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Green Bond Insights

Biodiversity begins to bloom

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- For now, biodiversity remains a niche use case for green bonds and most financing has been carbon related
- Part of the challenge is that there are a great many different measures of biodiversity which vary by sector and issuer
- But COP15 should raise awareness of biodiversity and help issuers set tangible targets

With the COP15 biodiversity conference scheduled for December, we expect biodiversity to rise up the agenda of green bond investors and issuers. While most green bond financing to date has been for carbon related projects, 17% of green bonds outstanding or about USD274bn make some kind of reference to biodiversity.

But that does not mean 17% of funds have been allocated to biodiversity. In many cases, biodiversity is competing with other uses of proceeds. For example, neither Indonesia nor Chile have to date allocated funds from their green bonds to biodiversity, despite their green bond frameworks allowing them to do so.

Another challenge is that there are a great many different measures of biodiversity which vary by sector and issuer, and there is no simple equivalent to tonnes of CO_2 nor a single target comparable to limiting global warming to well below 2°C.

Issuers also need agency over biodiversity. We think biodiversity is particularly relevant to issuers exposed to forests or oceans – for example paper and pulp companies, and to a lesser extent, food manufacturers. Blue bonds provide a way to brand green bonds funding ocean projects, but remain a small part of the market.

But we think that COP15 and its associated Global Biodiversity Framework (GBF) will be beneficial for the green bond market. First, they should help raise the profile of biodiversity among issuers and investors. Second, one of the strengths of the green bond market is that it can fund environmental objectives without waiting for agreement between governments. And third, while we think it is likely that biodiversity will need multiple targets, the GBF's action targets should help guide green bonds which address biodiversity.

In this note, we also take look at the new China Green Bond Principles.

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Biodiversity in green bonds

With the COP15 biodiversity conference scheduled for December, we think biodiversity will rise up the agenda of investors and issuers.

But first we start with some conclusions

- Biodiversity is for now a niche use case for green bonds, but with the COP15 biodiversity conference in December we expect interest to increase
- Part of the challenge is that there are a great many different measures of biodiversity which vary by sector and issuer, and at least in the labelled bond market, there is no simple equivalent to tonnes of CO_2 nor a single target comparable to limiting global warming to well below 2°C
- In many cases, biodiversity is competing with other uses of proceeds. For example, neither Indonesia nor Chile have to date allocated funds from their green bonds to biodiversity, despite their green bond frameworks allowing them to do so
- More generally, sovereign issuers talk about biodiversity, but have allocated little to date
- In order to fund biodiversity with green bonds, issuers need agency over biodiversity. We think biodiversity is particularly relevant to issuers exposed to forests or oceans
- Among corporate green bond issuers, this includes paper and pulp companies, and to a lesser extent, food manufacturers
- Paper and pulp companies regard biodiversity – specifically extracting natural resources in a nature neutral or nature positive way – as part of their core business, rather than as something to fund separately
- Blue bonds provide a way to brand green bonds funding ocean projects, but remain a small part of the market
- Biodiversity and climate change mitigation overlap, as natural ecosystems are often promoted as carbon sinks

Green bonds are use of proceeds bonds, which fund but are not secured against environmental projects. The Green Bond Principles published by International Capital Market Association (ICMA) list ten different possible project types (table 1a).

“Terrestrial and aquatic biodiversity” is one of the project types. According to Bloomberg data[1], 17% of green bonds outstanding or about USD274bn make some kind of reference to biodiversity. There are also three other biodiversity adjacent project types, most notably “Environmentally sustainable management of living natural resources and land use”, referenced by 20% of green bonds, as well as “Sustainable water and wastewater management” and “Pollution prevention and control”, referenced by 29% and 39% of green bonds.

Most green bond financing has been carbon related

Realistically, most green bond financing has been for carbon related projects. According to Bloomberg data, “Renewable energy” is the most common use of proceeds at 76%, followed by “Energy efficiency” at 59%, “Clean transportation” at 54% and “Green buildings” at 41%.

1 Bloomberg project categories do not correspond exactly to the ICMA project categories or the categories reported by issuers. However, if an issuer mentions biodiversity as a use of proceeds under another category, Bloomberg will report biodiversity as a project category even if the issuer does not.

