

# Environmental Finance



## Biodiversity Insight 2021

# Biodiversity on the rise

**B**iodiversity is increasingly on the agenda for investors. Some investors have posited that biodiversity is at the same stage of development that climate change was a decade ago.

Biodiversity is interconnected with climate. Not all climate mitigation projects are good for the climate, but projects that benefit biodiversity tend to be climate-positive.

The policies and other apparatus to enable biodiversity considerations to be better incorporated into investment decision making are currently under construction.

In October, the 'Kunming Declaration' on biodiversity was agreed by more than 100 countries at the COP15 to the Convention on Biological Diversity (CBD) in Kunming, China. The declaration commits countries to supporting a post-2020 global biodiversity framework that aims to put biodiversity on a path to recovery by 2030 at the latest.

The post-2020 global biodiversity framework, which is currently in its draft stages, is due to be adopted at the second part of COP15 in May 2022, CBD said, which should provide a further boost to the theme.

Biodiversity was a talking point at the COP26 meeting in Glasgow, when leaders of 141 countries signed a declaration to work collectively to halt and reverse forest loss and land degradation by 2030.

Meanwhile, a Nature Action 100 initiative has been formed to mirror the successes of the Climate Action100+ investor engagement initiative (see page 12), a Taskforce on Nature-Related Financial Disclosures has been assembled (see page 3) that is similar to the Task Force on Climate-related Financial Disclosures (TCFD), and Science-based Targets for Nature are being drawn up, similar to those for those in existence for climate.

Biodiversity concerns are now on the radar of central banks (see page 22), whose interest in the theme could be as transformative as it has been for climate.

Despite the growing interest, investment opportunities remain limited. There is an increasing number of funds being created, but it remains a niche (see page 23).

More specialist solutions are needed, and biodiversity needs to be built into the considerations of all companies and their investors.

*Environmental Finance* aims to be a vital source of information for investors as this theme develops. ■

*Peter Cripps*  
Editor  
*Environmental Finance*

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# TNFD: fusing markets and science to manage nature risks

The business and financial world's race towards net zero emissions will only succeed if they simultaneously race equally fast towards nature-positive, with the importance of biodiversity front and centre, says **Emily McKenzie**

**A**s biodiversity rapidly becomes a buzzword in sustainable finance, it is often used as a synonym for nature.

This incorrect simplification exemplifies the challenge ahead for the finance sector in expanding its sustainability work to the nature realm.

Biodiversity is a fundamentally important characteristic of nature, but nature is much broader than biodiversity.

Translating the inherent complexity of nature into accessible and practical terms, data and metrics without compromising on scientific accuracy is now the challenge ahead for the financial markets.

## Biodiversity covered by TNFD's proposed scope

Biodiversity is one of the nature-related elements the Taskforce on Nature-related Financial Disclosures (TNFD) is now looking at, as the initiative develops a risk management and disclosure framework for nature-related risks.

TNFD's proposed Technical Scope recommends defining nature to include both living and non-living nature, and its diversity.

Living nature covers habitats, species and genetic resources across land, the ocean, lakes and rivers, meaning all the plants, animals and microorganisms that live in these systems. Biodiversity simply means the variety of nature in all its forms. You can have a lot of nature without having a lot of biodiversity; picture a vast palm oil plantation for example.

Non-living nature encompasses soil, water and air. These non-living aspects of nature interact with living nature within ecosystems to produce a variety of benefits we call ecosystem services, like water filtration and flood protection.

TNFD's proposed scope also includes minerals in the definition of nature, in cases where mineral depletion affects the health of ecosystems – think a mining project in the Amazon rainforest, or oil extraction in the Arctic sea.

Across all these aspects of nature – the living and the non-living, in all their diversity – the TNFD framework will set out risk



Emily McKenzie, TNFD

management and reporting recommendations for companies and financial institutions.

## Market-led and science-grounded

After the TNFD initiative formally launched in June this year, work on the TNFD framework fully kicked off in October, after 33 senior executives from financial institutions, corporates and market service providers were appointed to the Taskforce. This

market-led approach is critical to ensure the TNFD framework will be accessible, practical, useful and widely adopted once the final version is launched in 2023.

But the complexity of nature means that market expertise must be closely coupled with scientific expertise, for example across ecology and the earth sciences. Only that combination of understanding and experience will ensure the TNFD framework can fulfil its ultimate mission of shifting financial flows towards nature-positive outcomes.

The TNFD governance structure offers several avenues for the Taskforce to tap into world-leading scientific expertise, alongside market insights.

First, the TNFD Knowledge Hub consists of global scientific, environmental and data organisations and subject matter experts. They provide insights on biodiversity and nature, as well as data, market standards and reporting practices. A core group of knowledge partners offer advice and support on the technical development of the framework. In addition, TNFD is drawing on the expertise of a range of standard setting bodies.

Second, the TNFD Forum is a consultative grouping of more than 200 organisations that support the mission of TNFD and support the Taskforce. It is open to a wide range of stakeholders, including financial institutions, corporates and regulators, but also academic and research institutions, and environmental organisations with extensive scientific and practical expertise relevant to development of the TNFD framework, like Conservation International, IUCN, The Nature Conservancy, UNEP World Conservation Monitoring Centre and WWF.

Finally, many of the Taskforce Members that now work across finance and business have scientific backgrounds and previous technical experience working on nature and nature-related risks, including on data, metrics, targets and reporting.

### A beta framework in early 2022

Together, these various groups that make up the TNFD Alliance have the collective expertise to develop a robust framework for management and disclosure of nature-related risks.

Early next year, TNFD will launch a beta version of the framework. TNFD is taking an open innovation approach similar to the iterative innovation models used in the technology sector. TNFD wants to share the initial high-level architecture of the framework as soon as possible, to enable early pilot testing and consultation, and then evolve and develop the framework further with feedback from the market and relevant experts.

The idea is to involve as many market actors as early as possible, given the complexity and urgency of the task of tackling nature-related risks.

The Taskforce Members are already underway with developing the beta framework, working across five Working Groups: defining nature-related risks, data, standards, targets and metrics, development of a beta framework and pilot testing.

### Integrating biodiversity and net zero

The TNFD framework must align with existing approaches for climate-related risk management and disclosures. The business and financial world's race towards net zero emissions will only succeed if they simultaneously race equally fast towards nature-

positive, with the importance of biodiversity front and centre.

At climate summit COP26, Mark Carney, UN Special Envoy for Climate Action and Finance, said the Glasgow Financial Alliance for Net Zero (GFANZ) – the flagship initiative now backed by financial institutions with US\$130 trillion of assets – ‘has the broader perspective that it needs’ to encompass biodiversity and nature.

He remarked that the finance sector's commitments to net zero now need to be shaped to ensure biodiversity and nature become part of their transition.

To that end, TNFD is aligning its framework with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

The TNFD framework plans to use the same four pillars of Governance, Strategy, Risk Management and Metrics and Targets to ensure compatibility with TCFD. Almost 90% of the TNFD members' organisations are also supporters of TCFD, which helps TNFD build on the lessons learned in the climate disclosure space.

The recent launch of the International Sustainability Standards Board (ISSB) is another welcome development and will help the integration of climate and nature. While ISSB will first look at climate-related disclosures, in future the board expects to expand to other sustainability topics. The TNFD looks forward to working closely with the new ISSB and other standard bodies on nature-related disclosures.

### Aligning with global biodiversity goals

Aligning with the post-2020 Global Biodiversity Framework also needs to be a priority for the finance sector.

The framework can be for biodiversity what the 2015 Paris Agreement was for climate change, providing the private sector with more policy certainty and clarity on collective goals.

Following the first phase of negotiations in October, governments are now preparing to agree in May next year on a final 10-year roadmap for reversing nature loss.

As set out in the TNFD's proposed technical scope, the TNFD framework will broadly seek to align with the two global targets in the draft Global Biodiversity Framework of no net loss of biodiversity by 2030 and net gain by 2050.

Aligning with these targets provides specificity to the mission of shifting financial flows to nature-positive.

### Looking ahead

At COP26, biodiversity and nature featured higher on the agenda than ever before. As the CEO of Standard Chartered put it: “In every conversation I've had [at COP] about [climate] transition and resilience plans, nature has come into the discussions.”

It's not a question of whether or when nature-related risks are coming; many nature-related risks are already here: water shortages, marine dead zones and the Covid-19 pandemic are all examples.

If nature loss continues, or as policy responses ramp up, nature-related risks will continue to grow. Financial institutions and companies have to manage those risks and identify opportunities to shift financial flows to nature-positive. ■

**Emily McKenzie is Technical Director at the Taskforce on Nature-related Financial Disclosures (TNFD).**



# Climate-smart forestry practices: the key to restoring biodiversity?

*Environmental Finance* talks to EFM CEO Bettina von Hagen about financing the preservation of our natural world.

**We still talk about forestry and biodiversity as a growing area of green finance - in 2004 it was very nascent, what drove you to set up EFM back then?**

We have been staring down the barrel of irreversible climate change and massive species extinction for 50 years, and the seeds were planted long before then. In 2004, the northern spotted owl, an umbrella species and the lightning rod for the “timber wars” in the Pacific Northwest, was already well on its way to extinction due to the elimination of its needed old-growth forest habitat.

Industry and conservation groups were still fighting about dividing the forest into cut and no-cut zones. We felt there was a different way forward, and there was solid ecological basis for it: Manage commercial forests for long-term health and productivity through longer rotations; establish reserves in riparian areas and

unique habitats where their ecological value is highly significant; retain trees in harvest units to protect and nourish young trees and the associated mycorrhizal network; and restore degraded landscapes. We call these the “5Rs” of climate-smart forestry. We believe this approach is responsive to investors while significantly increasing (by 30-50%) stored carbon, the quality of habitat, the protection of cold, clean water, and the flow of benefits to local communities while continuing to produce timber, which carries a significantly lower carbon footprint than competing building materials such as cement and steel.

**What role does private finance have to play in tackling a global issue as vast as forestry preservation?**

Private finance is integral to protecting the health and integrity

Logs being placed into streambeds in order to develop fish habitat on a tributary of the West Fork of Hood River, located on the EFM-managed Hood Uplands property. This area is being restored in partnership with the Confederated Tribes of Warm Springs, the U.S. Forest Service, the local watershed council and conservation groups.







