BANK OF AMERICA INSTITUTE

BANK OF AMERICA

ESG

Biodiversity means business

27 April 2023

Key takeaways

- Just as companies have worked to tackle climate risks, biodiversity is moving up the agenda as investors demand disclosure on a wider spectrum of environmental related risks. And while a growing share of companies are disclosing biodiversity policies and impact reduction initiatives, few have set real targets.
- How can companies address this risk? Practices like target setting or engaging with supply chain management can achieve both environmental and financial results.
- Additionally, investor-driven market-based approaches are bringing about greater potential for both transparency and lasting impact for biodiversity conservation.

No Net Zero without nature: Ten things to know

Biodiversity is the interplay between all forms of nature – animals, plants and microorganisms – found in an ecosystem, and it plays a critical role in regulating the Earth's climate. Forests, wetlands, and other natural habitats absorb and store vast amounts of carbon dioxide (CO2), helping to lower the overall ambient temperatures of regions. When these ecosystems are damaged or destroyed, either through deforestation or other human activities, they release carbon dioxide and other greenhouse gases into the atmosphere, contributing to climate change. At the same time, biodiversity also helps stabilize ecosystems and make them more resilient to the impacts of climate change, such as extreme weather events, sea level rise, and ocean acidification.

Biodiversity targets are specific, measurable, and time-bound, allowing companies to track progress and demonstrate commitment to biodiversity conservation. And according to BofA Global Research, we will not be able to reach Net Zero without halting the nature degradation or investing in nature restoration. Just as companies have worked to tackle climate risks, biodiversity is moving up the agenda as investors demand disclosure on a wider spectrum of environmental-related risks.

But just how important has biodiversity become? BofA Global Research recently identified ten key points to better understand biodiversity and its impact on institutions.

1. Habitat loss and degradation are major causes of biodiversity loss, and they come with a variety of financial risks

According to BofA Global Research, biodiversity loss as a source of financial risk has been acknowledged by central banks, where 54% of assets held by financial institutions are “very highly” dependent on ecosystem services. The financial institutions funding the supply chains affected by biodiversity loss stand to lose alongside farmers, producers, and retailers, and in turn, so do investors. In fact, just four sectors — food, energy, infrastructure, and fashion — are responsible for more than 90% of man-made pressure on biodiversity (Boston Consulting Group).

Governments' increasing focus on protecting biodiversity can present both risks and opportunities for companies that have a direct impact on it. Companies involved in destroying biodiversity run the risk of losing brand equity, customers, investors, and downstream market access. In fact, biodiversity loss is in the top three global risks to businesses over the coming decade, together with climate action failure and extreme weather, according to the World Economic Forum (WEF). And 70% of the world's largest publicly traded companies (by revenue) are exposed to risks associated with biodiversity loss, including deforestation and habitat destruction (McKinsey).

How can companies address this risk? Practices like target setting or engaging with supply chain management can achieve impact. Other strategies include “mitigating or avoiding” exposure to companies that are overexposed to biodiversity loss.

2. Even as Food and Agriculture companies face negative impacts of biodiversity loss, they are also playing a role in creating this loss

The food sector significantly impacts biodiversity, threatening the very ecosystems and species on which it depends. According to the US Department of Agriculture, over 50% of US land is used for agricultural purposes. Rising temperatures and changing precipitation patterns are already affecting crop yields, livestock productivity, and soil health. Between 1981 and 2020, heat stress caused by climate change has led to a loss of approximately $8 billion annually in US crop production. (Source: National Academies of Sciences, Engineering, and Medicine).

The agriculture sector heavily relies on nature, with 35-40% of crops relying on wild pollinators. Properly managed soils are crucial to enhancing farmland productivity and sequestering carbon, and natural pest control is more effective than chemical methods. Yet despite this dependence on nature, agriculture is also responsible for contributing to biodiversity loss, with 80% of deforestation driven by agricultural expansion. The use of pesticides and herbicides disrupts ecosystems and negatively impacts production systems. Monoculture practices are prevalent, with crops relying on a single genotype propagated across continents, making them vulnerable to disease. As wild genotypes diminish, our ability to combat these diseases and build resilience is reduced.

