

THE BLENDED FINANCE PLAYBOOK FOR NATURE-BASED SOLUTIONS



Content

1 Seeing nature as an asset in investment	2
2 Four types of blended finance for nature	5
3 Recommendations: Growing a blended finance portfolio	14
Annex	18
Overview of blended finance vehicles for nature	
References	21
Acknowledgements	22

Earth Security develops innovative programmes to link global finance to nature's capital.

info@earthsecurity.org
earthsecurity.org

Sponsors

Swiss Agency for Development and Cooperation, HSBC, UBS Optimus Foundation.

Disclaimer

The views and opinions expressed in this report are only those of Earth Security. They do not imply any kind of endorsement by its partners, funders or stakeholders referenced.

Report Title

The Blended Finance Playbook for Nature-Based Solutions

Publication date


June 2021

Copyright

© Earth Security 2021

Sponsors

We are grateful to the support of our funding partners:

 Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC



UBS Optimus
Foundation



INTRODUCTION

USING PUBLIC FINANCE TO MOBILISE PRIVATE CAPITAL

We are taking ecosystems and biodiversity to the brink of collapse, understanding very little about how this loss undermines our future. Nature may be our ultimate asset, but the investment markets that will enable investors to invest in precious ecosystem services are still at a very early stage. Innovative financing instruments are emerging to incentivise actors that benefit from those services, be it carbon sequestration, freshwater availability or coastal flood protection, to pay for their conservation.

The UN Environment Programme estimates that meeting climate change, biodiversity and land degradation targets will require an investment of USD 8.1 trillion in nature by 2050.¹ Governments are under growing pressure to increase funding to meet these targets, and are increasingly aware that public finance alone will not be sufficient to achieve these goals – much less to act on a planetary scale.

Now time is running out. Public financing institutions, such as DFIs and donors, as well as philanthropic foundations, are therefore increasingly interested in ways to use their balance sheets to attract private investors or to build the capacity of conservation projects to leverage private capital.

Enter blended finance

Blended finance is an approach that involves the use of public and philanthropic funds to change the risk/return profile of investment projects in order to attract the private sector. According to Convergence, which holds the world's largest database of blended finance transactions, over the past 15 years some 600 transactions involving blended finance have mobilised an aggregate USD 144 billion from public and private sources. Sectors such as energy, infrastructure and financial services represent the majority of these transactions, where projects can service paying customers, generate revenues, and clearly measure their social and environmental impact alongside a financial return.

By contrast, nature's ecosystem services are not yet fully recognised in the economy: for example, the ability of a forest to help maintain a freshwater source is largely taken for granted by water users downstream. The metrics and baselines, and monitoring and verification systems are not fully developed. Blended finance tools have a critical role to play in helping to move nature investments into the mainstream. But how?

We identify 31 active investment vehicles (funds, facilities and bond instruments) which use blended finance as an approach to drive the protection or restoration of nature's ecosystem services, just 5% of the total blended finance vehicles at play across investment sectors. Their combined fundraising target is just over USD 5.1 billion. Yet the models offer important practical insights into the opportunities to grow this form of collaborative capital to accelerate global impact.

About this brief

This brief is intended to provide government agencies and philanthropic foundations with a strategic view on how to use blended finance to catalyse private sector capital for nature-based solutions. It outlines the models, trends and opportunities to use blended finance to shift their investment portfolios towards nature-positive results.

The analysis and conclusions build on a review of blended finance transactions that have reached at least the pilot stage and that focus wholly or primarily on nature-based solutions. These vehicles were identified through an assessment of transactions analysed by Convergence across all sectors, case studies by the Blended Finance Taskforce and instruments endorsed by the Global Innovation Lab for Climate Finance that have reached the pilot stage. The analysis also draws on a series of interviews and a workshop organised by Earth Security with leading public and private investors in these transactions whose testimonials are featured here.

1

SEEING NATURE AS AN ASSET IN INVESTMENT

“I see nature as a lens that impacts all asset classes, whether a public equity or a bond held by investors. Currently, the fact that a country having healthy seas or forests does not correlate with much else in an investor’s portfolio is a big opportunity to attract new investment capital.”

Jennifer Pryce, President & CEO,
Calvert Impact Capital

Investors rarely think about the steady cycles of freshwater flows, the healthy oceans that provide abundant fish, the rich soils that enable food production on land, or the regulation of surface temperatures that makes life possible, as valuable services they could invest in.

Investors rarely think about the steady cycles of freshwater flows, the healthy oceans that provide abundant fish, the rich soils that enable food production on land, or the regulation of surface temperatures that makes life possible, as valuable services they could invest in. However, according to Swiss Re, the reinsurance company, we are reaching a tipping point, as these systems struggle to recover from the systematic degradation they are being subjected to. As many as a fifth of countries worldwide are already at risk from ecosystem collapse, as their biodiversity declines to levels that threaten life support systems.²

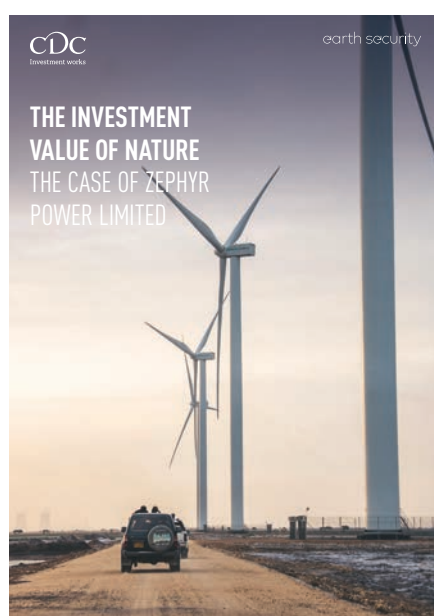
Governments are under increasing political pressure to provide the financial means to protect natural ecosystems. Country obligations under UN international conventions on biological diversity (CBD), climate change (UNFCCC) and desertification (UNCCD) require countries to pursue domestic targets as well as, in the case of developed economies, to support developing countries with the financial means to implement the conventions. The realisation that public finance alone will not be enough to meet these goals is creating a willingness to use public funds catalytically to mobilise private capital.