Large trees along Wassen Creek on EFM's Wasson property help to provide bank stability and protect critical habitat for Oregon's most threatened and emblematic salmon species—the native Oregon coast coho salmon.

of forests globally. Forests have often been referenced as the “lungs of the planet” for their role in exchanging carbon dioxide for oxygen, but their role in carbon storage is increasingly recognised as essential to keeping global temperature increases to under 1.5°C. We know that an essential part of the solution is to keep remaining intact forests standing, as that is by far the most effective way to protect carbon stores and biodiversity.

Business can play a large role in purchasing high-quality forest offsets to mitigate impacts that still remain after rigorous emission reductions in primary operations. Finance can also help in financing the conversion of degraded land to conservation and carbon-oriented management strategies that produce needed

commodities in a way that improves the soil, restores biodiversity, stores carbon, and serves human needs.

There is abundant evidence that these soil-enriching and habitat-enriching strategies produce better and more enduring financial returns.

There are increasing mechanisms and resources to “monetise” conservation and carbon values through carbon offsets, biodiversity offsets, and other mechanisms. These markets are expanding significantly with Reuters noting that global carbon markets reached \$272 billion in 2021. Managing natural landscapes for their whole suite of products and ecosystem services makes financial sense, and creates greater ecological and social value, than a focus on an intensive monoculture, which is especially risky in light of turbulent global markets and climate change.

### **What is unique about western US, why is this part of the world so significant for natural forestry?**

The western US is unique globally from a forestry and conservation perspective for a few reasons. First, commercial forestry employs native species, such as Douglas-fir, that are highly valued economically and are responsive to commercial production. Almost all other global commercial forest regions, like Australia and Brazil, primarily use non-native and single species trees in a plantation setting, which often require significant inputs of chemicals and water. Western forests, which rely on native species, just need soil, sun and rainfall. These native forests co-evolved with and support native flora and fauna, thus supporting local biodiversity, as well as capturing, purifying and providing cold, clean water. The forests of the western U.S. are exemplary in their capacity to store carbon by growing large trees that routinely live for over 300 years and sustain a vast network of underground carbon. In addition, timber can be sold to well-developed markets for wood products both domestically and to China, Japan, and Korea. This gives western forests incredible optionality – they provide high-value timber to multiple markets, carbon, biodiversity, and water, and beautiful places to recreate, hunt, and forage.

### **How do you marry successful land management for conservation, carbon sequestration and returning profits for investors?**

This optionality – the ability to provide timber, carbon, water, habitat and recreation from the same forest – is a dream from an investment perspective. It allows us to emphasize one or multiple products and services depending on market conditions and our long-term plan for forest health. For example, if timber prices are down, we can turn to carbon markets or focus on developing conservation easements which are generally uncorrelated to the timber market. When markets are unfavourable, we can simply let the forest grow and increase in value and wait for conditions to improve while benefitting from low holding costs. We do all this within the context of a long-term plan for the forest, established at purchase, which moves it towards improved health, biodiversity, carbon storage, productivity, resilience, and benefit to communities.



A rough-skinned newt residing in EFM's Garibaldi carbon project area which has provided offsets to General Motors and Nike.

### **What does it mean to have your business practices recognised as “best for the world” by B Lab?**

We became a B-Corp in 2011 - the first forestry company to receive that recognition - and have consistently been recognised as “best for the world” due to the social and environmental benefits we generate.

We believe passionately in the need for the private sector to deploy capital, ingenuity and energy on behalf of the planet and to advance environmental and social benefits. We will not achieve our common climate, biodiversity and social goals unless business, governments, NGOs and communities are working fully and collaboratively to address the climate, biodiversity and resource allocation crisis that defines this moment in time. To do that, we need trust and transparency and cooperation, and we value the role of third-party, independent entities like B-Corp to provide that.

The other role B-Corp plays, along with the other certification and recognition systems we are part of such as the Forest Stewardship Council, ImpactAssets50, GIIN, and others, is to build a movement that gives businesses encouragement to use our resources on behalf of the planet. The common mantra in the business sector has been that its function is to maximise shareholder value. However, that is inconsistent with the original intent of why corporations were created and granted limited liability, which was to engage in big initiatives to benefit society. The climate and related crises we are now witnessing lays bare the travesty of maximizing short-term value to the detriment of long-

term value creation and sustaining our life support systems. There is now a welcome shift, albeit too slow and halting, to embrace the true role of private markets, which is to enhance social good, and B-Corp and like-minded entities are playing a fundamental role in this shift.

### **The UN says biodiversity continues to deteriorate and decline across the globe, how do we reverse that? And what role do companies like EFM play in that reversal?**

We are increasingly recognizing how fragile, interconnected and finite our planet is. We must manage every inch of Earth for the finite and scarce resource that it is- all of us have an obligation to protect and restore biodiversity. We know that we can organise cities, build houses, produce energy, and successfully cultivate food and fibre in a way that is at least supportive, if not restorative – there is no lack of knowledge or examples of how to do this. For forests specifically, this means protect, improve, and restore: we should protect all remaining intact forests, we should manage commercial forests to restore biodiversity and store carbon, alongside timber production, and we should replant and restore degraded landscapes. Companies have a huge role in providing the capital and ingenuity for this transition, and governments have an equally important role in creating the enabling conditions: removing perverse incentives for deforestation, providing incentives for the desired outcomes and making enabling investments in information, monitoring and infrastructure. ■



# Nature Risks Through a Credit Lens

## What role can ratings agencies have to play in stemming biodiversity loss? And what are they doing?

Our role in this as a ratings agency is looking at the credit information of emerging regulations, emerging market trends around biodiversity conservation. So that can be either from an impacts perspective, where we see for example pesticide regulation causing an issue, on operating costs. We see the European Commission and the UK government exploring due diligence regulation, which would put the burden of proof on buyers of forest risk commodities to demonstrate that they are minimising adverse impacts on biodiversity.

The flip side of it is also the dependencies side of the equation, so understanding within supply chains where some of those critical dependencies are in biodiversity and conservation. As a ratings agency we're trying to look at these emerging credit risks, which are mostly latent risks rather than risks that are having any meaningful credit impact today.

At present there's very limited credit impact but we can see very

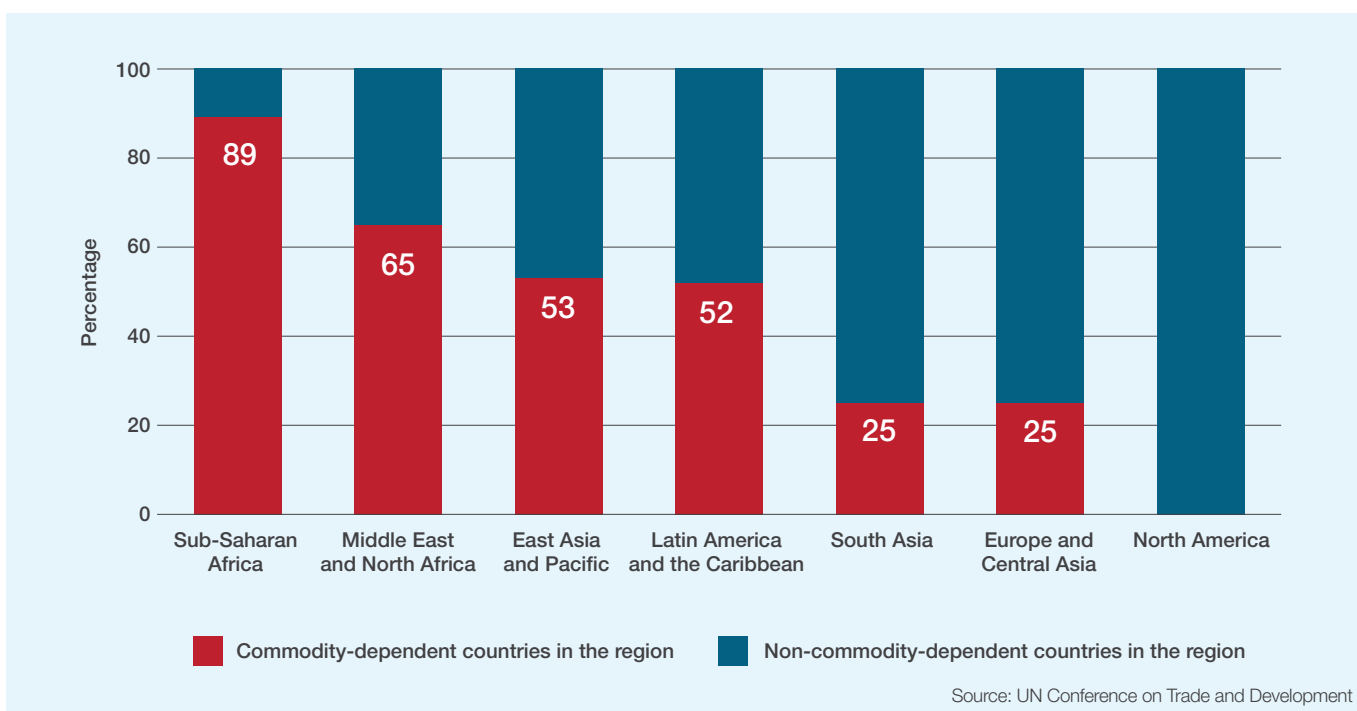
quickly that the policy and regulatory frameworks are starting to emerge around biodiversity conservation. Over time I think that will lead to a push for more standardisation of disclosure data, particularly around nature related financial risks.

The Taskforce on Nature-related Financial Disclosures (TNFD) has been a major disruptor in the market. That is reinforcing a lot of trends, particularly among asset owners, pushing for better disclosure of impact dependency data around biodiversity. We are seeing that to some degree impacting on banks and other financial institutions as well. The driving force of this has really been asset owners, similar to what we saw with climate change in the last five or six years.

