—unlocking capital at scale while maintaining ecological and financial integrity.

Table 13: TFFF Risk Allocation and Mitigation		
Risk Type	Mitigation mechanism	
Policy/regulatory	MDB engagement could improve policy alignment and reduce sovereign risk	
Revenue/demand	Diversified multi-credit portfolio could reduce dependence on any one buyer	
Performance	Professional fund management and independent verification would enforce standards	
Early-stage project risk	Donor or MDB guarantees could provide first-loss protection	
Natural Hazard Risk	Parametric insurance, disaster contingency plans	
FX and macro risk	Regional diversification and MDB-backed hedging facilities may help	
Investor Financial Risk	Capital stack layering, guarantees, blended finance	





Case Study 11 Terrasos—Habitat Banking as a PPPN Model

Table 14: PPP Snapshot: Terrasos Habitat Banking Model			
Element	Detail		
PPPN variant	Restore-Operate-Transfer (ROT)		
Scale	Project/site-level ecological infrastructure		
Public role	Regulator and verifier; defines offset rules		
Private role	Financing, restoration, management, delivery		
Revenue	Regulated biodiversity offset credits		
Instruments	Private equity/debt, sinking fund, verified payment milestones		
Key feature	30-year infrastructure-style nature management via performance-based concessions		

Terrasos is an environmental services company that develops and operates habitat banks—long-term conservation and restoration projects financed and managed by the private sector under regulatory frameworks that mirror concession-style PPPs. Terrasos has set up 13 habitat banks, which collectively protect over 7,000 hectares across five ecosystems. These banks function as natural infrastructure assets: Landowners commit to protect or restore habitats for at least 30 years with payment tied to verified nature outcomes. Biodiversity units generated from this work are sold to developers who, under legislation, must offset environmental damage caused by infrastructure and development projects, with compliance credits trading at US\$10,000 per hectare of restored land. Habitat banks can also generate smaller voluntary biodiversity credits for corporate buyers typically valued at about US\$25 per 10 m² 82.

Terrasos structures these projects as Restore-Operate-Transfer (ROT) models. It aggregates private capital, acquires or manages land, and oversees restoration activities. Credits are independently verified and registered as tradable, standardized instruments. Compliance buyers provide the core revenue stream, while voluntary corporate demand adds diversification. At the end of the contract, obligations can be transferred or extended, while the underlying land ownership typically remains private. Financial tools include private equity and debt, long-term land use agreements (e.g., usufructs), a 30-year or longer sinking fund, and milestone-based disbursements. Guarantees and insurance are not yet integrated but could support future scale and institutional investment.



Public regulators define compensation requirements and oversee crediting rules, while landowners, private investors, and infrastructure developers participate through structured financing and contracts. This model reflects PPPN principles: long-term delivery contracts, public regulatory anchoring, structured finance, and inclusive land access via usufruct agreements⁸³. The ROT structure is effective because it transfers delivery risk from government to private actors, while ensuring

sustained restoration and stewardship through regulated performance. Terrasos shows that nature credit delivery can be structured under a PPPN-aligned framework, combining long-term regulatory obligations with private capital and operational accountability. The use of sinking funds and performance-based revenue flows provides financial discipline, while the model's compatibility with blended finance instruments makes it replicable in other jurisdictions with clear regulatory foundations.

Table 15: Terrasos Risk Allocation and Mitigation			
Risk Type	Mitigation mechanism		
Policy/regulatory	Stable national offset regulation; clear legal framework		
Performance	Independent verification and 30-year obligations ensure nature outcomes		
Revenue/demand	Regulatory compliance creates mandatory offset demand and acts as de facto off-take mechanism; voluntary markets provide additional buyers.		
Restoration Risk	Restoration protocols; adaptive management; insured site delivery possible		
Long-term O&M Risk	30-year financing plan ensures post-credit sustainability		

Case Study 12 Guangzhou Urban Cooling PPP

Table 16: PPP Snapshot: Guangzhou Urban Cooling PPP			
Element	Detail		
PPPN variant	Restore-Operate-Transfer (ROT) (Yongqing Fang, heritage regeneration with NbS) and DRFO (Knowledge City, city-scale ecological design and financing)		
Scale	Precinct-level urban regeneration (Yongqing Fang); 12.6–12.8 km² district within a 178 km² new town (Knowledge City)		
Public role	Municipal planning authority sets policy/program environment; coordinates developers; integrates NbS guidelines into planning & design; explores ecological compensation		
Private role	Developer finances and delivers regeneration & cooling (e.g., Vanke under BOT lease) and bears added capex for NbS		
Revenue	Property leases & commercial rents (BOT area); municipal carbon-neutral green bond proceeds earmarked for green buildings/cooling in Knowledge City; potential "carbon coins" incentives; prospective ecological compensation flows		
Instruments	BOT lease (15–20 years, assets revert); carbon-neutral green mid-term note; Carbon Inclusive Platform ("carbon coins")		
Key feature	Embedding NbS (ventilation corridors, 3D greening, permeable/evaporative landscapes) into contracts and codes to reduce heat island effects at low marginal capex		

In Guangzhou, China, pilot projects tested how urban cooling through NbS can be procured and financed via conventional PPPs⁸⁴.