The realisation that nature is a valuable asset is sinking in. For example, investing in sovereign 'nature' bonds, which incentivise the protection of a country's natural capital alongside its economic development, could be a strategic way for investors to diversify their fixed income portfolios. But investors looking for these deals will only find a handful of investment funds and experimental transactions, which have taken years to develop and are the result of a collaborative effort of investors, NGOs and development finance institutions (DFIs). These opportunities — many featured here — are the early-stage prototypes of a market that continues to grow. The scarcities and risks arising from planetary boundaries on water, forests, soils, oceans, and other vital resources will position these markets in an entirely new light in the years to come.

The potential of forests and other natural ecosystems to sequester carbon has caught the attention of global companies and investors that are now racing to make good on their 'net-zero' promises. Nature is the cheapest, fastest and most widely available solution to sequester carbon dioxide. Land-use change is a fundamental driver of greenhouse gas emissions, while land-based ecosystems such as forests, working through established mechanisms such as REDD+, present significant opportunities to drive carbon sequestration.³ Nature could provide over one-third of the carbon sequestration needed to keep the planet's warming to below 2°C.⁴ However, the rapid growth of nature-based carbon sequestration projects around the world is not without challenges. These include ensuring the 'permanence' of forests given rampant deforestation rates, as well as the incentives to sustaining nature protection over the long term, among others.

Nature is more valuable than just its carbon. As the report suggests, nature's services in sustaining freshwater cycles and regulating temperatures can also be invested in once their value is recognised and understood. For example, Earth Security's recent work on mangroves revealed that in addition to sequestering carbon up to 4 times faster than tropical rainforests, mangrove forests provide a cost-effective form of 'green infrastructure' for coastal protection. They help save an estimated USD 65 billion per year in avoided losses due to extreme weather events.

In Pakistan, Earth Security worked with CDC Group — the UK's Development Finance Institution (DFI) — to define the investment value of mangroves for a coastal renewable energy investment project. The evidence suggests that mangroves will help the project developer save an estimated USD 7 million in maintenance costs, while providing another USD 5 million in income to local communities that depend on shrimp farming, improving the project's social licence to operate.⁵ The DFI community has yet to consider the value that nature's assets provide to their investment portfolios and support their development impact.



Earth Security's analysis with CDC Group has shown a 20-fold return on investment from mangroves restoration for coastal infrastructure.

Earth Security has identified the locations of key coastal cities for the development of 'municipal mangrove bonds' a scalable financing pathway for capital markets to invest in ecological assets globally.

Our global programme is working with cities around the world to develop this innovative mechanism.



The concept of 'nature-based solutions' (NBS) is the latest effort to operationalise the role that ecosystem services play in social and economic development. The World Conservation Union (IUCN) defines NBS as 'actions to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.'⁶ NBS provide investors with a practical way to rethink how their assets and investment portfolios incorporate the value of, and work in partnership with, nature.

The 'holy grail' of making NBS investable is to find positive cashflows that emerge from protecting nature, providing a return on an investment. The easiest route for investment is to invest in companies whose business model work in balance with nature. Think of a coffee-growing company that operates a regenerative agriculture model, protecting local forests and biodiversity alongside local livelihoods. In this case, crops cultivated under the canopy of trees benefit from a richer biodiversity, which makes crops more resilient to pests and able to withstand rising temperatures.

As a result of climate change and projected higher temperatures, high-value Arabica coffee crops will need to move to 300–500 metres above sea level in order to adapt. This may be feasible for producers in Ethiopia and Kenya (though it may drive deforestation in higher-altitude areas), but will be difficult for market leaders like Brazil.⁷ Investment funds that focus on nature-based 'shade-grown coffee' are hedging against climate risks in this commodity.

Other emerging investment opportunities focus on innovative financial instruments that unlock capital to invest in nature's services. These involve bonds, insurance products, and 'payment for ecosystem services' funds of various kinds. Most are still at an early stage. One example is the Forest Resilience Bond (FRB), which was created and piloted in California by Blue Forest Conservation. The FRB is a finance instrument that enables the US Forest Service to restore forests, minimising the catastrophic risk of wildfires. The cashflow that repays the bond for investors is provided by downstream companies that benefit from the steadier supply of cleaner water and save on water treatment costs.

According to the Coalition for Private Investment in Conservation (CPIC) some of the barriers that private investors face when it comes to investing in these solutions include the difficulty of generating attractive short-term cashflows through nature conservation and the timeframe it may take for projects to become profitable. Many of these investments are based in developing countries, where political risks, weak governance, and lack of creditworthiness or local financial capacity may deter investors.

Finally, designing these mechanisms and preparing them for the market is complex and both time- and resource-intensive.⁸ The shortage of baseline data in many developing countries means that the impacts of these projects can be costly and difficult to measure, and in some cases entirely new monitoring systems are required.⁹ Where local monitoring capacity is limited, the need to invest in capacity-building will add to the upfront costs facing investors. The tools provided by blended finance focus specifically on removing many of these barriers.

2

FOUR TYPES OF BLENDED FINANCE FOR NATURE

“The DNA of blended finance is based on collaboration. It brings together government, private finance, philanthropic investors and corporates based on comparative advantages and relative risk tolerances. As a development bank, DFC has provided technical assistance, political risk insurance and partial credit guarantees to projects to improve the risk-return equation and incentivise the private sector to come in.”

Jamie Cashman, Director, Investments,
US International Development Finance Corporation

Blended finance entails the use of capital from public or philanthropic sources to de-risk investments to attract the participation of the private sector for sustainable development. According to Convergence, the preeminent organisation promoting it, blended finance is an approach to structuring capital that allows organizations with different objectives to invest alongside each other while achieving their own objectives, whether financial return, social and environmental impact, or a blend of both.¹⁰

Blended finance is best used in transactions where the private sector would be willing to invest if the risk, real or perceived, were lower.¹¹ Over the past 15 years, Convergence has identified nearly 600 transactions, accounting for nearly USD 144 billion mobilised. As of 2020, roughly half of all these deals have been in the energy and financial services sectors — two sectors where blended finance is an effective approach. The other half of the deals consists primarily of investments in agriculture, infrastructure, health and education.¹²

Earth Security has identified a total of 31 vehicles, including investment funds, financing facilities and investment products, which (i) focus wholly or primarily on investing in ecosystem conservation or restoration in a way that captures economic value, and (ii) incorporate a blended finance approach of using public funds catalytically to attract private capital (see Annex).