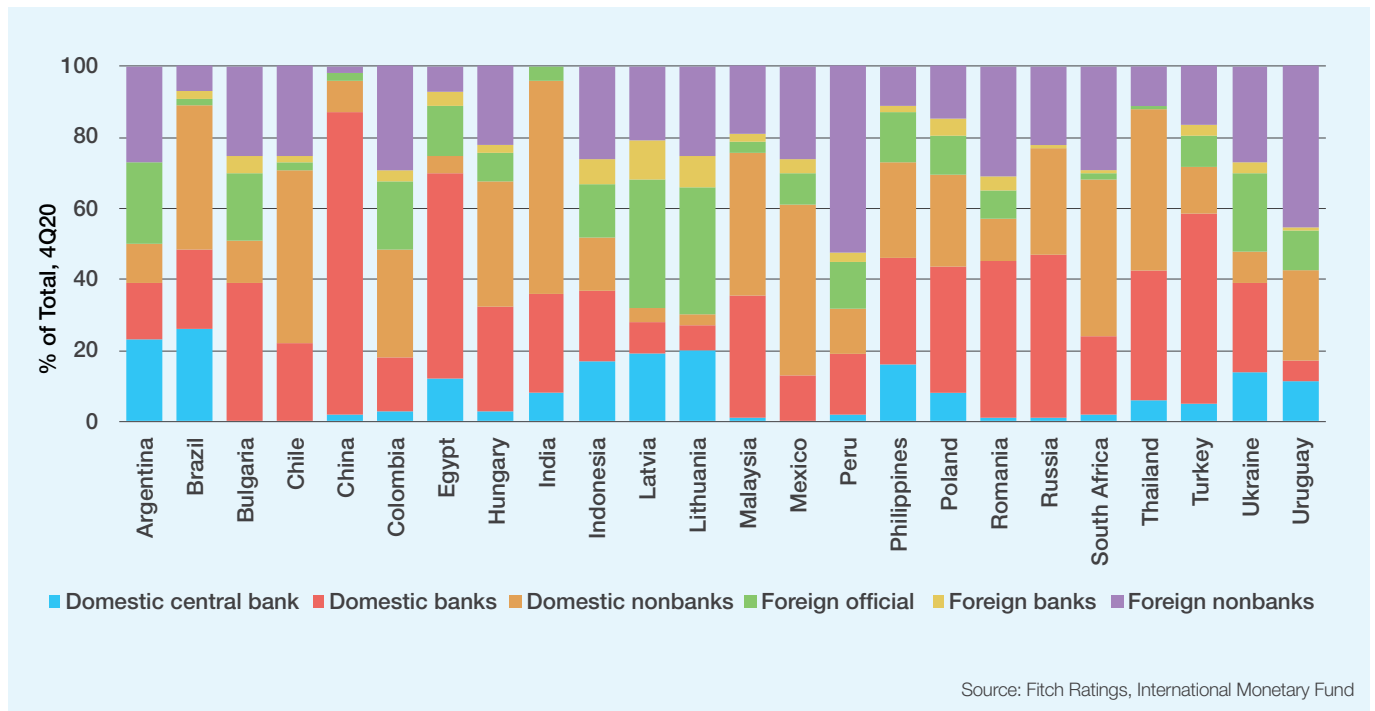
## In the report *Investors Grapple with Stemming Biodiversity Loss* Fitch emphasises better financing terms to incentivise biodiversity, is the solution as simple as that? Are we seeing an uptick?

It's not the whole solution. It'll be regulations, better information

Distribution of commodity-dependent and non-commodity-dependent countries within each geographical region, 2013-2017 (percentage)







### Investor Exposure to Emerging Market Sovereign Debt

on supply chain risks, increasing use of technology in reporting on biodiversity impacts and TNFD standardisation of data will play a key role. There will be a push for understanding where those impacts and dependencies are occurring in supply chains and doing that in a more granular way. There's a really a dearth of data linking upstream company operation and assets to downstream land use change and biodiversity loss. We have good information on these two datasets, but a dearth in linking the two. That is starting to change with better satellite and remote sensing data and that will start to put pressure on some agri-businesses to demonstrate that they are minimising those impacts.

The point around financing is relating to the wider point around what is driving biodiversity risk. In many cases we know this is quite heavily dominated by state owned enterprises, by private companies so a lot of the levers we've seen addressing issues around climate change in many ways are less effective for aggressive biodiversity because of those structural challenges. So it becomes a question of how can we influence some of these structural drivers of deforestation and biodiversity loss.

One of the areas which we felt was really interesting from this perspective was, in addition to the stick of regulation, having a carrot by tapping into the impact investment community and looking at the explosive growth we've seen of green, social and sustainability bonds and fixed income markets. We recognise that states are major actors both in driving deforestation and biodiversity loss but also potentially in some of the solutions, so if you can provide some incentives to address some of these issues that could yield some positive outcomes for development, managing debt burdens and for biodiversity conservation. We've started to see some of

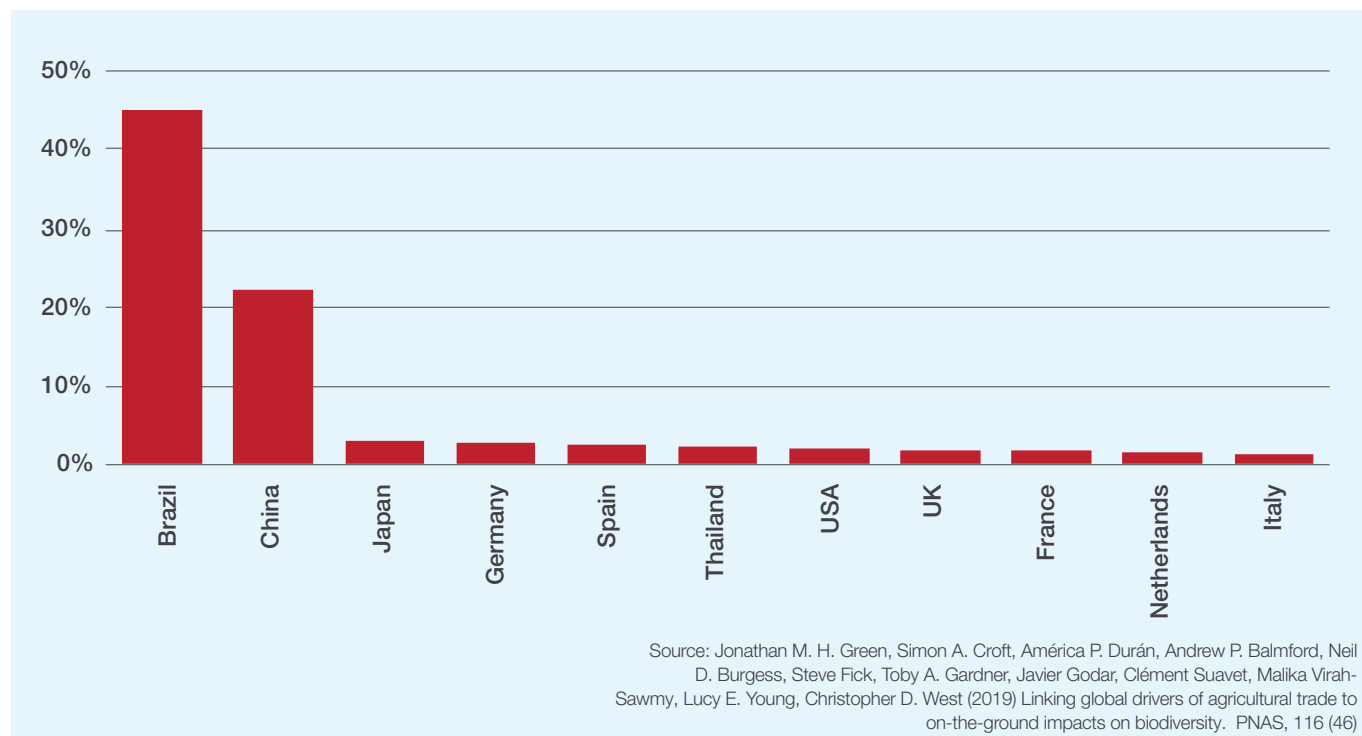
this with, for instance, the World Bank's Nature and Performance bonds, the re-emergence of debt for nature swaps as an investment class. There's a suite of opportunities there for investors to engage with biodiversity as an opportunity.

The explosive growth of voluntary carbon markets and nature based solutions, typically related to forestry and land use that are driven by climate mitigation concerns that can also demonstrate nature and biodiversity co-benefits. So that can be a critical part of the equation over the next decade as a lot of capital flows from developed markets, particularly high-emitter sectors, looking for carbon credits that can demonstrate biodiversity co-benefits in addition to climate mitigation.

### How do we go about strengthening the relationship between biodiversity and nature loss to credit? Of financial materiality of biodiversity loss to corporate performance

The key thing here is understanding the financial transmission mechanisms of nature and biodiversity issues in credit impacts. We've published a series of research, ESG in Credit, which is across all the environmental topics that we address within our ESG core relevance core framework, we provide examples of elevated ESG relevance core issues, we can demonstrate examples from where these can go from an environmental issue that doesn't have a credit impact into something that is impacting on the right thing.

The challenge is a lot of these are latent risks, they're risks that accelerate over the next 10 years as regulations tighten, as our understanding of the drivers of biodiversity loss and attribution of



Relative Impact of Soy Consumption on Cerrado Biodiversity

these losses to companies increases I think we are likely to see these issues become credit relevant. Whether that's through tightening supply chain regulations, we have seen the EU and the UK take the lead on that, whether it's through activist investors taking the lead on these topics and divesting in some cases. Nordea Asset Management have been active in this area in the last couple of years with their Brazilian deforestation policies, where they've paused investment in sovereign bonds there.

There's three pillars; the transition, the physical, and the litigation aspects.

It's similar to climate change, we can look at this from a transition risk perspective or regulations, certainly in many developed markets a lot of regulations put the burden on buyers of forest risk commodities for example. We can see this in physical risk, where we know that tropical deforestation, biodiversity loss could lead to heightened exposure of cities, municipalities, company assets to more extreme weather conditions to drought, storm conditions.

In addition to that we see litigation risk on the rise, we're starting to get more climate litigation directed at corporates in particular. I think that's something that'll be the on the increase.

