The background features a dark blue gradient with faint, semi-transparent financial charts and a world map. In the top right corner, there is a line graph with a green upward-pointing triangle and the text 'Index ▲ 1.56' and a red downward-pointing triangle with the text '▼ 0.78'.

# Greening Sovereign Debt

## Building a Nature and Climate Sovereign Bond Facility

February 2021



# Greening Sovereign Debt: Building a Nature and Climate Sovereign Bond Facility

## About the Proposal

**This briefing sets out a proposal to accelerate the timely and effective integration of nature and climate into sovereign debt markets.** It sets out the core design for a practical mechanism to support sovereign issuers and their investors to address the short-term sovereign debt crisis in ways that drive a green, inclusive recovery, while embedding over the long-term nature- and climate-related risks and opportunities in sovereign debt markets.

**The Nature and Climate Sovereign Bond Facility builds on recent experience in establishing collaborative platforms to support green and sustainability bonds.** Such platforms have provided services to creditors and debtors in advancing nature- and climate-linked debt agreements, including technical assistance, performance assessment, credit enhancement and other financial services. All of these are crucial to rapidly mobilise public and private finance to support economic recovery and scale up funding for investments in nature and climate.

**2021 is the year to establish the facility to support international efforts to address both the sovereign debt crisis and ambitious action on nature and climate.** It is encouraging that many aspects of the facility proposal set out in this paper are today under consideration by the World Bank and its partners with a view to supporting developing countries align nature- and climate-related sovereign debt relief and restructuring. These efforts need to be supported and amplified through the frame of the G20 and the G7, as well as through forthcoming international meetings on climate and biodiversity. Development finance institutions, sovereign and private actors, and environmental and development organisations all have a role to play.

**For related past publications, please see:**

- [Recapitalising Sovereign Debt: Policy Briefing](#)
- [Recapitalising Sovereign Debt: Technical Paper](#)
- [Emerging Market Debt Crisis: Biodiversity as a Lever for Building Back Better](#)

**This paper has been prepared by Ashley Gorst, Simon Zadek and Louis de Montpellier on behalf of F4B.** Comments and queries about this proposal, and other work of F4B, can be addressed to [contact@f4b-initiative.net](mailto:contact@f4b-initiative.net).

## Acknowledgements

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## About Finance for Biodiversity

Finance for Biodiversity (F4B) aims to increase the materiality of biodiversity in financial decision-making, and so better align global finance with nature conservation and restoration. F4B is advancing five workstreams that create and amplify the feedback signals that increase the value of biodiversity in private and public financing decisions:

- **Market efficiency and innovation:** including a leadership role in the Task Force on Nature Related Financial Disclosure, and support to a number of data and fintech-linked initiatives
- **Biodiversity-related liability:** with a particular focus on the place of extended environmental legal liabilities for financial institutions, as well as financial policy and regulatory initiatives.
- **Citizen engagement and public campaigns:** advancing data and fintech-led instruments to catalyse shifts in citizen behaviour as consumers, savers, pension holders and capital owners.
- **Responses to the COVID crisis:** advancing measures and advocacy linked to stimulus and recovery spending, and the place of nature in sovereign debt markets.
- **Nature markets:** catalysing nature markets by developing new revenue streams and robust governance innovations.

F4B has been established with support from the MAVA Foundation, which has a mission to conserve biodiversity for the benefit of people and nature.

For more information, visit [www.f4b-initiative.net](http://www.f4b-initiative.net).



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## Executive Summary

**Unsustainable levels of sovereign debt threaten many countries and the imperative of an inclusive, green transition.** COVID-19 has put immense strain on governments' ability to service their mounting debts. The International Monetary Fund (IMF) has warned that half of low-income countries are either at high risk of, or in, debt distress. Debt restructurings in Angola, Argentina, Belize, Ecuador, Kenya, Lebanon, Suriname and Zambia underscore the mounting severity of this crisis. The G20 has temporarily suspended debt payments for many developing countries, and the international community is now looking for solutions to ensure the pandemic does not lead to lasting economic damage.

**Nature's health and the impacts of climate change pose both immediate and long-term risks to sovereigns and investors.** Half of global gross domestic product (GDP) depends on nature, with this share higher in many developing countries. The Dasgupta Review on the economics of biodiversity highlights the increasing importance of nature's role in supporting resilience and economic productivity. This is both because of the importance of nature in mitigating climate and other physical risks, and because of the growth in nature-based economic opportunities. Yet nature conservation efforts have to date fallen far short of what is needed to sustain its vital contribution to our economies and broader well-being.

**Short- and longer-term solutions to addressing both the debt and the nature and climate crises must be mutually reinforcing.** The solutions to today's crises must embed nature and climate risks and opportunities into tomorrow's sovereign debt markets, and indeed across all of global finance. Such a positive disruption is now realistic, building on the recent growth of sustainability-aligned debt that now exceeds US\$1.5 trillion, and is expected to make up 10% of global issuance in 2021. Initiatives such as the Task Force on Nature-related Financial Disclosures (TNFD) and related policy and regulatory developments have exemplified and accelerated greater investor awareness and accountability.

**For the first time in history, there are calls for an 'inclusive, green debt relief' round.** Leading policymakers, organisations and figures in the financial community are calling for actions and initiatives that integrate nature, climate and other Sustainable Development Goals (SDGs) into the response to the debt crisis, by funding short-term recovery needs whilst kick-starting a virtuous circle to rapidly scale up international nature and climate finance. The World Bank, with a wide-ranging global partnership, is advancing approaches to sovereign debt instruments that integrate nature and climate priorities. The United Nations Economic Commission on Africa has, for example, set out a proposal to provide immediate debt relief linked to concessionary access to nature- and climate-positive sovereign debt instruments and agreements which can underpin green investment strategies.

**Establishment of a Nature and Climate Sovereign Bond Facility would enable a robust scaling of nature- and climate-linked sovereign debt across diverse policy environments, contexts, actors and needs.** Such a facility would provide the foundations needed to coordinate and consolidate the technical expertise of different stakeholders. It would become a key reference mechanism for advancing nature- and climate-linked sovereign debt instruments that can be used across diverse fiscal and policy contexts, leveraging blended finance opportunities where appropriate. By building robust performance assessment, more standardised approaches, and engaging with debt markets actors such as rating agencies and index providers, the facility would establish the conditions for scaling the integration of nature and debt into sovereign debt markets, in both the immediate context of the debt crisis, but also, crucially, for the longer term.

**The proposed Facility would offer practical support to debtors, creditors, and other policy and market actors and experts in advancing nature- and climate-linked sovereign debt investments.** Its mandate would be to:

*Develop debt solutions and markets for nature- and climate-linked sovereign debt by advancing innovative instruments, co-ordinating efforts of public and private actors, crowding-in innovation and actors, mobilising finance, encouraging learning, promoting standardisation, and reducing costs.*

**In fulfilling its mandate, the facility would have seven, inter-linked functions:**

- 1. Catalysing the use of innovative sovereign debt instruments** structured to integrate nature and climate into performance offers, the cost of capital and the use of proceeds, linked to both new issuance and debt restructuring arrangements.
- 2. Coordinating the integration of nature and climate into international sovereign debt markets** with relevant supranational organisations at the core of the international financial system, and to promote these market developments with sovereign issuers, investors and market actors such as credit rating agencies.
- 3. Managing performance assessment**, notably the development of relevant nature and climate metrics and associated monitoring, reporting and verification (MRV) assessment tools to oversee robust performance outcomes. This would link national commitments on nature and climate to existing and emerging metrics and standards.
- 4. Leveraging the balance sheets of many public and private financial institutions** to support the mobilisation of 'green-linked' concessional and blended financing from diverse sources - notably across the development finance community - in enabling pilots and links to short-term debt relief. This would pave the way towards nature and climate becoming an integral part of the 'new normal' of sovereign debt markets.

5. **Promoting standardisation of nature and climate performance outcomes** through systematic data collection, analysis, and reporting protocols, drawing on existing green and sustainable development bond initiatives and standards; and encouraging nature- and climate-related developments with rating agencies, indexing and data providers.
6. **Promoting institutional knowledge sharing and capacity building** to embed natural capital in sovereign bond issuance across all debt market actors including all-important banking and advisory intermediaries. This would involve working with sovereign debtors in developing nature and climate performance modelling and offerings, increasingly linked to risk pricing.
7. **Reducing transaction costs** to issuers and investors by: bringing together counterparties to make investments; increasing standardisation; providing credible and authoritative nature and climate performance-linked data and assessment; and building out knowledge. This would support de-risking of investments across both the debtor and creditor communities.

**Establishing the facility during 2021 would be consistent with the urgent need for effective action on debt, nature and climate.** The ambitious yet practical mandate and design of the facility, and the unique constellation of policy pathways, provides an historic opportunity for aligning sovereign debt relief with nature and climate outcomes. It would ensure strong alignment with key international nature and climate policy priorities being discussed the CBD and UNFCCC Conferences of the Parties. Short-term action can and must be taken in the context of debt relief, but in the context of the longer-term agenda for nature and climate to become part of the ‘new normal’ of sovereign debt markets.

**The policy and political context provide positive and viable pathways for advancing these complementary agendas.** The G20 and G7 in particular have a strong track record of advancing platforms that support the implementation of innovative approaches to financial and economic policy development. These moves would be all the more attractive in being aligned to forthcoming international negotiations on both climate and nature.

**The facility proposed in this paper would be complementary to, and supportive of, several related initiatives advocating inclusive green debt relief.** An array of expert and advocacy organisations are supportive of such a facility being established, with key multilateral institutions already taking leadership, including development finance institutions, such as the World Bank, working in close collaboration with other international organisations including the IMF, the Organisation for Economic Co-operation and Development (OECD) and the United Nations (UN).