The vehicles are used to finance sustainable forest management, agroforestry and agriculture, and the sustainable management of coastal and marine ecosystems. They represent just 5% of the overall universe of blended finance transactions, with a combined fundraising target of just over USD 5.1 billion. This reflects the nascent stage of commercial investments that focus on nature protection, since blended finance requires NBS projects to have a commercial element, and to deliver a cashflow that can remunerate private investors.¹³

“We see that fund managers need more than grants in order to innovate. GEF is supporting transactions in challenging environmental areas by taking a first loss position or an anchor investor role and by providing equity, debt or guarantees that help achieve necessary risk/return profile to mobilize additional investment and attract necessary coalitions of investors.”

Avril Benchimol Dominguez, Senior Finance Specialist
Global Environment Facility (GEF)

THE BLENDED FINANCE PLAYBOOK FOR NATURE-BASED SOLUTIONS








We identify four main modes of blended finance for nature. These provide a range of options for layering capital to incentivise investment in nature-based solutions. Often, blended finance vehicles will combine many of these modes in one transaction, depending on the needs and complexity of the investment.¹⁴

Importantly, blended finance is not merely the presence of public/philanthropic and commercial capital in the same transaction, but rather the strategic use of risk-tolerant capital from public and philanthropic sources to de-risk and attract larger sums of capital available from private finance.

The main public finance and philanthropic actors that have provided blended finance for nature-based transactions can be grouped into the following three categories:

- Philanthropic Foundations.
- Donors and Multi-donor Funds.
- Development Finance Institutions (DFIs).

Blended Finance Types and Likely Providers

	Philanthropic Foundations	Donors and Multi-donor Funds	Development Finance Institutions
Type 1 Design and Preparation Funds			
Type 2 Technical Assistance Funds			
Type 3 Guarantees and Risk Insurance			
Type 4 Concessional Finance			

Leaders

The organisations that have been active in these types of transaction

Bloomberg Philanthropies
Convergence (grant windows)
David and Lucile Packard Foundation
Global Innovation Lab for Climate Finance (philanthropy collaborative)
Gordon and Betty Moore Foundation
MacArthur Foundation
Paul G. Allen Family Foundation
Prince Albert II of Monaco Foundation
The Rockefeller Foundation

Agence Française de Développement
Dutch Ministry of Foreign Affairs
European Union
Global Environment Facility
Green Climate Fund
USAID

Asian Development Bank
Dutch Entrepreneurial Development Bank – FMO
Inter-American Development Bank
KfW
European Investment Bank
US International Development Finance Corporation
The World Bank

BLENDING TYPES

Type 1

Design and Preparation Funds

Description

Grant funding for the design or preparation of a transaction, to improve the viability and bankability of a project or enterprise to reach financial close. Design-stage grants are used to support the proof of concept, establish a baseline and a monitoring and verification system, develop a pipeline and provide the pre-commercial funding needed in the initial stages of an investment thesis or vehicle. Instruments may include grants or convertible grants (including the Right of First Refusal for investors).

Case study

The Cloud Forest Blue Energy Mechanism

As cloud forests are rapidly depleted around the world, the loss of their ecosystem services, such as water regulation, poses a significant risk to water-intensive assets.

The Cloud Forest Blue Energy Mechanism aims to mobilise commercial finance from hydropower companies to restore and protect cloud forests in Latin America as a way to ensure the availability and resilience of their water supplies. Debt and equity is mobilised from domestic commercial investors into a Special Purpose Vehicle, which pays implementation partners for the restoration and conservation of cloud forest ecosystems. The repayment to investors is provided by hydropower companies via an off-take agreement for the delivery of ecosystem services — in this case, a reduction in sedimentation load in reservoirs. This reduces their water treatment costs and can prolong the lifetime of hydropower assets by an estimated 10 years. The payment of hydropower companies is dependent on the successful delivery of reductions in sedimentation (after 3–5 years) as a results-based financing model.¹⁵

The Climate Finance Lab — a philanthropy collective — provided the design-stage grants to develop the model. Patient capital will be needed to offset the fact that the offtake agreement will not begin to yield returns until the project has been running for 3–5 years. In the first stage of the project, USD 1 million in grant funding from FMO, Global Environment Facility and Conservation International will fund research and development to prove the model.¹⁶ Subsequently, up to USD 30 million in blended public and private finance will be mobilised to de-risk private sector investment. The aim is for the mechanism to be replicated on a purely commercial basis from 2026 onwards. If successful, the Cloud Forest Blue Energy Mechanism could provide the blueprint and business case for combining payment for ecosystem models and pay-for-success financing mechanisms to deliver nature-based solutions in other markets.¹⁷

<https://www.climatefinancelab.org/project/cloud-forest-blue-energy-mechanism>

Likely providers



**Philanthropic
Foundations**

Type 2 Technical Assistance Funds

Description

Technical assistance grants are used to build the technical capacity of investees and of key stakeholders such as local communities that may be crucial to the successful implementation and ultimately the commercial viability of projects. They can also be used to build capacity in other areas such as financial management, contracting, business model development, or impact monitoring and evaluation. These grants for technical assistance can be often provided by donors through a dedicated fund running in parallel to an investment vehicle.

Case study

The Land Degradation Neutrality Fund

An estimated 75% of the earth's land area is already degraded.¹⁸ In order to combat this, the UN Convention to Combat Desertification and fund manager Mirova Natural Capital created the world's first investment fund dedicated to preventing soil degradation — the Land Degradation Neutrality (LDN) Fund.

The fund is a blended finance vehicle investing in projects that promote sustainable land management and the rehabilitation of degraded land through investments in sustainable agriculture and forestry among other land-use sectors. The target size of the fund is USD 300 million, with investment from senior investors (70% of the total) who are aiming for commercial returns, as well as junior investors (30%) who are providing concessional capital. 20–30% of the USD 300 million raised will be first-loss capital, most of it from public investors. At the project level, the fund takes a mezzanine position, with the aim of attracting additional commercial funding to scale up promising projects.¹⁹ Private investors include Fondation, BNP Paribas Cardif, and Garance.