1. Green bond project types and their relevance to biodiversity

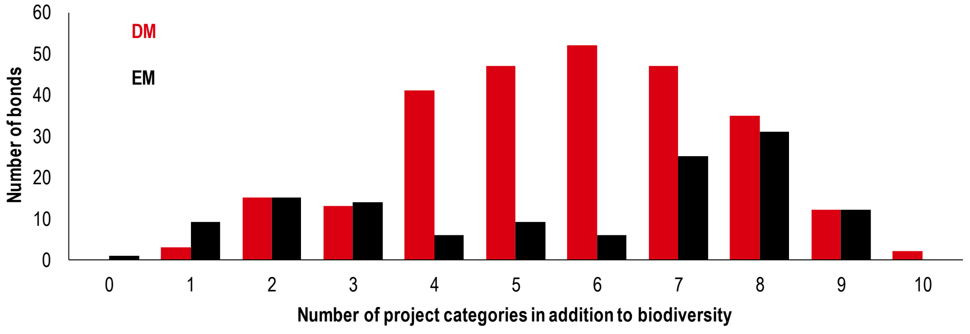
Type	ICMA green bond category	Bloomberg project category	% green bonds*
Biodiversity	Terrestrial and aquatic biodiversity	Terrestrial and aquatic biodiversity conservation	17%
Biodiversity adjacent	Environmentally sustainable management of living natural resources and land use	Agriculture and forestry	20%
	Sustainable water and wastewater management	Sustainable water management	29%
	Pollution prevention and control	Pollution prevention and control	39%
Non-biodiversity	Renewable energy	Renewable energy	76%
	Energy efficiency	Energy smart technologies and energy efficiency	59%
	Clean transportation	Clean transportation	54%
	Climate change adaptation	Climate change adaptation	21%
	Circular economy adapted products, production technologies and processes and/or certified eco-efficient products	Eco-efficient products, production technologies and processes	13%
	Green buildings	Green buildings and infrastructure	41%

Source: HSBC, ICMA, Bloomberg. *By amount outstanding, according to Bloomberg project categories. Green bonds typically fund multiple project categories, and percentages do not reflect how much has actually been allocated to each category.

Most green bonds can fund multiple project types

But we caution that even if some 17% of green bonds reference biodiversity, that does not mean that 17% of funds have been allocated to biodiversity. 75% of green bonds which reference biodiversity also reference between four and eight other project categories. Until you see an issuer's allocation reports, you do not know what has actually been funded.

2. Almost all green bonds which address biodiversity also address other themes



Source: HSBC calculations, Bloomberg

Biodiversity in the wider context: COP15 and TNFD

"We need ants to survive, but they don't need us at all" – Edward O. Wilson[2]

COP15

The UN Biodiversity Conference or COP 15[3] was originally planned to take place in Kunming, China in 2020. Instead, it was split into two parts with part one taking place virtually in October last year. Part two will now take place from 7 to 9 December 2022 in Montreal, Canada.

Part one saw countries commit to supporting a Global Biodiversity Framework (GBF) which aims to put biodiversity on a path to recovery by 2030 and to ensure that, by 2050, the "shared vision of living in harmony with nature is fulfilled".

2 Quoted in Chivian, E., Bernstein A., Center for Health and the Global Environment, Harvard Medical School, 2010
3 Fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity

The first draft of the GBF was published in July 2021[4] and has four long term goals to be achieved by 2050 with milestones for 2030 along with 21 action targets to be achieved by 2030.

Much is yet to be finalised

A number of revised drafts have been circulated since. But according to Environmental Finance (15 August 2022), the most recent draft contains more than 1,800 square brackets containing different possible phrasing, so much is yet to be finalised. And for now, the GBF lacks a single target comparable to the Paris Agreement's goal to limit global warming to well below 2°C.

Nonetheless, we think that COP15 and the GBF will be beneficial for the labelled bond market. First, they should help raise the profile of biodiversity amongst issuers and investors. Second, one of the strengths of the labelled bond market is that it can help fund environmental objectives without waiting for agreement between governments.

GBF targets will help guide green bonds and SLBs

And third – while we think it is likely that biodiversity will need multiple targets, we think the GBF's action targets will help guide green and sustainability-linked bonds which address biodiversity. But we think the specifics of those action targets may well change before the final version of the GBF.

Taskforce on Nature-related Financial Disclosures

The Taskforce on Nature-related Financial Disclosures (TNFD) is a market-led initiative bringing together financial institutions, corporates and market service providers, which aims to replicate the success of the Task Force on Climate-related Financial Disclosures (TCFD) but for nature-related risks rather than climate risk.