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# 1. The Challenge

## Nature's role in supporting resilience and economic productivity

**Natural capital is a fundamental source and driver of the wealth of nations.** Natural capital is the stock of natural processes, habitats and species that underpin human life and economic prosperity. Economies depend on nature to sustain the quality of the air and soils, distribute fresh water, regulate the climate, provide pollination and pest control, and reduce the impact of natural hazards. The World Economic Forum (WEF) estimates that over half of global GDP is highly or moderately dependent on nature, with this share higher in many developing countries.<sup>i</sup> The release of the Dasgupta Review on the Economics of Biodiversity in February 2021 has cemented the idea that nature functions like any other type of capital, including produced capital (like roads and buildings) and human capital (like education and health).<sup>ii</sup> Yet natural capital is declining at an unprecedented rate, and pressures driving this decline are intensifying.

### Nature Crisis Will Lead to an Economic Crisis

**The crisis of nature and climate change threatens to undermine productivity and prosperity.** The Global Assessment Report on Biodiversity and Ecosystem Services states that one million species are at risk of extinction globally. The latest edition of the WWF's Living Planet Report states that population sizes of mammals, birds, fish, amphibians and reptiles have fallen 68% since 1970 due to loss of habitats driven by human interference.<sup>1</sup> The world also faces an urgent challenge to avoid harmful climate change, with the Intergovernmental Panel on Climate Change (IPCC) warning there are only ten years left to act to limit warming to 1.5°C. The human and economic costs of COVID-19, wildfires, locust infestations and floods are visible symbols of this crisis. The IMF estimates that the economic costs of COVID-19 alone are projected to reach US\$28 trillion, highlighting the fragile link between nature and the economy. The release of 'The Economics of Biodiversity: The Dasgupta Review' sets the benchmark for analysing nature as an asset alongside produced and human capital, with biodiversity enabling nature to be productive, resilient and adaptable.

**The link between nature and the drivers of economic growth and resilience are increasingly understood and measurable.** Nature directly impacts economic performance through three main channels, as shown in Figure 1:

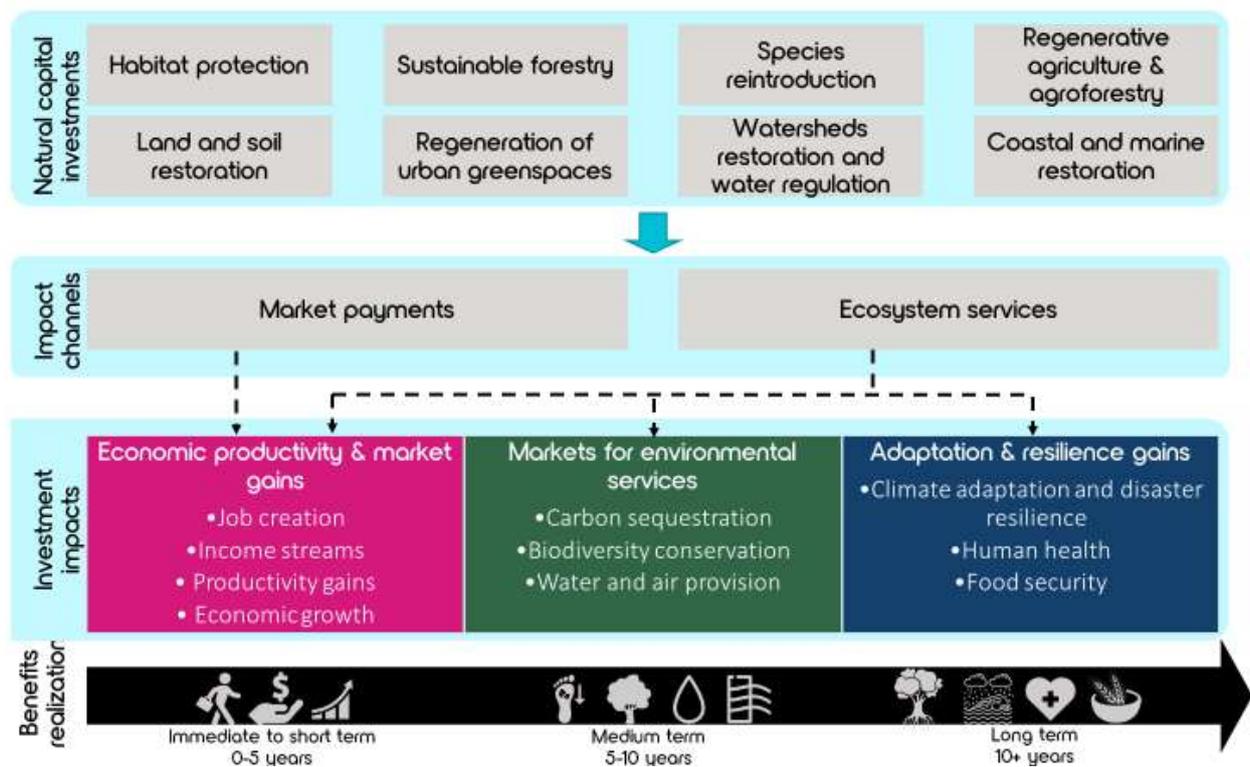
**1) Productivity and market impacts:** These are impacts to established markets and are recorded on private and public economic accounts. They are captured by metrics such as household income, public revenue streams, job creation, gross value-added (GVA), and economic growth (or gross domestic product (GDP)). These include impacts on sectors such as

sustainable agriculture and tourism that can create both a stream of revenue and positive environmental impact.

**2) Marketable ecosystem services:** As markets become more robust, the value of certain ecosystem services will become increasingly monetizable, offering new revenue streams from natural capital investments. The most developed example is carbon sequestration, though early-stage markets also exist for biodiversity and water sanitation and regulation.

**3) Adaptation and resilience:** Adaptation and resilience support economic stability and can prevent future economic damage through reducing exposure to natural hazards or vulnerability. These are longer-term and sometimes more difficult to quantify directly in monetary terms. Quantifiable examples include avoided flood or drought damage. Examples that are more difficult to quantify due to their widespread economic impacts include reduced risk of future zoonotic disease-related pandemics, and greater food security.

**Figure 1: The role of nature in driving economic performance**



**Depleting natural capital threatens economic productivity and jeopardises a country's ability to generate wealth.** Rapid, unsustainable use of natural capital may generate immediate income (e.g. through deforestation) but it compromises the ability to generate future income. Short-

term fiscal pressures due to COVID-19 increased deforestation during the first half of 2020 in parts of Africa and Asia<sup>iii</sup>. This example illustrates a common pattern across many nations, where between 2015 to 2020, the rate of deforestation was 10 million hectares per year due largely to conversion of forests to agriculture.<sup>iv</sup> Despite these trends, natural capital becomes more critical for countries as they develop and become more productive, with the World Bank Changing Wealth of Nations Report showing that the value of natural capital per person in OECD countries is three times that of low-income countries.<sup>v</sup>

***“As governments rebuild... policymakers must learn to value nature, providing the right conditions and incentives to drive change. One important step would be to create a new asset class comprised of things such as productive soils, crop pollination, and watersheds.”***

*Hank Paulson, Chair, Paulson Institute*

**Nature is one of the main drivers of economic activity in many emerging markets, with large, diverse but diminishing stocks available.** Across low income countries, nature makes up 47% of total wealth according to the World Bank.<sup>vi</sup> Many of these countries are home to particularly rare or valuable habitats and species, offered both public and private investors opportunities to invest in the economic returns from nature. Indeed, research by WWF, the Global Trade Analysis Project (GTAP) and the Natural Capital Project has shown that there is a clear correlation between the decline in services nature is able to provide and GDP growth.<sup>vii</sup>

**Nature and climate risks and opportunities are increasingly recognised by governments, regulators, financial institutions and investors.** Recognition of the scale of the crisis is growing amongst regulators and investors, with the Taskforce for Climate-related Financial Disclosures (TCFD) and emerging Taskforce for Nature-related Financial Disclosures (TNFD) pushing greater responsibility on investors to account for the impact of their investments on climate and nature. Natural capital investments have traditionally been overlooked by both private and public finance communities, ignoring a potentially large domain of investments that generates a double dividend of strong environmental and economic returns. The Food and Land Use Coalition estimates a global commercial opportunity of US\$200 billion from protecting and restoring nature by increased conservation and the restoration of 300 million hectares of tropical forests by 2030.

**Many countries face the twin challenges of stopping the decline in nature and responding to the climate crisis, requiring coordinated but distinct policies to address both.** Addressing the pressures on nature will require national policies focused on ecosystem and species protection and restoration, including protection of highly biodiverse forests, wetlands and marine areas. At the same time, meeting climate mitigation and adaptation targets requires countries to invest

in low-carbon energy systems and resilient infrastructure. Meeting national nature and climate goals could overlap significantly with cost-effective nature-based solutions - such as afforestation and peatland restoration - which reduce emissions while also protecting and restoring valuable ecosystems. While some integrated solutions to both crises are available to policymakers, targeted policies to mobilise financial resources will be needed to ensure that the natural world is protected, while emissions reductions and adaptation needs are met.

**Countries lack the financial resources and incentives to address nature and climate challenges, despite the growing evidence of its materiality.** Recent work by the Paulson Institute and The Nature Conservancy (TNC) has shown that global financial flows into conservation were between US\$124-143 billion in 2019. This figure compares with over US\$500 billion spent on harmful agricultural, forestry and fisheries subsidies. Currently 80% of financial resources available for conservation are from public sources<sup>viii</sup>, illustrating the large gap and opportunity to align private finance with nature. Meetings of the G7, G20, United Nations Convention on Biological Diversity (COP15) and the United Nations Framework Convention on Climate Change (UNFCCC) COP26 climate conference in 2021 all put ambitious action on nature and climate finance high on the agenda, representing a global opportunity to cement policies that deliver resources at scale.