#### How optimistic are you for the future of biodiversity after COP26, the One Planet Summit in October and various

#### other programmes being launched such as the Green Recovery Action Plan for Africa?

I think if these programmes are executed properly, we can certainly see a lot of that biodiversity conservation gap of the financing, both from private and public sector funds. I think a really big breakthrough at COP26 was agreement on Article 6 of the Paris rulebook on voluntary carbon markets and on bilateral trades between countries. We have started to see the bilateral carbon credit trade industry take off in the last couple of years.

The area that gives me optimism is the alignment of climate and nature conservation policies, which has not been emphasised terribly heavily but in the context of the Covid-19 recovery, the heavy debt burden of emerging markets, recognition that creative solutions will be needed here. We've also seen the private sector massively ramp up the scale of net zero and carbon neutrality pledges. I think there's a recognition that these pledges need to be delivered on.

What will be critical over the next 10 years will be getting a chance of mind-set in many of these emerging markets, from seeing the nature-based assets as something of liability that incurs management costs to them to actually seeing these as natural assets. Some of the agreements we saw at COP26 reflect that. ■

# Investing in adaptation and biodiversity

**A Landscape Resilience Fund provides financing to SMEs that work with smallholders in vulnerable landscapes, says Urs Dieterich**

**A** changing climate and disappearing [biodiversity](#) mean that our world is facing a double crisis. And with over [half of global GDP dependent](#) on nature and its services, nature loss matters a lot for all businesses – by impacting operations, supply chains and markets, and putting entire economies at risk.

Physical impacts aside, inaction on climate resilience and adaptation also threatens a company's reputation and social licence to operate.

We need to help vulnerable communities and ecosystems resist and recover from the fluctuations of a warming world.

This means *adapting* to climate change: profoundly changing human behaviour, corporate strategy and supply chains, and ingrained geopolitical and economic power structures. It also extends to building new, climate-friendly and resilient infrastructure on a global scale.

A tall task for one organisation alone. But the companies who do start chipping away at the challenge today will be ahead of the curve by future-proofing their business models and defending their social licence to operate over the long term. And the good news is that there's already a way to do it.

## It takes a village (and a landscape)

Private capital will make or break our ability to prepare for the future, since public finance alone is woefully insufficient to meet the world's adaptation needs. Furthermore, financing critical areas of adaptation in 'silos' – including poverty alleviation or biodiversity – will not get us far either. The scope and scale of the climate challenge calls for genuinely integrated approaches.

Some corporate leaders have realised the urgency for greater resilience and have already stepped up to invest in adaptation. One of these pioneers is Chanel, which in 2021 provided a \$25 million anchor investment to the [Landscape Resilience Fund \(LRF\)](#), an independent foundation co-developed by South Pole and WWF.

The Landscape Resilience Fund is an innovative partnership that blends public, philanthropic, and private finance to attract large-scale investment for local adaptation efforts, ecosystem restoration, economic recovery, and global supply chain resilience.

In practice, the LRF provides financing and assistance to small and medium-sized enterprises (SMEs) that work with smallholders in vulnerable landscapes – such as cocoa growers or rattan harvesters – to help them access better farming materials, such as drought-resistant seeds, as well as training and additional finance.

By looking at the different actors and ecosystems within the



Landscape in Aceh, Indonesia

Sandy Zebua (unsplash)

same landscape, the projects, SMEs, and farmers supported by the LRF work in sync to uphold community wellbeing, a healthy environment, and biodiversity conservation.

This landscape approach also helps mitigate climate change by challenging the drivers of deforestation, as well as increasing carbon sequestration through climate-smart agriculture practices, such as inter-cropping and agroforestry.

Chanel's investment has two clear benefits. On one hand, it will catalyse a virtuous cycle of additional investments into SMEs and at-risk communities in vulnerable landscapes.

In parallel, Chanel will learn how to build climate resilience into their own supply chains, and improve the long-term value of their business in the eyes of investors, employees, and customers.

## Making a lasting impact

The most effective way for companies to safeguard their social licence to operate is to show – rather than tell – how they are playing a part in creating a more equitable, climate-resilient future for all.

Today there is a vacuum of corporate leadership when it comes to adaptation. But funds like the LRF give forward-looking companies a chance to be part of an alliance of leaders that are going above and beyond their climate mitigation targets to invest in climate adaptation, for their own sake as well as for the sake of the millions who rely on forests and agriculture for their livelihoods. ■

**Urs Dieterich is managing director of the Landscape Resilience Fund.**



# Transparency will be key to Nature Action 100

Transparency of the outcomes of engagement with companies on their biodiversity impact will be key to ensuring the burgeoning Nature Action 100 improves on its climate counterpart, Peter van der Werf tells Michael Hurley

Investors developing a proposed Nature Action 100 (NA100) collaborative engagement initiative are keen to improve on an equivalent for climate change, Peter van der Werf, senior manager of engagement at Netherlands-based asset manager Robeco, tells *Environmental Finance*.

“Nature Action 100 originates out of a couple of investors coming together earlier this year to discuss biodiversity as a global systemic risk on a similar level as climate change. However, it is less well understood, less well captured in terms of data and in terms of ability to report,” he says.

Robeco developed a stewardship programme on deforestation in 2020, focused primarily on engaging with companies active in ‘soft commodities’ with a very high impact on deforestation, including soy, cocoa, rubber and timber. However, it identified a need to broaden this approach and bring in other investors, van der Werf says, and to improve on Climate Action 100+ (CA100+).

The huge investor-led climate initiative is made up of 617 global investors who are responsible for more than \$55 trillion in assets under management. However, some observers have questioned the achievements of its members’ engagements with high-emitting corporates.

“The purpose is to develop this [NA100] into a programme that creates awareness among global corporates of their dependencies and impacts on biodiversity, to get them to put this into their governance structure, and really to also prepare them for embracing the Taskforce on Nature-related Financial Disclosures (TNFD) when it is launched two years from now.”

The TNFD will by 2023 deliver “a framework for organisations to report and act on evolving nature-related risks, to support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes”.

Van der Werf was a driving force behind the creation of NA100, several sources told *Environmental Finance*. He presented the concept to the Convention on Biological Diversity (CBD)’s financial institutions workshop in June.

Robeco is among a “core group” of fewer than 10 investors working to develop a governance structure for NA100. “We’re having conversations on funding to run a secretariat that can effectively manage all investor activities, and also support the technical advisory committee that does the benchmarking and research that feeds into the investor engagement,” van der Werf says.



Peter van der Werf, Robeco

NA100 is likely to comprise a corporate engagement pillar, a policy engagement pillar and a technical advisory group to advise those first two

The Finance for Biodiversity Foundation has also been a key contributor to the NA100, he says. “Robeco is one of its more closely involved members and I sit on the foundation’s advisory board. As one of the early signatories to the [Finance for Biodiversity] pledge, we felt that the work that we do [on NA100] is conducive to the second commitment of the pledge, which is to start engaging in a collaborative fashion with other investors on biodiversity.”

He is keen to stress that, while NA100 is led by investors, it is likely to incorporate organisations focused on nature conservation as well as benchmarking organisations, to ensure it encompasses the latest science.

Among the “core group”, the instigators of NA100 are split across “a small group that works on the governance structure and funding; another group is working on the investor expectations; another group, and that’s more under leadership of Finance for Biodiversity Foundation, is looking into tools for footprinting and other elements”.

NA100 is likely to comprise a corporate engagement pillar, a policy engagement pillar and a technical advisory group to advise those first two. “But in terms of which organisations will take a lead, which other organisations will be involved and which organisations will fund it, that’s all still fully open,” he adds.

No date has been set for formal launch of the initiative. It was initially slated for October, to coincide with the meeting of the Convention on Biological Diversity (CBD COP15) in Kunming, but the launch was delayed following news that parts of the event would be postponed until spring next year, as first reported by *Environmental Finance*.

“Timelines have become rather fluid as COP15 has become less clear, and specifically on which days the [Post-2020] Global Biodiversity Framework will be negotiated and formally agreed. The framework is a centrepiece of the [Finance for Biodiversity] Pledge that we signed in September last year to, by 2024, align our investments to the framework [to reverse nature loss by 2030].”

He says it will be important to provide space for the proposed NA100 technical advisory group “to develop the boundaries of” what are the most important dependencies and impacts that this group of investors should focus their engagement on and the list of 100 companies it will target. He adds that it is too early to identify target sectors for engagement.

Compared with the CA100+ initiative, it is likely to be more complicated to identify companies as targets for nature-related engagement, van der Werf suggests.

“With CA100+ you have this absolute carbon footprint perspective that, to some degree, makes it clearer as to which companies to target.

“With biodiversity – given that geospatial, local context that is very important, as to where the impact really is made – this will require more choices in terms of how we delineate specific biomes or specific pieces of that impact chain.”

Among the “learnings” the proponents of NA100 aim to take from CA100+, he says clear communication of “real-world outcomes” will be crucial.

“The challenge of running an effective collaborative engagement [is] how do you get high energy, high frequency engagement, driven by a group of people that is really contributing to a joint analysis of the performance of that company? It is something that I’ve witnessed myself having spent a lot of time within various Principles for Responsible Investment (PRI) working groups on topics like palm oil, deforestation, labour standards, water risk, et cetera.

“Some collaborations really take flight. Other collaborations don’t get off the ground, people lose energy, time or interest, or people rotate out of roles very quickly and new people don’t pick it up.

“That is something that the PRI is discussing at a broader level: how to ensure that each collaborative engagement is delivering on what the individual parties have set out to, and what the programme at large promises: to really make an impact, to be able to measure real world outcomes from the dialogue, and not just report ‘x’ number of meetings.

“That’s one of the things that we are looking at, based on CA100+: how can we define that better?”

While publishing more information about engagements is desirable, communicating progress while dialogue is ongoing may be less desirable for some investors, he suggests.

“It might be that investors just don’t have the bandwidth to spend time on this, or that the companies that are targeted are slow in making commitments.

