DATA BRIEF | JUNE 2025

Blended Finance for Nature-Based Solutions

HIGHLIGHTS

- Nature-based solutions (NbS) are efforts to protect, manage, or restore natural ecosystems to address societal challenges, including the negative impacts of climate change. While these solutions explicitly rely on nature to drive revenues and impact, they are distinct from those solutions that are solely 'nature-derived', such as solar power or hydro electricity.
- NbS are critical to not only increasing climate resilience, but could also contribute to an estimated 30% of global mitigation efforts required to achieve the Paris Agreement.
- Blended finance within NbS transactions is limited. Convergence's Market Data has recorded 48 blended transactions over all time with a total value of $4.7 billion.
- Blended NbS transactions have a smaller median deal size of $40.8 million compared to $69.9 million in the broader climate market, due to the nascency of the sector and the often bespoke design of these deals.
- NbS transactions primarily rely on concessional debt/equity and technical assistance (TA). TA is largely used to develop measurement tools and key performance indicators to support the valuation of nature and the monetary returns of NbS projects.
- Funds (38% of transactions) and bonds/notes (23% of transactions) are the most frequently used vehicles in blended NbS transactions.
- Latin America and the Caribbean (LAC) has the largest portion of NbS transactions (35% of transactions), driven by the region's vast environmental landscape and biodiversity, and its vulnerabilities to habitat fragmentation and degradation.
- The primary direct beneficiaries of NbS are smallholder farmers (61% of transactions) due to the sector's strong focus on climate-resilient agriculture and agroforestry transactions.
- Challenges in mobilizing private investors to participate in blended NbS transactions include the nascency of the market, difficulties in defining nature as an asset class, and the long time horizon required for returns on nature-based investments.
- Opportunities to increase private investment in the sector include using various concessional instruments to build a pipeline of bankable transactions, using concessional capital to add NbS elements to existing asset classes and align transactions with recognizable standards, and providing patient capital through concessional debt and equity instruments.

CONVERGENCE
BLENDING GLOBAL FINANCE

Introduction

With the global annual investment gap to safeguard the natural environment exceeding $700 billion, there is a critical and urgent need to scale up financing for NbS. Public and philanthropic capital alone cannot meet this challenge. Currently, public funds account for a total of 82% of the annual financing flows to NbS, with private finance accounting for the remainder.

The consequences of failing to protect the natural environment are far reaching; the economic fallout alone should raise concerns for private investors globally. It is estimated that $44 trillion of economic value generation – more than half of the world's total gross domestic product – is moderately or highly dependent on nature and its services. Moreover, around 72% of non-financial corporations (NFCs) are highly dependent on at least one ecosystem service, and nearly 75% of corporate bank loans are granted to NFCs with a high dependency on at least one ecosystem service.

Beyond safeguarding against these economic consequences, there are also benefits to investing in NbS. For instance, a global assessment found that benefit-cost ratios for protecting mangroves for coastal protection were estimated at more than five-to-one. There are other ways NbS can create additional investment opportunities in related industries. For example, 30% of the world's reefs are of value for tourism, with a total annual value estimated at nearly $36 billion.

NbS are also critical in the fight against the negative impacts of climate change. According to the United Nations Environment Programme, by working with nature, there is the potential to reduce emissions by up to 11.7 gigatons of carbon dioxide equivalent per year by 2030. The International Union for Conservation of Nature (IUCN) further found NbS could contribute to an estimated 30% of global mitigation efforts required to achieve the Paris Agreement.

Not only are NbS important to mitigation efforts within climate change, but they can also be critical within adaptation initiatives. In an assessment of NbS in Sub-Saharan Africa, for example, the World Resources Institute found that these projects are typically designed to enhance climate resilience and reduce disaster risk by improving water quality, supply, and flood control, while also delivering co-benefits such as job creation, biodiversity gains, public health improvements, and stronger community cohesion.

NbS are defined as efforts to protect, manage, and/or restore ecosystems to address societal challenges like food insecurity, climate vulnerability, and public health. These solutions recognize that healthy ecosystems are critical for both natural systems and sustainable economic development.

Convergence recognizes NbS alignment if nature explicitly drives revenue or impact within the transaction. This can, for example, include a fund that invests in projects that focus on restoring ecosystems, reforestation transactions with revenue from land use improvements through carbon credits, or sustainable agriculture that makes biodiversity conservation an integral part of its strategy. It excludes, however, 'nature-derived' transactions such as solar power or hydroelectricity.

Convergence has recorded 48 blended NbS transactions over all time, totaling $4.7 billion in aggregate financing. This brief analyzes how blended finance has been used to date to support NbS transactions, presenting insights from an analysis of transactions within Convergence's Market Data and interviews conducted with industry stakeholders.

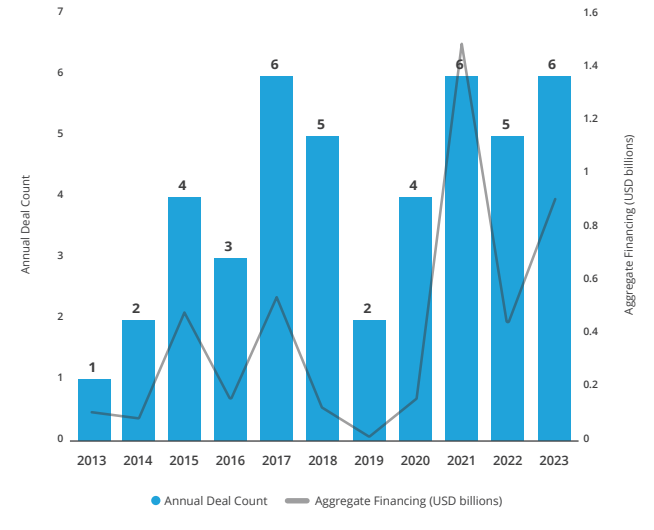

Figure 1: Annual deal count and aggregate financing of blended transactions for NbS within Convergence's Market Data, 2014-2023[1]

1 Note 2024 is not included given the current dataset does not yet reflect the full extent of market activity in that year. This is due to prevailing disclosure practices among market participants, where many closed deals have yet to be made public, and several transactions with concessional commitments are still in the process of mobilizing private capital before being classified as blended finance.

Blending for NbS: Transaction Analysis

NBS TRANSACTIONS ARE FOCUSED IN AGRICULTURE

The majority of NbS transactions are directly related to agroforestry and climate resilient or sustainable agriculture (55% of transactions for each). Agroforestry, which integrates trees with crops or livestock systems, is an example of an NbS that generates multiple co-benefits, including carbon sequestration, soil fertility enhancement, and diversified rural incomes. These transactions, however, often face barriers to success. Blended finance can play a pivotal role in scaling agroforestry efforts by aligning public and private interests around long-term environmental gains.

One example of how blended finance was used in an agroforestry transaction is the eco.business Fund, which provides debt financing to local financial institutions and businesses engaged in priority sectors including agriculture and forestry. The $373 million fund, launched in 2015, is comprised of two sub-funds: one focused on LAC and the other on Sub-Saharan Africa. Each sub-fund possesses a multi-layer structure, comprising senior notes, subordinated notes, senior shares, and junior shares, consisting of concessional debt and equity.

Sustainable agriculture and NbS are also intricately linked. The United Nations Food and Agriculture Organization describes NbS as cost-effective approaches that can strengthen the resilience of farming and food systems, help mitigate climate change impacts, and contribute to ecosystem restoration. IUCN further found that many sustainable agriculture approaches place biodiversity at the core of their theoretical basis, and that the focus of these approaches is not only on preserving, but also enhancing biodiversity.

