World Bank, IBD and WWF

International Conference on Sustainable Finance Solutions for Nature Conservation

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Keynote Remarks by Julie McCarthy (delivered virtually)

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1. Introduction

Thank you so much for this invitation to give a keynote today on Nature Positive Finance. I was thrilled to learn about this gathering on *Sustainable Finance Solutions for Nature Conservation* and am very grateful to the World Bank Group, the Inter-American Development Bank, and WWF International for hosting it and inviting me to give this talk.

For those who are not familiar with NatureFinance, we are a global non-profit organization that works with governments, MDBs, Financial Institutions and civil society organizations to try and align global finance with an economy that works for nature, climate and people. We operate as a kind of think tank and solutions lab, helping develop and pilot innovative financial instruments and policy reforms which can:

- support low- and middle-income countries in particular to address the vicious cycle of debt, climate and nature crisis,
- help make financial systems and economies more resilient and adaptive in a rapidly warming world,
- and ensure that natural capital is valued and harnessed as a driver of sustainable development and economic opportunities.

Given our mission and the theme of this event, I'm delighted to join you all today and reflect on the future of nature positive finance, particularly at a time when the geopolitical context is demanding all of our most creative and determined thinking to make progress on nature positive finance at scale.

2. Landscape

I was asked to hopefully leave you all with a bit of inspiration, and I aim to do just that, but I'll you ask you to bear with me a bit, because in order to get to what I hope are some potential solutions and rays of light, I think it's really important to first have a clear-eyed diagnosis of the current strategic landscape for advancing nature positive finance. And that landscape is quite bracing, to say the least.

To start with, according to the latest IPCC science, the global financial and economic system is currently aligned towards 2.5C-3C warming. 80 percent of the world's leading climate scientists anticipate at least 2.5C of global heating by the end of the century, while almost half anticipate at least 3C. And this is a best-case scenario, if no transformational action is taken over the next five years.

I don't need to walk this group through the implications of that level of warming for our societies and economies—the implications for food security, health, livelihoods, migration and conflict are truly unprecedented in human history.

What is clear is that while our most intensive and ambitious efforts between now and 2030 can and must help shave off fractions of degrees of warming that will matter enormously to human and planetary well-being, the reality that it is no longer possible, or responsible, to count on a 1.5C warmed world in the coming decades.

Knowing that we will not keep warming below 1.5 degrees, and that we will continue to see an increase in the frequency and scale of extreme weather events, droughts, floods, wildfires, heatwaves, migration, health and food security challenges, we all need to rapidly expand our focus from mitigation to also include futureproofing and adapting our economies and societies in a rapidly warming world.

Nature positive finance sits at the heart of this mitigation, adaptation and resilience nexus. We know that nature's destruction is a key driver of the climate crisis, that nature-based solutions are a key part of the solution to it, and that avoiding nature collapse is the key outcome we are all desperately trying to avoid.

And we know that investments in the conservation, restoration and health of ecosystems are absolutely essential to adaptation and resilience, whether to prolong the productive lifespan of agricultural land, prevent flooding and wildfires, manage excessive heat or continue providing freshwater to communities and industries, to name just a few examples.

So, the urgency for investing in nature's conservation, restoration and resilience has never been greater, *and* at the same time, the problem is not simply that we aren't raising enough funds to invest in nature—it's that our current financial and economic activities are still actively causing massive harm.

The brings me to the second key landscape point worth dwelling on, which is that, according to UNEP FI, **close to $7 trillion per annum is currently directly destroying nature**, with an additional unknown quantum of indirect costs.

I know that we are all deeply and rightly committed to filling the $200 billion gap in finance that the GBF has outlined for nature conservation efforts over the coming years, but I think it's important to step back from a fundraising posture to appreciate the bigger picture.

In a context where 7% of global GDP is actively destroying nature each year, putting several hundred billion into nature conservation is akin to treading water in monsoon, at best—unless we are simultaneously working *at a systemic level* to transform our financial and economic systems to become more nature positive.

Accomplishing that kind of systemic financial transition towards more nature positive approaches would be challenging under the best of circumstances, but as we know, it needs to happen in an especially challenging and disruptive economic context.

This gets to a third key feature of the current landscape to consider, which is that low- and middle-income countries are currently in the midst of a **historic sovereign debt crisis,** at the same time that they are at the leading edge of worsening climate and nature impacts. This fiscal crisis is likely to *worsen* over the coming period, driven by unsustainable debt and the compounding effects of climate and nature degradation.