In Yongqing Fang, a historic neighborhood in the old town undergoing regeneration, major developer Vanke entered a BOT lease (15–20 years) to finance, operate, and maintain heritage regeneration that integrates cooling measures, with assets returning to the government at term end. This created a revenue base from leases/rents, while the marginal cost of NbS was small (\approx US\$80–90k vs \approx US\$10 million total capex).

In Knowledge City, a 178 km² China–Singapore joint venture new town designed as a green, low-carbon innovation hub, authorities used planning and design guidelines to scale 3D greening and landscape ventilation and tapped a carbon-neutral green bond to finance high-standard green buildings and cooling features. Guangzhou also operates a Carbon Inclusive Platform that issues "carbon coins" for verified low-carbon actions and may include cooling measures. The city is exploring ecological compensation, supported by the valuation of Haizhu Wetland services (cooling energy savings, mortality risk reduction, productivity). Together, these show a replicable path to blend municipal instruments with private concessions for nature-as-infrastructure.

Table 17: Guangzhou Risk Allocation and Mitigation			
Risk Type	Mitigation mechanism		
Policy/regulatory	Municipal planning authority coordinates developers and embeds NbS into guidelines and planning processes; supportive program environment facilitates financing and incentives		
Financing	Carbon-neutral green bond channels capital to green buildings and cooling; BOT lease enables private upfront financing in regeneration area		
Revenue/demand	BOT area monetizes via property leases and rents; potential ecological compensation and carbon coins expand/anchor incentives for cooling investments.		
Performance/delivery	Private developer covers added NbS costs and delivers design/works; measures are low-cost relative to total capex, improving feasibility		
Early stage/capacity	Public–private partnership explicitly used to share cost, risk, and technical capacity (developer + city)		

5.4 Comparative Lessons from Emerging PPP Models

The LEAF Coalition, the TFFF, and Terrasos' habitat banking model illustrate how different configurations of PPPNs—demonstrating the breadth of possibilities for public-private structuring in nature finance—can be applied at jurisdictional, fund, and project scales, each with distinct financial and regulatory features. Guangzhou adds a city-scale, planning-integrated PPPN example: NbS are embedded into land-use rules and delivered via a private BOT concession and municipal green debt, with prospective incentive platforms and ecological compensation expanding revenue options.

Structural Similarities

Across all three models:

- Core PPPN aspects are demonstrated: Long-term contracts, outcome-linked payments, blended financing, and a division of roles between public regulation and private delivery.
- NAI is managed with the same financial discipline as built infrastructure, via performance milestones, monitoring, and regulated payment streams.
- Public regulatory frameworks (offset laws, credits standards, donor-backed procurement) anchor private investment.
- Market mechanisms (nature credits) are, or have the potential to be, integrated to supplement or anchor financial flows.
- Risk is allocated to the actors best equipped to manage it, and payments are made only for results, similar to pay-for-success public infrastructure PPPs.
- On-the-ground delivery is carried out by public and private actors (environmental agencies, NGOs, IPLCs, scientific institutions, and private landholders or contractors), albeit with specific composition varying by model and geography.
- Urban NbS can be procured using mainstream city tools (leases, bonds, planning codes) while still aligning with PPPN features (long-term delivery, measurable outcomes, blended revenue).

Differences between base studies are highlighted in Annex 5.

Lessons Across Models

- PPPNs are highly adaptable. They function at national, regional, and project levels and in both voluntary and compliance markets.
- 2. Long-term, contracted outcomes and robust, thirdparty verification are essential to investor confidence and attracting private capital.
- Financial structures must be matched to investor profiles: TFFF's blended finance model suits large, patient capital. LEAF aggregates voluntary buyers with simpler payment flows. Terrasos matches private equity and project finance with clear, regulated demand.
- 4. Expanded use of guarantees, insurance, and liquidity facilities could further improve investment readiness and scale potential.
- 5. City finance + PPPNs: Municipal bonds and concession leases can complement credit/insurance by anchoring near-term cash flows for NbS while larger markets for nature outcomes mature.

5.5 Positioning for Scale

Together, these models represent a spectrum of PPPNs. LEAF shows how demand aggregation and jurisdictional governance can scale voluntary carbon finance. The proposed TFFF model illustrates how complex blended finance vehicles can pool capital for high-integrity, multi-credit nature outcomes. Terrasos proves that even project-scale initiatives can be structured like infrastructure concessions, with long-term payment security, performance verification, and clear private-public roles. The Guangzhou pilots add a city-scale perspective, showing how PPPNs can be embedded in urban regeneration and new town development, leveraging standard municipal instruments such as BOT leases, planning codes, and green bonds. Collectively, they reinforce the potential of PPPNs to mainstream private investment in nature as infrastructure.

Chapter 6 Conclusion and Recommendations

The integration of nature into economic and financial systems is marked by both innovation and significant political obstacles. While the innovations covered in this report offer promising pathways, political dynamics—such as the EU postponing the EU Deforestation Regulation or the US withdrawal from the UNFCCC and continued absence from the UNCBD—underscore the complexity of embedding nature into global governance frameworks.

While progress on nature governance and financing through the UNCBD process should be applauded, it is clear that we are still far from on track to achieving the goals of the GBF, and that significant increased effort from governments, multi-lateral organizations, and regulators will be required in order to rectify this and enable the private sector to step up with the financing and asset reallocation required.