Concessional finance has been provided by the European Investment Bank, Fondation de France, and the Government of Luxembourg. Grants for technical assistance were provided by Agence Française de Développement (AFD) and the Global Environment Facility (GEF).

The layered structure allows the LDN Fund to offer different risk-return profiles for different investors, with the junior tranche (funded using public and philanthropic funds) de-risking the more senior tranches and incentivising private investment.²⁰ The use of blended finance also facilitates the provision of technical assistance, longer repayment periods and repayment grace periods, which are necessary due to the long time horizon over which many land rehabilitation and forestry projects take place and the significant gap between initial investments and the first cashflows generated by projects.^{21 22} The fund aims to show private investors the potential of investing in natural capital, catalysing new investment.²³

<https://www.cbd.int/financial/un/unccd-ldnfund2017.pdf>

Likely providers



**Donors and
Multi-donor Funds**

Type 3

Guarantees and Risk Insurance

Description

Risk guarantees protect investors against losses, as part of a capital structure. This de-risks projects that are initially perceived to be too risky by private investors. The guarantor will agree to cover the loss (in full or in part) of a third-party financing transaction in the case of non-repayment or loss of value. Guarantees allow transactions to attract capital at more favourable rates. Other risk mitigation instruments such as political risk insurance play a similar role.

Case study

The Seychelles Blue Bond

In 2018, the Seychelles issued the world's first sovereign blue bond, with the aim of financing sustainable fisheries and marine protection. The bond raised USD 15 million from international investors with USD 5 million purchased privately by each of three impact investors in the USA: Calvert Impact Capital, Nuveen, and Prudential.

The bond demonstrated the potential for countries to harness capital markets for financing the sustainable use of marine resources.²⁴ Of this, USD 12 million is earmarked for the Bank of Seychelles-controlled Blue Investment Fund, which will be used to invest in projects that will deliver financial returns to investors. The remaining USD 3 million is earmarked for the Blue Grants Fund, controlled by the Seychelles Conservation and Climate Adaptation Trust (SEYCCAT).

Projects funded by SEYCCAT are not expected to deliver financial returns.²⁵ The government of the Seychelles will be responsible for repaying the debt. Blended finance was instrumental in reducing the risk of default and keeping the interest rate manageable.

The World Bank (IBRD) issued a repayment guarantee worth USD 5 million, while the Global Environment Facility (GEF) provided USD 5 million as a non-grant instrument, which offers a 40-year maturity period at a fixed interest rate of 0.25%, with a 10-year grace period.

Without these support mechanisms, the interest rate on the bond could have been as high as 8%, given the Seychelles' small tax base, low credit rating and previous history of defaulting on sovereign obligations in 2008. As it stands, the rate of interest is 2–3%.²⁶ The Seychelles Blue Bond marks an important step forward in the field of financing for nature in that it tested and demonstrated the willingness of private donors to step in at a sovereign level to offset government debt in pursuit of conservation-related goals.²⁷

<https://www.worldbank.org/en/news/press-release/2018/10/29/seychelles-launches-worlds-first-sovereign-blue-bond>

Likely providers



**Donors and
Multi-donor Funds**



**Development
Finance Institutions**

Type 4 Concessional Finance

Description

Concessional finance is provided by public entities on more favourable terms in order to mobilise commercial capital. Debt or equity at below-market rates helps to lower the overall cost of capital and mobilise finance from more risk-averse investors. This includes accepting subordinate or junior terms (first-loss or junior equity) compared to other co-investors. Concessional loans can also effectively reduce the overall interest rate of financing if other lenders provide market-rate loans, thereby improving the affordability of finance to the investee. Concessional capital can also be provided conditional on a pre-agreed set of results ('impact-linked loans' or 'results-based financing'), which provide investors with the assurance that financing will be effectively tied to its intended ecological and social impact.

Case study

The Forest Resilience Bond

In California, where one in three homes is at risk of wildfire, the funding gap for improving forest management and reducing wildfire risks is estimated at USD 6 billion.²⁸ The Forest Resilience Bond (FRB) aims to help bridge this gap by mobilising investments from private and philanthropic capital to finance forest restoration activities at a greater speed and scale across the western United States.²⁹

The Yuba Project was created in 2018 as a collaboration between fund manager Blue Forest Conservation, Tahoe National Forest, the Yuba Water Agency and the National Forest Foundation. The project mobilised USD 4 million from private and philanthropic sources via the issuance of a bond to protect 15,000 ha of the Tahoe National Forest from wildfire risk. Early-stage design grants were provided by The Rockefeller Foundation and the Gordon and Betty Moore Foundation to enable the development of the model including stakeholder collaboration. The foundations additionally committed concessional debt at below market rates, enabling private investors Calvert Impact Capital and CSAA Insurance Group to invest in the bond at a higher rate.

Fund manager Blue Forest Conservation aims to issue additional bonds and mobilise enough capital to fund projects in the USD 10–25 million range.

The FRB relies on a cashflow provided by beneficiaries of the forest ecosystem services, including the Water Agency and the water utility company, which share the costs of reimbursing investors over time. These are fixed cost-share payments based on project outcomes, which include avoided fire risks, improved water quality and reduced sedimentation, and water quantities. Contracted payments to investors will be made for up to 10 years, in line with the timing of benefits expected.

The FRB model is innovative in that it takes a systemic approach to forest health and ecosystem services, making use of the expertise and resources from a range of public and private stakeholders. Another defining aspect of the FRB is its ability to raise private capital to fund the full cost of restoration upfront, meaning that restoration activities can be implemented immediately.³⁰

<https://www.blueforest.org/forest-resilience-bond>

Likely providers



Philanthropic Foundations



Donors and Multi-donor Funds



Development Finance Institutions

KEY INSIGHTS

Insight 1

Design-stage grants play an important role in nature-related transactions. This is because NBS solutions benefit more from a discovery phase, as their markets and solutions are less developed.