Net outflows of funds from LMICs (excluding China) in 2023 were estimated at more than $50 billion, which means poorer countries are currently paying significantly more in debt service than they are receiving in new development finance.

Mounting U.S.-driven tariff wars are likely to compound these dynamics in the coming years, reorienting markets and supply chains in the most disruptive way possible, while at the same time G7 aid and concessionary lending is rapidly decreasing.

So, to recap, we are facing a potentially significant overshoot of 1.5C, our financial and economic system continues to pour gas on the fire through a massive amount of investment that is actively destroying nature, and the countries suffering the most are running out of options and support to address the growing environmental and fiscal crisis they face.

This gets to my fourth and final observation about the current landscape, which is that we are also experiencing an **aggressive global backlash against ESG, driven by disruptive geopolitics, where even talking about the climate and nature crisis in public** feels increasingly dangerous for a wide range of government and finance stakeholders.

Some leaders are avoiding travelling to the US for institutional annual meetings where climate and nature have been deprioritized and deeply politicized. South Africa's G20 agenda of solidarity, equality and sustainability was deemed a DEI agenda by the U.S administration., which has since refused to participate. Lawsuits against ESG investment practices in the U.S. and withdrawal from voluntary initiatives like the Net Zero Banking Alliance and GFANZ reflect a broader trend of declining leadership on environmental standards, regulation, and "denialist" public discourse, especially in the U.S., but by no means limited to it.

I could go on, but the larger point is that many important stakeholders—sometimes in positions of power, sometimes extremely vulnerable—are all finding it impossible or unpalatable to talk about the challenges we are confronting on nature, climate and development in key political fora right now. This will have a material impact going forward on the pace and scale of leadership we see on nature positive finance, at least in certain parts of the world, in the near term.

At the same time, we know that emerging economies—particularly China—are continuing their focus on rapid decarbonization, green innovation and south-south cooperation. South-South cooperation is on the rise, with a growing number of LMIC economies such as Nigeria, the UAE and Malaysia joining the BRICS group, which now represents more than 50% of the global population and around 40% of global GDP. Multilateral and plurilateral leadership structures are rapidly shifting into new configurations.

The recent *Finance in Common Summit* in Cape Town was an extraordinary example of this new leadership landscape, with public and private stakeholders from Brazil, South Africa, China, Germany, Kenya and France, among others, playing increasingly prominent roles in driving more ambitious action and innovation around sustainability and development.

Generally, looking at the landscape for nature positive finance in the coming years, **self-help, south-south solidarity, and coalitions of the willing** are likely to be the name of the game, in terms of how we continue making progress on the climate, nature, and inequality crises in the current geopolitical environment.

Likewise, I believe we are likely to get much further with policymakers, financial institutions, corporate executives and even the general public by focusing on nature and climate related risk, resilience and future-proofing our financial and economic systems in a context of rapid warming, rather than continuing to rely on rhetorical net zero and GBF commitments to motivate ambitious action.

I've shared this rather sobering landscape analysis not to generate hopelessness or paralysis, but to ensure that we enter into this next generation of nature finance innovation with eyes wide open about the challenges and headwinds we experiencing, and in hopes that we can leverage these insights to find increasingly creative and asymmetric strategies to still make progress.

And I am increasingly convinced that we can make non-incremental progress on nature positive finance in the coming years. I'd like to now focus on three areas specifically that I think will be key to this transformation in the near to medium term, which are (1) central banks and financial supervision, (2) innovative finance that treats nature as a shock absorber and (3) scaling the bioeconomy as a central feature of broader green economic transition.

3. Central Banks and Financial Supervision

Central banks, as we know, play a critical role in financial supervision and regulation, ensuring that financial institutions undertake the necessary due diligence in their investment decision making and management to address material risks.

In a rapidly warming and unpredictable world, they have a particularly key role to play in helping future proof the financial and economic system from unpriced vulnerabilities with systemic impacts.

Last year, NF worked with the European Central Bank and the Potsdam climate institute to undertake the first ever climate and nature integrated risk scenarios for central banks, with an initial focus on the agricultural sector in Europe. The findings demonstrated that treating nature and climate risks and transition planning separately is likely to exacerbate instability, with potential negative real economy impacts in areas such as agricultural productivity, input prices and food security. These nature-climate integrated risk scenarios reinforced what we intuitively know to be true-- that our economies heavily depend on a stable climate and reliable ecosystem services, which are interdependent, and increasingly at risk.

According to the European Central Bank, nearly 75% of all eurozone bank loans are provided to firms that are highly dependent on at least one ecosystem service. A World Bank analysis of 20 emerging markets found that 55% of bank loans, on average, are exposed to activities that are highly dependent on at least one ecosystem service.