These challenges highlight the need for bold yet adaptable policies that can navigate both the challenges and opportunities in nature finance. These recommendations are ambitious but are designed to unlock value across constituencies. For governments, they offer a pathway to reduce fiscal and credit risk, strengthen climate and nature alignment, and access new forms of capital. For investors and financial institutions, they enable risk-adjusted exposure to nature-linked assets and emerging markets. For Indigenous Peoples and local communities, they can provide long-term, equitable revenue linked to stewardship roles. And for MDBs, they support system-wide alignment with development, climate, and nature mandates. While some recommendations require structural reform, others offer near-term entry points to capture early wins and build political and market momentum.

Recommendations are presented in this context and framed under an overarching recommendation to establish PPPs for Nature (PPPNs) as a core delivery model for scaling nature finance.

Recommendations

Table 18: Recommendations at a Glance			
Overarching recommendation	1.	Establish PPPs for Nature as a Core Delivery Model for Scaling Nature Finance	
Strengthen the nature finance operating system	2.3.	Build a System that Makes Nature Count in Financial Decision Making Establish Strong Governance for Nature Markets	
Drive Scalable Financial Innovation	4.	Mobilize and Scale Nature-Linked Financial Instruments	
Embed nature in sovereign and global economic policy	5.6.7.8.	Embed Nature in Sovereign Finance, Fiscal Policy, and Debt Systems Redefine MDB Roles to Unlock and Scale Nature Finance Align Trade, Investment, and Subsidy Policy with Biodiversity Goals Protect Indigenous Rights and Embed Equity in Nature Finance	

Overarching Recommendation

Establish PPPs for Nature as a Core Delivery Model for Scaling Nature Finance

Governments must take the lead in setting the rules, defining the overall terms of engagement, and creating the enabling environment for PPPNs to become the principal delivery model for scaling investment in nature as infrastructure, nature restoration, and ecosystem services. These partnerships provide the institutional and legal architecture through which public and private capital—including commercial banks, institutional investors, and insurers—can be blended and directed toward nature-positive outcomes. To succeed, they must be built on standardized structures, de-risked financing, and enabling policy environments, and be treated as replicable investment platforms, integrated into national development plans and infrastructure pipelines.

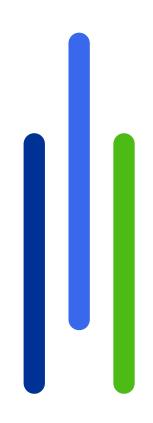
PPPN design should be progressive and reflect differing national capacities regarding the nature finance operating system—with MDBs and DFIs playing a stronger role in structuring, training, and initial co-investment in lower-income and fragile contexts. A staged approach can

enable early adoption, beginning with PPPNs that use third-party ecological verification and evolving toward domestic monitoring systems and integration with national accounts as institutional capacity matures.

These frameworks must be designed to attract a range of capital providers, not only commercial lenders. Institutional investors, infrastructure funds, and insurance underwriters must be able to assess risk and returns with confidence—supported by robust legal contracts, regulatory alignment, and transparent project data. This is a dynamic process: Governments strengthen their own capacity as they work with private partners, learning through both policy reform and individual transactions.

Rationale:

A progressive approach to achieving standardized PPPN frameworks will lower transaction costs, reduce legal uncertainty, and give commercial banks, institutional investors, and insurers the confidence to participate in structuring and financing NAI—particularly in high-risk or unfamiliar jurisdictions. These reforms will help build pipelines of investable projects, especially when paired with guarantees, insurance, and diverse revenue streams.





What this means for policymakers:

- Take the lead in defining the overall terms on which PPPNs operate—a higher-level public-private agreement that sets rules, rights, and responsibilities across sectors.
- Align PPP legislation and financial regulation with capital market requirements (e.g., strong disclosure, legal enforceability, and credit enhancement mechanisms).
- Mandate the inclusion of nature-related valuation tools, land-use planning inputs, and equity principles in PPP design.
- Build institutional capacity to structure and manage nature-positive partnerships at national and sub-national levels, integrating NbS into national PPP legislation, procurement guidelines, and public investment frameworks.

What this means for financial institutions:

- Participate in government-led PPPN frameworks alongside MDBs, institutional investors, and underwriters, offering expertise in deal structuring, risk pricing, and project finance.
- Advocate for consistent PPPN terms that enable investment, including credit enhancements, risk-sharing provisions, and clear performance benchmarks.
- Support bundling of smaller nature projects into scalable platforms, using PPPNs as a legal and financial bridge to capital markets.

What this means for MDBs and DFIs:

MDBs should work with sovereign clients to:

- Develop clear, replicable PPPN templates and legal frameworks, including model contracts, provisions for risk-sharing, co-ownership, maintenance responsibilities, and long-term benefit distribution, especially for IPLCs.
- Support enabling policies, such as green procurement mandates, natural capital valuation, and open-access data platforms, that allow for the integration of multiple nature finance solutions within PPPNs.
- De-risk private and institutional participation guarantees,
 subordinated capital, or early-stage project preparation funding.

Ensure alignment of PPPNs with climate and nature goals, positioning NAI and NbS as viable, competitive infrastructure options.