Convergence Market Data provides several examples of how blended finance can support transactions that are focused on both sustainable agriculture and NbS. For example, Café Selva Norte, a Peruvian project that seeks to mitigate and reverse land degradation resulting from coffee production and lessen smallholder coffee farmer exposure to the effects of climate change, used TA to help assuage investor risk concerns and maximize potential impact by building cooperative capacity. Specifically, the TA helped support the introduction of more climate-resilient bean varieties and fund value chain commercialization studies.

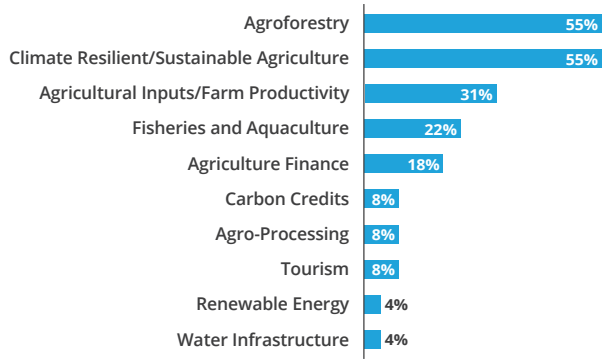

Figure 2: Blended NbS transactions by sub-sector

NBS TRANSACTION SIZES TEND TO BE SMALLER THAN THOSE IN THE BROADER BLENDED CLIMATE MARKET

NbS transactions typically have a smaller deal size than the broader climate market. The median deal size of NbS transactions is $40.8 million, compared to $69.9 million for all climate transactions, with 23% of transactions between $10-$25 million in deal size.

One reason transactions in the NbS sector may be smaller compared to the overall climate market is likely due to the nascency of the market. **Julia Langenegger**, Senior Associate at Clarmondial, discusses the challenges investors face, stating:

> *"The business and investment case for Payments for Ecosystem Services (PES), notably for biodiversity and climate resilience, is often context specific and can be difficult to standardize globally. For example, while there may be relatively well-accepted methods enabling payments for the mitigation of greenhouse gases (carbon finance), including under national and international approaches, this is not the case for watershed health or biodiversity. This means that local and sector knowledge, as well as relevant networks, are needed to build actionable business and investment cases."*

Moreover, these transactions are more complex and bespoke as they are often highly location-specific. This requires active management, intensive community engagement, and potentially high transaction costs associated with specialized assessments and expertise to accurately quantify and measure environmental and financial returns. Findings from the European Investment Bank (EIB) demonstrate that NbS transactions cover less land mass and attract lower capital investments compared to traditional climate initiatives.

Discussing some of the challenges associated with smaller transactions, **Oliver van Bergeijk**, Head of Equity and Funds Division at KfW, noted:

> *"I do see that the market is probably too fragmented. We need to get away from the very small biodiversity related funds to larger platforms with similar structures, where asset managers could integrate and bring in their money more easily."*

Alongside these attributes, the maturity period is often longer than traditional investments, as returns are typically tied to natural growth cycles and environmental restoration. The extended payback period may deter investors from committing large amounts of capital.

The largest NbS transaction recorded to date is Climate Investor 2. Active in Sub-Saharan Africa, Asia, and LAC, the $875 million fund targets opportunities in the water, sanitation, and oceanic infrastructure and preservation sectors. The fund received an investment-stage grant from the Green Climate Fund, along with concessional, first-loss equity within its capital stack that helped align commercial investor risk with expected returns.

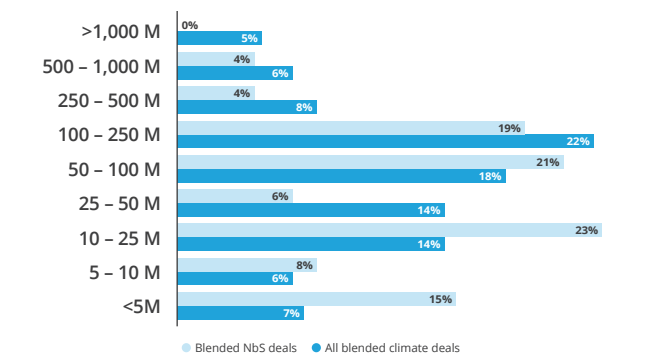

Figure 3: Blended NbS transactions vs. all blended climate transactions by size (USD)

FUNDS AND BONDS/NOTE ARE THE MOST FREQUENTLY USED VEHICLES IN BLENDED NBS TRANSACTIONS

Funds and bond/notes are more represented in NbS transactions (38% and 23% of blended NbS transactions respectively), compared to all climate deals in Convergence's Market Data (24% and 8% respectively). The preference of funds as an investment vehicle in the NbS market can likely be attributed to a fund's ability to provide risk diversification for investors and better alignment with longer investment periods often required for NbS deals. **Nicolas Couture-Miambanzila**, Natural Capital Advisor at Bamboo Capital Partners and Palladium, notes that funds can help de-risk NbS investments by diversifying both business models and geographies of projects. He explains:

> *"Palladium's pipeline is across emerging countries around the world, meaning that if there is an adverse event in Brazil, maybe Ecuador's not touched the same, and all the more Africa or Southeast Asia."*

Given the generally longer maturity periods of NbS transactions, funds may also offer a more suitable investment vehicle to diversify investment timelines. This may also help explain why direct investments in projects (18%) and companies (12%) are underrepresented in the NbS sector compared to the broader climate market.

Blue and green bonds have also emerged as a popular vehicle for NbS. These debt instruments, typically issued by national governments or large financial institutions, are perceived as lower risk due to their structured repayment mechanisms and credit enhancements, making them more attractive to institutional investors. One of the largest NbS bonds is the $364 million Belize Blue Bond for Conservation, which launched in 2021 as part of The Nature Conservancy (TNC)'s Blue Bond for Conservation program. The bond allowed Belize to repurchase its Eurobond debt at a discount, redirecting the savings towards marine conservation projects. Issued by TNC and structured by Credit Suisse, the bond received political risk insurance from the United States (U.S.) International Development Finance Corporation (DFC) to improve its credit profile, along with a series of grant funding. The grants helped mobilize participation from a consortium of institutional investors.

Lastly, impact bonds may be particularly well-suited to NbS because they enable the mobilization of upfront capital for long-term interventions, while tying returns to measurable outcomes, thereby aligning financial incentives with the transaction's success. In an impact bond, private sector investors provide upfront capital toward a development outcome, and donor governments or philanthropic organizations commit to reimbursing them with additional returns, contingent on the achievement of pre-determined impact outcomes over the life of the program.

Ashley Camhi, Ph.D., Director of Innovative Finance at the Wildlife Conservation Society (WCS), discusses the decision of the HIFOR team to create an outcome bond:

> *"We've created the HIFOR unit—a hectare of well-maintained, high integrity tropical forest designed to be financed for the suite of climate and ecosystem services it provides. On the corporate side, demand is still limited, although we expect that to change. It's difficult to make a compelling case to the private sector that these forests are integral to their supply chains—whether that's through hydropower reliability, rainfall-dependent agriculture, or commodity production.*

We're starting to map those connections—linking HIFOR areas to supply chains and flagging key companies whose operations rely on rainfall generated by these biomes. Historically, these areas have relied on philanthropy and minimal public funds, which fall far short of what's needed to secure their long-term protection."