## **The fundamental link between nature, climate and sovereign debt**

**There is still a fundamental mismatch between sovereign debt markets and the incentives to act on nature and climate.** Despite the large funding and policy gap that exists between what is required to stop the destruction of nature and respond to climate change, and what is currently being done, sovereign debt markets remain agnostic about nature and climate risks.

**Sovereign debt markets do not recognise that natural capital underpins the health of the economies they are betting on.** In contrast to corporate firms, sovereigns are not evaluated based on their balance sheets (the total stock of assets and liabilities), so the state of the assets that underpin their economies is overlooked by most issuers and investors. Not accounting for the state and management of natural capital means that debt markets do not price in the risks posed by destroying a nation's natural assets. Nature – and the biodiversity it supports – plays a critical role in economic growth and resilience, but has long been absent in considerations of the attractiveness and risk of countries' sovereign debt.

**The integration of natural and climate risks and opportunities in sovereign debt markets is incomplete, creating the need to incorporate them properly into these markets.** Work by the IMF and others highlights the increased cost of capital, poorer credit ratings and risk of default for climate vulnerable countries, which are often amongst the world's poorest states.<sup>ixx</sup> This

work also shows that countries that are able to increase their resilience to climate shocks also reduce the risk of default. Work by the researchers at the Grantham Research Institute at the London School of Economics and Political Science estimates that 28% and 34% of Argentina and Brazil's sovereign bonds respectively are exposed to the potential climate and deforestation policy during the 2020s.<sup>xi</sup> Ratings firms are beginning to integrate nature and climate risks into their analysis, highlighting significant credit risks to countries exposed to climate impacts and dependent on stocks of natural capital (an example of emerging work is S&P's ESG Risk Atlas<sup>xii</sup>).

**While nature and Environmental, Social and Governance (ESG) considerations have been integrated into other sectors and asset classes, sovereign debt markets are lagging at a time when critical leadership is required.** The global sovereign debt market stands at US\$64 trillion<sup>xiii</sup>, yet sovereign debt instruments today offer little or no opportunity for the issuers of debt to capitalise on improvements in their natural capital, or for investors to seek better nature and climate performance to reduce sovereign risk.<sup>xiv</sup> Investors in other asset classes are increasingly demanding instruments that offer clear, measurable environmental benefits or reduced exposure to investments, with investments in sustainable assets totalling USD\$30.7 trillion in 2019 in developed countries alone.<sup>xv</sup>

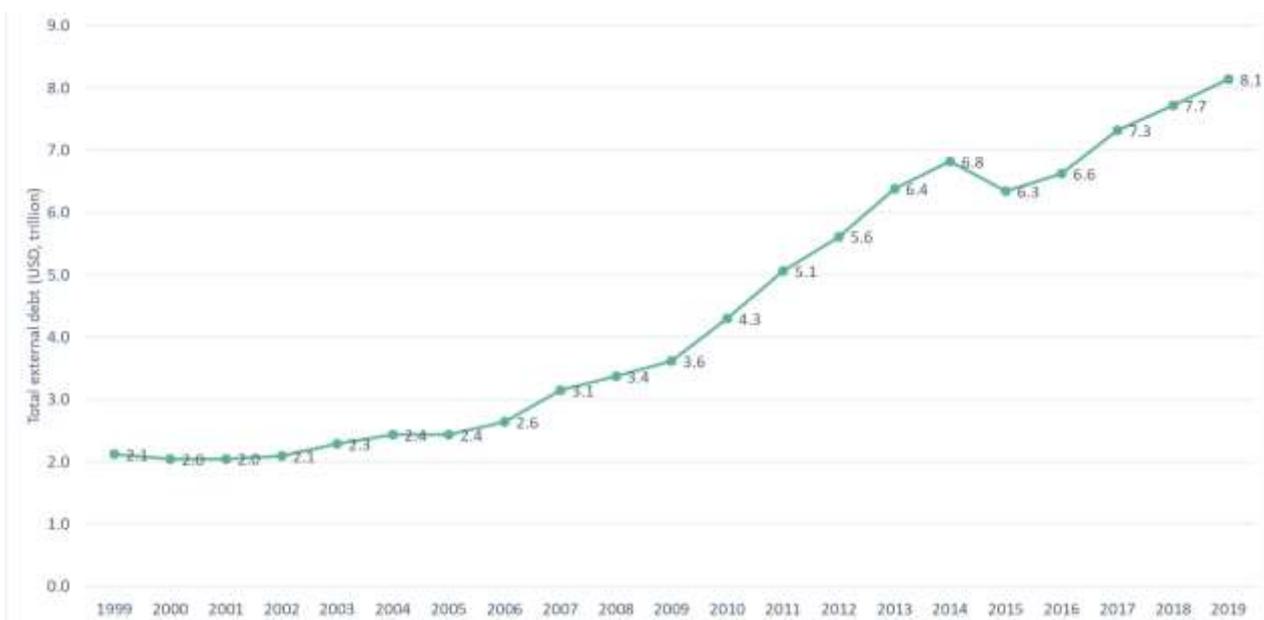
**To drive the integration of natural capital into sovereign debt markets, sovereign issuers and investors require instruments to align the price of sovereign debt with the risks and opportunities posed by the management of natural capital.** Many investors recognise that the value of nature capital should influence their macro appraisal and creditworthiness assessment of sovereign debtors, especially in emerging markets. However, they do not have the instruments to express these considerations in a proper risk/return investment framework. Increasing the options available to fund natural and climate investments at scale through sovereign debt markets can more correctly align sovereign debt markets with the fundamental drivers of prosperity, creating new opportunities now and in the future.

## **A looming debt crisis**

**The COVID-19 pandemic has reduced the short-term growth prospects of most emerging market countries.** The global recession and containment measures to stop the spread of COVID-19 has led the IMF to project that economic growth in emerging markets will contract by 5.7% in 2020. Rescue packages in emerging economies so far total 5.4% of their GDP.<sup>xvi</sup> The combined effect of increased public spending and reduced government income has put a large fiscal strain on many economies, leading to an urgent need to secure liquidity to fund the pandemic response and recovery.

**Fiscal impacts of COVID-19 have increased the already large debt burden pushing many countries towards the risk of default.** As shown in Figure 2, developing countries' external sovereign debt reached US\$8 trillion at the end of 2019. According to the United Nations Conference on Trade and Development, the cost of debt service in 2020 and 2021 will be over US\$3 trillion across emerging economies, raising concerns in financial markets about debt sustainability in some of the poorest countries.<sup>xvii</sup> In 19 sub-Saharan African countries, the debt to GDP ratio reached 71% in 2020 compared with 26% in 2012.<sup>xviii</sup> At the same time, debt restructurings in Angola, Argentina, Belize, Ecuador, Kenya, Lebanon, Suriname and Zambia are clear examples of the pressure on developing and emerging markets, with the IMF warning that over 50% of low-income countries are either at high risk of, or in, debt distress.<sup>xix</sup>

**Figure 2: Total external debt stock for 135 low- and middle-income countries**



Source: World Bank

**The G20 has unveiled short-term support to aid economic recovery but debt markets will be needed to support the need for more funding.** The G20 has suspended official bilateral debt service payments through the Debt Service Suspension Initiative (DSSI) for 73 low- and lower-middle-income countries. This provides much needed debt relief, but these countries, and many others outside of the DSSI framework, will continue to rely on lending from the public and private sector to fund the post-pandemic recovery, and to support long-term investment needs.<sup>xx</sup>

**Responding to the global debt crisis requires meeting short-term funding needs while putting economies on a sustainable path.** Many emerging economies need help to support health, social and economic challenges associated with COVID-19. Additionally, the IMF has called for recovery measures to shape nature, climate and human health in the long-term.<sup>xxi</sup> Despite these calls, recovery programmes across the world have largely failed to contribute to more sustainable outcomes, with US\$2.8 trillion of the US\$14.9 trillion injected estimated to leave large and lasting impacts on carbon emissions and nature, through damaging support for agriculture, industry, waste, energy and transport.<sup>xxii</sup>

**Investments in nature can have strong immediate economic benefits, being deployable quickly, and can be targeted towards vulnerable communities.** For every US dollar invested, investments in natural capital generate US\$3.75 in annual output gains.<sup>xxiii</sup> The investment multipliers for nature-focused interventions are often higher than traditional stimulus measures as they are more labour-intensive, so more of the value-added accrues to sectors and workers directly employed rather than on intermediate inputs. In Africa specifically, natural capital investments outperform investments in more traditional sectors such as agribusiness, energy and infrastructure.

**Solutions that integrate nature and climate into debt relief have gathered rapid momentum.** For the first time in history, there is serious policy debate about an ‘inclusive, green debt relief’ round. Such a progressive conditionality comes with many challenges, whilst offering the potential to leverage the crisis in accelerating the transition to sustainable development.<sup>xxiv</sup> The United Nations Economic Commission on Africa (UNECA) sets out a proposal to provide immediate liquidity and develop a medium-term green stimulus investment strategy supported by nature and climate financing instruments.<sup>xxv</sup> Similarly, the Debt Relief for a Green and Inclusive Recovery Initiative has called on G20 members to tie debt relief to low- and middle-income countries with commitments to pursue green and inclusive recovery.<sup>xxvi</sup> US President Joe Biden has pledged to meet America’s climate finance goals by providing “green debt relief” to countries that align recovery efforts with climate mitigation.

**There is an opportunity to respond to short-term recovery needs, while laying the foundation for broader market reforms.** Nature, climate and other Sustainable Development Goals (SDGs) can be integrated into the response to the crisis by deploying instruments that fund short-term recovery needs, which kick-start a virtuous circle to rapidly scale up international nature and climate finance. To turn policy intentions into concrete results, as well as credibly develop budding market structures, an execution platform is needed to concentrate on market mechanisms and instruments that integrate performance on nature and climate policy objectives. This would offer the opportunity to use ‘green-linked’ concessional finance and blended finance solutions to leverage public sector funds to catalyse private sector involvement at scale.