Group 1: Strengthen the nature finance operating system

Build a System that Makes Nature Count in Financial Decision Making

Governments and international financial institutions must go beyond standalone natural capital accounts and build an integrated accounting system that links nature to capital markets and public finance. This system should connect:

- Ecological science and accounting: spatial biodiversity and ecosystem data integrated into natural capital accounts, using global standards such as SEEAEA.
- Disclosure and financial reporting: alignment with corporate and sovereign risk disclosure frameworks (TNFD, ISSB), and recognition of naturerelated assets and liabilities in balance sheets.
- Fiscal and investment decisionmaking: embedding natural capital into sovereign wealth accounts, fiscal planning, and debt frameworks, and using these entries to influence asset allocation, credit ratings, and investment portfolios.

This effort should build on existing sovereign-level NCA initiatives and be developed to ensure interoperability, starting with regional frameworks where appropriate. A multi-stakeholder G20-led task force should drive this agenda and develop a phased roadmap for governments.

Rationale:

This end-to-end framework enables banks and investors to consistently assess nature-related risks and opportunities across jurisdictions. By ensuring consistency in how data is measured and reported, aligning accounting standards and linking nature to financial disclosures, it supports the development of nature finance products, informs risk models, and ultimately integrates natural capital into mainstream financial decision-making. These priorities are consistent with, and reinforce, international initiatives such as the G20 Nature Investment Roadmap, which also calls for integrating natural capital into sovereign accounts, fiscal systems, and financial regulation through a G20-led task force.

What this means for financial institutions:

- Incorporate nature-related metrics into internal risk models and client assessments as national and global natural capital accounts become available.
- Engage with TNFD-aligned disclosure pilots and help test the integration of nature assets into lending and portfolio decisions.
- Use natural capital data to develop innovative financial products, design investible pipelines, and price risk more accurately.

What this means for policymakers:

- Mandate the integration of TNFD and ISSB frameworks into national corporate and financial reporting systems and ensure coherence with other ESG standards.
- Align national statistical offices, finance ministries, and regulators to support interoperable frameworks linking science, natural capital, and financial data.
- Provide enabling regulation and public investment in biodiversity data infrastructure, valuation tools, and accounting guidance for nature-related risks and assets.

What this means for MDBs and DFIs:

- Support countries to build interoperable natural capital accounts and link them to public financial management systems.
- Integrate natural capital accounting into project appraisal, sovereign lending criteria, and advisory services.
- Fund programs for developing countries to participate in, e.g., TNFD/ISSB, and use natural capital data for fiscal planning and investment readiness.

Establish Strong Governance for Nature Markets

Governments must establish clear legal and regulatory frameworks to govern nature markets to ensure integrity, equity, and credibility. Markets should be integrated into national environmental and financial governance systems through:

 Clear legal definitions and enforceable standards for nature-related assets (e.g., biodiversity credits)

- supported by mechanisms for transparency, traceability, and independent verification.
- Mandatory safeguards for Indigenous rights, meaningful participation in decision making (e.g., FPIC or similarly internationally recognized standards), and local benefit-sharing, and inclusive oversight that involves IPLCs, scientists, and civil society.

Rationale:

Strong, transparent governance reduces reputational risk and builds regulatory confidence, enabling banks and institutional investors to enter emerging nature markets. Without it, markets risk fragmentation and failure to deliver environmental or social outcomes.

What this means for financial institutions:

- Engage only in high-integrity nature markets that are subject to transparent rules, independent verification, and robust legal frameworks.
- Support standard-setting initiatives and contribute to the development of credible governance structures by offering financial sector perspectives.

 Build internal capacity to assess nature market risk and integrity and integrate governance quality into investment criteria.

What this means for policymakers:

- Legislate clear definitions, standards, and oversight for nature-related credits and market mechanisms.
- Embed Indigenous rights protections and equity principles in market governance laws and regulations.
- Establish competent, independent regulatory bodies or authorities with clear mandates to supervise nature markets.

What this means for MDBs and DFIs:

- Support countries in designing governance frameworks for nature markets, including legal reform, regulatory architecture, and institutional capacity.
- Ensure market integrity by requiring compliance with social and safeguard standards, and by funding data, monitoring, and thirdparty certification systems.
- Act as trusted independent brokers in conflict resolution and stakeholder disputes.



Group 2: Drive Scalable Financial Innovation

Mobilize and Scale Nature Finance Instruments

Governments, MDBs, and National Development Banks (NDBs) must scale up the deployment of nature-linked financial instruments to unlock private capital for NAI.

This includes:

- Guarantees and credit enhancement tools to de-risk early-stage investment and attract commercial lenders and institutional investors.
- Nature credits with robust standards and platforms to aggregate demand from corporate buyers.
- Nature-linked insurance products, including parametric cover for reefs, forests, and crops; sustainabilitylinked insurance with premiums tied to nature KPIs; and sovereign protection gap instruments such as catastrophe bonds and climate resilient debt clauses.
- Post-disaster nature recovery bonds and insurance pools to finance rapid ecosystem restoration following climate shocks, such as mangrove restoration, wetland recovery, or forest regeneration, instead of gray infrastructure.
- Bundled and blended finance platforms, aggregating smaller-scale nature projects into bankable portfolios, supported by demand-side policies such as green procurement commitments, and public co-investment.