“Compared with the CA100+ initiative, it is likely to be more complicated to identify companies as targets for nature-related engagement”

Peter van der Werf, Robeco

“The challenging bit is that, while engaging with the company, being very open and transparent on what’s happening at the table can also negatively impact the ability for you to come to the table the next time. For example, if the company feels that they are exposed in a process where they’re not yet comfortable with setting targets and they’re working on it, but there are internal pressures between the head of sustainability, who is typically in favour of what we would be asking, [and] business leaders and others who might feel that they’re moving ahead too quickly.

“If you [as an investor] report: ‘We’re here but the company isn’t willing to commit to these targets yet’, the next time that the head of sustainability needs to have that internal conversation, and these people have heard about this being in news outlets, that can really hurt trust.

“We fully subscribe to the concept of being clearer on what is achieved by engagement, and that engagement becomes an instrument that external stakeholders can measure and verify, but at the same time, you need to find the right timing for it. In most cases the timing is right when they’ve achieved what you were asking of them.”

He adds that Robeco would be happy to say: “These are the five companies out of the 100 we are engaging with, and you can hold us accountable for running the dialogue.” However, other investors might feel comfortable to sign up to NA100, but not to be named in full, or for what exactly they are responsible.

“Sometimes you must make choices that protect the interest of parts of the group,” van der Werf says. ■

# COP's special guest – Nature

What lessons can we take from Glasgow that can inform our approach at COP15, asks Simon Zadek

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**T**here is one uncontested fact amidst the many post-COP26 analyses. Glasgow may have been about climate, but it was marked by nature's grand entrance into global politics.

Despite decades of environmentalists urgently pointing out the risk of nature's destruction, it is the climate crisis that has thrust it most visibly onto the world's stage.

In that context, let us not forget there are less than five months to go before we immerse ourselves in the second green multilateral effort – and the UN Framework Convention on Climate Change's lesser-known cousin – the Convention on Biological Diversity, whose own COP15 will be held in April 2021 in Kunming, China.

What [lessons can we take from Glasgow](#) that can inform our approach at COP15?

With our aspiration to keep global temperature rises below 1.5°C, nature's place in Glasgow arose because of its potential as an investable asset for carbon sequestration. The high-profile agreement on deforestation was all about this key attribute.

Moreover, the agreement on Article 6 enshrined in the Glasgow Climate Pact signals an embrace of carbon offset markets, with much made of the potential for investing in nature-based solutions.

COP15's success depends in part on reciprocating nature's VIP treatment in Glasgow, by leveraging the critical role that nature can play in addressing relatively matured climate commitments by governments and market actors.

There is huge market as well as policy value in connecting these dots, highlighted in F4B's first piece on the [climate-nature nexus earlier this year](#), and a point to be further amplified in its forthcoming contribution to building an integrated transition risk framework that takes account of both nature and climate, and their dynamic relationship.

Nature's bounty is, however, far more than a way of storing carbon. As I have said previously in my columns for *Environmental Finance*, **every product, dollar and job making up the global economy is ultimately dependent on nature**. And although the monetisation of nature is on the move, whether we look at carbon markets or the rapid progress being made by the Taskforce for Nature-related Financial Disclosures (TNFD), the market is still at an early stage in seeing nature as a substantive investable domain.

For COP15 to attract the necessary geopolitical interest to underpin an ambitious deal, it needs to strike the right balance between a ring-fenced conservation of nature, and its stewardship through its tradable value.

Nature's place in the global economy is self-evident, but its monetisation is still at a primitive stage.

Climate, by comparison, is very much a geo-competitive issue. World attention was focused on COP26 not only because of scary existential reasons, but also because climate policy is now

**“For COP15 to attract the necessary geopolitical interest to underpin an ambitious deal, it needs to strike the right balance between a ring-fenced conservation of nature, and its stewardship through its tradable value”**

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centre stage in the global struggle to dominate tomorrow's highly profitable technologies and low-carbon industries.

In striking this balance, Glasgow offers some tricks-of-the-trade that COP15 can emulate. Most obvious is the need for some genuinely ambitious voluntary deals underpinned by credible coalitions, of substance in themselves, and having a positive effect on the negotiated text. Some progress is being made on this front, but to date not nearly enough.

And COP15 Sherpas beware: more conversational convenings just will not suffice after Glasgow's dismal glitzy parade of the great and wanna-be-good.

In that spirit, I offer what I consider to be three (among, I





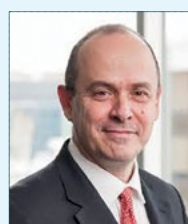
am sure, many other) serious plays that can be brought to, and strengthen, Kunming, amplifying some amazing efforts that are already in progress.

**Public Development Banks need to commit to a nature positive portfolio by 2030, with annual reporting on their nature-related risks.** Public Development Banks (PDBs) – state-owned financial institutions with a mandate to finance public policy – have a combined balance sheet of \$11.6 trillion. Together, they account for 10% of annual global investment, weighted heavily towards nature-dependent assets across the food system and infrastructure, as [F4B's recent report on their nature-related risks highlights](#). They are owned by us, through governments as shareholders, and are mandated to serve the public interest. [F4B has called for shareholders to demand](#) that PDBs make a commitment to report annually on progress, cascading this momentum into requirements with private financing partners.

**Financing value chains should be 'nature crime free'.** Unlike carbon emissions, much of nature's destruction is illegal, but remains unpunished or at best lightly punished. Financing institutions are, in the main, legally protected from the illegalities of firms and folks they finance, except where anti-money laundering (AML) rules apply. In a forthcoming paper [prepared for the UK's Global Resource Initiative](#), F4B argues that legal financing should not be allowed to benefit from profits arising in part from the exploitation of nature crimes, such as raising cattle on illegally deforested land. It recommends building on actions being taken by the UK, EU and US in strengthening AML rules, and initiating a 'conflict diamond' type approach to requiring the financial community to ensure their financing value chains are 'nature crime free'.

**Nature markets are the next thing; they need to be well governed.** Carbon markets will be important in our fight against climate change, one way or another. But they are the thin edge of the wedge of a far greater upswell in diverse nature markets over the coming years, including the trading of climate-linked nature-based solutions; varied biodiversity offset markets; and the monetisation of embedded nature across many existing and future markets linked to changing trade rules and consumer interests. F4B will launch a high-profile Task Force on Nature Markets in early 2022 to better understand how such developments can deliver nature positive, secure revenue streams rather than adding to nature's destruction.

Glasgow positively shows us that what is needed is to harness the synergies between large-scale voluntary platforms, policy and regulatory innovations, and ambitious text negotiations. COP15 has the extraordinary, second-mover advantage of learning, and building on nature-relevant developments from Glasgow, to deliver a cluster of platforms and innovations that can strengthen prospects for an ambitious deal on biodiversity. ■



**Dr Simon Zadek is the Chair of Finance for Biodiversity (F4B). Comments are welcome at [simon.zadek@f4b-initiative.net](mailto:simon.zadek@f4b-initiative.net)**

# There is a market for biodiversity – and it is expanding

In Europe, biodiversity is generally produced by millions of small landowners. For more biodiversity, a functioning market for biodiversity is a prerequisite. Forest certification forms essentially a voluntary market for biodiversity, where a “plus-sustainability” scheme has standards more ambitious than those required by law. In the following, we illustrate a market-based solution for biodiversity based on an existing plus-sustainability scheme. Our DHF-Model is currently being applied for biodiversity conservation on 5 million hectares as a first target.

by Olli Haltia, Tapani Pakkasalo, Dasos Capital Oy Ltd

In a market economy, it is useful to consider biodiversity as a product which is produced by management effort. In Europe, biodiversity is produced by millions of forest and land owners, typically small-holders owning up to 50 ha of land. While such small holders tend to focus on the production of timber incentivized by a well-established roundwood markets, biodiversity remains a side product. Or it is even considered as a constraint to the cash-flow generating activity, and thus an extra cost.

Occasionally, incentive schemes have been established to encourage biodiversity production by forest owners – in Finland, METSO-programme is an example of such schemes which compensates a forest owner for the biodiversity produced. An innovative proposal has also been made to establish a pricing system for decaying wood as a “commercial” timber grade (decaying wood remaining in forest provides feeding for numerous insects, fungi and bird species). However, such individual schemes cannot replace a fully developed market – although they can complement it.

## Forest certification forms a market for biodiversity

For more biodiversity, we need a functioning market for biodiversity. Fortunately, a market for biodiversity has, in fact, already been established: this market is called forest certification. Forest certification forms essentially a voluntary market for biodiversity which a forest owner may participate upon her own decision. Forest certification forms a “plus-sustainability” scheme for forest management where standards are clearly more ambitious than those required by law. Hence, the problem is not that we would not have a market for biodiversity, but the market remains incomplete and needs to be fine-tuned to function in a more adequate manner.

For such a plus-sustainability scheme to function at full power, the market has to compensate a sufficient price premium for forest products (e.g., packaging, engineered wood) which are manufactured based on wood raw material complying with such plus-sustainability schemes. The price premium is then made available to forest owners as a compensation for the produced biodiversity, a prerequisite for plus-sustainability.

It is beyond reach for forest owners to influence the premium paid for plus-sustainable forest products by the consumers of packaging, tissue and other fibre and solid wood products. The current trend seems to be, however, that consumers are becoming more aware of biodiversity, placing thus greater emphasis on plus-sustainability. There is a broadening market window for forest product manufacturers to tap the opportunity by more aggressive marketing of certified forest products.