Though most financial institutions are still not mandated to consider nature-related risks, impacts and dependencies in their decisions, we have recently seen some high profile first-movers begin to take matters into their own hands.

Many of you may have seen the recent decision by Norges Bank, the Norwegian sovereign wealth fund and guardian of $1.6 trillion in assets, has decided to place *96% of their entire portfolio* under natural capital risk assessment.

This is an extraordinary decision, especially in a context of ESG backlash, by Norges Bank to put nearly all the money under their management through enhanced nature risk scrutiny to address what they see as potentially significant environmental threats on the horizon.

Their report notes that even at relatively low levels of future warming, they see nature related “threats manifesting indirectly via global economic growth as well as directly through energy prices, consumer demand, regulatory requirements, and changes to the physical and natural environment.”

Backing up this insight, in April last year, the UK's Green Finance Institute released a study showing that across the portfolios of the seven largest UK banks, we are likely to see downward adjustments in the values of domestic holdings of up to 4-5% over the next ten years alone from physical nature-related risks.

All of this to say, we have a global financial system that is currently not including nature-related risks within everyday pricing, lending and investment decisions, with growing evidence that there is a serious amount of systemic risks accumulating as a result, which will in turn be increasingly vulnerable to correction in the coming years, as warming and ecosystem degradation continue to escalate.

We are now at a moment where need to see these scenario insights on risk translate into not just into improved stress testing, but also into Central Banks' broader macroprudential supervision, and potentially other tools like collateral frameworks and targeted refinancing operations.

In a context where political leadership and public opinion is moving away from regulation around nature positive financial transition and net zero imperatives, Central banks and supervisors have many powerful as yet under leveraged tools well within their mandate to guard against environmental disruption and shift finance towards a nature positive trajectory.

4. Innovative Finance/Nature as a Shock Absorber

This gets to the next area I'd like to focus on, which is how to generate the volume of innovative finance necessary for a positive nature transition, in order to confront the growing physical and financial stability risks we face.

In the innovative finance domain, NF is convinced that the emergence of sustainability-linked sovereign financing can be a game changer for both public finance and development finance.

As some of you may know, several years ago NatureFinance established a Sustainable Sovereign Debt Hub (SSDH), which brings together issuing countries, MDBs, investors and experts with the goal of providing a neutral convening platform to facilitate the scaling up sustainability-linked finance.

These interactions have shown us that there is real appeal to sustainability linked instruments that can give countries flexibility on how to spend resources across a wide range of public finance needs, as long as they can deliver on their core KPIs.

AND these engagements have also shown us that it is very complex and challenging for many potential issuer countries to know where to start and how to ready themselves to quickly and thoughtfully bring performance-linked nature and climate bonds to market.

The more hands-on work we have done with countries in this area, including through our own KPI accelerator program with DMOs, the more convinced we are that we need to start looking at nature as not only a physical shock absorber, but **also as a fiscal shock absorber.**

I've already described a global debt crisis that is bad and getting worse. Countries are becoming locked into a vicious cycle of mounting climate and nature disasters, followed by debt crisis, further excluding these countries from access to affordable capital and without the ability to make the long-term investments needed for adaptation and resilience. Aid is further out of reach than ever.

In response to these pressures, which are exacerbated by biased and outdated ratings and Debt Sustainability Analysis methodologies, we need new ways of identifying the positive financial transmission channels that investments in adaptation and resilience investments can have on improved sovereign creditworthiness.

We recently released a report titled ***"Nature as a Shock Absorber ",*** which explores how Sustainability-Linked Sovereign Financing can offer a pathway towards aligning public financial management with sustainability goals for countries to unlock vital investments in nature, support improved sovereign credit ratings, and drive climate and equity outcomes.

We introduce a financial materiality assessment framework (FIMA) that helps countries demonstrate how making adaptation and resilience investments in macro-critical sectors of the economy—in this case, addressing deforestation in Ghana, which affects the cocoa sector—can potentially boost the country's sovereign credit rating and DSA profile, through improved economic resilience and productivity.

The study also shows how Ghana could generate between $93 million and almost $1 billion annually from carbon credits linked to reduced deforestation, providing increased fiscal space for domestic adaptation investments.

We are now rolling out this FIMA framework across a wider range of countries and sectors and working to create a tool that enables Debt Management Offices and ministries of finance to do this kind of assessment increasingly on their own.