3. Companies are pushing for stricter regulations in the Food and Agriculture space

Many major food and agricultural companies are committing to sustainability and biodiversity. These commitments are driven by upcoming regulations, carbon credit markets, and the increasing awareness of biodiversity by consumers. In Europe, there are strict reporting requirements for companies on climate risk and a ban on forest risk commodities. Similar regulations are being proposed in the US.

The good news is that companies are taking steps to pioneer sustainability practices. Look at the sustainable seafood sector. By pledging to source 100% Marine Stewardship Council (MSC) or equivalently certified seafood, companies have created an industry around fishery improvement projects in addition to certifying wild capture fisheries and aquaculture production systems. And in the agriculture sector, large corporations are willing to pay more than the commodity price for supply chain assurances and guarantee long-term offtake agreements, up to 15 years in some crops.

4. Impact investing as it relates to biodiversity is an investor-led solution or strategy that many asset managers/investors are currently undertaking

Financial opportunities around the nature theme can flow through efficiency improvements, reduction of risks and brand reputation. A fundamental underpinning of many of investment strategies is de-commoditizing products through better protection of biodiversity and telling that story through consumer facing brands. As consumers become more aware of the negative impacts of food production on the environment and local communities, they are seeking companies that prioritize sustainability and regenerative practices. These consumers are willing to pay more for products that are produced authentically and do not cause harm.

By investing in regenerative practices and working towards carbon neutrality in their supply chains, companies can actively protect biodiversity. Impact investing is uniquely compelling in terms of the scale at which it can harness resources towards these goals of net zero and biodiversity protection.

5. Frameworks that allow for screening criteria are essential for risk management and informed investment decision-making

Investors are increasingly recognizing the importance of biodiversity and ecosystem services in driving long-term value creation and financial stability. Companies that rely on natural resources or have significant impacts on ecosystems may face a range of risks, such as regulatory scrutiny, reputational damage, supply chain disruptions, and changes in consumer preferences. Conversely, companies that actively manage their impacts on biodiversity and ecosystems may have access to new markets, partnerships, and financing opportunities.

Quantified targets should be aimed at mitigating negative biodiversity impacts, having a net positive impact or through specific pledges such as ‘no deforestation’. Depending on the industry and business model, key performance indicators (KPIs) should also be set around material biodiversity themes.

By adopting nature reporting frameworks, companies can better understand their dependencies and impacts on nature and develop strategies to manage these risks and capitalize on opportunities. For investors, this will provide a standardized approach to assess and compare companies' biodiversity-related risks and opportunities, enabling more informed investment decisions. These frameworks may also drive momentum for regulations that address biodiversity risk especially in US where policies are less comprehensive compared to Europe.

6. The greatest challenge with current reporting around biodiversity risks and opportunities is the lack of standardized metrics and methodologies

Biodiversity is a very complex term that involves the interplay between species, ecosystems, and human activities, making it difficult to develop a universally applicable set of standardized metrics. The limited availability of data on biodiversity-related factors adds to the challenge.

There are also concerns about greenwashing, where companies may subjectively choose metrics that align with their business model while hiding other problems in their supply chains. This approach risks missing the bigger picture and can result in misleading reporting. Traditional investors and companies face a challenge in balancing short-term financial returns with the long-term benefits of biodiversity conservation and restoration.

As climate change and biodiversity loss are twin crises, carbon emission reduction targets must be accompanied by specific biodiversity goals. And while a growing share of companies are disclosing biodiversity policies and impact reduction initiatives, few have set specific targets. As of 2022, 83% of Fortune Global companies have set emissions targets, while only 5% have set biodiversity loss targets (McKinsey).

7. Biodiversity is related to climate change through the carbon cycle and carbon sequestration

Diverse ecosystems such as forests, wetlands, and peat marshes are the biggest stores of carbon dioxide as well as the most effective sequesters of carbon. For instance, 45% of terrestrial carbon is stored in standing forests. And, though often overlooked, peatlands cover only ~3% of the earth's surface, but they sequester about 30% of the world's carbon. Similarly, phytoplankton and marine vegetation in the oceans cover less than 0.1% of the ocean floor but are responsible for 18% of carbon capture that is permanently sunk to the bottom of the ocean. From a soil health perspective, biodiverse soils (active bacteria, fungi, and invertebrate, rich diversity of those species) do a great job at sequestering carbon and storing it for the long-term.