She continues:

"In that vacuum, we took a step back and said how do we use different financial structures that already exist to fund it? It actually has been more interesting to the banks to do an outcome bond, because it really wraps in everything about the ecological integrity of an area — it's the water services, it's the biodiversity, it's the carbon. Outcome bonds are a great way to start to galvanize this market."

Camhi explains that the outcome bond model has allowed WCS to provide financing for conservation to meet the key performance indicators over the bond period. At the end of the bond, the HIFOR unit certificate has been generated, which could then be sold to finance additional conservation.

Through this method, the outcome-bond market can be a stepping stone to an off-taker model by driving initial demand for the HIFOR units. Her team is continuing to create science-backed business cases to link private company supply chains directly to natural resources to grow the demand.

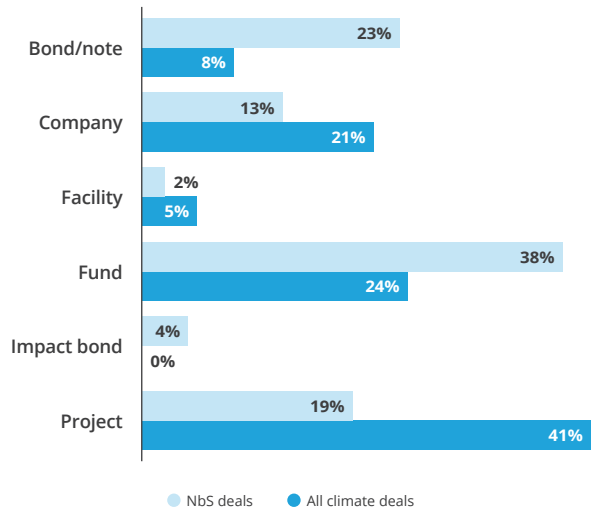

Figure 4: Blended NbS transactions vs. all blended climate transactions by vehicle type

BLENDED NBS TRANSACTIONS USE HIGHER LEVELS OF TA THAN CLIMATE BLENDED TRANSACTIONS

In NbS transactions, the two most commonly leveraged blending instruments are concessional debt/equity (79%) and TA funds (46%), which are deployed at higher levels than in the broader climate blended finance market.

TA can be used within NbS to make transactions more familiar and attractive to private investors. The NbS market lacks standardized, quantifiable outcomes and generates a range of co-benefits that are often difficult to monetize as revenue streams. When talking about biodiversity projects specifically, Langenegger outlines some challenges associated with investing in the sector, noting:

"Nature outcomes are inherently context-specific, so cannot easily be standardized. For example, there are many nature-related indicators and methodologies, and we assessed the utility of over 100 potential nature-related indicators. While this work can be overwhelming, the good news is that a scientific approach to prioritizing context-specific nature indicators can be developed which we did together with Stockholm Environment Institute (SEI). This work resulted in the development of a "nature tool" that allows us to identify and prioritize investments where positive nature outcomes can be realized and to tailor the investments to contexts where there is a business case that rewards positive nature outcomes."

TA can help mitigate this barrier by providing funding to create specialized measurement and verification assessments to quantify and accurately capture the environmental and monetary returns of NbS projects. TA also improves NbS project transparency, which can improve the credibility of these initiatives and build investor confidence.

This type of funding can also be critical to ensuring that there is a high level of community involvement within NbS transactions, which is often a proven requirement for the

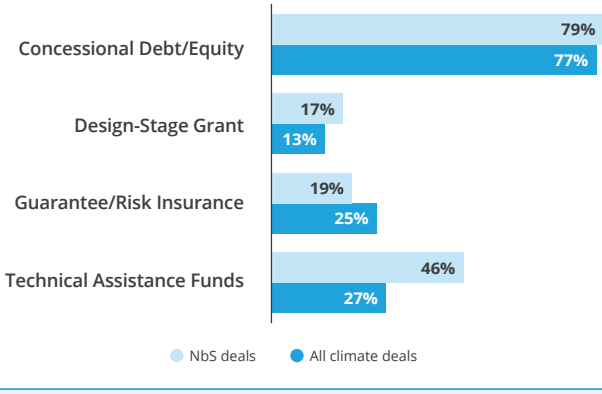

Figure 5: Blended NbS transactions vs. all blended climate transactions by archetype

transaction's success. Local communities have the distinct advantage of understanding unique biomes where these projects unfold, and TA, along with design-stage funding, can ensure the appropriate integration of this knowledge and provide training to build comfort with and awareness of the project locally.

An example of a transaction which leveraged TA to raise capital is Forest Carbon Indonesia. The company, which focuses on restoring degraded wetland forests, received a TA grant from the U.S. Agency for International Development (USAID) to conduct due diligence on the enabling environment and policy frameworks for carbon offset production. TA was also used to design the company's environmental and social management system. USAID's participation, alongside grant funding from the Dutch Fund for Climate and Development, helped Forest Carbon mobilize $11 million from the AXA Impact Fund for wetland restoration projects in Indonesia.

Guarantees, which are underutilized in NbS transactions compared to the broader climate blended finance market (19% compared to 25%, respectively), can also be a catalytic instrument in attracting private capital to the sector. Given the barriers to establishing reliable revenue streams, guarantees can be leveraged to provide a more secure environment to pilot innovative measurement approaches.

In the wider climate blended finance market, Convergence has noted that guarantee usage has recently increased; the number of transactions featuring guarantees or risk insurance rose by 185% from 2022 to 2023. With growing evidence demonstrating the mobilization potential and capital efficiencies of these tools, there are increasing opportunities to leverage their use in NbS transactions.

LAC LEADS IN BLENDED NBS TRANSACTIONS, WITH COLOMBIA RECORDING HIGHEST NUMBER OF DEALS

NbS transactions captured by Convergence's Market Data have primarily targeted Colombia (7 deals, $717 million aggregate financing), followed by Indonesia (6 deals, $259 million), and Mexico (6 deals, $221 million).

In Colombia, NbS has become more of a priority given its ability to assist in reaching the country's Nationally Determined Contribution goals, mainly through reduced deforestation efforts, forest restoration, and the integration of trees into agricultural landscapes initiatives. In the country's mitigation targets, implementing NbS solutions can help to mitigate up to 340 million tonnes of carbon dioxide equivalent per year.

Meanwhile, Ecuador has the highest financing level for blended NbS transactions, totaling $1.2 billion. The largest blended NbS transaction in Ecuador and one of the largest captured by Convergence's Market Data is the Ecuador Debt-for-Nature Swap. The bond, structured by Credit Suisse, converted $1.6 billion of Ecuador's international bonds into a $656 million blue bond. Over the next 18 years, the bond is expected to generate over $450 million for long-term conservation in the Galápagos Islands, through debt savings and contributions to the Galápagos Life Fund. The blue bond received political risk insurance from DFC, an $85 million guarantee from the Inter-American Development Bank (IDB), and additional coverage from 11 private insurers.

Unsurprisingly, the LAC region accounts for the largest share of blended NbS transactions at 69% and aggregate financing at 78%. The prominence of deals in the region is due to the vast environmentally rich landscape, home to 26% of the world's mangrove forests, half of its tropical forests, and extensive biodiversity. However, these ecosystems are increasingly threatened by habitat fragmentation, overexploitation of natural resources, and environmental degradation. NbS projects are emerging as a positive solution to help mitigate these risks while delivering additional co-benefits to communities and ecosystems across the region.