Design-stage grants from public and philanthropic donors play a fundamental role in helping early-stage NBS mechanisms to become bankable.³¹ This up-front finance is especially important in NBS where the early-stage research requirements are high: baseline data and systems to track impacts may be lacking, business models may require proof of concept, and investment structures may need to be developed and proven. Design-stage grants are likely to be a critical part of growing the blended finance market for nature-based solutions.³²

This funding is frequently provided through dedicated 'accelerators' such as Convergence Design Funding, the Global Innovation Lab for Climate Finance, the Blue Natural Capital Financing Facility, and the TNC Natural Climate Solutions Accelerator, which provide design-stage funding to promising projects but do not offer additional forms of capital.³³

In the case of the Forest Resilience Bond, where it was determined that an innovative model was needed, early-stage grant funding provided the resources needed to carry out the economic analysis needed to develop the model and prove its viability as well as to engage a diverse range of public and private stakeholders to maximise stakeholder buy-in and their contribution to the model's chances of success.

Insight 2

Technical assistance grants offer government donors a way to participate in blended finance by using non-commercial grants for development impact, while also helping kick-start market models and an enabling environment for private investment in environmental goods.

Implementing most NBS projects requires the active work of local stakeholders such as local NGOs, small businesses, local communities, small-scale farmers and artisanal fishers, who often require training in technical, business or financial skills.³⁴

Building the capacity of these stakeholders can in turn be vital to the viability of an NBS investment. Grant funding can help fund the development of necessary data and baselines and the skills training to ensure that recipients of funding are equipped to implement projects effectively. Grant-based technical assistance is also critical to improve impact measurement, reporting and transparency – often cost requirements that can reduce the commercial viability of enterprises operating in nascent markets.³⁵

In addition, technical assistance grants can enable the participation of a larger range of funders, such as government donor agencies, which may not have the fiduciary mandate to get involved in commercial transactions. Setting up technical assistance facilities outside commercial vehicles and focussing on building local capacities with clear development objectives provides a route for donors to help support these transactions.

In the case of the Land Degradation Neutrality Fund, grant funding from AFD and the GEF supported training in technical skills for sustainable forestry and regenerative agriculture projects, as well as the development of baselines that will be used to measure and demonstrate positive impact, which will in turn encourage more investors to increase their exposure to investing in NBS.³⁶

Insight 3

Concessional capital, the most commonly used mode of blended finance for nature, can improve the rate of return for investors, while risk guarantees will help NBS projects become bankable.

The case of the Forest Resilience Bond demonstrates that concessional capital does not need to be subordinate to be catalytic. While all four investors invested the same amount, the two concessional investors accepted a lower interest rate, which allowed for an affordable rate of repayment and attractive commercial returns for the two commercial investors.³⁷ The high risks (both real and perceived) associated with NBS investments make the use of risk guarantees or first-loss capital a critical way of improving the bankability of projects.³⁸ In addition to first-loss, guarantees can be tailored to mitigate the specific risks that may impede private investments, particularly in developing countries.

In the case of the Seychelles Blue Bond, the USD 5 million repayment guarantee provided by the World Bank helped reduce the risk of government default on repayment obligations, reducing the interest rate on the bond and providing investors with peace of mind.

Guarantees have played an instrumental role in credit-enhancing bonds: 67% of the blended finance transactions that were bonds launched between 2017–2019 used guarantees or risk insurance, increasing their likelihood of achieving investment-grade ratings, which is a requirement of most institutional investors.³⁹

Insight 4

Results-based finance can help strengthen blended transactions, by providing greater confidence in particular to public investors and donors that their support for blended finance transactions for nature will have a strong outcome focus.

While impact bonds and other forms of ‘payment for results’ have been widely used in the social impact space, meaning that they are familiar to impact investors, results-based financing is at a very early stage when it comes to blended finance for NBS.⁴⁰

Two new vehicles to be taken to market in 2021 — the Wildlife Conservation Bond and the Cloud Forest Blue Energy Mechanism — will likely have a broader demonstration effect on the value of using results-based financing in blended finance transactions as an investor confidence-building measure. In the case of the Wildlife Conservation Bond, the World Bank is creating a structured bond that will raise finance from private investors for rhino conservation activities in two nature reserves in South Africa.

Under the terms of the bond, investors will not receive an annual coupon payment. Instead, they will be repaid their original capital once the bond matures — plus an additional payout depending on whether or not rhino population targets have been met, allowing them to make a profit. The cost of the additional results-based payout will be funded by the GEF.⁴¹

Environmental Impact Bonds (EIBs) are only just emerging in this space but are seen as an important results-based finance instrument to scale nature-based solutions with sound impact measurement at the core. A newly launched Global Fund for Coral Reefs is also exploring results-based financing options as an attractive way of paying for tangible conservation results.⁴²

3

RECOMMENDATIONS GROWING A BLENDED FINANCE PORTFOLIO

“Coming in at an early stage, foundations can help to set up, catalyse and unlock high-potential markets for nature-based solutions. The support of foundations has shown to be a critical enabler of new models and increasing the comfort levels of commercial investors in the early stages of this market. They must be comfortable with a long and risky timeline to success.”

Adam Connaker, Director of Innovative Finance,
The Rockefeller Foundation

Recommendation 1

All together now

Blended finance for nature is ultimately about the catalytic use of public funds to increase the 'bankability' of nature-based solutions by private investors, and create markets that fully recognise natural capital as underpinning the viability of economic investments. An important task is therefore to engage public finance institutions to provide de-risking capital on a global scale.

A range of public entities, from DFIs to multilateral funds, are demonstrating that it is possible to use their balance sheets to guarantee investors or provide other forms of support such as technical assistance, and to do so in line with their public development mandate. Growing the share of public, private and philanthropic investors that are unlocking finance for nature will require going beyond individual transactions. Market-building efforts must focus on facilitating access to baseline assessments, monitoring and verification systems to provide a wide market infrastructure.

Initiatives that can increase investor education on NBS are also needed, helping translate how to build nature-positive portfolios through day-to-day investment decision-making. In particular, on the private investor side, it is necessary to go beyond the small group of impact investors involved, and activate the engagement of long-term capital – especially through pension funds and insurance companies. This will require identifying the type of products and mechanisms that fit within their portfolios, helping organisations that are creating new nature-based financing concepts to design them for scale and attract larger investment ticket sizes.