8. Carbon credits can help to preserve natural habitats in many cases, but carbon markets have a narrow focus, and considering other critical factors that contribute to biodiversity loss is key

Carbon credits can be sold to fund conservation projects that protect biodiversity directly or help reverse the degradation of ecosystems. Carbon markets can also encourage sustainable land use practices and provide incentives for companies to reduce habitat destruction. However, carbon markets have a narrow focus on carbon sequestration and do not account for other critical factors that contribute to biodiversity loss such as natural resource degradation and pollution. There is also potential for leakage, which refers to the displacement of economic activities that are harmful to biodiversity to other areas outside of a hotspot that's being protected.

Additionally, some companies are opting for a “compensation strategy” through nature biocredits to reach climate neutrality. Biocredits are a “purely positive investment in nature” that can function as tradeable financial assets similar to carbon credits. While this could provide a critical source of funding for forests and other ecosystems, critics of this approach fear it might divert funds from critical emission reduction measures.

9. There is a growing market for securities that focus on minimizing biodiversity loss and capitalize on long-term growth potential

Philanthropy has traditionally played a critical role in funding biodiversity conservation efforts but has limitations in scalability and modularity. Nowadays, there is a shift towards investor-driven market-based approaches where investors seek financial returns while also prioritizing biodiversity conservation and climate change. These approaches include impact investing, green bonds, blue bonds, conservation investments, and sustainable loans. This approach unlocks more funding for conservation efforts and is often more rigorous and transparent in its application.

Private capital markets are very deep and can bring a certain level of rigor to the way the way capital is deployed. They can also be much more permanent than philanthropically funded projects. Additionally, working with big companies that have a significant impact on biodiversity through their operations can help drive collaboration between companies, governments, and non-governmental organizations (NGOs).

10. Major financial institutions are building dedicated teams internally and are pooling capital to support biodiversity conservation

Investing in biodiversity shows great promise as investors have become more aware of how important these issues are to the performance of their investments. Collaboration between government, non-governmental organizations (NGOs), and investors is also key to the success of biodiversity investment. Each of these stakeholders bring different skillsets and tools to the table and finding ways to blend them together and potentially create a blended capital stack to fund biodiversity projects is exciting and represents the future of biodiversity investment for the foreseeable future.

Contributors

Taylor Bowley

Economist, Bank of America Institute

Sources

Dimple Gosai

US ESG Strategist, BofA Global Research

Megan Mantaro

US ESG Strategist, BofA Global Research

Disclosures

These materials have been prepared by Bank of America Institute and are provided to you for general information purposes only. To the extent these materials reference Bank of America data, such materials are not intended to be reflective or indicative of, and should not be relied upon as, the results of operations, financial conditions or performance of Bank of America. Bank of America Institute is a think tank dedicated to uncovering powerful insights that move business and society forward. Drawing on data and resources from across the bank and the world, the Institute delivers important, original perspectives on the economy, Environmental, Social and Governance (ESG) and global transformation. Unless otherwise specifically stated, any views or opinions expressed herein are solely those of Bank of America Institute and any individual authors listed, and are not the product of the BofA Global Research department or any other department of Bank of America Corporation or its affiliates and/or subsidiaries (collectively Bank of America). The views in these materials may differ from the views and opinions expressed by the BofA Global Research department or other departments or divisions of Bank of America. Information has been obtained from sources believed to be reliable, but Bank of America does not warrant its completeness or accuracy. Views and estimates constitute our judgment as of the date of these materials and are subject to change without notice. The views expressed herein should not be construed as individual investment advice for any particular client and are not intended as recommendations of particular securities, financial instruments, strategies or banking services for a particular client. This material does not constitute an offer or an invitation by or on behalf of Bank of America to any person to buy or sell any security or financial instrument or engage in any banking service. Nothing in these materials constitutes investment, legal, accounting or tax advice.