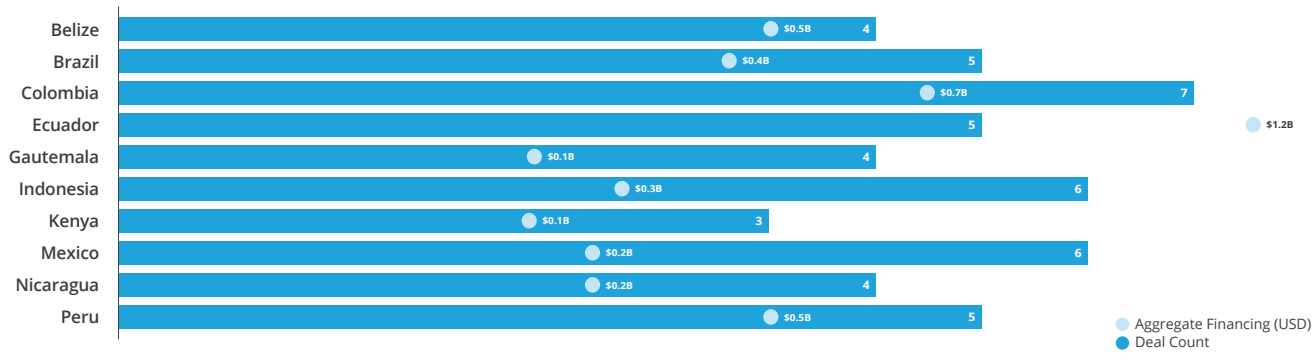

Figure 6: Blended NbS transactions by count and aggregate financing by country, top 10 by deal count

Investor Analysis

FOUNDATIONS/NON-GOVERNMENTAL ORGANIZATIONS AND IMPACT INVESTORS ARE THE MOST ACTIVE DEAL SPONSORS IN BLENDED NBS TRANSACTIONS

Foundations/non-governmental organizations (NGOs) play a leading role in sponsoring blended NbS transactions, significantly outsizing their participation in the broader climate finance market (28% compared to 6%, respectively). Impact investors also emerge as dominant sponsors, contributing to 21% of NbS transactions, slightly above their representation in climate finance deals (19%). The overrepresentation of these actors is likely because of their core mandates, which often prioritize long-term environmental and social impact over immediate financial returns.

As **Paul Schüller,** Chief Executive Officer of Fairventures Agroforestry, discusses, for NbS projects to succeed environmentally, they must start with smart and inclusive social strategies, stating:

> *"A key condition for successfully implementing the environmental components of Nature-based Solutions (NbS) projects is to always prioritize the income needs of local communities. Without a minimum and stable level of income, there is a high risk that environmental interventions will fail, as local communities are unlikely to prioritize their maintenance and protection."*

Development finance institutions (DFIs) and multilateral development banks (MDBs) are underrepresented as deal sponsors in the sector, participating in only 6% of transactions, compared to 11% in the overall climate market. Their limited engagement may be attributed to the nascency of the market and lack of attention to the financial value of nature-based assets within their investment portfolio. Similarly, commercial investors are significantly underrepresented in the sector, sponsoring only 19% of deals, far below their 45% participation in the overall climate finance market. This reluctance is likely due to the unclear return potential and longer-term investment periods required by NbS transactions.

Unlike conventional climate finance investments, the lack of standardized and clear revenue streams in NbS misaligns with private investors' fiduciary mandates.

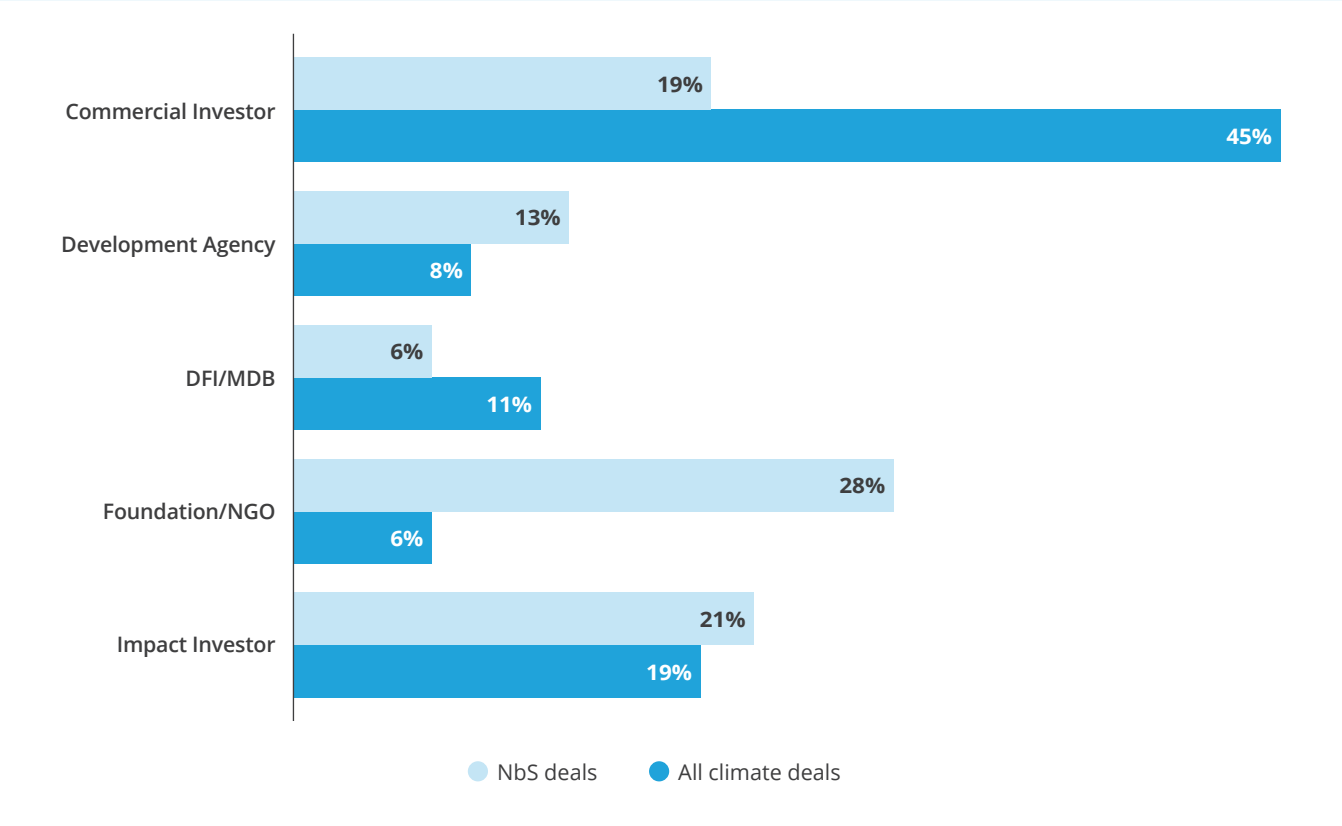

Figure 7: Blended NbS transactions vs. all climate blended transactions by deal sponsor organization type

THE NETHERLANDS DEVELOPMENT FINANCE COMPANY AND EIB ARE TOP COMMERCIAL INVESTORS IN BLENDED NBS TRANSACTIONS

The most frequent providers of commercial capital in blended NbS transactions are the Netherlands Development Finance Company (FMO, 11 deals), EIB (7 deals) and Inter-American Development Bank (IDB, 7 deals), followed by DFC (4 deals).