Long-term investors such as pension funds and insurance companies will be uniquely positioned to consider using their balance sheets to support the growth of NBS investments that need longer timeframes of maturity, if this is done in tandem with a growing participation of de-risking guarantees provided by public finance institutions.

Finally, there are simply not enough deals on the table. Identifying, designing and supporting programmes and mechanisms that can better articulate the market information and interests of these investment sectors, to come into contact with one another, understand mutual opportunities, and connect around transactions, themes and regions of interest. A suite of market-building efforts is an important vector of growth for the future of blended finance transactions for nature.

Recommendation 2

Public finance institutions

Public finance institutions, including government donors, DFIs and sovereign funds have demonstrated the critical role they can play in providing the grant funding and concessional capital needed to kick-start and accelerate the market for investing in nature-based solutions. However, our analysis of the majority of blended finance transactions for nature over the last ten years reveals a rather small pool of the same public finance institutions engaged in supporting the same deals.⁴³ Widening the pool of donors, DFIs and other public financing entities is vital for this market to grow.

The linkages of NBS as a conduit for climate finance (i.e., seeing nature as a cost-effective climate solution) is expected to be one of the drivers through which public finance institutions — DFIs and donors — increase their willingness to consider NBS investments. For example, the UK government, in its drive to increase climate finance strategically as the host of COP26 in 2021, has committed GBP 3 billion to NBS over the next five years, which is intended to support the development of a larger global pipeline of NBS projects.⁴⁴

Actions for public institutions include:

— **Development Finance Institutions:**

DFIs, including multilateral development banks, must increase the budget lines available for risk-taking concessional capital to support NBS investments. They can do so via a range of de-risking capital instruments, including risk guarantees or first-loss investments. Increasing their portfolio allocation to these instruments may require new investment windows, but just as important will be to develop the internal understanding and buy-in from senior management of the opportunities for their DFIs to use NBS as a strategy for sustainable growth in their regions that also makes investment sense. This can best be done by focusing on thematic investment opportunities that are most relevant in their regions, and helping DFIs identify how to increase their exposure to NBS deals in a way that is regionally specific. DFIs do not always need to come into an investment with a higher risk-taking profile than private investors, as there will be opportunities to invest in NBS where DFIs can do so on equal terms to private investors.⁴⁵

— **Government donors and multi-donor funds:**

A key factor in engaging donors and donor funds with blended finance deals for nature will be whether their mandates allow the use of taxpayer funding as part of commercial investment vehicles. If this is not the case (or if the internal agency expertise or buy-in is not there yet), the majority of donor agencies and funds will still be able to set up technical assistance grants and technical assistance facilities, which build the capacity of local organisations and allow them to participate and benefit from market mechanisms. That these technical assistance grants are provided separately and through a facility that operates outside (but in coordination with) the commercial investment vehicle, provides donors with a safe space for experimentation, in aligning grants and capacity building that they would fund anyway more strategically with investment mechanisms that can leverage and attract the private sector. For those multilateral funds that do have the mandate and expertise to use their funds catalytically as part of blended finance, the model of the Global Environment Facility's (GEF) participation in blended finance deals deploying a range of instruments provides a template for action. However, acting through multilateral funds that focus on blended finance, such as the GEF, governments can contribute to strengthen a global response and pipeline to finance NBS, in alignment with key global frameworks and conventions such as CBD and UNFCCC.

Recommendation 3

Philanthropic foundations

Philanthropic funding represents a relatively small pool of funds in blended finance transactions for nature, in comparison to government funds. However, a group of US-based foundations have had an outsized impact in the development of this nascent investment space.

Foundations often play a strategic role by providing early-stage research grants, and design-stage blueprints and pilots, that support the formative stages of innovative finance transactions and instruments to reach an investment closing stage. This is the case of philanthropy collectives such as the Climate Finance Lab and the philanthropic funding windows of Convergence. Philanthropic foundations are a key early-stage stakeholder, and are involved in over half of all the blended finance deals for nature in the market.

There are only a very few examples of foundations participating as investors in blended finance transactions for NBS. These include the David and Lucile Packard Foundation and MacArthur Foundation as investors of junior equity into the Terra Silva investment vehicle, and The Rockefeller Foundation and Gordon and Betty Moore Foundation capital investments in the Forest Resilience Bond in California.

Foundations at the forefront of pioneering blended finance for NBS transactions have been willing to accept the possibility of failure that comes with testing and piloting creative solutions. They have also been willing to invest in building the market architecture, by supporting research into opportunities that can educate investors and build buy-in among other types of public and private investors. Philanthropists (foundations, high-net worth individuals and family offices) have a critical role to play in diversifying and growing the market of blended finance investments for nature, whether through catalytic grants, or 'impact-first' high-risk investments.⁴⁶

Actions for public institutions include:

— For foundations not yet involved, and philanthropy advisors: For all its potential, the universe of foundations involved in these transactions is rather small. Hundreds more foundations can have an outsized impact in this space, using the template already developed by leading foundations in these transactions. They can do so by participating in philanthropy collectives, which has the benefit of providing foundations still at an early stage of the learning curve with a pipeline of projects and the advice of experienced foundations. Alternatively, they can engage directly with a range of NGOs and other actors developing these deals. More support and guidance is needed, including from philanthropy advisors who themselves need to build their knowledge and advisory capacity on what foundations and philanthropists can do to use their capital more catalytically to support the early-stage development of blended finance for nature.

— For foundations already involved in blended finance: These foundations are already at the forefront of this agenda. However, the experience of a handful of US-based foundations shows that there are growing possibilities to use philanthropic grants, including through programme-related investments that can play a catalytic role. For instance, this can be done by providing convertible grants or taking junior positions in financing instruments or funds. A closer coordination between grants provided for the early stages of blended finance transactions, with commercial positions, through programme-related investments, will continue to develop the blended finance playbook for nature-based solutions, and increase the leverage that foundations can deliver together with innovative grant capital.