## 2. The Tactical Opportunity

**There is an urgent need to facilitate a transition towards incorporating nature and climate into emerging and global debt markets.** This would provide issuers and investors with the tools to respond to the current debt crisis in ways that positively impact nature and climate, while better aligning the cost of capital with natural capital. Many investors recognise the value of natural capital should influence their appraisal and creditworthiness assessment of sovereign debtors, especially in emerging markets. They do not have at their disposal, however, investment instruments and market structures to express these considerations in a proper investment framework.

**Establishing the facility during 2021 is consistent with the urgent need, its ambitious yet practical mandate and design, and the unique constellation of policy pathways.** This year provides an historic opportunity for aligning sovereign debt relief with nature and climate outcomes. Short-term action can and must be taken in the context of debt relief, but very much in the context of the longer-term agenda for nature and climate to become part of the ‘new normal’ of sovereign debt markets.

**The present policy environment provides viable pathways to advance this twin agenda to transform sovereign debt management for the future.** G7 and G20 leaders have committed to working towards implementing a Common Framework for addressing the mounting sovereign indebtedness by working with governments and International Finance Institutions “to protect jobs and support a strong, sustainable, balanced and inclusive recovery.”<sup>xxvii</sup> Several national authorities, including members of the G20 and G7, are communicating publicly and debating internally at the highest level about inclusive green sovereign debt relief for emerging markets. This economic policy debate towards green debt relief is also supported by high quality conceptual and technical research by multilateral organisations, as well as by proposals coming from different market participants and civil society organisations.

**The G20 and G7 have a strong track record in advancing such platforms that support the operationalisation of innovative approaches to financial and economic policy development.** Such a facility would be complementary to, and support of, several related initiatives advocating inclusive green debt relief. Moreover, multiple expert and advocacy organisations are supportive of such a facility being established, with key multilateral institutions already taking leadership, including development finance institutions such as the World Bank working with other international organisations including the IMF, the OCED, and the UN. Such moves would be all the more attractive in being aligned to forthcoming international negotiations on both climate (UNFCCC COP26 in Glasgow, UK) and nature (CBD COP15 in Kunming, China).

**The growth of green and sustainable debt instruments demonstrates the market environment is moving towards scaling up the integration of nature and climate into the sovereign debt markets.** The sustainable debt universe now tops US\$1.5 trillion for the first time. This market continues to grow, with global sustainable debt issuance surpassing US\$270 billion during the first seven months of 2020, up by 5% since 2019.<sup>xxviii</sup> Mainstream investors are increasingly looking for ways to factor in natural capital into their investment portfolios.<sup>1</sup> With the demand for ESG investments multiplying across all markets, sovereign debt markets will be the next frontier in aligning finance with nature and climate.

**The private sector will be crucial in advancing nature- and climate-linked debt instruments that can be valued and traded across global markets.** Without the interest of private investors, the potential for scaling these solutions will remain limited. There is a clear need to leverage private sector capital by ensuring these debt instruments meet investors' portfolio needs, can be adequately priced, create liquidity, and deliver value for money.

**Decision-makers urgently need a platform to launch options to address the debt crisis and climate and nature goals through global sovereign debt markets.** While many opportunities for innovation exist, uncoordinated efforts will likely result in confusion, inefficient use of resources and slow progress. Decision-makers urgently need a set of developed instruments to meet immediate budgetary needs, and address climate and nature goals through global sovereign debt markets. These efforts also require close coordination between supranational organisations and international finance institutions overseeing the functioning of international financial markets, to ensure this initiative is complementary to, and reinforces, wider efforts.

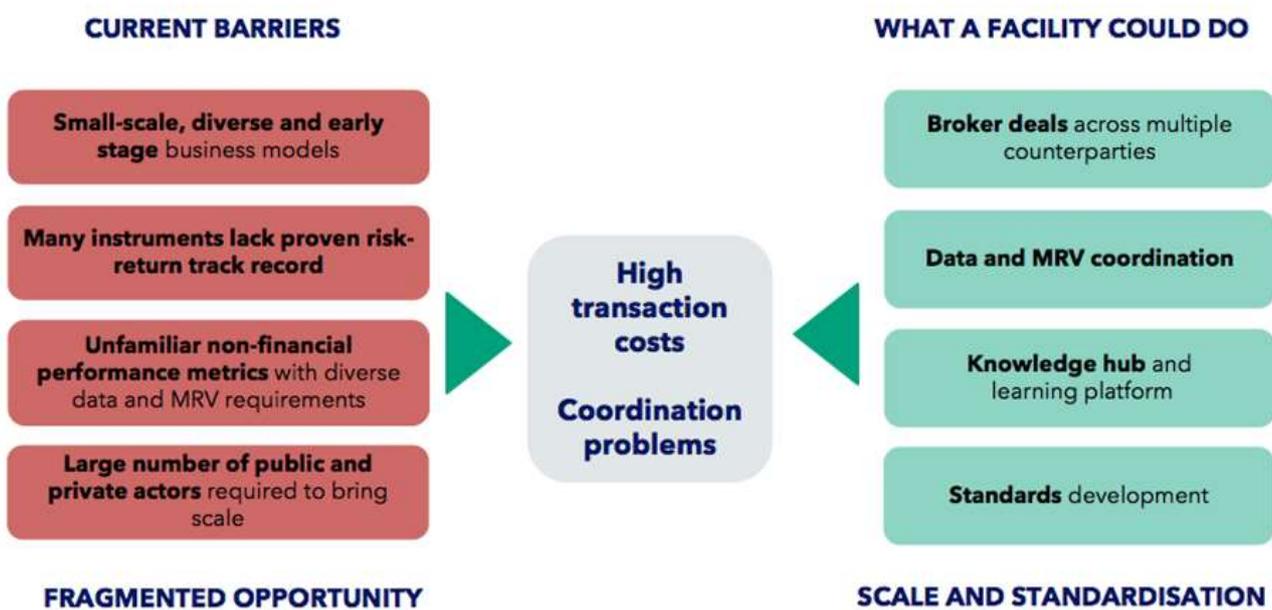
**Overcoming the barriers to integrating nature and climate into sovereign debt markets requires a clear, structured set of processes to consolidate knowledge and expertise.** Governments and investors will need the frameworks, expertise and capacity to make sovereign debt instruments accessible to a wide range of investors and issuers. A key barrier is the fragmented state of knowledge and expertise required to standardise bond structures and performance indicators, in order to simplify instruments that maximise investor potential. The key barriers are summarised in

Figure 3.

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<sup>1</sup> A prominent example is HSBC Global Asset Management and Pollination Group's Natural Capital Fund aim to raise US\$6 billion from institutional investors.

Figure 3: Overcoming the barriers to coordination and scale



To capitalise on this opportunity, a dedicated and technically well-equipped execution platform is needed to rapidly develop and scale the deployment of these instruments. The aim of such a facility would be to organise, develop and promote the market for emerging sovereign debt instruments that integrate nature and climate outcomes. The facility would focus on the emerging world as offering the most immediate potential for decisive nature impact linked sovereign debt. It could also serve as a source of inspiration and an execution guide to promoting the inclusion of nature and climate impact parameters into all sovereign debt markets, including the largest ones of the developed world.



### 3. Catalysing New Sovereign Nature and Climate Instruments

**The facility would catalyse several potential debt instruments structured to link sovereign performance to the nature and climate space.** While the facility would support the use of green sovereign bonds where and when appropriate, the facility should also focus on a new generation of nature and climate bonds, or nature performance bonds (NPBs), as a new generation of sovereign state-contingent debt instruments (SCDIs). The deployment of several possible bond structures would allow the facility to meet the needs of different debtors with varied borrowing and technical capacity, and the objectives of different categories of investors.

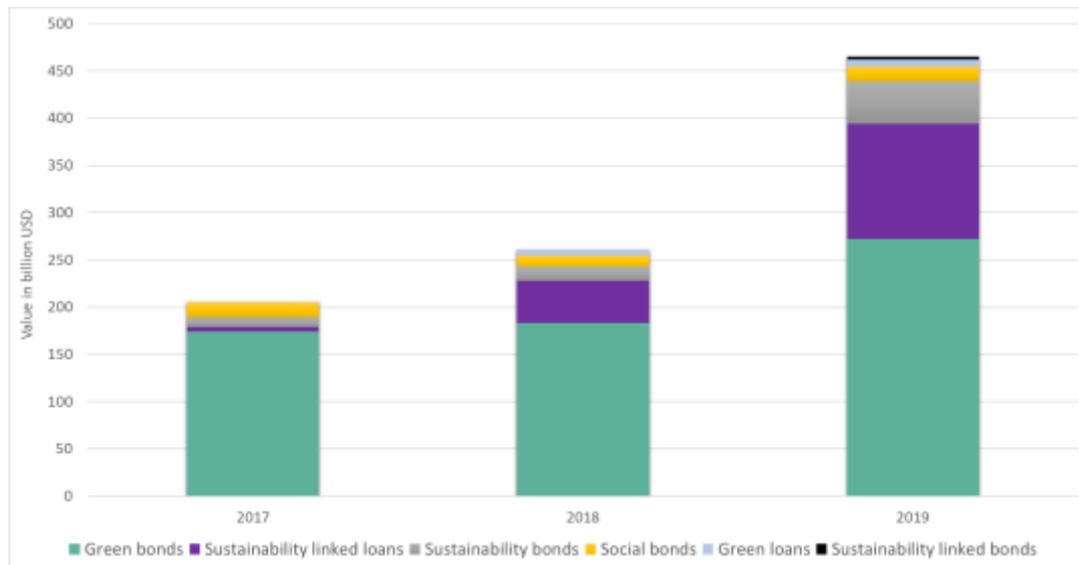
**The following section summarises the status of these instruments in sovereign debt markets and the key barriers that a facility would overcome to deploy these instruments at scale.**