Rationale:

Nature-linked instruments reduce risk, create predictable revenues, and provide viable entry points for commercial banks, insurers, and institutional investors. These instruments should be fast-tracked in climate-vulnerable economies, where reactive adaptation cycles—the "midadaptation trap"—limit fiscal space and resilience. Scaling guarantees, credits, and insurance in integrated PPPN platforms can crowd in private capital while improving long-term resilience and sovereign creditworthiness.

What this means for financial institutions:

- Corporates should commit to longterm offtake agreements for nature credits.
- Insurers should design and scale sustainabilitylinked products, with premiums tied to nature KPIs and verified resilience outcomes.
- Institutional investors should participate in blended vehicles that combine guarantees, credits, and risktransfer products.

What this means for policymakers:

- Establish legal and regulatory frameworks for biodiversity credits and nature-linked insurance, ensuring clarity and enforceability.
- Integrate post-disaster recovery bonds, insurance pools, and protection-gap targets into national adaptation, fiscal, and infrastructure planning.
- Create stable demand through procurement commitments, fiscal incentives, and co-investment in verified nature outcomes.
- Prioritize countries and regions facing compounding climate and nature risks for targeted financial innovation.

What this means for MDBs and DFIs:

- Expand guarantee and insurance offerings tailored to NAI, including pooled risk facilities, parametric cover, catastrophe bonds, and protectiongap instruments linked to sovereign financing.
- Support countries in developing registries, standards, and aggregation platforms for biodiversity credits.
- Provide earlystage finance and technical assistance for pilots that bundle guarantees, insurance, and credits into blended platforms.

Group 3: Embed nature in sovereign and global economic policy

Embed Nature in Sovereign Finance, Fiscal Policy, and Debt Systems

Sovereign finance systems must fully account for nature as an asset to be protected, valued, and invested in, as well as a liability to be avoided. This requires integrating natural capital into sovereign balance sheets, fiscal frameworks, and debt systems. By aligning macroeconomic forecasting, budget planning, and credit risk analysis with natural capital accounts, governments can treat ecosystems as productive infrastructure, not externalities. Approaches should be tailored to fiscal capacity: MDB-supported capacity building, risk sharing, and capacity building may be first required in some cases.

Rationale:

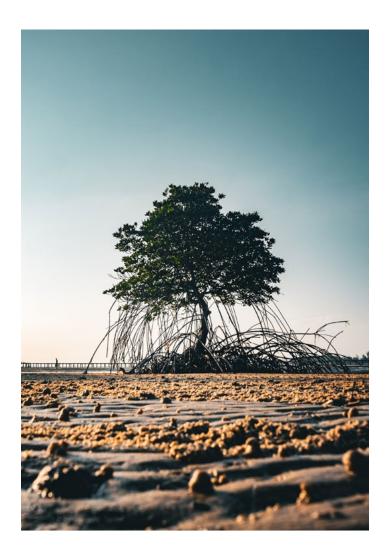
Embedding nature into sovereign fiscal and debt architecture enables countries to manage nature risk, improve creditworthiness, and unlock nature-positive investment. Linking natural capital to sovereign credit profiles and debt sustainability analyses creates incentives for governments and markets to protect ecosystems, while fiscal incentives and budget codes ensure that NAI and NbS can compete fairly with gray infrastructure.

What this means for financial institutions:

- Incorporate nature-related factors into sovereign lending and risk assessments, particularly in ESG bond markets and structured sovereign finance.
- Engage with credit rating agencies and data providers to improve visibility of biodiversity and ecosystem risk in sovereign credit profiles.
- Support nature-linked sovereign debt products, such as sustainability-linked bonds or debt-for-nature swaps, that align with country climate and biodiversity plans.

What this means for policymakers:

• Integrate natural capital into fiscal frameworks, including budgets, investment pipelines, and national accounts.



- Work with the IMF and development partners to include nature in Debt Sustainability Analyses (DSAs) and in eligibility for concessional finance.
- Develop nature-smart fiscal policy, including green subsidies, tax incentives, and cost-benefit tools that account for ecosystem services.

What this means for MDBs and DFIs:

- Reform capital adequacy and risk-weighting frameworks to treat nature-based solutions as infrastructure assets eligible for core lending.
- Mainstream nature in sovereign lending diagnostics, public finance reviews, and debt advisory services.
- Provide concessional finance, technical assistance, and blended instruments to support countries in valuing and investing in nature as part of national fiscal strategy.

Redefine MDB Roles to Unlock and Scale Nature Finance

Sovereign shareholders that want to advance nature-positive investments should require MDBs to integrate nature into core mandates and investment strategies. They must be empowered to play a more catalytic role by structuring, derisking, and crowding in private capital at scale.

Shareholders, particularly G7, G20, and major borrower countries, should require MDBs to:

- Systematically screen all infrastructure projects for nature opportunities and impacts, consider opportunities for voluntary net gains, and ensure NbS and NAI options are assessed on equal terms with gray infrastructure.
- Set binding institutional targets for nature-positive investment across sectors such as infrastructure, agriculture, and urban development.
- Require transparent reporting on nature-related risks and outcomes, aligned with global disclosure frameworks.
- Embed nature-related performance indicators into strategies, staff incentives, and capital allocation processes.