In recent years, FMO has strengthened its focus on NbS within its mitigation, adaptation, and resilience projects, as outlined in its Climate Action plan. The bank also committed to developing a €1 billion forestry portfolio by 2030, which leverages blended finance to support biodiversity and agri-business initiatives. Additionally, FMO manages the £152 million Mobilising Finance for Forest program in partnership with the UK government. The program aims to reduce deforestation and unsustainable land use while simultaneously mobilizing private capital for sustainable forestry and land use projects.

One example of a commercial investment by FMO is in Miro Forestry, a West African afforestation company that secured a $56 million blended financing package in 2020. The financing supports Miro's efforts to expand its forestry plantations on degraded land and improve sustainable timber supply to local markets in Ghana and Sierra Leone. FMO provided both concessional and commercial capital to the company, initially through concessional design-stage capital through the MASSIF Fund, followed by senior commitments of $12.5 million in 2019 and $11.5 million in 2020.

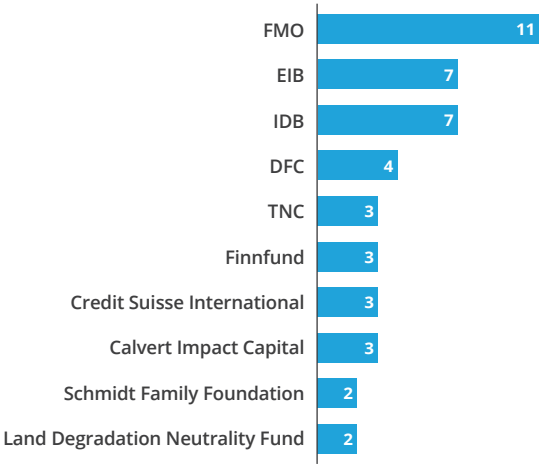

Figure 8: Top 10 commercial investors in blended NbS transactions by commercial capital commitments

USAID AND GLOBAL ENVIRONMENT FACILITY ARE THE DOMINANT CONCESSIONAL INVESTORS IN BLENDED NBS TRANSACTIONS

In blended NbS transactions, 49% of concessional commitments come from development agencies, 28% from foundations and NGOs, and only 13% from DFIs and MDBs. USAID is the dominant concessional actor, making 12 commitments. They are followed by the Global Environment Facility (GEF) with 12 commitments, and IDB with 8 commitments. GEF's active role as a concessional actor aligns with its core mandate to fund initiatives in emerging markets that generate global environmental benefits, particularly in biodiversity, climate change, and land degradation.

A recent NbS transaction leveraging a concessional investment from GEF is the Wildlife Conservation Bond, a $150 million, five-year, outcome-based bond which launched in 2022. The bond ties investor returns to conservation success, specifically the growth rate of black rhino populations in South Africa. In the bond, GEF acts as the outcome funder, committing to pay investors if conservation efforts are successful. The bond, one of the first of its kind, would not have been possible without GEF's catalytic participation in financing the outcome payments.

Recent cuts to USAID's foreign development contracts and official development assistance under the new U.S. administration may impact the availability of concessional capital for NbS. The NbS sector remains reliant on concessional commitments given its nascency and perceived investment risks. As demand and familiarity with NbS continue to grow, the need for concessional capital remains critical. The evolving aid landscape presents an opportunity for other capital providers, particularly philanthropic capital providers and foundations with environmental mandates, to step in and help fill the gap left by traditional aid agencies like USAID.

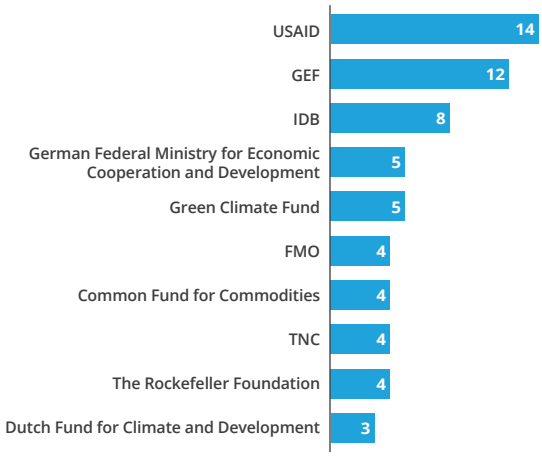

Figure 9: Top 10 concessional investors in blended NbS transactions by concessional capital commitments

Impact Analysis

THE PREDOMINANT DIRECT BENEFICIARIES OF NBS TRANSACTIONS ARE SMALLHOLDER FARMERS AND LOW-INCOME CONSUMERS

The largest beneficiaries of NbS transactions are smallholder farmers (61%) and low-income consumers (50%).

The predominance of smallholder farmers as a primary beneficiary is likely because over half of all deals focus on climate-resilience/sustainable agriculture (54%) and agroforestry (54%), which offer significant environmental and economic benefits. Sustainable agricultural practices improve biodiversity, increase native species populations, and stabilize soil levels, which benefit agriculture and, thus, farm productivity. Similarly, sustainable agroforestry initiatives increase crop diversity, improve soil health, support the restoration of natural habitats, and strengthen productivity and biodiversity. These improved productivity outcomes generate increased farmer revenue streams and greater food security. Schüller also emphasizes the important role smallholder farmers in the Southeast Asian NbS market, noting:

> *"The 60 million smallholder farmers in Southeast Asia account for around 80% of the local food production. At least 50% of these smallholder farmers live below the poverty line, mainly because of the highly fragmented and distorted supply chains involving many layers of middlemen."*

He explains that smallholder farmers are often at the very bottom of these value chains, and without proper support, the entire market structure risks collapsing. Schüller recommends supporting these farmers by, after strengthening the cooperatives the farmers are members of, acting as a reliable offtake partner to the cooperatives. This enables cooperatives to start paying 'fair' prices to the farmers for their produce. This can bring the necessary stability and improve market access.

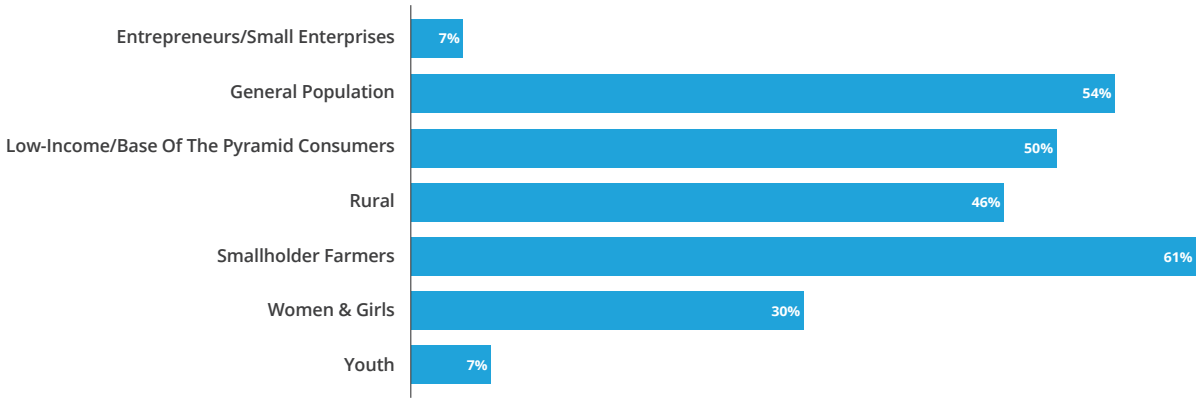

Figure 10: Blended NbS transactions vs. all blended climate transactions by direct beneficiary

SUSTAINABLE DEVELOPMENT GOALS 2 (ZERO HUNGER) AND 13 (CLIMATE ACTION) ARE HIGHLY TARGETED IN NBS TRANSACTIONS

The most commonly targeted Sustainable Development Goal (SDG) for blended NbS transactions is SDG 13 (Climate Action), accounting for 85% of deals captured by Convergence's Market Data, significantly higher than the 33% in the broader blended climate market. SDG 13 largely focuses on actions regarding adaptation financing. While NbS can have co-benefits for both mitigation and adaptation, a higher proportion of NbS have an adaptation focus than the general climate blended finance market. Meanwhile, a large share of the broader climate market are energy-related transactions, which are generally categorized under SDG 7 (Affordable & Clean Energy).