#### Green, social and sustainability bonds

**The market for green, social and sustainability bonds has grown steadily since the first green bond issuance in 2007.** Green or sustainability bonds are fixed income assets used to fund projects that have positive environmental or sustainability impacts. The first green bond issuance by the European Investment Bank in 2007 was used to fund renewable energy and energy efficiency projects. The total issuance of green bonds stood at around US\$800 billion at the end of 2019<sup>xxix</sup>, and increased by US\$491 billion in 2020, including US\$250 billion of green bonds, US\$100 billion of social bonds and US\$75 billion of sustainability bonds. Moody's expects this to increase to a record US\$650 billion in 2021, with green, social and sustainability bonds representing up to 10% of global bond issuance.<sup>xxx</sup>

**A central benefit of green bonds lies in their simple financial characteristics.** The bonds share the same characteristics of ordinary bonds but include a commitment to 'use of proceeds' for green projects. Pricing of these bonds is simple, since the credit profile of a green bond is the same as an ordinary bond by the same issuer. Standards and certification of projects that meet green criteria have also developed over time, with best practices developed including the Climate Bonds Standard and Certification Scheme and the international standard developed under the EU Green Bond Standard.<sup>xxxi</sup> This approach is now being applied to support a broader set of SDGs, with the emerging SDG Impact Bond Standards providing a set of protocols to develop these instruments.<sup>xxxi</sup> Up to November 2020, 22 governments have issued green, social and sustainability bonds in the last four years<sup>xxxiii</sup>, including in the developed countries of France, Germany and South Korea, as well as in middle-income countries including Indonesia, Nigeria and Seychelles.<sup>xxxiv</sup>

**Figure 4: Value of sustainable debt issued worldwide from 2017 to 2019**



Source: Bloomberg NEF

**Several attributes of the sustainable debt market highlight the significant limitations in using green bonds to meet short- and long-term challenges.** First, the ‘use of proceeds’ approach is restrictive to issuers who need to raise funds for urgent short-term socioeconomic needs, since funds are earmarked for specific projects. Second, green bonds do not measure the impact of the use of proceeds on the overall sustainability performance of the issuer.

## State contingent debt instruments

**State contingent debt instruments (SCDIs) link debt payments to indicators that measure the state of key economic variables.** Recent work by the IMF divides SCDIs into two categories: instruments linked to continuous adjustments to debt service payments (e.g. linked to GDP or commodity prices), and instruments linked to one-off events (e.g. natural disasters). Variable debt terms are a crucial innovation for both debtors and creditors faced with increasing volatility, allowing for payments to vary depending on the state of a pre-defined variable.<sup>xxxv</sup> An attractive feature of these instruments lies in their capacity to generate fiscal space for sovereigns in the event of adverse events that affect their ability to repay debt, acting as a countercyclical and risk-sharing tool. This can lower the risk of default, benefiting creditors and investors. In Barbados and Grenada, a large proportion of external debt now includes state-contingent debt clauses in the event of a natural disaster.

**SCDIs set a precedent for linking debt payments to broader variables that link to economic performance.** SCDIs seek to better align the incentives of debtors and creditors by pricing in the

risk of adverse events driving lower than expected macroeconomic performance. While they can act as insurance against downside risk and generate short-term liquidity, they do not incentivise countries to invest in long-term productivity and resilience. By not doing so, future debt payments are not linked to the risk of destruction of natural capital driving adverse performance.

**To date the take-up of SCDIs has been low, with issuance mostly limited to debt restructuring contexts.** So far, SCDIs have only been issued by sovereigns in a handful of cases, mainly in a debt restructuring context.<sup>xxxvi</sup> Limited uptake has partly reflected the ‘novelty premium’ demanded of such instruments, and their ad-hoc and non-standardisable nature. Further standardisation is critical for creating liquidity in the market, reducing costs to investors and facilitating widespread use of these products.

**The development of the inflation-linked bonds market provides a case-study of a state-contingent debt instrument that has become an established asset.** Inflation-linked bonds (ILBs) are fixed income securities whose principal value is periodically adjusted according to the rate of inflation.<sup>xxxvii</sup> ILBs decline in value when real interest rates rise, offering investors protection against inflation risk. They align the incentives of the issuing government - aimed at pursuing an adequate anti-inflationary monetary policy and at attracting long term investments at a low (real) interest rate - with the interest of the investors of hedging against unexpected inflation, due to rapid economic growth or monetary policy shocks. This established SCDI market acts as a key foundation for the deployment of sovereign bonds that link debt terms to nature and climate outcomes.

## Nature and climate performance bonds

**Nature performance bonds (NPBs) are like SCDIs but link debt payments to pre-defined nature and climate indicators.** This class of asset is also referred to as ‘Sustainability-linked’ or ‘Key Performance Indicator (KPI)’ bonds, and represents a growing market trend towards linking debt terms to performance against a pre-defined outcome. They would incentivise the debtor to achieve positive outcomes, rather than insure against adverse outcomes, through an improvement in debt terms via a reduction in coupon, and the potential for a principal adjustment on full delivery of the targeted nature and climate outcomes. In this case, however, investors would benefit financially if the KPI is not met. Alternatively, the bonds could incentivise investors to partake in performance successes of issuers meeting predefined nature or climate KPIs, like GDP-linked bonds or some social impact bonds. In both cases, the payment structure could be designed to provide continuous adjustments to debt payments if pre-agreed indicators that measure performance against targets are met.

**The opportunity to develop NPBs is occurring in parallel with a move towards sustainability performance-linked bonds in the corporate space.** In 2019, the Italian energy group Enel issued a US\$1.5 billion five-year sustainability-linked bond. The bond rate is subject to it having achieved a target of at least 55% of its installed capacity in renewable energy by 2021. If the 55% goal is not reached by end 2021, the coupon will be increased by 25bps until the bond matures. This initial activity has been followed by other firms issuing these bonds, including Tesco (February 2021), LafargeHolcim (November 2020), Suzano (September 2020) and Novartis (September 2020). In anticipation of increasing issuer and investor interest in these instruments, efforts to standardise them have already started with the publication by the International Capital Market Association (ICMA) of the Sustainability-Linked Bonds Principles, which sets out early principles for standardisation. A key moment in the development of this asset class is the announcement by the European Central Bank that bonds with coupon structures linked to certain sustainability performance targets will become eligible as collateral for Eurosystem credit operations, significantly increasing the potential liquidity of the asset class.

**The need for NPBs in sovereign debt markets arises because of this inadequate consideration of natural capital as a critical part of the balance sheet of many countries.** They are in this sense a transitional phenomenon, much like green bonds, where being specific about the ‘use of proceeds’ is only important because policies, regulations and market practices have not yet built ‘green’ into the core functioning of global bond markets.

**The key characteristics of these debt instruments is that they are:**

- **Outcome-based.** By linking the bond structure and financial terms to the achievement of clearly defined and measurable outcomes, they incentivise the issuer to demonstrate improvements in natural capital to strengthen prosperity and solvency.
- **Pay for performance or sharing in successful progress.** Investors pay only for performance that is demonstrably achieved, or receive additional income due to measurable performance. In both alternatives, this is an improvement on ‘use of proceeds’ bond models where there is no enforceable link between investment and achievement of sustainability outcomes.
- **General ‘use of proceeds’.** By not restricting ‘use of proceeds’, they can support more immediate economic recovery needs, while at the same time incentivising performance of nature and climate goals.
- **Simple, clearly defined metrics.** The performance index needs to be easy to understand and project for investors. The official reporting and verification governance must be transparent and robust, and linked to emerging standards and protocols that allow sovereigns and investors to benchmark performance indicators against internationally recognised metrics.

- **Scalable.** By adopting a scalable structure that aligns with emerging standards, the bonds have the potential to be used across countries and performance metrics, allowing for maximum investor potential.

## Aligning the incentives of debtors and creditors

**The central purpose of moving towards performance-based debt instruments is to align the incentives of debtors and creditors to integrate natural capital more completely into decision-making.** However, incentives can differ among types of sovereign issuers and across investors' categories, especially along the lines of 'pay for performance' or sharing into success. Incentives are also highly dependent on the expected reaction function of creditors and debtors under specific economic and macro circumstances.

**During government financial stress or sovereign debt crises, as presently experienced by many emerging countries, the incentives of existing investors and sovereigns are strongly aligned around avoiding defaults, with their dire economic and humanitarian consequences.** Nature sovereign debt instruments in these circumstances should embed the offset of debt relief against climate and biodiversity improvement: the terms of the debt should include a reduction in coupons or a downward adjustment of the capital on achieving the targeted nature and climate outcomes:

- Sovereigns under stress would be greatly incentivised to perform against pre-agreed nature milestones in return for better debt terms.
- Investors would be attracted to sovereign debt instruments embedding nature and climate objectives that would benefit them in two ways: helping the sovereign creditors avoid default, and increasing the probability of a positive nature result due to the 'pay for performance' system.

This type of NPB could either be directly included in a debt relief or restructuring package, or undertaken as a new borrowing programme to refinance sovereign debt in time of financial and budgetary stress.

**The incentives of creditworthy sovereigns to include NPBs in their regular borrowing programme, as well as of investors in this new type of sovereign instrument, are different than those of sovereign borrowers and investors in times of debt crises.** In the medium term, all economic agents who recognise that natural capital needs to be preserved and restored have strong incentives to integrate nature into financial markets, and to benefit economically from this inclusion:

- Sovereign issuers need to attract funding to generate the budgetary resources necessary to enhance nature and fight climate change: offering investors to share financially into the restoration of nature capital and the fight against climate change will enhance investors' interest, and broaden the investors' universe.
- Investors are managing financial assets into portfolio frameworks: long-term sovereign instruments that partially hedge their portfolio against nature degradation and offer another type of diversification into nature capital should attract them.