## Efficiency of Conservation

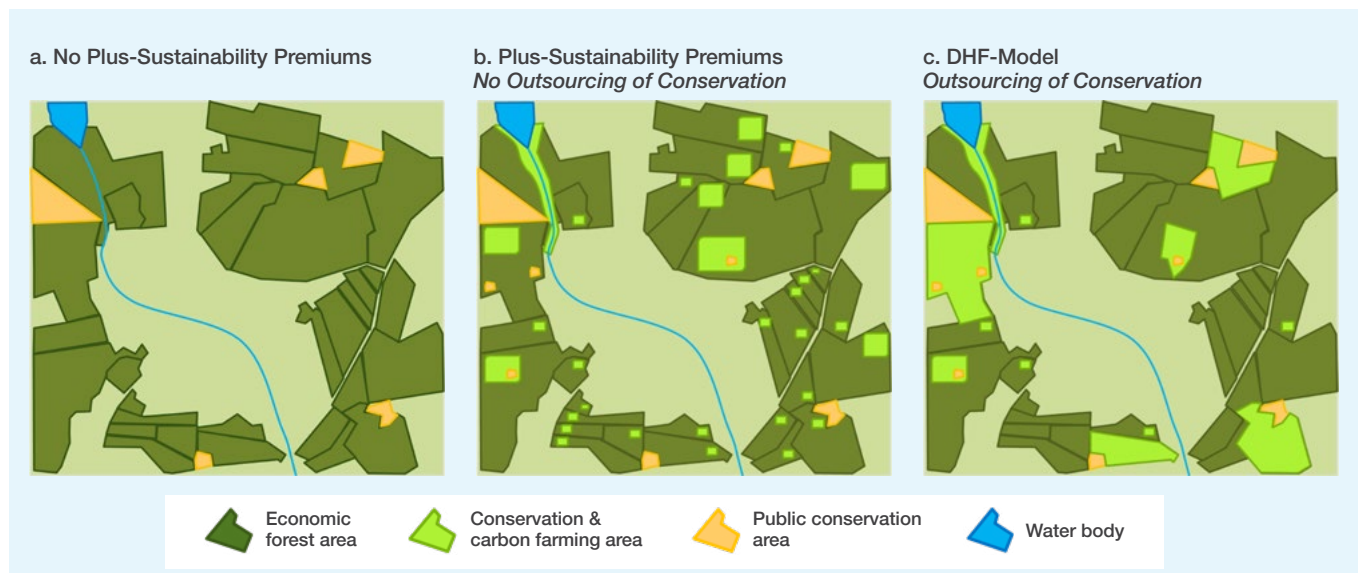
Whatever the premium for plus-sustainability might be, the production of biodiversity has to be efficient. Maximum amount of biodiversity should be accomplished for each additional euro invested. Nevertheless, with conservation having been largely an activity based on public resources, too little attention has been paid to efficiency.

Private sector driven biodiversity production is subject to budget constraint for two main reasons. First, the compensation for biodiversity is determined by the price premium for plus-sustainable forest products depending upon market’s willingness to pay for biodiversity. As discussed above, we may see larger price premia and thus larger budget in future. However, efficiency should be maintained also with a broader budget.

Second, an owner of land will have to take into account an opportunity cost when deciding about allocation of land into biodiversity management. For example, the owner may have to consider a foregone revenue of timber production and wind power rent when allocating a piece of land into biodiversity production with no scope for future revenues from timber and wind.

Another aspect of efficiency is the environmental quality. Probably the most widely applied indicator for biodiversity is simply the area conserved. For example, forest certification pays remarkable attention to the quota of forest area being set aside for biodiversity. Much less attention is paid on biodiversity itself. However, the biodiversity sensitive areas are typically not evenly distributed, and therefore conservation efficiency suffers if there is no focus.

A related quality issue is the size of an individual conservation area. Larger conservation areas typically imply not only broader



Evolution of an efficient conservation model with plus-sustainability premiums

biodiversity but also larger number of individuals in each species, indicating vitality of broader genetic pools over smaller conservation plots.

#### DHF-Model: The Conservation Model of Dasos Habitat Foundation

DHF-Model considers a situation whereby a forest owner is contemplating to join a plus-sustainability scheme requiring to set aside e.g. 5 % quota of forest area for conservation. The forest owner with an average property of e.g. 30 ha needs therefore to evaluate whether the additional revenue gained from the plus-sustainability wood market compensates for the foregone revenue from 1.5 ha designated entirely for biodiversity production.

In many cases, the evaluation yields a negative outcome (note that less than 50 % of forests in Europe have been certified). A typical situation is that a forest owner finds only e.g. 0.5 ha suitable forestland for conservation whereas the remaining 1 ha needed has little biodiversity value but a high opportunity cost. Hence, the forest owner would reject the idea of plus-sustainability on rational grounds.

DHF-Model comes to forest owner's aid by offering an opportunity to outsource parts of strict conservation area. Here, the forest owner conserves 0.5 ha of own land whilst the remaining 1 ha is conserved by DHF on behalf of the forest owner. As a result, the forest owner has a chance to benefit of a plus-sustainability premium. Note that plus-sustainability scheme requires maintaining biodiversity values throughout the whole area. The forest owner is better off compared to staying out of the plus-sustainability scheme.

Dasos Habitat Foundation has established such biodiversity trading scheme in cooperation with Metsä Group (MG) in Finland. MG is owned by 100,000 forest owners with a total forest area of some 5 million hectares. MG-forests are in fact widely covered by forest certification - here, the target for the cooperation is to apply an additional form of plus-sustainability.

DHF-Model offers conservation areas to those MG-forest owners who do not have enough suitable forest land to conserve. In short, the set-up allows forest owners to optimize the degree of the conservation outsourcing. The key parameters include the plus-sustainability premium available and the opportunity cost faced due to conservation. DHF-Model employs a specific algorithm which accurately maximizes forest owner's revenue by finding an optimal conservation pattern.

#### DHF-Model benefits the environment, forest owners and the wood processing industries

Applied in the context of sustainable forest management, DHF-Model generates fundamental benefits, not only to forest owners and wood buyers but essentially to the environment – and thus, to the society at large. The benefits stem from substantial efficiency gains.

First, DHF-Model expands the market of plus-sustainable wood by providing a new option for certification compliance. This allows wood buyers and forest product manufacturers to broaden their presence in the growing market for packaging, tissue and engineered wood products. DHF-Model forms also the lowest-cost route to procure a given amount of plus-sustainable wood raw material for processing.

Second, DHF-Model allows for a forest owner a competitive option to benefit of plus-sustainability premium – the difference is drastic especially in the situation where plus-sustainability scheme would not be profitable without the DHF-Model. Hence, the model increases forest owners' revenue at all levels of premium – or compared to the situation that a forest owner would not join to the plus-sustainability scheme. As all conservation can be outsourced, it would make sense for a forest owner to join a plus-sustainability scheme even without any conservation by herself.

Third, a fundamental environmental benefit results from the fact that DHF-model lowers the (opportunity) cost by forest owners for conservation, encouraging to establish forest areas





designated entirely for biodiversity. Very importantly, the model guides to allocate biodiversity conservation to areas with relatively high environmental value compared to timber production. Perhaps the most significant implication of the model is in the larger conservation areas. Consolidation of the outsourced conservation by small holders into larger conservation entities results in richer genetic pools. Thus, the scope for the trading conservation plays an important role in the reduction of fragmentation for conservation.

DHF-Model is illustrated in the illustration/graphic on page 17. In a situation where plus-sustainability premiums do not exist, there are only public conservation areas (a.). Being dependent on scarce public resources, the scale of conservation remains sub-optimal.

When plus-sustainability premiums are paid to forest owners with compliance, the incentive is sufficient for some forest owners to increase the conservation (b.). This applies to those with the best possibilities to do this, and whose costs do not exceed the revenue increase. Some new scattered conservation areas can be formed but the fragmented structure of European forest ownership results in scattered conservation. The scale of conservation still remains sub-optimal with too small size for an average biodiversity area.

An efficient DHF-conservation (c.) model includes the possibility of joining a conservation group where Dasos Habitat Foundation focuses solely on conservation taking care of an optimized scale of biodiversity management on behalf of other forest owners. This significantly reduces the private cost of conservation, enabling more areas to be conserved, more plus-sustainable wood to be produced and results in significantly larger and more valuable conservation areas.

Dasos Habitat Foundation has executed DHF-Model in Finland since 2020 based on private sector financing. After its first operational year, the established conservation area facilitates plus-sustainable forests of some 50,000 ha. Moreover, the conservation units established so far as single biodiversity management areas are 8 times larger than achieved by simultaneously executed public conservation programmes in the private sector forestry. DHF-Model has become probably the most significant privately financed venture for biodiversity in Europe.

There is huge potential and need to expand applications of DHF-Model across Europe - if not elsewhere. Based on experience accumulated in a short time, a couple of remarks can be made.

First, practically all biodiversity areas established by DHF-Model perform as very good forests for CO<sub>2</sub> storage and sink – the conservation areas established by DHF have a volume of mature big trees more than 2 times compared to an average forestry area whereas the biological growth is also attractive. As a rule of thumb, most biodiversity areas count as an efficient means for carbon sequestration whereas the opposite is much less often true. Hence, carbon sequestration payments designated especially to biodiversity forests represent a positive spill-over incentivizing joint-production. This should be a first guiding principle when considering a compensation for forest-based carbon in the context of EU emission trading system or otherwise.

Second, European wind and solar power capacity is bound to grow manifold over the next 10-20 years, or even sooner. Substantial part of the wind power capacity will be on-shore and placed on forestlands. The biodiversity footprint of wind power is becoming a major issue. Turbine sites, roads and grid lines cause deforestation when installed in forested regions. It is likely that the demand for “plus-sustainable” wind and solar electricity will grow – the biodiversity-compensated electricity is currently emerging as a “new” product.