Another targeted goal is SDG 2 (Zero Hunger), representing 76% of all NbS deals in Convergence's Market Data, also higher than the broader climate market, which targets the goal in only 24% of transactions. NbS offers a solution to reduce food insecurity. Initiatives such as sustainable agriculture, agroforestry, and soil restoration promote food security by improving soil health, increasing crop resilience, reducing the use of harmful pesticides, and protecting ecosystems. These outcomes support better sustainable agriculture practices, improving the quality and quantity of food produced.

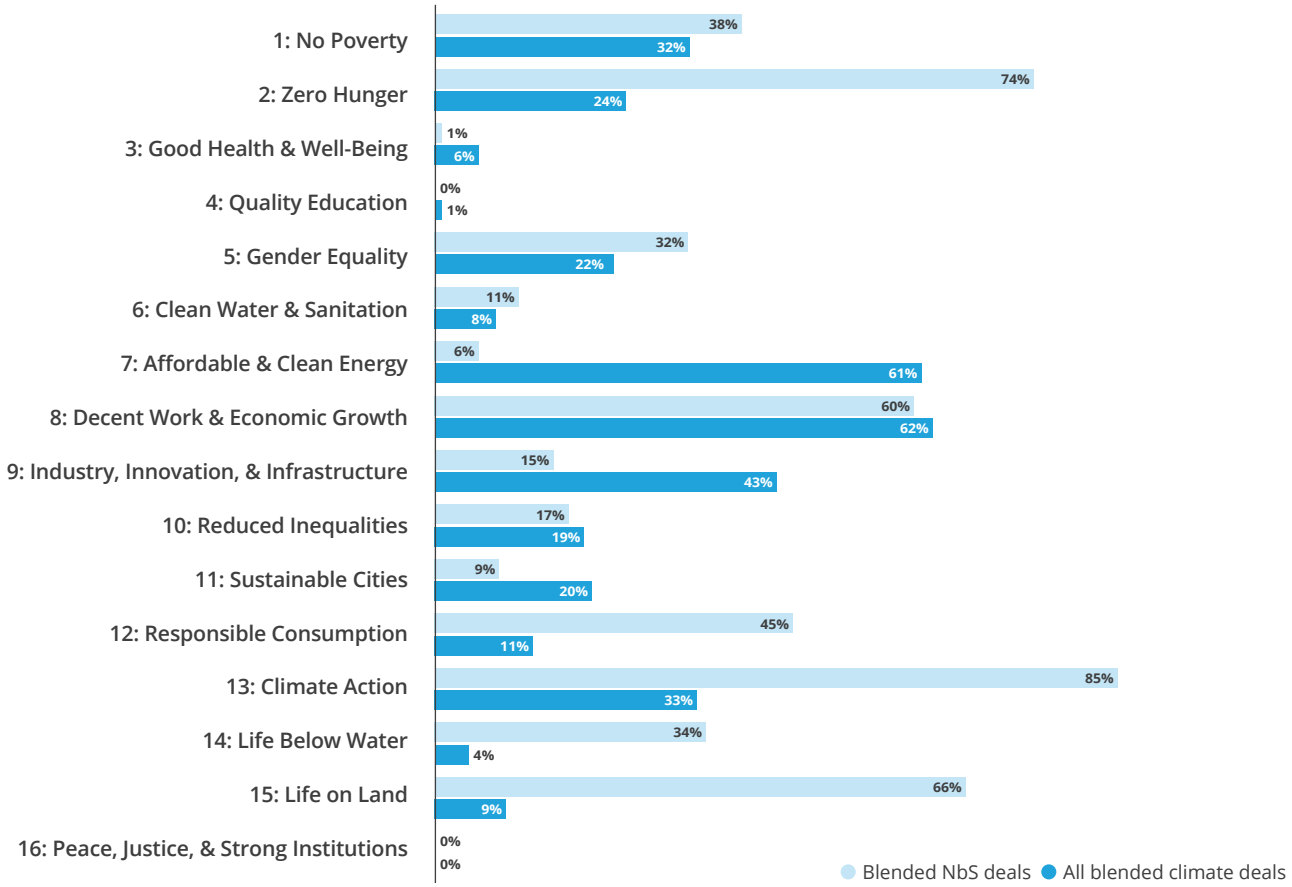

Figure 11: Blended NbS transactions vs. all blended climate transactions by SDG-focus

MOST BLENDED NBS TRANSACTIONS DO NOT HAVE A GENDER FOCUS

The majority of NbS transactions lack a gender focus (68%), with only 32% of deals having some gender consideration. Notably, no blended NbS transactions captured in Convergence's Market Data have an intentional gender lens. Interestingly, however, Figure 10 demonstrates that women and girls are identified as direct beneficiaries in 30% of NbS deals, suggesting these transactions can generate positive gender outcomes, even if gender was not an intended focus in the initiative's design.

One blended NbS transaction that demonstrates some gender consideration is EcoEnterprises Fund III (EcoEIII). The $80 million fund launched in 2014 focuses on providing growth capital and post-investment TA to small- and medium-sized enterprises (SMEs) with sustainable business models and practices. EcoEIII focuses on SMEs in Central and South America, regions home to some of the world's most biodiverse ecosystems, to maximize environmental impacts.

The fund has some form of gender focus by committing at least 15% of its capital to women-owned or women-led SMEs. It also tracks the representation of women in leadership roles across its portfolio companies to improve the gender balance in senior management positions at these firms. The fund received a plethora of equity investments from a consortium of DFIs, along with a TA facility carried over from the previous fund, and a TA grant from IDB, which helped mobilize private sector contributions.

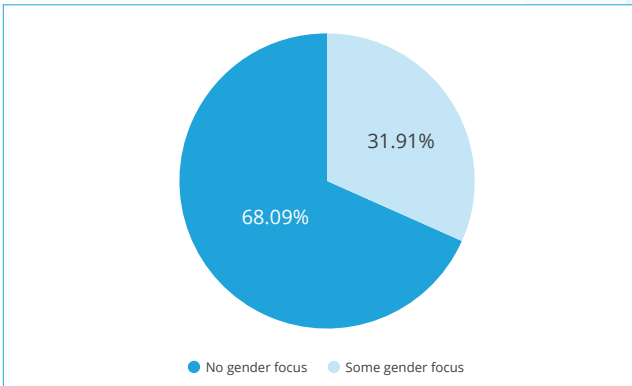

Figure 12: Blended NbS transactions vs. all blended climate transactions by gender-focus

Reflections

In our conversations with practitioners, several themes became apparent regarding the challenges and opportunities for using blended finance in NbS.