**Establishing and growing a sovereign nature SCDI segment for the long-term therefore requires these instruments to align the positive incentives of both sovereign issuers and investors to invest into natural capital, and accrue economic benefits from these investments.**

By offering investors debt terms that benefit them in case of successful nature performance, sovereign issuers also benefit by enhancing their creditworthiness thanks to the market acknowledgement of enhanced nature outcomes. They also broaden their investors' outreach at an attractive cost, while investors benefit financially from the investment in natural capital achieved by the relevant governments. It could, therefore, be expected, especially in emerging economies, that sovereign markets evolve from a negative to positive relationship between nature outcomes and the cost of government debt when the sovereign debt crisis subsides following relief and restructuring.

**The key benefits of using these instruments for debtors, official creditors and private creditors is summarised in Table 1 on page 24.**

## **Developing a market for nature and climate sovereign debt instruments**

**To achieve scale and maximise investor potential, a new generation of nature and climate sovereign debt instruments will need to overcome barriers to arrive at liquid, easily tradable assets that can be included in standard fixed income indices.** The key barriers are:

### **1. Standardisation of performance indicators and outcomes**

**While nature and climate performance indicators and outcomes would be country- and investment-specific, a lack of standardisation would substantially reduce investor potential and inhibit scale.** Performance-based instruments add an extra layer of complexity compared to 'use of proceeds' bonds due to the need to develop indicators that can be accurately measured and monitored. Ensuring that performance indicators are developed using existing performance frameworks (e.g. through Nationally Determined Contributions or through REDD+ metrics) may be an early option for achieving rapid standardisation.

**Table 1: The benefits of nature and climate performance instruments for debtors and creditors**

Debtors	Official creditors	Private creditors
<ul style="list-style-type: none"> <li>• Proceeds support short-term economic recovery, with most of the funds released available for general purpose use.</li> <li>• In the ‘pay for performance’ model, benefit financially because the terms of their debt will improve as they achieve agreed performance milestones.</li> <li>• In the ‘success sharing’ model, benefit by attracting a larger and more diversified investor cohort, and make debt terms more attractive only in favourable economic circumstances.</li> <li>• If appropriately targeted, NPBs could enhance the ability of debtors to meet impending debt obligations. They could be part of a solution in a debt-restructuring process given that the product structure offers a mechanism through which debtor countries can obtain some debt (principal and repayment) relief.</li> <li>• Strengthened, more productive natural capital balance sheet can bring new economic opportunities and resilience.</li> </ul>	<ul style="list-style-type: none"> <li>• A ‘pay for performance’ approach that would simultaneously secure both nature and climate objectives, and strengthen a developing nation’s solvency and prosperity.</li> <li>• The bonds would support delivery of existing and future international commitments to outcomes such as climate change adaptation and mitigation, job creation, health and other social goals, as well as biodiversity protection itself, enabling investors to demonstrate the broader social benefit of their activities.</li> <li>• Increase value for money through efficient leveraging of private capital to support policy objectives.</li> </ul>	<ul style="list-style-type: none"> <li>• Lenders - whether public or private - would have new ways to build into their portfolios the financial risk/return trade-offs stemming from climate change, nature capital valuation, including biodiversity loss and ecosystem degradation.</li> <li>• Private creditors would be interested where they are impact investors, or where nature performance outcomes impact the productivity of economic assets that they are invested in.</li> </ul>

## 2. Payment structure

**Experience from SCDIs shows debt instruments may prove challenging where investors value liquidity of debt due to the fear of ‘nonstandard’ payment clauses.** The liquidity for emerging market sovereign debt tends to be relatively low as shown by the higher bid-ask spreads on emerging market debt compared with developed market debt. The inclusion of the instruments in indices or benchmarks is key to boosting liquidity as the market develops. Green bonds are a precedent here. They have become a liquid asset class, helped significantly by their inclusion in major indices from 2014.<sup>xxxviii</sup>

**The performance element of the NPB includes a challenge due to positive incentives for debtors, which takes the form of a discount to the creditor on delivery of outcomes.** The potential reasons that different creditors might find this attractive are outlined in the previous section, particularly where the creditor has an interest in the delivery of an outcome (e.g. public creditors buying performance outcomes or private creditors with a specific interest in the productivity of natural capital). The additional considerations for catalysing the involvement of the private sector in these instruments are set out in the following section.

## 3. Verification

**The need to robustly report and verify performance outcomes also adds additional complexity and costs to the instrument.** Standardisation of indicators would reduce costs but still requires a credible means of verifying outcomes to deliver uncontested payments. Third-party verification is likely to be the only way of achieving this, placing a need to develop standard reporting and verification protocols that reduce the costs and increase transparency.

## 4. Risk

**Market and political risks, poor legal and regulatory conditions, and insufficient institutional commitment and capacity can constitute a large barrier to delivering finance at scale.** The additional complexity of meeting performance outcomes may be difficult for debtors with low capacity and expertise in delivering outcomes at scale. While more developed emerging markets with better implementation capacity and access to international bond markets would be obvious targets for these instruments, less developed countries may require significant technical assistance, knowledge transfer and capacity building to support implementation.

## Catalysing the private sector

**Significant support is needed to catalyse private sector involvement to integrate nature and climate considerations at scale in sovereign debt markets.** It will be key to ensure that the design and structuring of instruments aligns with interests of various categories of private sector institutional investors.

**Public support is likely to be an important element at an early stage.** A key lesson learned from the use of state-contingent instruments is that absent public participation, these markets do not emerge on their own and do not scale up easily. The use of donor support or funding for nature and climate performance outcomes may be important to enable finance at scale in the short run. One route is that nature performance gains are financed by public interest organisations, including public bodies and impact investors, enabling bonds to be traded ‘as if’ there was no payment for nature performance outcomes. Another potential lever is to consider credit enhancement or risk mitigation to improve the seniority of instruments and pricing to reflect the lower risk when backed by public guarantors. This could be sourced from several counterparties such as governments and multilateral development banks who might act as ‘anchor investors’ to buy performance outcomes and leverage private capital to generate finance at scale.

**Another opportunity is to create a link to voluntary carbon markets and offsets, such that nature performance outcomes yield tradable offsets.** Investors requiring these offsets could invest in cost-effective programmes that link to certified carbon reductions. There is a significant opportunity to link with large-scale programmes, including through REDD+ and the African Forest Landscape Restoration Initiative (AFR100), a country-led initiative to bring 100 million hectares of deforested and degraded landscapes across Africa into restoration by 2030.

**Impact investors target investments with social and environmental returns in emerging markets where investors are often willing to take lower than market returns.** In June 2020, the Global Impact Investing Network found that the total size of this market was US\$715 billion.<sup>xxxix</sup> Such investors may be willing to engage early in the market for nature performance outcomes given their focus on investments that generate positive environmental and social returns.

**Creditors would be interested in nature performance outcomes if they materially affect solvency risks that feed into credit ratings.** As summarised earlier in the paper, an increasing body of work is emerging that links nature and climate to sovereign credit risk. Where these risks measurably impact the likely profitability of a dependent economic asset that is material to the sovereign’s short- to medium-term economic and solvency prospects, investors would have an interest in sovereigns achieving outcomes. Improved measures - building on the experience in the climate risk area - that make clear the direct physical linkages, such as the impact of soil degradation on agricultural production, and on expected policy changes or potential liabilities, legal, reputational or otherwise, are likely to be important in making this case to investors.

## 4. Facility Mandate and Objectives

**The aim of the Nature and Climate Sovereign Bond Facility is to scale up solutions and catalyse the market for sovereign debt instruments that integrate nature and climate outcomes.** The facility would provide the practical services to enable emerging sovereigns to issue nature or climate performance debt, either as new government financing, or in coordination with debt relief or restructuring programmes managed by other supranational organisations. It will also serve as a key information source and sophisticated reference to potential investors in this new sovereign market segment. Its mandate would be to:

*Develop debt solutions and markets for nature- and climate-linked sovereign debt by advancing innovative instruments, co-ordinating efforts, crowding-in innovation and actors, mobilising finance, encouraging learning, standardisation, and reducing costs.*

**To do this, a facility would promote and develop the market for instruments linked to sovereign performance in the nature and climate space that would fulfil seven inter-linked functions:**

- 1. Catalyse the use of innovative sovereign debt instruments** structured to integrate nature and climate into performance offers, the cost of capital and the use of proceeds, linked to both new issuance and debt restructuring arrangements.
- 2. Coordinate the integration of nature and climate into international sovereign debt markets** with relevant supranational organisations at the core of the international financial system, and to promote these market developments with sovereign issuers, investors and market actors such as credit rating agencies.
- 3. Manage performance assessment**, notably the build out of relevant nature and climate metrics and associated monitoring, reporting and verification (MRV) assessment tools to oversee robust performance outcomes. This would link national commitments on nature and climate to existing and emerging metrics and standards.
- 4. Leverage the balance sheets of many public and private financial institutions**, by supporting the mobilisation of ‘green-linked’ concessional and blended financing from diverse sources - notably across the development finance community - in enabling pilots and links to short-term debt relief. This would pave the way towards nature and climate becoming an integral part of the ‘new normal’ of sovereign debt markets.
- 5. Promote standardisation of nature and climate performance outcomes** through systematic data collection, analysis, and reporting protocols, drawing on existing green and sustainable

development bond initiatives and standards; and encouraging nature and climate related developments with rating agencies, indexing and data providers.