Not just risks but also opportunities

TNFD is developing a framework which will allow organisations to identify the nature-related risks and opportunities they face, so that they can both disclose those risk and opportunities, and also act on them – and the emphasis is on opportunities as much as risks.

Double materiality less suited to nature-related risks

The concept of double materiality is sometimes used to emphasise that the impact of sustainability on an organisation is separate from the impact of an organisation on sustainability. But TNFD takes the view that because nature risks are very location dependent, double materiality is less appropriate for nature related risks and that if an organisation impacts nature, then in due course nature will impact the organisation.

Version 0.2 of the framework was published in June 2022, and the final version is expected to be published in September 2023.

China Green Bond Principles

On 29 July 2022, the China Green Bond Standards Committee published the China Green Bond Principles (China GBP). This requires green bonds to allocate 100% of their proceeds to green projects. Previously, up to 50% of proceeds could be used to repay bank loans or bolster general working capital.

Domestic issuers are required to use the Green Bond Endorsed Projects Catalogue. Overseas issuers however can use other classification standards, such as the EU Taxonomy, or the Common Ground Taxonomy which is effectively the intersection of the Green Bond Endorsed Projects Catalogue and the EU Taxonomy.

According to ICMA, the China GBP are "based on and aligned with" the ICMA Green Bond Principles (ICMA GBP) but with some additional requirements and some "very minor" differences (Environmental Finance, 8 August 2022). We compare the two below.

4 https://www.cbd.int/doc/c/abb5/591f/2e46096d3f0330b08ce87a45/wg2020-03-03-en.pdf

3. A comparison of the China GBP and ICMA GBP

Feature	China GBP	ICMA GBP
Eligible green projects	- Domestic issuers should refer to the China Green Bond Endorsed Projects Catalogue - Foreign issuers can base projects on those described in the Common Ground Taxonomy: Climate Change Mitigation, EU Taxonomy Climate Delegated Acts and other international green industry classification standards	- Renewable energy - Energy efficiency - Pollution prevention and control - Environmentally sustainable management of living natural resources and land use - Terrestrial and aquatic biodiversity - Clean transportation - Sustainable water and wastewater management - Climate change adaptation - Circular economy adapted products, production technologies and processes, and/or certified eco-efficient products - Green buildings
Use of proceeds	100% of the proceeds should go to green projects	100% of the proceeds should go to green projects
Process for project evaluation and selection	- Issuers should disclose specific information on the green projects and the evaluation and selection process - Technical aspects and potential environmental impacts of the eligible green projects should also be considered	Issuers should disclose - the environmental sustainability objective of the green projects, - the project selection process - complementary information on the perceived social and environmental risks associated with the relevant projects Issuers are encouraged to - provide information on the alignment of projects with official or market-based taxonomies, and green standards/certifications referenced in project selection, if application - have a process in place to identify mitigants to known material risks of negative social/environmental impacts from the relevant projects
Management of proceeds	- Proceeds of the green bonds should be credited to a dedicated account to ensure they are used in strict accordance with the described purposes, and tracked by the issuer - Upon broad approval, the issuer can invest the temporary idled proceeds in highly secure and liquid products. A single investment period should not exceed 12 months - If there is a change in the use of proceeds, it should still stay within described scope of green projects	- Proceeds of the green bonds should be credited to a dedicated account or otherwise tracked by the issuer and attested in a formal internal process - The issuer should make known to investors the intended types of temporary placement for the unallocated net proceeds - The proceeds can be managed per bond or on an aggregated approach - Management of proceeds is highly recommended to be supplemented by the use of an external auditor or a third party to verify the internal tracking method and the fund allocation
Reporting	- Post bond issuance, on annual basis, the issuer should disclose the allocation of bond proceeds, progress of the green projects, the actual or expected environmental impact. All related information should be kept for at least 2 years after bond maturity - The issuer is recommended to update the proceed allocation on a half year or quarterly basis. proceed allocation on half year or quarterly basis - The issuer is recommended to disclose the third party review and verification of the progress of green projects and their actual or expected environmental impacts	- On an annual basis, the issuer should disclose the allocation of bond proceeds, progress of the green projects, the actual or expected environmental impact - The issuer is recommended to appoint an external review provider to access through - a pre-issuance external review the alignment of the green bond/finance framework with the four core components of GBP - post-issuance verifications of internal tracking and allocation of funds to eligible green projects

Source: NAFMII, Green Bond Standards Committee, ICMA

Disclosure appendix

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