We believe that a financial materiality assessment approach to nature finance can help provide a roadmap for countries to leverage their natural capital for credit enhancement, and also better evidence arguments that investments in nature's resilience should be understood and deployed as a credit-positive asset, rather than being considered as generic debt and effectively punished by ratings agencies and DSAs.

The practical application of this kind of analysis is that it can help countries identify which key performance indicators related to adaptation and resilience are most likely to strengthen economic fundamentals and result in a potential credit uplift, particularly for bio-based sectors of the economy such as agriculture, fisheries and alternative fuels, for example.

5. Bioeconomy

This leads me to the final area that I want to speak about this morning, which is the nature positive investment opportunity landscape—a landscape we hear increasingly referred to as the sustainable bioeconomy.

From the 2024 Biodiversity COP in Cali to the *Finance in Common Summit* in Cape Town and recent South Africa G20 conversations, the bioeconomy is increasingly being recognized as a potential driver of green economic transition, and most importantly, of jobs, economic value added, and resilience.

Broadly defined, the bioeconomy is the use of bio-based inputs, or natural capital, to produce goods and services. It is not, as we know, limited to just fruit and nuts or biofuels. It covers an extraordinary landscape of nature-based innovation, from alternative fertilizers and feed made from biowaste, to mushroom based plastic alternatives and pineapple fiber textiles and car doors, to sustainable biofuels and controlled environment agriculture, to blue carbon and the kelp economy, regenerative agriculture, nature as infrastructure and nature credit instruments. It's a huge umbrella.

The bioeconomy is set to grow from around $4 trillion per annum at present to around $30 trillion by 2050, or almost one third of current global GDP, according to BCG and the World Bioeconomy Forum.

It is arguably a deeply underappreciated part of green economic transition, which, if sustainably deployed, can dramatically reduce dependence on fossil fuel resources, advance circular and more resilient approaches across a range of sectors, and also accelerate biodiversity conservation and restoration.

It has been thrilling to see Brazil's leadership on the bioeconomy within the G20, launching a Global Bioeconomy Initiative during their presidency last year, achieving agreement around high level principles in September, making the bioeconomy a part of their country platform, and now considering how to carry bioeconomy momentum into COP30 this year.

It has likewise been so inspiring and heartening to watch South Africa take this work forward under their G20 presidency, in a context where Africa has an estimated 6.3 trillion in natural capital currently not on balance sheet. One of the things they are looking to advance is a stand-alone platform to support global south countries to develop and finance sustainable bioeconomy strategies at scale, and NF is working closely with partners like the *African Natural Capital Alliance* to explore opportunities there.

One area of the bioeconomy that has gained a lot of momentum in these discussions is nature as infrastructure (*NaI*). Sometimes referred to as "green vs grey" infrastructure, NaI sits right at the heart of the bioeconomy landscape—both in the kinds of nature-based solutions it provides to major adaptation and resilience challenges like floods, drought, soil erosion and coastal protection, as well as the sustainable inputs the bioeconomy can potentially provide to support infrastructure, including materials such as bio cement, bio steel, and alternative plastics.

Just last month I heard the incredible story of a water bond for City of Cape Town in SA that Rand Merchant Bank (RMB) helped arrange, where they were facing down a catastrophic water crisis and had to rapidly explore the best infrastructure options to maximize freshwater availability in the coming years. They looked at desalination, aquifer drilling...a whole range of options, and it turned out that getting rid of invasive species around rivers and streams was just as effective as desalination in terms of increasing freshwater provision, and also 12x cheaper. So that is the structure that DBSA, RMB, TNC and others ultimately went with--it made economic sense, and it has had fantastic co-benefits in terms of helping water drain better into aquifers, improving biodiversity health, strengthening ecosystem resilience and employing female owned businesses to remove the invasive plants.

In recent discussions with public and multilateral development banks, I hear huge interest in shifting from grey as the default to more proactively surfacing and economically evaluating green infrastructure strategies during the project origination phase. NaI is one piece of the bioeconomy that can play a huge role in driving nature positive finance in the near term, and I think it will rapidly becoming more mainstream for development finance institutions and private investors in the coming years.

Before I close, there is one more area of bioeconomy that I want to briefly touch on, which is nature credits.

As we know biodiversity credits are a part of the nature-based solutions supported under target 19 of the GBF, and are increasingly seen as a potential means to drive private finance into nature conservation and restoration at scale They have been a real lightening rod topic at times in the field, with big questions of offsetting equivalency, long distance trading and secondary markets feeding off of major issues here with voluntary credit markets. You will hear all about the exceptional work that the International Advisory Panel on Biodiversity Credits (IAPB) did later today, so I won't dwell on that.