- 6. Promote institutional knowledge sharing and capacity building** to embed natural capital in sovereign bond issuance across all debt market actors including all-important banking and advisory intermediaries. This would involve working with sovereign debtors in building out nature and climate performance modelling and offerings, increasingly linked to risk pricing.
- 7. Reduce transactions costs** to issuers and investors by: bringing together counterparties to make investments; increasing standardisation; providing credible and authoritative nature and climate performance-linked data and assessment; and building out knowledge and therefore de-risking investments across the debtor and creditor communities.

The characteristics of each of these functions are set out in the remainder of the section.

## Catalysing the use of innovative sovereign debt instruments

**The facility would support the development of performance instruments that integrate nature and climate into sovereign debt markets.** The facility would accelerate the integration of nature and climate into sovereign debt markets by supporting issuers to develop standardised, yet country-specific sets of outcomes and financial mechanisms. This would allow the facility to foster innovative approaches, while providing investors with standardised information and assurance processes required to understand the instruments and fulfil fiduciary obligations.

**A focus on a diverse set of instruments is crucial to adapting to the needs of various issuers and investors.** As discussed in the previous section, this could incorporate various models of integrating nature and climate into performance offers depending on the specific circumstances of the sovereign and investors. These models could range from those incorporating variations in the cost of capital to use of proceeds models.

**The facility would also support nature and climate debt instruments linked to both new issuance and debt restructuring arrangements.** The variety of sovereigns that could benefit from this facility ranges from those in debt distress and cannot access financial markets, to those who have adequate access to markets but require additional services to design and structure sovereign instruments that integrate nature and climate.

## Coordinating the integration of nature and climate into international sovereign debt markets

**The facility would act to originate and coordinate investments between governments, investors and other stakeholders, including NGOs.** To provide a coordinated way of then engaging with creditors and investors, the facility would act as a central focal point between the following types of organisations:

- **Multilateral organisations** – coordinate and form partnerships between key development finance institutions such as the World Bank and key international organisations including the IMF, the OCED, and the UN to deliver solutions that meet the needs of sovereigns and investors within the global financial system.
- **Sovereigns** – promote nature and climate sovereign debt market developments and solutions to sovereign issuers in the context of the current debt crisis and beyond.
- **Investors** – increase investor awareness of nature and climate debt instruments and act as a trusted platform for public and private investors to engage with sovereigns around issuance.
- **Market actors** – facilitate the long-term integration and standardisation of nature and climate into sovereign debt markets by engaging with key market actors, such as credit rating agencies and regulators.
- **Environmental and development organisations** – use key organisations with expertise in designing and evaluating nature and climate performance indicators to ensure that instruments effectively address economic, environmental and development priorities of sovereigns.

**To fulfil this role, the facility would be hosted by one or a collaboration of international institutions but would leverage expertise from partner institutions undertaking different functions.** The facility would likely be hosted by one institution (or small set of institutions) to oversee its mandate and coordination of its activities. The host organisation would provide a core secretariat to ensure the smooth running of the facility's day-to-day operations.

**Partner organisations with expertise in specific areas would be responsible for undertaking functions of the facility relevant to their expertise.** These could include public and private organisations, as well as NGOs with specific knowledge. An example is the Forest Carbon Partnership Fund that draws on the expertise of the World Bank, the Inter-American Development Bank (IDB) and United Nations Development Programme (UNDP) as delivery partners responsible for providing REDD+ readiness support services.

These partner organisations could also have a role in the overall governance of the facility's strategy and operations. Any donor/creditor countries or organisations would also have a seat on the governing board of the facility.

## Managing performance assessment

**The development of standardised and robust metrics to measure nature and climate performance is crucial to creating trusted, homogenous debt instruments.** This would reduce complexity and informational barriers that sovereigns and investors face in investing in novel bond instruments, allowing investors to clearly understand the impact of investments to fulfil fiduciary duties, and allow them to benchmark products.

**The facility would work with sovereign issuers to construct credible, science-based performance indicators that align with national nature and climate goals.** This would include linking with Nationally Determined Contributions (NDCs) and nature and biodiversity targets that are set to be agreed at the upcoming Convention on Biological Diversity (CBD COP 15). The facility would bridge a critical gap that currently exists in collecting, structuring and analysing data in a consistent way, and in developing transparent monitoring and reporting protocols to allow investors to assess what they are paying for.

**The facility would establish guidelines and protocols for issuers and investors to design nature and climate indicators linked to payments that can be credibly measured, as well as functioning as a trusted platform to oversee the transparent MRV of performance outcomes.** This would ensure that:

- Design of performance indicators is carried out consistently and according to current or emerging best practice guidelines and protocols across a range of nature and climate performance indicators and countries.
- Measurement and reporting of performance follows robust and transparent protocols to ensure issuers and investors can agree on payment schedules and terms.
- Verification of nature and climate performance is credible and transparent enough to deliver uncontested payments. To provide assurance to issuers and investors, the facility would have the capacity to centrally provide verification and oversight about whether performance has been achieved in line with established guidelines and protocols.

**To do this, the facility would work to:**

- Develop simple, robust, widely understood performance indicators that effectively measure performance against impactful nature and climate outcomes.

- Bring in the expertise of scientific organisations with the expertise to oversee the development of robust metrics, particularly emerging metrics around nature and biodiversity.
- Establish MRV protocols that are simple, fast to implement and low cost.
- Align performance indicators with international best-practice biodiversity, carbon and nature accounting methodologies, including nationally determined contributions (NDCs), National Biodiversity Commitments, and the UN System of Environmental-Economic Accounting (SEEA) and World Bank Wealth Accounting and the Valuation of Ecosystem Services (WAVES) methodologies.
- Link performance indicators to the full range of outcomes, including SDG goals and large-scale nature-based job creation and livelihoods targets.

## Leverage many balance sheets

**The facility would seek to leverage the balance sheets of many organisations, rather than having its own, centralised balance sheet.** To achieve scale, and to maintain flexibility, the facility would aim to facilitate investment from a wide set of actors with balance sheets that far outweigh the balance sheet of a single organisation. This would be achieved by the facility working as a platform to develop and structure bond offerings for diverse private and public finance institutions, rather than by the facility being backed by funding from a single organisation. The facility would support public and private actors to effectively mobilise ‘green-linked’ concessional and blended financing from diverse sources, enabling pilots and links to short-term debt relief.

**This ‘distributed balance sheet’ model would overcome the limitations to achieving scale inherent in the facility being limited to a single institution.** It would also serve to reduce the risk to the balance sheet of any single organisation. A key benefit of this approach is that it would allow many different institutions with different geographical and policy priorities to participate in the market.

## Promote standardisation of nature and climate performance outcomes

**The development of standardised and robust metrics to measure nature and climate performance is crucial to creating homogenous debt instruments that reduce complexity and overcome the informational barriers that investors face to investing in novel bond instruments.** The facility would play a vital role in systematically collecting and analysing data,

and in developing transparent monitoring and reporting protocols to allow investors to assess what they are paying for. Key to this would be designing metrics and protocols for investors to clearly understand the impact of investments to fulfil their policy or fiduciary duties and allow them to benchmark products.

**A central role of the facility will be to align instruments with emerging standards, public policy and regulation on reporting and benchmarking nature and climate performance.** This would include the facility engaging in the following areas:

- Align instruments with existing green and sustainable development bond initiatives and standards, as well as linking to emerging standards linked to nature and biodiversity performance, to provide investors with accessible and comparable metrics.
- Link with existing and emerging financial market reporting requirements, including linking with the TCFD and TNFD to allow investors to align portfolios with reporting and disclosure requirements.
- Integrate nature and climate risks and opportunities into sovereign credit ratings by working with rating agencies to better reflect nature and climate performance in sovereign debt pricing.
- Promote the development of instruments to be included in standard fixed income indices to create greater liquidity of nature and climate debt instruments.

## **Promote institutional knowledge sharing and capacity building**

**The facility would deliver technical assistance by providing the appropriate information and expertise to public and private sector counterparties in the emerging market sovereign debt space.** Technical assistance has the main aim of building capacity and knowledge sharing to reduce transaction costs and efficiently exchange best practice approaches. The facility would focus on the following areas:

- **Providing counterparties with the relevant information to integrate nature and climate into sovereign debt instruments.** These could include comparative analysis of instruments, financial structuring, stress testing and value for money considerations. This would benefit sovereign issuers and involve working with banking and advisory intermediaries to develop instruments that can be quickly and effectively designed and issued. An example of such a facility is the AFRI-RES facility that facilitates interaction between counterparties on projects to ensure best practice on infrastructure investment regarding climate.

- **Capacity building to support debtor country governments** (including but not limited to Ministries of Finance, Planning, and Environment) to develop skills to integrate natural capital into decision-making, align with SDGs, and improve coordination across government departments. An example is the Forest Carbon Partnership Facility that provides technical assistance to create a framework for future REDD+ investments or performance-based payments by helping countries with their readiness to implement REDD+.