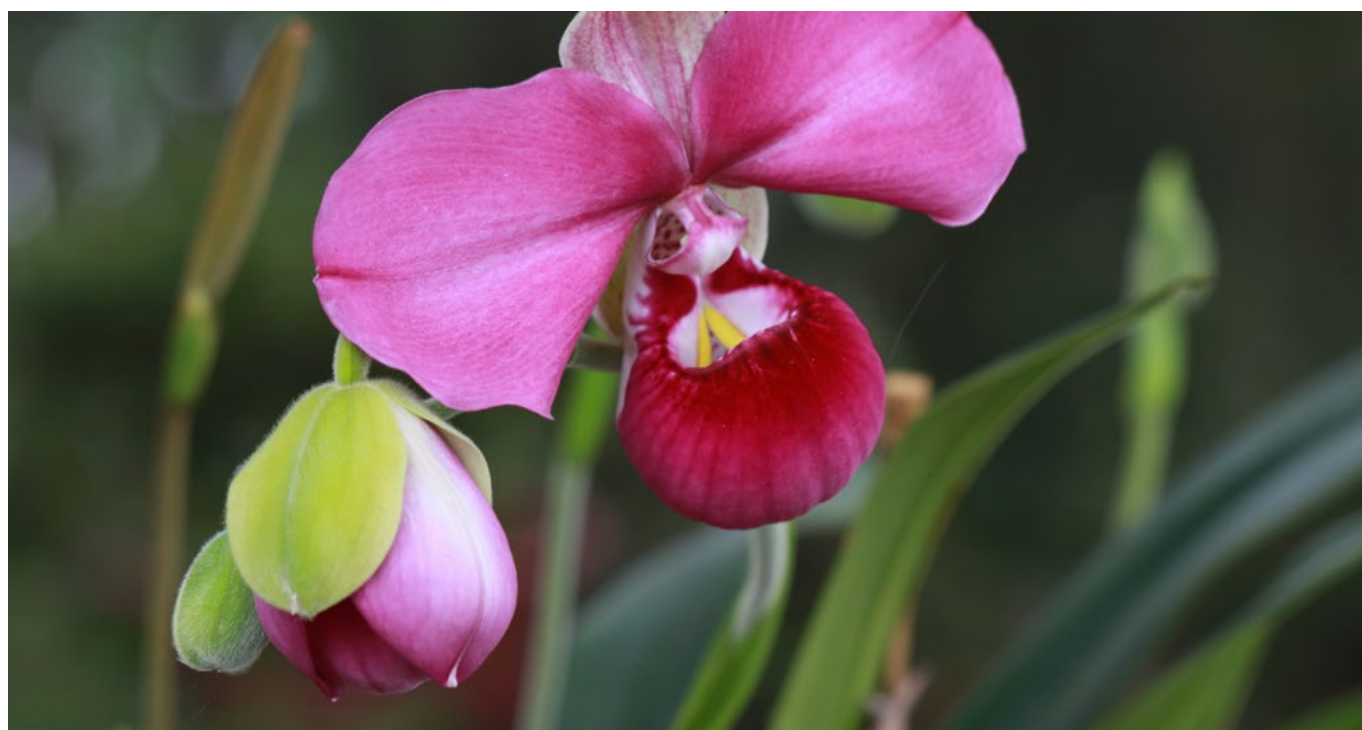
In conclusion, the market for biodiversity is expanding rapidly. The vision of Dasos Habitat Foundation is to bring efficient conservation models into use, channel funds from the markets to nature conservation – and provide investors with a sustainable investment opportunity based on the attractive return/risk profile inherent with Natural Capital. In doing so, Dasos Habitat Foundation aims to conserve more valuable natural habitats. ■

Dasos Habitat Foundation is part of Dasos Capital Group. Dasos Capital Oy Ltd is an investment advisor to private equity funds investing in sustainable forests, wood-based construction and natural capital. Assets under management total over EUR 1.3 billion.

Dasos Capital is a signatory of UN PRI and a member of Finland's Sustainable Investment Forum (FINSIF) and a Partner of the Circular Bioeconomy Alliance (CBA) as well as supporter of the Task Force on Climate-related Financial Disclosures (TCFD).

# Standards catalyse finance for biodiversity conservation

As more and more organisations enter the biodiversity market, Verra strives to ensure that the high standards of projects are maintained, as Naomi Swickard, Chief Program Officer, outlines.



© Conservation International/photo by Carlos Bustamante

Kovachii orchid close up in the Alto Mayo Conservation Initiative, Peru, which has helped protect the region's unique biodiversity

## **The UN says biodiversity continues to deteriorate and decline across the globe. How do we reverse that? And what role do standards organisations like Verra play in that?**

Standards organisations like Verra play a catalytic role in this context. We set the rules by which you can develop projects, issue credits, or make claims. These projects implement a variety of activities, including emission reductions, biodiversity conservation, and socio-economic improvements. The credits and claims the projects make are of interest to buyers and investors and can therefore drive demand for investment in the space. When you're talking about a carbon offset, we have a built-in demand coming from the fact that countries have targets under the Paris Agreement and that there's a growing realisation among companies that if we don't invest in climate mitigation then it's going to hit their bottom line. We can use these incentives to drive investment in activities that reduce emissions and increase sequestration.

On the biodiversity side, it's a little more complicated because we don't have this same type of signal that requires people to invest. However, we have the ability to package biodiversity benefits with emission reductions. And because we're seeing an increased focus on sustainable development, which includes biodiversity, in carbon markets, there is a chance for these markets to also significantly impact biodiversity.

## **How do you see successful land management for conservation, biodiversity and carbon sequestration all being connected with sustained economic benefits?**

The same measures that protect forest carbon and help improve and protect biodiversity also have socio-economic benefits. Verra has specialized in nature-based solutions, and in this category, a properly designed project that may have a primary role as a carbon project is generally also going to focus on alternative livelihoods, conservation, and biodiversity protection. We know





Crystal Riedemann

Proboscis Monkey mother and infant at the Rimba Raya Biodiversity Reserve Project

that the end goal is to move towards more decarbonisation and an increase in sequestration. However, if we take away the finance for existing standing forests – in other words for preventing deforestation and degradation – then we have so much more to lose. Not only will this increase carbon pollution, but we'll also lose all the biodiversity and the community benefits from those forests as well.

One of the best things we can do is look at this holistically, within project areas and landscapes, so that we're maximising outcomes not only on carbon but also on biodiversity, livelihoods, and the plethora of sustainable development benefits that can be attached to these projects.

We also have two other standards, in addition to our Verified Carbon Standard (VCS), which are related to the UN Sustainable Development Goals (SDGs): The Sustainable Development Verified Impact Standard (SD VISTA) is a framework for measuring and monitoring any sustainable development impact, including on biodiversity, health, environmental, or community issues. Then you can either create a claim based on those impacts or even go all the way to an asset, so a tradeable unit like a carbon credit. We're seeing a lot of projects use SD VISTA to quantify the benefits around things like biodiversity.

We have also developed, with several partners including Rainforest Alliance and Conservation International, an assessment framework called LandScale, which is similar but focused on an entire landscape. Existing certifications in this field either tend to focus on just one aspect of sustainability or are site-specific.

However, when it comes to conservation, biodiversity and sequestration you can't actually address any of these issues without looking at the whole landscape, they're all interconnected. Water quality and quantity issues in one part of the landscape can impact forest growth or agriculture in another part, for example. LandScale is about measuring and monitoring the whole landscape, holistically, across a range of indicators to drive finance to address key sustainability issues and see improvement overall.

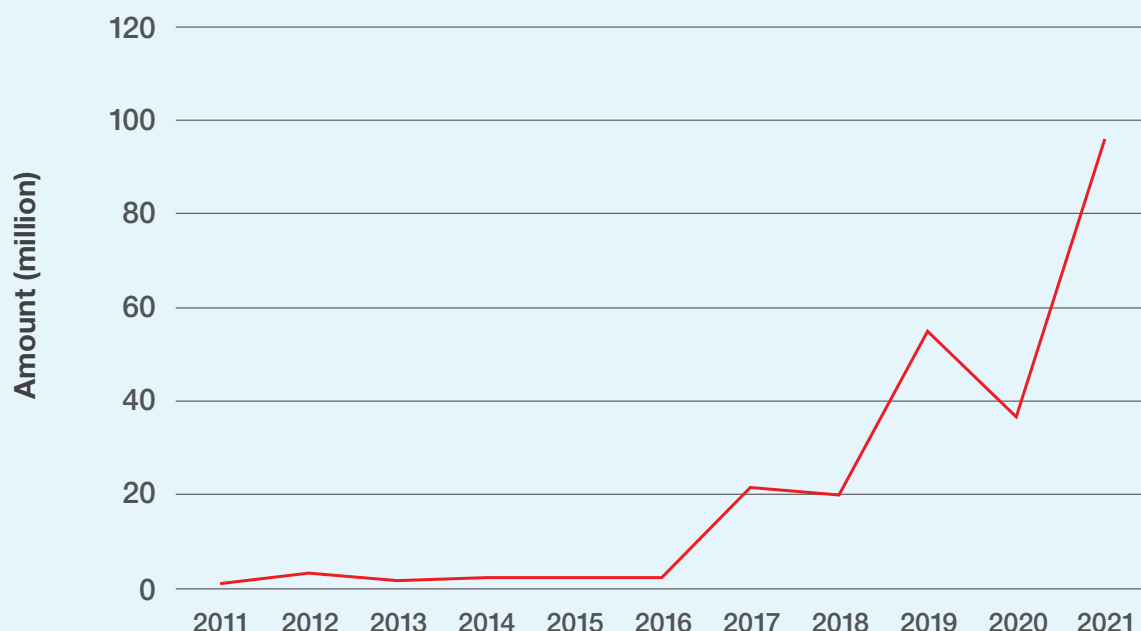
So, through VCS, SD VISTA, or LandScale you can look at maximising those outcomes across the connection between biodiversity, carbon, conservation, and the economy.

### **Has there been a big uptick in projects looking for certification? How do you encourage more projects so more companies are offsetting their emissions?**

There has been a huge growth in the market. From our side, our issuance volume has doubled from 2020 to 2021. A lot of developers are also doubling or tripling the size of their businesses over the next few years, so there's clearly growth. I think that's a reflection of companies waking up to the fact that climate change is going to impact their core business, so they're looking to address their environmental impact.

That said, our goal is not to grow the size of the pie, our goal is to make sure we are supporting the transition to a decarbonised world. So, companies first need to set their net zero targets and focus on internal mitigation, making sure there's a concrete





Annual issuance of VCS projects that are also certified under the Climate, Community & Biodiversity (CCB) Standards, among other things, these projects assess biodiversity impacts

plan to be working towards net zero and reducing their internal emissions. Offsets are a bridge to help us compensate for those emissions that cannot be avoided or reduced today as a transition to decarbonised economies.

For us the key is about using our work to drive investment as quickly as possible in climate mitigation and biodiversity conservation today, while we're all aiming for a net zero goal.

**Looking at the biodiversity COP, do you feel more emphasis is placed on the transition to green energy and more effort, attention, and financing is needed on a global governance scale on biodiversity preservation and carbon sequestration?**

Renewable energy is important and there's a lot of attention on that, especially at a national scale. As countries are trying to meet their climate targets, they tend to focus first on the biggest point sources of emissions, which is why we see energy production regulated first. But the biggest growth in carbon markets has been on nature-based solutions and that is partially because how critical they are to the overall climate solution. A second important reason is the fact that these solutions have biodiversity and livelihoods benefits as well as other outcomes that companies look at beyond carbon.