Recommendation 4 Private investors

While private capital is present in over half of the transactions reviewed, the number of private investors active in this space is small. A handful of pioneering fund managers and impact investors have led the advancement of blended finance transactions for nature-based solutions. In particular, impact investors such as Calvert Impact Capital have taken investment positions in a range of innovative transactions, bringing market rate capital to innovative investments.

A small number of global banks have acted as lead managers or placement agents for these transactions, bringing their core skills and expertise to develop the market. They too have a facilitation role to play in exploring how to accelerate their support for NBS as part of their portfolios and investment activities, in tandem with creating more interest from institutional investors and asset owners.

One route to accelerate change is to educate investors about the opportunity to invest in nature-based solutions, encouraging them to advocate with financial advisors for more exposure to these kinds of deals. Pension funds and insurance companies are uniquely placed to embrace nature-based deals, since the longer time frame of these opportunities is better aligned with their capital, alongside a growing participation of public finance institutions contributing to de-risk transactions, for example through first-loss guarantees.

Increasing the exposure of private investors to these deals will require a clearer communication of the positive investment performance of these instruments. More transparency on their impact will be also needed, in particular to support results-based financing options that can link finance to a positive increase in ecosystem services. Finally, a critical barrier for institutional investors such as pension funds will be the size of the transactions. This will be a challenge for specific investment products, where aggregation of products into larger investment options will be increasingly important for these opportunities to be distributed to investors, and for this sector to grow in scale.

ANNEX

OVERVIEW OF BLENDED FINANCE VEHICLES FOR NATURE

In carrying out this analysis, Earth Security identified and reviewed a total of 31 investment vehicles which have reached at least a pilot stage and which have mobilised blended finance in some way to fund nature-based solutions. The list excludes investment vehicles that may be at a concept stage, as well as those which leverage public and private finance but do not take a blended finance approach of deploying public capital to de-risk private investment. The vehicles reviewed fall into three categories:

1 Funds

A fund is a pool of capital from many sources. Funds can be layered to distribute risks and returns differently to commercial and concessional investors.

2 Facilities

A facility is an earmarked allocation of public (and sometimes philanthropic) funding, which can invest in projects with the aim of attracting commercial investment to those same projects.

3 Bonds

A bond is a fixed-income product representing a loan made by an investor to a borrower. Bonds are frequently used by governments to finance projects.

Sources

The vehicles were identified through a review of existing databases of blended finance including Convergence, the Global Innovation Lab for Climate Finance (only vehicles at the pilot/replication stage), the Blended Finance Taskforce, as well as the Global Environment Facility (GEF)'s resources on blended finance. They are not intended to provide an exhaustive list of all such transactions and are based only on publicly disclosed information.

Name	Instrument or Vehicle	Ecosystem Impact	Blended Finance				Target USD million
			Type 1	Type 2	Type 3	Type 4	
&Green Fund	Fund	Forests		Technical Assistance Funds		Concessional Finance	400
Africa Forest Carbon Catalyst	Fund	Forests		Technical Assistance Funds		Concessional Finance	300
Agri3 Fund	Fund	Forests		Technical Assistance Funds	Guarantee and Risk Insurance	Concessional Finance	205
Althelia Biodiversity Fund Brazil	Fund	Forests			Guarantee and Risk Insurance	Concessional Finance	100
Althelia Climate Funds	Fund	Forests		Technical Assistance Funds	Guarantee and Risk Insurance	Concessional Finance	120
Arbaro Fund	Fund	Forests				Concessional Finance	110
Caapora Socio-Climate Benefits Fund	Fund	Forests		Technical Assistance Funds		Concessional Finance	18.1

Continues on next page

Name	Instrument or Vehicle	Ecosystem Impact	Blended Finance				Target
			Type 1	Type 2	Type 3	Type 4	USD million
Cloud Forest Blue Energy Mechanism	Fund	Forests	Design and Preparation Funds				30
DC Water EIB	Bond	Rivers and Riparian				Concessional Finance	25
Eco.business Fund	Fund	Multiple		Technical Assistance Funds		Concessional Finance	383
Forestry and Climate Change Fund (FCCF)	Fund	Forests		Technical Assistance Funds		Concessional Finance	15–20
Forest Resilience Bond	Bond	Forests	Design and Preparation Funds			Concessional Finance	8.3
Global Fund for Coral Reefs	Fund	Coastal and Marine		Technical Assistance Funds	Guarantee and Risk Insurance	Concessional Finance	500
Land Degradation Neutrality Fund	Fund	Multiple		Technical Assistance Funds		Concessional Finance	300
Livelihoods Carbon Fund 3	Fund	Forests		Technical Assistance Funds	Guarantee and Risk Insurance	Concessional Finance	109
Meloy Fund for Sustainable Community Fisheries	Fund	Coastal and Marine		Technical Assistance Funds		Concessional Finance	22
Mobilising Forests for Finance (MFF)	Fund	Forests			Guarantee and Risk Insurance	Concessional Finance	212
Moringa Fund	Fund	Forests		Technical Assistance Funds		Concessional Finance	103
Nature+ Accelerator	Fund	Multiple		Technical Assistance Funds		Concessional Finance	200
Responsible Commodities Facility	Facility	Forests			Guarantee and Risk Insurance	Concessional Finance	339