## Reduce transactions costs to issuers and investors

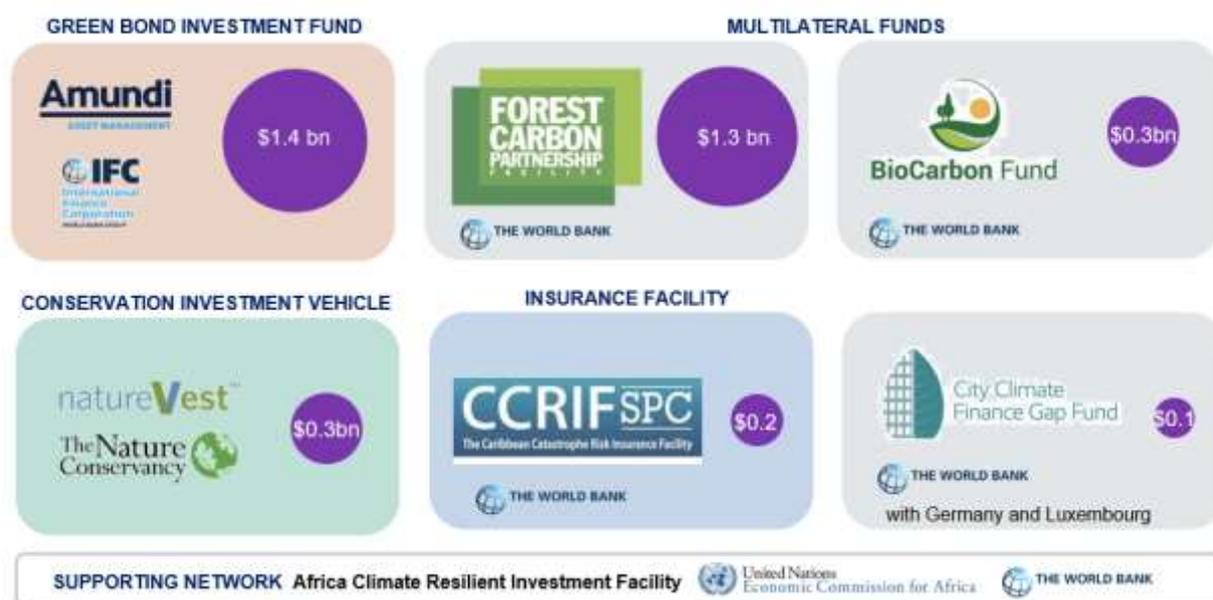
**The facility would reduce the informational and technical barriers that many sovereigns and investors face in engaging with nature and climate debt instruments.** The facility would bring together counterparties to make investments by increasing the information available about standardisation, building out knowledge and therefore de-risking investments across the debtor and creditor communities. To do this, the facility would seek to:

- **Screen and liaise with developing market sovereigns** who wish to integrate nature and climate into new issuance or a restructuring arrangement. This would aim to create a supply of nature and climate sovereign instruments.
- **Match emerging market sovereign debtors with the appropriate creditors** - both public and private sector institutions - already committed to supporting the achievement of nature and climate outcomes. This would help to ensure alignment between those creditors seeking to fund particular outcomes - for example protection of marine, wetland, peatland or forest ecosystems - and developing countries in a position to deliver them on the ground.
- **Develop a database and mapping of instruments and approaches**, facilitating easy access to the market by any new potential sovereign issuer and issuer, highlighting alignment of instruments with relevant standards and regulatory frameworks.

## ANNEX 1: Comparative analysis

To inform the design of the facility, seven different facility models were reviewed to highlight key functional attributes of existing facilities. Figure 5 shows prominent examples of several multilateral facility models including multilateral funds, investment funds, insurance facilities, investment vehicles, and investment catalysers.

Figure 5: Comparable facilities



The mandates of the facilities vary widely but all aim to facilitate flows of funds to support nature- and climate-related objectives. The Forest Carbon Partnership Facility and City Climate Finance Gap Fund support governments to improve market readiness and to catalyse investment in climate-smart projects. The Amundi/IFC Plant Emerging Green One Platform aims to stimulate both global demand and supply for green bonds using a targeted support programme for emerging markets financial institutions. The Caribbean Catastrophe Risk Insurance Facility aims to fill the gap in sovereign disaster risk insurance and to catalyse risk management strategies. The NatureVest facility aims to source and structure investment products that support conservation.

Most of the facilities put technical assistance and capacity building at the centre of operations. They see a key role in building capacity and promoting knowledge sharing and learning. The extent of technical assistance varies considerably but always seeks to reduce the informational and capacity barriers to implementation and scale. For example, the AFRI-RES facility eases

interaction between counterparties on projects to promote best practice on infrastructure investments incorporating climate resilience. The Forest Carbon Partnership Facility supports countries with readiness and implementation of REDD+ systems and protocols. The Amundi/IFC Plant Emerging Green One Platform advises local financial institutions on how to issue green bonds, recognising the need to bridge gaps in capacity in emerging markets. More specific technical assistance is provided by NatureVest which involves origination, structuring, capital raising and legal expertise to work with sovereigns and investors to support investments in nature. It is generally designed to overcome high transaction costs involved with making investments, and to ensure that local governments embed best practices into conversation programmes to attract private investment.

**Key lessons:** A nature and climate sovereign bond facility would require a significant technical assistance function to stimulate both supply and demand of bond instruments. It would need to work with issuers and investors to build capacity and overcome gaps in information and knowledge that inhibit the design and use of sovereign debt instruments. These functions would also need to account for different levels of market experience from both issuers and investors.

**Several facilities utilise significant resources to improve measurement, reporting and verification (MRV) techniques.** These capabilities differ significantly in terms of the extent of standardisation required, and the complexity of aligning actors around agreed reporting and verification protocols. The Forest Carbon Partnership Facility, which uses REDD+ protocols as a central framework, provides the most advanced MRV support through the design of national REDD+ strategies, developing reference emission levels, designing measurement, reporting, and verification systems, and setting up national REDD+ management arrangements. The Emerging Green One Platform has a green bond analysis platform to ensure bond standards reflect the Green Bond Principles. The fund also comprises a scientific committee consisting of industry and green finance experts to oversee the technical functioning of the platform.

**Key lessons:** There is a direct link between the extent of standardisation required for scale and requirement of the facility's MRV system. Given the complex data and analytics requirements to standardise nature and climate performance indicators, the ability to standardise and provide oversight is likely to be a crucial function, and a major differentiator in building capacity for nature and climate debt instruments.

**Catalysing private sector involvement is a central role in the majority of the facilities.** Generally, the aim is to leverage grant funding to crowd in the private sector, such as in the City Climate Finance Gap Fund and the BioCarbon Fund. This is generally achieved through facilitating partnerships between issuers and investors. Using public funding from the IFC is used to offer credit enhancement in the Emerging Green One Platform with the IFC taking any first losses. The

NatureVest platform uses public and philanthropic funding to source and structure scalable and impactful investments that are attractive to private capital markets.

**Key lessons:** Designing a facility to ensure private sector involvement is a central priority to generate scale. To maximise the attractiveness of nature and climate debt instruments to private investors, the facility must perform several functions. Experience shows that providing technical assistance to both issuers and investors is key. Creating investment opportunities between private sector actors interested in supporting impactful investments and issuers has also been a successful strategy. Allowing for the role of public capital to leverage private funds and de-risk investments may be required in some circumstances, although reliance on public funds could limit the scale of the market. Finally, ensuring that a robust MRV system is in place is essential to deliver standardised and trusted instruments that allow for nature- and climate-related performance debt instruments to be attractive to mainstream investors.

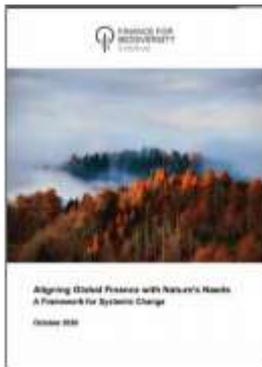
**Table 2: Overview of Facility Archetypes**

							
MANDATE	Help EM countries develop green finance programmes by investing in green bonds in domestic capital markets	Reduce emissions from deforestation and forest degradation (REDD+)	Reduce emissions from the land sector, including REDD+ in developing countries	Bridge between private investors and TNC's mission	Limit financial impact of natural catastrophes by providing short-term liquidity	Support city and local governments facing barriers to financing for climate-smart projects	Strengthen capacity of institutions to implement resilient infrastructure investments
TECHNICAL ASSISTANCE		Technical assistance with implementation of REDD+	Grant-based technical assistance activities and capacity building efforts	Structuring of debt for nature swaps		Grants normally for early project preparation stages	Facilitate interaction to develop new practices on resilient infrastructure
PRIVATE SECTOR ROLE	Investors in the fund	Largely indirect and exploring involvement	Increase private involvement in forest sector through fostering industry commitments and supporting investments between industry and governments	Private sector capital used to buy discounted sovereign debt	Recently expanded to the private sector – electric utilities	Yes	Project developers and financiers
MRV	N/A	REDD+	REDD+	Trust fund monitors conservation spend	State-contingent parameters for pay-out	N/A	N/A
USE OF FUNDS	Fund – investing in bonds	Grants and result-based payments	Grants and results-based payments	Loans, structured financing, and guarantees	Insurance Facility	Grants for project preparation	Grants to World Bank projects
CREDIT ENHANCEMENT	IFC takes first loss			Credit enhancement and insurance			

## **ANNEX 2: Working Group on Debt and Nature**

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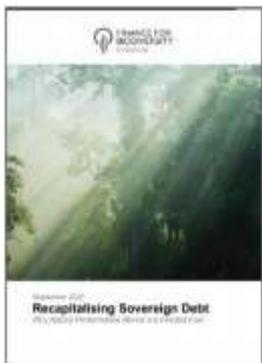
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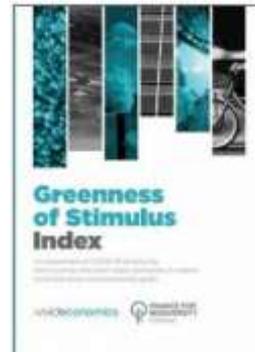
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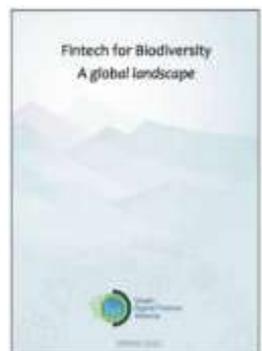
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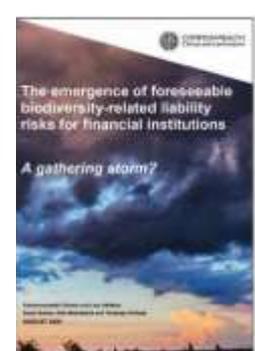
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