Rationale:

Shareholder direction and internal incentives are powerful levers to shift MDB behavior. When MDBs are aligned around nature-positive outcomes, they can help sovereign clients design bankable projects, de-risk policy volatility, and crowd in private capital—fulfilling a unique role that sits between public ambition and market execution.

What This Means for MDBs:

- Taking note of country context, work with sovereign clients to build capacity where needed in order to create the enabling policy environments required to scale nature finance. This includes upstream support for regulation, permitting, land tenure clarity, and green procurement, especially where these enable PPPNs.
- Act as neutral structuring agents in PPPNs, brokering agreements, mitigating regulatory risk, and serving as trusted third parties in contracts.
- Pilot new instruments (e.g., guarantees, insurance, and biodiversity credits) and aggregate smaller projects into investable portfolios.
- Development of regional or global platforms for knowledge-sharing and standard-setting, building on successful PPPs in infrastructure, water, and ecosystem services.

What this means for financial institutions:

- Partner with MDBs in structured co-financing vehicles for nature-based infrastructure and restoration projects.
- Co-develop risk-sharing tools and engage in MDBled platforms for innovation, blended finance, and pipeline development.
- Use MDB presence to reduce exposure to policy or regulatory risk, especially in frontier markets.

What this means for policymakers:

- As MDB shareholders, push for nature-focused mandates, KPIs, and accountability.
- Collaborate with MDBs to create enabling legal and policy environments that support scalable PPPNs.
- Engage MDBs early in project design to attract concessional and private finance.

Align Trade, Investment, and Subsidy Policy with Nature Goals

Governments must reform trade, investment, and subsidy regimes to support nature-positive outcomes and eliminate incentives that drive ecosystem degradation.

This includes aligning trade agreements, investment treaties, and fiscal instruments with nature goals, and ensuring these changes are reflected in WTO reviews, G7/G20 trade discussions, and UNFCCC/UNCBD negotiations.

Rationale:

Aligning trade and fiscal policy with nature goals makes sustainable production more competitive and investable. It levels the playing field for nature-positive business models and enables commercial banks and investors to scale finance for projects that regenerate ecosystems, rather than degrade them.

What this means for financial institutions:

- Integrate biodiversity and land-use criteria into due diligence for supply chain, trade, and FDI finance.
- Regulators should require institutions to identify and disclose nature-related risks and develop transition plans for nature-positive portfolios.
- Develop lending and investment products that reward nature-positive trade practices (e.g., preferential terms for deforestation-free supply chains).

What this means for policymakers:

- Integrate biodiversity and land use standards into trade and investment agreements, including bilateral investment treaties and regional trade frameworks, supported by due diligence and performance standards.
- Establish enforcement mechanisms such as biodiversity-adjusted border tariffs, import restrictions linked to ecosystem destruction, and sustainability disclosure requirements for high-risk commodities.
- Phase out environmentally harmful subsidies and redirect public spending toward regenerative production and nature restoration.
- Use fiscal and trade levers—tariffs, taxes, and

- procurement—to give competitive advantage to nature-positive production.
- Report progress through WTO, UNCBD, and UNFCCC mechanisms, ensuring global policy coherence.

What this means for MDBs and DFIs:

- Provide technical assistance to governments negotiating nature-aligned trade and investment agreements.
- Align their own investment screening with biodiversity and land-use trade risks and require compliance among clients in sensitive sectors.
- Support subsidy reform through concessional finance and help countries redirect fiscal space toward naturepositive alternatives.

Protect Indigenous Rights and Embed Equity in Nature Finance

All nature finance must be grounded in legal protections for Indigenous Peoples and Local Communities (IPLCs), ensuring equitable governance, benefit sharing, and land rights.

Governments must:

- Legally recognize customary land tenure and resource rights, including in areas targeted for nature-positive investment.
- Guarantee Free, Prior, and Informed Consent (FPIC)
 or similarly internationally recognized standards for all
 projects affecting Indigenous Peoples.
- Establish frameworks for equitable benefit sharing, including revenue flows from nature markets.
- Involve Indigenous leadership directly in co-designing safeguards and decision-making.

These protections must be embedded in legislation, disclosure standards, and financing agreements.

Rationale:

Respecting Indigenous rights and the rights of local communities who may be affected by the transition to a nature-positive economy reduces legal and reputational



risk for investors, improves project integrity, and strengthens long-term nature outcomes. It also expands the pipeline of credible, community-led nature projects that are essential to scaling high-integrity nature finance.

What this means for financial institutions:

- Require FPIC or similarly internationally recognized standards, land tenure recognition, and equitable benefit sharing as conditions for financing.
- Conduct enhanced due diligence and disclose safeguard policies.
- Prioritize and co-finance Indigenous-led nature projects as resilient, long-term investments.

What this means for policymakers:

- Enact legislation to protect land and resource rights, aligned with FPIC and self-determination norms.
- Involve IPLCs as co-creators of national frameworks for nature markets and NAI.
- Establish grievance mechanisms and legal recourse for IPLCs in nature finance programs.

What this means for MDBs and DFIs:

 Make FPIC or similarly internationally recognized standards and Indigenous rights binding conditions for nature-related finance.

- Provide technical and legal support to governments for implementing Indigenous safeguard frameworks.
- Fund Indigenous-led financial mechanisms (e.g., community-managed trust funds or biodiversity funds) that channel investment directly to IPLC priorities.