CHALLENGE

Attracting private investors to a nascent market

A predominant barrier in mobilizing private investors to NbS is the nascency of the market itself. Schüller explains:

> *"For private investors in the NbS space, similar to renewable energy three decades ago, it's still extremely early days and we have a long way to go."*

Schüller goes on to outline that the time-intensive nature of working with local communities to develop sustainable and effective NbS initiatives and the time it takes to generate substantial revenues contribute to market immaturity.

As the NbS market is in its early development stage, many emerging products are managed by first-time investment managers in the space or new entities lacking the traditional track record required by institutional investors. These often involve smaller ticket sizes and higher risk profiles, limiting the appeal to private investors.

Further, the nascency in the market is attributed to a knowledge gap that continues to disincentivize private sector participation. EIB reports that a lack of information and capacity among practitioners and policymakers poses difficulties when building the market. This is further compounded by a lack of completed NbS projects to inform future investment decisions. **William Howe**, Junior Partner at Big Valley, discusses how this uncertainty influences private investors to invest in the space:

> *"If [NbS projects] are going to succeed and be a valuable tool in climate finance, people need to have confidence that the money is doing its intended job and having real impact, both social, environmental, etc."*

The nascent nature of the NbS market is also partly due to the highly localized and tailored structuring of existing NbS investments. The required specificity of these projects to address unique environmental issues complicates standardization of monitoring and the creation of key performance indicators in the sector. This variability, partnered with the lack of completed investments, makes demonstrating the viability and scalability of the industry to private investors difficult.

This challenge is further exacerbated by scrutiny of the carbon markets, where concerns about project legitimacy and greenwashing have been raised. Howe notes, when discussing inhibiting factors for large scale private capital flows to the NbS sector:

> *"They [private investors and institutional investors] are not going to pull the trigger on the purchase of tens or hundreds of millions on offsets they think will ultimately be valueless or have a negative impact on the company's reputation, so things such as methodologies and the measurement, reporting and verification of tangible climate/socio-economic impact need to be clear and verifiable before we start to see really large capital flows."*

He continues:

> *"Carbon finance can be a very effective tool for channeling capital to these projects, but in the last several years there's been immense scrutiny and a series of rather damning articles written on the shortcomings of some NbS solutions, specifically Reducing Emissions from Deforestation and Forest Degradation REDD+[1] projects. Much of this negative publicity has focused on crediting methodologies that are sufficiently robust, abuse of accounting techniques and misattribution or overestimation of the carbon impact of projects, as well as in some cases insufficient benefit-sharing of project revenues with local communities implicated in project execution."*

Likewise, **Dylan McCall-Landry**, Senior Director, Sustainable Finance at the Environmental Defense Fund, has seen challenges within the voluntary carbon market:

> *"There's been significant volatility in the voluntary carbon markets over the last several years. These are still relatively illiquid markets with real challenges with transparency around pricing and deal structure."*

Moreover, the enabling environment for the NbS sector as a whole is still developing. There is currently a lack of supportive policies, financial incentives, regulations, and industry standards to guide investments. While there are advancements being made in the European Union (EU), through the EU Nature Restoration Regulation and EU Regulation on Deforestation-Free Products these policies do not encompass the entire NbS sector and have faced implementation delays.

2 REDD+ projects stand for Reducing Emissions from Deforestation and Forest Degradation. The "+" refers to additional forest-related activities. These projects are part of countries' climate mitigation strategies under the UN Framework Convention on Climate Change.

OPPORTUNITY

Using concessional instruments to build a pipeline of bankable transactions

Using different concessional instruments such as TA, design-stage grants, and results-based financing can help build a pipeline of bankable transactions and support the growth of the NbS market. These instruments can generate the necessary evidence needed to standardize project design, implementation approaches, and impact measurement to improve the viability of the market and investors confidence. Langenegger discusses the value and necessary role of grant funding when improving the viability of NbS, saying:

> *"There are two ways in which TA is helpful: (1) Pre-investment readiness: There are many opportunities to integrate NbS in specific deals to help strengthen business resilience, but it often requires some additional, upfront work – including aligning stakeholders, collecting and validating baseline data (e.g., Measurement, Monitoring, Reporting & Verification - MMRV), and structuring. And (2) Well-structured design grants: These can help investment intermediaries, especially those working on high-integrity nature finance products, develop robust investment strategies and MMRV systems."*

Reflecting on Clarmondial's own experience, Langenegger adds:

> *"[The design-stage grant] allowed us to develop a Nature Framework, a flexible, evolving tool that can be adapted to differing levels of data quality, local capacity, and investment-specific contexts. It allows us to capture business-relevant outcomes related to nature and provides a scientific foundation for linking nature outcomes to investments. It also allows us to assess landscape-level risks and helps to prioritize investment opportunities where there are clear opportunities to generate additional and significant environmental and social impacts, alongside business profitability through mechanisms, such as Payments for Ecosystem Services."*

TA and design-stage grants can be used to conduct field studies and cost-benefit analyses, and to develop evidence-based metrics and indicators to establish a robust and clear monitoring, reporting, and valuing framework for NbS projects. These activities can help demonstrate the impact of projects, thereby reducing the perceived risks to investors. Moreover, cost-benefit analyses will help strengthen evidence on monetizing non-financial nature outcomes.

As mentioned earlier, results-based financing, such as through impact bonds, is another concessional instrument that can address the difficulties of valuing nature by linking financial returns to verified environmental outcomes. Howe highlights the unique role that results-based financing in NbS can play beyond its traditional uses, stating:

> *"Blended, results-based financing for NbS improves both the scale and effectiveness of investments by combining concessional capital with outcome-based incentives. The blended structure reduces financial risk through tools like first-loss capital, guarantees, or technical assistance, which attracts private investors and enables larger, more ambitious projects. Results-based payments—linked to independently verified metrics such as carbon sequestration, biodiversity gains, or livelihoods improved—ensure that funds are only disbursed when real impact is achieved, improving accountability and project quality. This drives better long-term stewardship of natural assets, strengthens monitoring and data systems, and aligns local actors around measurable performance goals. Together, these features accelerate climate mitigation and adaptation outcomes, improve biodiversity protection, and deliver stronger social and economic co-benefits, all while leveraging more capital per unit of public or donor funding."*

CHALLENGE

Defining nature as an asset class

One of the primary challenges in mobilizing private sector capital for NbS is the difficulty of defining NbS as an asset class, since the benefits it provides are wide-ranging, and often context-specific and intangible. Moreover, most initiatives rooted in nature currently have no value in the financial market.

While some outcomes of NbS are easily valued, through project costs and generated incomes, other non-monetary benefits are difficult to value, including improved livelihood opportunities, climate-resiliency, biodiversity conservation, and improved air quality, amongst others. NbS inherently produce externalities that cannot be fully captured through revenue, and the transactions often contain elements of public goods. In Langenegger's experience:

> *"Although markets may not fully capture negative externalities related to nature nor renumerate positive externalities, such as environmental stewardship, extensively, we are seeing a shift in this, predominantly led by corporates with nature-dependent supply chains. These corporates identify risks related to nature and see the need for building resilient and climate adaptive supply chains. Landscape approaches that touch on wider landscape-level nature-related outcomes, including for the public good, for example supporting protected and conservation areas, can play an important role in addressing this discrepancy."*

Howe highlights this as a main challenge in attracting private commercial capital to NbS, stating:

> *"One barrier is the lack of value attribution to many of these results of financing these projects, such as better livelihoods, untouched hectares of land, soil health, biodiversity--a lot of them don't necessarily have monetizable/tradeable natural asset like carbon associated with them, which introduces additional complexity from a fund manager perspective. Ultimately, funds have to deliver to their investors, so unless there's some way of valuing these co-benefits (or having an investor base that is very impact-oriented and less concerned with returns), it can be difficult to fully quantify these impacts as part of the monetary return of a project."*

The lack of standardization and measurement indicators also pose a challenge in defining nature as an asset class. Often these solutions are designed to meet the specific ecological and geographic context in which they are implemented. This variability makes it difficult to standardize information and practices across projects. Measurement is also difficult as NbS often yield multiple co-benefits at varying levels of impact.