I will just note that NF was a part of the IAPB effort and to help inform our own thinking there, we undertook a study last year that sought to understand the state of play with biodiversity credits in Africa right now—specifically, what was happening, who were the key players, how many transactions had taken place, what kinds of innovation did we see, and what were the risks, barriers and opportunities.

We profiled over 30 different projects, many with groundbreaking innovation in areas such as MRV, and democratizing access to these instruments for remote communities. We saw some amazing creativity and innovation, AND we also found a range of challenges that seem universally relevant. These include everything from limited knowledge, awareness or policy frameworks around these credits, to limited local capacity, to difficulties around pricing not linked explicitly to carbon.

But there was one challenge in particular that struck me as existential, which is that at present there is virtually no policy induced demand for these biocredits. Of all these amazing projects we saw, there was virtually no private finance showing up to fund them, only a range of philanthropic, development finance and CSR donations.

This is because despite the many innovative biocredit projects, no one has an imperative right now to buy them. Unlike with net zero mandates, there are no mainstream mandates yet around no biodiversity net loss/net gain, where, for example, in a specific jurisdiction you either have to either comply or compensate for biodiversity loss through buying biocredits from an approved set of project developers.

Without policy leadership from countries to incentivize demand—whether through no net loss/net gain policies, Payment for Ecosystem Services (PES) taxes that finance biocredit projects, the linking of insurance provision and premiums to proactive investments in adaption and resilience, or other creative approaches—I strongly believe we are not going to see this essential part of the bioeconomy take off in a significant way.

6. Conclusion

I want to end on a genuinely hopeful note, because despite the many daunting challenges that I have outlined over the past 30 minutes, we have never had more tools and opportunities at our disposal to advance nature positive finance. We just have to get really creative in the current environment about how we do it.

I've spoken about central banks and financial supervisors, innovations in finance and nature as a shock absorber, and the bioeconomy investment landscape as key opportunity zones for nature positive finance in the coming years.

So, the last hopeful point I want to leave you with is that unlike serval years ago, we have now had an emerging "nature finance operating system," to underpin and accelerate a revolution in nature positive finance.

Over the past several years we have seen exponential advances in developing the kinds of data, standards, accounting and disclosure architecture that we need to enable high integrity and equitable investment in nature at scale.

We now have TNFD and their incredibly detailed guidance and easy to use resources to help business and finance to understand and start reporting on nature impacts, risks and dependencies.

We have new tools, both free and market based, to enable financial institutions, govts and MDBs to assess the nature footprint of their portfolios down to the asset and watershed level and begin to develop targets and transition plans towards more nature positive outcomes.

We have amazing developments in affordable, accessible remote sensing and satellite data for pretty much every pixel of land on the planet, through startups like the SEED Biodiversity Complexity Index, AdaptaBrasil, Lobelia Earth and the Leveraging Earth Observation for Nature Finance (LEON) project and so many more that are providing real time data for monitoring, verification and reporting.

We have natural capital accounting frameworks being taken up by a growing range of countries, who can now put a value on nature's contributions to their economies, and also more precisely measure our economies' dependence on nature.

We have an emerging set of regulations and market architecture, for example Australia's nature repair market, the UK's Biodiversity net gain rules, and Colombia's biodiversity offset guidelines, which can hopefully enable countries to better harness private sector engagement in conservation and restoration in new ways.

We are seeing an increasingly sophisticated pipeline of high integrity nature positive investments that can help protect and restore nature while also future-proofing investment value chains and corporate supply chains across the economy.

And we have a growing number of hotel conference rooms and convention centers around the world full of government leaders, development banks and investors like all of you that are increasingly aware of both the nature and climate related risks and investment opportunities at their doorstep.

What we urgently need now is:

- institutional leadership across government, private finance and development banks to act on what the science and economic analysis is screaming at us.
- a willingness to look beyond narrow short-term risks and more familiar vanilla instruments to resilience-oriented finance that embeds the economic value of preventing nature collapse into deal terms, structures and ratings.
- and finally, we need an enabling policy and supervisory environment that safeguards financial stability and livelihoods by incentivizing investments that protect and restore the nature we so deeply rely on.

I hope that in your conversations throughout this conference and for the rest of today, you are able to find real glimmers of opportunity to advance parts of this agenda in your own work, despite all the current headwinds.

In a world where solidarity is in increasingly in short supply and needed now more than ever, you can most certainly count on NatureFinance to continue fighting alongside all of you to advance a more equitable and sustainable financial system. So please do get in touch to share your work and explore ideas, and in the meantime, thank you very much for listening.