Positioning for Scale

Together, these eight recommendations form a coherent agenda to mainstream nature as infrastructure within global finance. They call for standardized PPPN frameworks, integrated accounting systems, scaled financial instruments, and sovereign fiscal reform—supported by MDB mandates, trade and subsidy realignment, and demandside commitments from the private sector. Crucially, equity and Indigenous rights are foundational conditions: secure land tenure, FPIC, and community benefitsharing must be embedded in the legal and financial architecture of nature finance to ensure durable, highintegrity outcomes. By aligning public policy, private capital, and community stewardship, this agenda enables PPPNs to function as replicable platforms that can crowd in private investment at scale, strengthen sovereign resilience, and deliver on both nature and development goals.



Annex 1 Illustrative Case: Guarantee Mechanisms in Emerging Markets: InfraCredit Nigeria

Established in 2017 by the Nigerian Sovereign Investment Authority with GuarantCo and later joined by other partners, InfraCredit provides guarantees on Naira-denominated infrastructure bonds. Its products—including financial guarantees, contingent refinancing guarantees, and annuity PPP guarantees—raise the credit rating of local infrastructure bonds to investment grade. This allows Nigerian pension funds and insurers, traditionally limited to government securities, to invest in long-term infrastructure. InfraCredit has mobilized significant domestic capital, extended loan tenors up to 20 years, and stimulated the development of a local infrastructure bond market. It is now viewed as a replicable model for other EMDEs and could potentially be used in NAI investment.

Annex 2

Illustrative insurance for nature solutions (non-exhaustive)

Exposure	Insurance Solutions	Description	Example
Real nature assets			
Land ecosystems	Forest Insurance	Coverage for losses incurred on forest products, including destruction of trees, pests and disease, debris removal, replanting costs following extreme weather events such as drought or wildfire	Conservation International's Restoration Insurance Service Company (RISCO) for mangroves in the Philippines ⁸⁵
Marine ecosystems	Reef Insurance	Coverage for losses for coral restoration due to hurricanes and tropical storms	TNC's 2024 Hawaii parametric coral reef insurance ⁸⁶ policy
Named species	Wildlife Protection Insurance	Coverage for losses to livestock from attacks by endangered species	UNDP, Government of the Province of Misiones, and Río Uruguay Seguros' 2025 Jaguar Protection Insurance ⁸⁷
Nature markets			
Timber	Forestry Insurance	Coverage for losses to operations and damage to third-party timberlands and forests	TNC and WTW's 2024 California Wildfire Resilience Insurance ⁸⁸
Crop & Livestock	Crop Insurance	Coverage for losses related to changes in yield and price	PepsiCo and Precision Conservation Management (PCM) regenerative soy and corn crop insurance in Illinois, USA ⁸⁹
Nature credits	Carbon Credit Insurance	Coverage for losses incurred from non-delivery of credits, non-compliance with standards or regulations, failure to deliver on carbon removal, political risk, etc. Howden's Carbon Credits Warra Indemnity (W&I) insurance polici in 2024 for a reforestation proje degraded forest lands in Ghana	
Nature-based livelihoo	ds & investments		
Business operations	Business Interruption	Coverage for lost income and essential operating expenses due to named perils	Microinsurance Catastrophe Risk Organisation (MiCRO) parametric develops index-based loss-of-income coverage for vulnerable households due to the impacts of climate change and natural disasters ⁹¹
Legal liability	Environmental Directors & Officers (D&O)	Coverage for cost of compensation claims for wrongful acts, including related nature risks	ClientEarth's lawsuit against Shell's Board of Directors of personal liability for carbon emissions ⁹²
Credit and political risk	Nature Bonds/Loans Insurance	Coverage for non-payment of debts due to issuer default, transfer and convertibility, or other credit events	TNC's 2021 debt-for-nature swaps in Belize, containing a fully guaranteed "Blue Bond" ⁹³

Annex 3

Selected measures to close the protection gap

Risk Control Examples	Risk Financing Examples	
Avoidance: prohibitions on coastal settlements	a. Risk transfer:	
Loss prevention: building retrofitting Loss reduction: flood barriers Separation: resettlement of vulnerable populations Duplication: back-up generators and data centers Diversification: diversified land use and forestry practices	 Private-sector insurance: property catastrophe, business interruption, agro/crop, etc. Macro insurance: insurance of public assets and income Climate-resilient debt clauses Weather derivatives Insurance-linked securities (ILS, e.g., catastrophe bonds) Insurance-linked securities (ILS, e.g., catastrophe bonds) 	
	b. Risk retention:	
	Ex-post budgetary financing	
	Reserve funds	
	Contingent debt facilities	
	Donor grants	

Annex 4

Selected measures to foster insurance deepening

Demand-side Measures	Supply-side Measures
Product bundling (e.g., crop and credit insurance)	Reduce premium taxes
Premium Subsidies	Legal reforms to clarify terms of liability
Compulsory coverage	Risk-based solvency capital requirements
Microinsurance	Lowering licensing barriers to entry
Digital distribution channels (insurtech)	Permit cross-border reinsurance
	Upgrades to building codes