Nature-based solutions have additional complexities as they are related to the livelihoods and rights of local communities. This is the reason governments regulate these large point sources of emission first, but we should not lose sight of the importance of

tackling the more complex solutions as well.

Governance is critical for the implementation of mitigation within countries but putting the necessary policies and regulations in place is very time-consuming and we really can't wait for that if we want to avert disastrous climate change and loss of biodiversity. Here is where voluntary markets come in; they help drive that finance to emission reduction and biodiversity conservation while governments take the time they need to invest in and establish policy. Private finance moves quickly, it's nimble and can be directed to site-based interventions.

When we're talking about biodiversity, it's critical that we're protecting those forests that are most threatened – and they're being lost every single day. Because we can move private finance to forest conservation more quickly, we can help protect the biodiversity in those forests while governments are getting their policies in place and implementing them.

#### What's next for Verra?

We continue to focus on expanding and refining our standards programmes and to increase their potential and reach. SD VISA and LandScale help direct finance to measuring and therefore increasing the impacts in these areas beyond emission reductions. The essential value of standing forests is critical in this context, so I think a lot of that of our focus will continue to be on growing and continuing to update our work in that sector – and on communicating this value so we can continue to drive finance to it and don't lose those critical ecosystems. ■

# NGFS: How central banks can confront biodiversity risk

Central banks and financial supervisors have been told they can improve their assessment of the relationship between financial stability and biodiversity, including by developing their own “ad hoc methodological approaches that better capture the risk of biodiversity impacts”.

The recommendations came in a report co-authored by the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) and the International Network for Sustainable Financial Policy Insights, Research, and Exchange (INSPIRE).

A better understanding of the relationship is “crucial” for central banks and financial supervisors aiming to assess the financial risks that could arise from biodiversity loss, the authors said.

“That biodiversity loss poses a risk to macroeconomic and financial stability is now well-established and scientifically-grounded. Central banks and financial supervisors need to extend and complement their work on climate change and make a similar effort – both individually and through forums such as the NGFS – on biodiversity loss,” the authors added.

They also recommend central banks and supervisors “signal to the financial institutions that they supervise, other economic actors and policymakers the importance of understanding the risks arising from their dependencies and impacts on biodiversity”. “In addition, and within the remit of their mandates, they should support governments’ efforts to reverse biodiversity loss.”

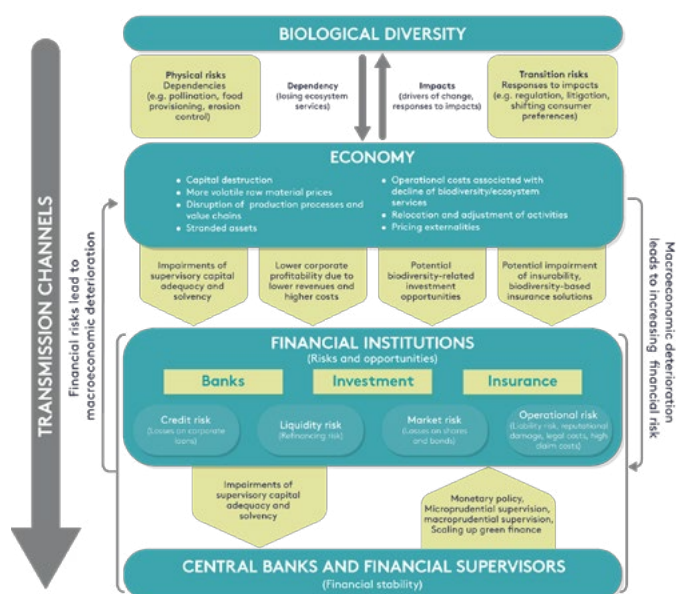
Assessments could include developing alternative approaches to assessing biodiversity-related financial risks by addressing “how biodiversity-related shocks could cascade through economic sectors and along supply chains, and how biodiversity-related financial risks could cause contagion throughout the financial system”, the group said in the 42-page report, *Biodiversity and financial stability: building the case for action*.

Central banks and financial supervisors could also embed models that show the dependence of the macroeconomy on biodiversity into existing risk assessment frameworks, the joint study group said. Such models have recently become available.

One example is the “bounded global economy model” in *The Dasgupta Review* commissioned by the UK government. This model is underpinned by an ecological understanding of how ecosystems are affected by economic activity.

Another example is the “global Earth-economy model”, developed by the World Bank, which estimates how economic policy changes will affect the loss of ecosystems. “The model’s results suggest that partial ecosystem collapse would have particularly dire effects on low- and lower-middle-income countries,” the group said.

The report stressed how challenges remain in assessing the risk of biodiversity loss to financial institutions for three reasons:



Biodiversity, the economy and the financial system Source: NGFS-INSPIRE

- Monetary valuations of ecosystems would not be possible should a natural system undergo irreversible change;
- Existing macroeconomic models tend to consider the importance of ecosystems being proportionate to its output – which is often problematic for high-income countries which have few sectors especially exposed to biodiversity loss such as agriculture; and
- Creating a simple measurement to show an aggregation of disparate aspects of biodiversity is difficult.

The NGFS-INSPIRE study group, which has more than 70 members, is co-led by Dr Ma Jun, chair of the NGFS workstream on research, and Nick Robins, professor of sustainable finance at the Grantham Research Institute on Climate Change and the Environments in London.

The group will publish another report in early 2022 on biodiversity loss, the macroeconomy and the financial system. The report “will more comprehensively consider” options for central banks and financial supervisors to address the micro- and macroprudential risks that biodiversity loss poses, as well as setting out a research agenda.

“Central bankers and financial supervisors are starting to recognise the potential risks posed by biodiversity loss, growing scientific and public concern, and increasing attention paid to the subject by policymakers, regulators and investors,” the group said. ■

Thomas Cox

# Lack of projects constrain conservation investment

Investors are increasingly looking to allocate capital to investments in conservation, but a shortage of investable deals restricts the market, according to a survey by a conservation coalition.

Deals are impeded by project developers' lack of awareness of investors' requirements for internationally recognised standards and competitive returns, respondents to a survey conducted by the Coalition for Private Investment in Conservation (CPIC) said. The survey received 35 responses between January and June 2021 from public and private investors, conservation project developers and organisations that identified as both developers and investors.

Return-seeking investments in conservation are "increasing" due to greater investor awareness but not at a fast enough rate to avert a global climate crisis, the CPIC said in a survey report led by Swiss carbon finance consultants South Pole, the Cornell Atkinson Center for Sustainability at Cornell University, and the International Union for Conservation of Nature.

Although more organisations are looking to invest in conservation, the deal pipeline is "continuing to delay the flow of capital" into the sector, CPIC said. There does not seem to be a boost in investable projects in sight to match the amount of available capital.

Nevertheless, the market seems to be "growing", as some 40% of respondents said they planned significantly more investments in projects in 2021 than during the previous year, the coalition said.

Almost all of the conservation flows reported by respondents (99.7%) were concentrated in just seven countries: the UK, the US, Australia, Germany, the Netherlands, South Korea, and Switzerland.

"The main investment instruments were private debt and equity, as well as real assets (91%) – with few [investors] using publicly traded instruments (8%)," CPIC said.

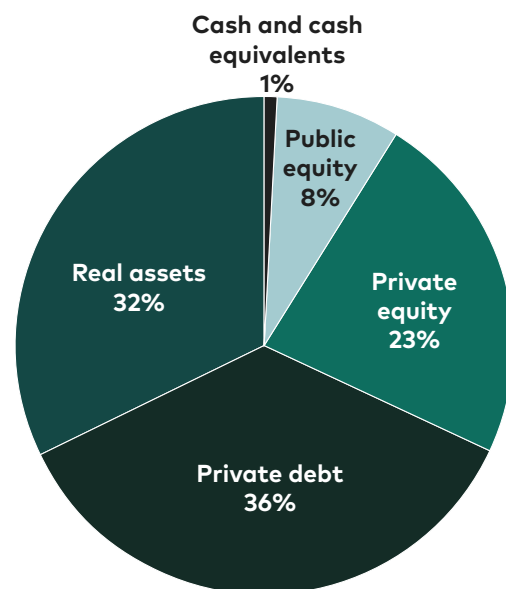
"The lack of publicly traded conservation assets means that the financing costs for conservation are still much higher than for other sectors, such as renewable energy."

John Tobin-de la Puente, professor of sustainability at Cornell University, said: "Raising awareness of the other available conservation assets could drive down the cost of financing conservation."

Investor reliance on sustainable commodity markets, which comprised 55% of respondents' flows, limits the type of conservation projects available to investors, CPIC said.

"The way the limited number of existing deals are structured, and more specifically their small deal size, long investment term, and high associated risks, is an additional problem perceived by respondents as not having progressed in the past five years."

Only 2% of deals reported by respondents were above \$51



Conservation instruments by instrument type and revenue streams. Based on data from 21 organisations

Source: CPIC

million in size and 85% of transactions were under \$5 million.

Nevertheless, survey responses showed that conservation deals were looking increasingly profitable, leading CPIC to predict a "significant" boost in return-seeking finance. Such growth would be notable because conservation finance has historically relied on grant-based public and philanthropic funding.

Some 70% of respondents were planning "substantially higher investments" in conservation in 2021 compared to 2020, the coalition said. Private funding of conservation is approximately \$18 billion annually, it added.

Over the next decade CPIC expects corporations like Apple and L'Oréal to "contribute significantly" to the increase in conservation investment through financing funds for nature.

Vincent Gradt, CEO at Mirova Natural Capital – which advised on the survey – said: "The growing interest in conservation finance from for-profit investors inevitably increases the short-term gap between existing investable opportunities and investors requirements."

"But there are reasons to be optimistic – the conservation market has a unique potential to grow."

New technologies and updates to ESG disclosure requirements are expected to drive more investments in conservation in the coming years, CPIC said. ■

Thomas Cox



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