OPPORTUNITY

Using blended finance to incorporate NbS in existing asset classes and aligning measurement with international standards

One way to increase investor confidence in NbS transactions is to embed nature outputs in existing asset classes. There are several benefits to this strategy. First, adding NbS elements to already familiar deal structures may reduce hesitation from private investors.

Second, adding a focus on nature can be marketed to investors as providing benefits for their investments. For example, NbS can act as future insurance for the success of a project — an agriculture project that incorporates mangrove restoration helps protect surrounding areas from soil erosion and potential floods. Likewise, creating a revenue stream from sustainable reforestation alongside more traditional crops can help hedge against disruptive weather patterns that may lead to reduced crop yields. Van Bergeijk has seen interesting new fund ideas with focus on multiple revenue streams within a transaction, where NbS is one element of a more traditional deal:

> *"Biodiversity credits as well as carbon credits are mainly top-ups for existing revenue streams of projects that might be fundable, but in case of biodiversity credits not on its own yet. For the time being, it's mainly a mix of revenue streams."*

He also discussed how this can lead to greater familiarity for the investor:

> *"The investments need to fit into one of the boxes that they are prepared to invest in."*

Third, incorporating NbS within existing asset classes can allow deal sponsors to inset carbon emissions as opposed to buying carbon offsets. This can be a more cost-effective way to meet existing and future regulatory requirements.

Concessional capital can be used to integrate these elements within existing structures. Grants, through TA or design-stage funding, can provide the working capital needed for deal sponsors to incorporate NbS elements, mitigating the potential increased transaction costs associated with doing so. Moreover, while the underlying asset class may be more familiar to investors, concessional debt or equity can provide a de-risking tool that can further increase investor confidence in what may be perceived as more risky elements of the transaction.

Blended finance can also be used to help define NbS more distinctly as an asset class by providing the capital, again through granting such as TA or design-funding, to ensure that the transaction is aligned to international standards. For example, IUCN developed the IUCN Global Standard for NbS in 2020, while the International Advisory Panel on Biodiversity Credits created a framework to define, guide, and encourage the development of high integrity biodiversity credits and credit markets. Aligning NbS transactions with international standards and frameworks helps to create a distinct, recognizable asset class for interested investors.

CHALLENGE

Creating short-term revenue opportunities

By their nature, NbS rely on natural processes, including regrowth, rehabilitation, and restoration that inherently require longer time periods to reach maturity and yield measurable outcomes. The full extent of benefits may not be realized until years after the initial investment. The value of these benefits may also vary over time and by the type of NbS intervention in place.

A recurring challenge identified by stakeholders for mobilizing private capital was the prolonged time horizon of NbS projects. Howe discusses this shared concern among stakeholders:

> *"The time scale of many NbS projects--which often span 10 to 30 years--creates significant challenges for both investors and funds. Carbon sequestration and ecosystem restoration outcomes take years to materialize, delaying revenue streams such as carbon credits or biodiversity offsets and misaligning with typical fund lifecycles of 7–10 years. Projects often face front-loaded costs for land preparation, community engagement, and monitoring infrastructure,*

with few short-term financial returns to offset these early investments. Additionally, regulatory uncertainty, the evolving nature of carbon and biodiversity standards and markets, and the need for sustained community stewardship over decades compound the risk, making it challenging, but not impossible, to build credible exit strategies or meet traditional return expectations."

These sentiments were shared by Schüller, who notes:

"There needs to be some sort of realism for the sector that it takes years before crops or trees can be harvested, especially if you go for medium or higher failure agroforestry products."

Financial entities and investors with strict fiduciary duties often seek predictable and timely returns. The extended timelines required by NbS initiatives due to their intrinsic link to natural growth rates may prove challenging in attracting these investors. For instance, reforestation initiatives take approximately 25 years for forest ecosystems to regain full structure and function. Moreover, conventional investments like grey infrastructure may offer a more immediate and predictable return compared to NbS, thus aligning better with the fiduciary expectations of investors.

This issue is further exacerbated by the lack of enabling policy environments, specifically in emerging markets. Regulatory frameworks fail to provide long-term incentives to mobilize private investment to NbS.

OPPORTUNITY

Providing below-market rate patient capital

The challenges associated with long timelines in NbS can be at least partially addressed with below-market, patient capital. Case studies analysed by Climate Policy Initiative found that barriers within NbS associated with long-term financing were aided by patient capital such as concessional guarantees, long-term equity, and debt with longer tenors. This type of capital can make it possible for funds to support higher risk NbS transactions with longer timelines, while allowing commercial investors to make appropriate returns.

Patient capital can also be critical to helping existing projects incorporate NbS by providing working capital during periods of transition. For instance, offering longer-term financing structures and concessional funding can enhance the feasibility of sustainable transition loans for both farmers and financial institutions. These loans can support smallholder farmers by covering the expenses linked to the transition process, while also addressing the heightened risks that may arise from a temporary decline in productivity.

Conclusion

NbS play a vital role in addressing climate challenges by leveraging natural ecosystems to deliver environmental, social, and economic benefits. Despite its potential, blended finance in the NbS sector remains limited. To scale private investment, the market must overcome challenges associated with nascent markets, difficulty defining nature as an asset class, and long timelines. Blended finance can help address these challenges through the use of concessional financial instruments to build a pipeline of bankable deals, create a recognizable asset class, and provide patient capital. Unlocking the full potential of NbS will require coordinated efforts to scale innovative financing solutions that value nature not only as a critical environmental asset, but also as a viable and investable opportunity.

Methodology & Notes

1. **Convergence's database:** Convergence maintains the largest and most detailed database of blended finance transactions that have reached financial close. Given the current state of information sharing, it is not possible for this database to be fully comprehensive. We have made efforts to capture all relevant blended finance transactions; however, there are likely more transactions that have not been captured.
2. **Scope of available data:** This brief analyzes 48 transactions targeting the NbS sector. This brief also draws upon stakeholder interviews conducted with Nicolas Couture-Miambanzila, Natural Capital Advisor, Bamboo Capital Partners and Palladium; Julia Langenegger, Senior Associate, Clarmondial; Paul Schüller, Chief Executive Officer, Fairventures Agroforestry; Oliver van Bergeijk, Head of Equity and Funds Division, KfW; Dylan McCall-Landry, Senior Director, Sustainable Finance, Environmental Defense Fund; Ashley Camhi, Ph.D., Director of Innovative Finance, Wildlife Conservation Society ; and William Howe, Junior Partner, Big Valley.
3. **Definition of NbS:** Convergence uses the definition of NbS provided by the International Union for Conservation of Nature (IUCN). Convergence determines a transaction's NbS alignment if it explicitly derives an economic benefit from nature. As transactions are analyzed using publicly available data, an NbS transaction is therefore defined as such based on the disclosure by an investor through publicly available sources, and subsequent due diligence by Convergence against the IUCN's definition where possible.

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