Annex 5 Key Differences Between Case Studies

Dimension	LEAF Coalition	TFFF	Terrasos Habitat Banks	Guangzhou Urban Cooling
Scale	Jurisdictional (national/ subnational)	Landscape and regional fund-level	Site-level ecological assets	City district/precinct (Yongqing Fang; Jiulong Lake district)
Revenue	REDD+ carbon credits	Carbon, biodiversity credits, ecosystem services	Regulatory offsets and voluntary credits	Property leases and rents; carbon-neutral green bond-financed assets; carbon coins incentives; ecological compensation
Private role	Corporate offtakers; potential insurers	Full capital providers: banks, pension funds, insurers, corporates	Project developers, land managers, private investors	Real-estate developer finances, delivers, and operates under BOT; bears added NbS costs
Public role	Donor governments; forest nation policy	Host governments; donors; MDBs	Regulators; environmental licensing authorities	City planning authority orchestrates policy/ programs; integrates NbS standards; facilitates financing/incentives
Finance	Aggregated credit, advance payments	Blended capital stack, guarantees, insurance	Equity/debt; sinking fund; performance-based cash flows	BOT lease cash flows; municipal green bond; incentive platform; potential ecological compensation.
PPP Variant	DRO	DRFO	ROT	BOT / DRFO (urban ecological infrastructure)
Risk Allocation	Moderate: tied to verified outcomes, advance payments	High: shared across capital stack with multiple risk layers	High: performance risk assumed by DeliveryCo; revenue linked to credits	Moderate-to-high private delivery risk (added NbS capex small); policy/regulatory risks managed via integrated planning; revenue anchored by rents with prospective incentive add-ons.
Governance	Central aggregator (Emergent)	SPV/fund structure, multi-stakeholder governance	Private operator under regulation	Municipal coordination with developer(s); city-level instruments (bond, platform)

List of Abbreviations and Acronyms

AIIB — Asian Infrastructure Investment Bank

AXA XL — AXA XL (re/insurer)

BCA — Biodiversity Credit Alliance

BOT — Build-Operate-Transfer

COP30 — 30th Conference of the Parties (UNFCCC)

DFI / DFIs — Development Finance Institution(s)

DFRO — Design–Restore–Finance–Operate

DRC — Democratic Republic of the Congo

DRO — Design–Restore–Operate

DSA / DSAs — Debt Sustainability Analysis / Analyses

EBRD — European Bank for Reconstruction and Development

EMDEs — Emerging Markets and Developing Economies

ERPA — Emission Reductions Purchase Agreement

ESG — Environmental, Social and Governance

EU — European Union

FI / FIs — Financial Institution(s)

FPIC — Free, Prior and Informed Consent

FX — Foreign Exchange

GBF — Kunming-Montreal Global Biodiversity Framework

GBIF — Global Biodiversity Information Facility

GDP — Gross Domestic Product

GEMs — Global Emerging Markets Risk Database

GEP — Gross Ecosystem Product

GGG — Green Guarantee Group

GHG — Greenhouse Gas

GRI — Global Reporting Initiative

G7 / G20 — Group of Seven / Group of Twenty

IDB — Inter-American Development Bank

IDB Invest — Private sector arm of the Inter-American Development Bank Group

IFIs — International Financial Institutions

ILS — Insurance-Linked Securities

IMF — International Monetary Fund

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

IPCC — Intergovernmental Panel on Climate Change

IPLC / IPLCs — Indigenous Peoples and Local Communities

ISSB — International Sustainability Standards Board

KPI / KPIs — Key Performance Indicator(s)

LEAF — Lowering Emissions by Accelerating Forest Finance (Coalition)

MDB / MDBs — Multilateral Development Bank(s)

MiCRO — Microinsurance Catastrophe Risk Organisation

MRV — Monitoring, Reporting and Verification

NAI — Nature as Infrastructure

NCA — Natural Capital Accounting

NDBs — National Development Banks

NbS — Nature-based Solutions

OECD — Organisation for Economic Co-operation and Development

PES — Payment for Ecosystem Services

PPP / PPPs — Public-Private Partnership(s)

PPPN / PPPNs — Public-Private Partnership(s) for Nature

REDD+ — Reducing Emissions from Deforestation and forest Degradation (plus conservation, sustainable management of forests, and enhancement of forest carbon stocks)

ROT — Restore-Operate-Transfer

RTO — Restore-Transfer-Operate

SEEA-EA — System of Environmental-Economic Accounting – Ecosystem Accounting

SBB — Swiss Federal Railways (Schweizerische Bundesbahnen)

SLB — Sustainability-Linked Bond

SLI — Sustainability-Linked (Re)Insurance

SLL — Sustainability-Linked Loan

SPV — Special Purpose Vehicle

TCFD — Task Force on Climate-related Financial Disclosures

TCX — The Currency Exchange Fund

TFFF — Tropical Forest Forever Facility

TNC — The Nature Conservancy

TNFD — Taskforce on Nature-related Financial Disclosures

UNCBD — United Nations Convention on Biological Diversity

UNEP — United Nations Environment Programme

UNEP-FI — United Nations Environment Programme – Finance Initiative

UNESCO — United Nations Educational, Scientific and Cultural Organization

UNFCCC — United Nations Framework Convention on Climate Change

US / USD — United States / United States Dollar

WTW — Willis Towers Watson

WTO — World Trade Organization

D&O — Directors and Officers (liability insurance)

W&I — Warranty and Indemnity (insurance)

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