Continues on next page

REFERENCES

- 1 'State of Finance for Nature' UN Environment Programme, May 2021.
- 2 'A fifth of countries worldwide at risk from ecosystem collapse as biodiversity declines, reveals pioneering Swiss Re index' Swiss Re, September 23, 2020.
- 3 'IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems,' Summary for Policymakers, Intergovernmental Panel on Climate Change (IPCC), 2019.
- 4 'Natural climate solutions', Griscom, B.W. et al, Proceedings of the National Academy of Sciences of the United States of America, 2017.
- 5 'Financing the Earth's assets: The case for mangroves as a nature-based climate solution' Earth Security, December 2020.
- 6 'IUCN Global Standard for Nature-based Solutions: first edition', International Union for Conservation of Nature (IUCN), 2020.
- 7 Ovalle-Rivera O, Läderach P, Bunn C, Obersteiner M, Schroth G (2015) 'Projected Shifts in *Coffea arabica* Suitability among Major Global Producing Regions Due to Climate Change'. PLoS ONE 10(4).
- 8 'Scaling private investments in conservation: five barriers and five solutions', Coalition for Private Investment in Conservation (CPIC), 2020.
- 9 'Investing in partnership with nature: An interview with Jennifer Pryce, President and CEO, Calvert Impact Capital', Earth Security, 2021.
- 10 Visit Convergence's blended finance work at <https://www.convergence.finance/blended-finance>
- 11 'OECD DAC Blended Finance Principle 2: Design Blended Finance to Increase the Mobilisation of Commercial Finance', Organization for Economic Cooperation and Development (OECD), 2020.
- 12 'The State of Blended Finance 2020', Convergence, 2020.
- 13 'Blended Finance', Global Environment Facility. Available at: <https://www.thegef.org/topics/blended-finance> (accessed 29 March 2021).
- 14 The definitions of blended finance modes has drawn on the following resources: 'The State of Blended Finance 2020', Convergence, 2020; 'The Little Book of Investing in Nature', Tobin-de la Puente, J. & Mitchell, A.W. (eds.), Global Canopy, 2021; 'Catalytic First-loss Capital', Global Impact Investing Network, October 2013; 'SDC Handbook on Private Sector Engagement', Swiss Agency for Development and Cooperation, January 2021; 'Blended Finance: Bridging the Sustainable Development Finance Gap', OECD, 2017.
- 15 'Cloud Forest Blue Energy Mechanism', Global Innovation Lab for Climate Finance, 2018.
- 16 'New impact investment instrument targets cloud forests and energy security in Latin America', Development Aid, 2018.
- 17 'Cloud Forest Blue Energy Mechanism: Instrument Analysis', Global Innovation Lab for Climate Finance, 2017.
- 18 'Land Degradation Neutrality (LDN) Fund: An innovative impact investment fund for soil health, with a linked TA facility', Mirova, 2019.
- 19 'Land Degradation Neutrality (LDN) Fund', Center for International Forestry Research (CIFOR), 2015.
- 20 'Land Degradation Neutrality Fund: An innovative fund project dedicated to sustainable land use' Mirova, 2017.
- 21 'The Business Case for Investing in Soil Health', World Business Council for Sustainable Development (WBCSD), 2018.
- 22 'Sustainable risk-adjusted returns through natural capital', Queru, G., LAPF Investments, 2017.
- 23 'Land Degradation Neutrality Fund: Catalysing private capital for sustainable land management and restoration projects', Climate Action Stories, 2020.
- 24 'Innovative Financing – Debt for Conservation Swap, Seychelles' Conservation and Climate Adaptation Trust and the Blue Bonds', 2020.
- 25 'Investing in the Blue Economy: How Should Impact Be Measured?', Imperial College Business School, 2019.
- 26 'Finance Plan for Biodiversity Conservation 2019-2023', The Biodiversity Finance Initiative: Seychelles, 2019.
- 27 'Global Fund for Coral Reefs: Terms of Reference (2020-2030)', Conservation Finance Alliance, April 2020.
- 28 'Forest Resilience Bond', Blue Forest Conservation, 2017.
- 29 'Case Study: The Forest Resilience Bond (FRB)', Convergence, 2020.
- 30 'The Forest Resilience Bond', Coalition for Private Investment in Conservation (CPIC). Available at: <http://cpicfinance.com/the-forest-resilience-bond/> (accessed 29 March 2021).
- 31 'The Reforestation Accelerator: A Powerful Tool for Driving Natural Climate Solutions', The Nature Conservancy, May 20, 2020.
- 32 'Data brief: Blending in Conservation Finance', Convergence, October 2019.
- 33 'The State of Blended Finance 2020', Convergence, 2020.
- 34 'Global Fund for Coral Reefs: Terms of Reference (2020-2030)', Conservation Finance Alliance, April 2020.
- 35 'Investing in partnership with nature: An interview with Jennifer Pryce, President and CEO, Calvert Impact Capital', Earth Security, January 2021.
- 36 'The Little Book of Investing in Nature', Tobin-de la Puente, J. & Mitchell, A.W. (eds.), Global Canopy, 2021.
- 37 'The Forest Resilience Bond Case Study', Convergence, June 2020.
- 38 'Annual Impact Investor Survey 2018', Global Impact Investing Network, June 2018.
- 39 'The State of Blended Finance 2020', Convergence, 2020.
- 40 'Environmental Impact Bonds: Where are they now?', Austin Thompson, UNC Chapel Hill, July 2020.
- 41 'World's First Wildlife Bond to Track Rhino Numbers in Africa', Bloomberg Green, March 2021.
- 42 'Global Fund for Coral Reefs: Terms of Reference (2020-2030)', Conservation Finance Alliance, April 2020.
- 43 'Blended Finance for Natural Capital Investments', Nature Capital Investment Conference 2021, March 2021.
- 44 'Prime Minister commits £3bn UK climate finance to supporting nature', Prime Minister's Office, 2021.
- 45 'The Blended Finance Playbook for Nature-based Solutions', Earth Security Webinar, 23 March 2021.
- 46 'Terra Silva', Catalytic Capital Consortium, 2019.

ACKNOWLEDGEMENTS

Earth Security is grateful to the sponsors that have made this research possible: The Swiss Agency for Development and Cooperation, HSBC, and UBS Optimus Foundation.

We also wish to thank the investors and experts that provided their insights on blended finance for the Earth Security Webinar 'The Blended Finance Playbook for Nature-based Solutions' that took place on 23 March 2021: Adam Connaker (The Rockefeller Foundation); Jason Scott (Renewable Resources Group); Jamie Cashman (US International Development Finance Corporation); and Avril Benchimol Dominguez (Global Environment Facility).

In addition, we are also grateful to the individuals that provided their time and insight to support this work through dedicated interviews, from Bloomberg Philanthropies; Calvert Impact Capital; Conservation International; Convergence; Foreign, Commonwealth & Development Office; Gordon and Betty Moore Foundation; Mirova Natural Capital; Swiss Agency for Development and Cooperation; Wyss Academy for Nature.

earth security

info@earthsecurity.org
earthsecurity.org

