Funding Nature: A Guide for Investors



Closing the Biodiversity Finance Gap and leading by example

Guide) (Funding Nature



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Introduction

Biodiversity

Biodiversity refers to the variety and variability of life on Earth, encompassing all living organisms and the ecosystems they form.

The Earth's natural ecosystems are facing an unprecedented threat as a result of human activities. The delicate balance of nature is being disrupted at an alarming rate, leading to a significant decline in global biodiversity. To combat the alarming loss of biodiversity and protect our natural heritage for future generations, it has become imperative to explore innovative and sustainable financing mechanisms.

Within this guide, we will explore the intricate web of challenges a nd opportunities in financing nature preservation. We will delve into the critical role of investors in preserving biodiversity, the emergence of conservation finance mechanisms, and the new biodiversity frameworks that are emerging. We believe that by unlocking the power of finance, we can create a sustainable pathway towards a future where nature thrives.



Biodiversity in crisis

International Union for the Conservation of Nature (IUCN)

The IUCN is a global organization that aims to conserve and protect nature by assessing the status of species and ecosystems, providing expertise, and promoting sustainable practices. According to the International Union for Conservation of Nature (IUCN) Red List of Threatened Species, more than 41,000 animals worldwide are currently threatened with extinction. Astonishingly, this includes 41% of all amphibians, nearly 33% of reef-forming corals, 27% of the world's mammals, over a third of all marine mammals, and 13% of all known bird species.

The IUCN's report reveals that the decline in biodiversity is driven by various direct and indirect factors, many of which have intensified over the past 50 years. Among the primary direct drivers, pollution stands out as a significant contributor. Marine pollution, in particular, has surged tenfold since 1980, wreaking havoc on the marine ecosystem and impacting at least 267 species. Shockingly, this includes 86% of marine turtles, 44% of seabirds, and 43% of marine mammals.

Alongside pollution, other direct drivers of change in nature encompass changes in land use, invasive species, direct exploitation of organisms, and the overarching challenge of climate change. These factors, coupled with the indirect drivers rooted in societal values and behaviors, have placed our ecosystems at a critical crossroads.



Climate and biodiversity are two faces of the same coin

A report jointly released by the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has underscored the critical need for integrated management of climate change and biodiversity, which have historically been treated as separate issues. The report highlights the co-benefits of taking action on climate change and protecting biodiversity, emphasizing the need to protect and restore carbon-rich ecosystems, manage sustainable agricultural and forestry practices, and create urban green spaces. By combining efforts to tackle climate change and biodiversity loss, we can achieve climate mitigation, adaptation, and the preservation of crucial ecosystem services provided by biodiversity. This integrated approach is crucial to realizing our global climate and environmental ambitions.



Climate mitigation

Climate mitigation refers to the efforts and actions taken to reduce or prevent the emission of greenhouse gases into the atmosphere and minimize the impact of human activities on the Earth's climate system.

Climate regulation

Climate regulation refers to the natural processes and feedback mechanisms within the Earth's ecosystems that help maintain a stable climate by balancing and regulating various environmental factors, such as temperature, humidity, and atmospheric composition.

Nutrient Cycling

Nutrient cycling, also known as biogeochemical cycling, is the natural process by which essential elements such as carbon, nitrogen, phosphorus, and other nutrients are continuously recycled and exchanged among living organisms, soil, water, and the atmosphere in an ecosystem.

Why is protecting biodiversity economically beneficial?

Protecting biodiversity is not only essential from an environmental and ethical standpoint but also holds significant economic benefits.

Economic value of ecosystem services

Biodiversity is the cornerstone of thriving ecosystems that provide essential services to human societies. Ecosystem services, such as pollination, nutrient cycling, water purification, and climate regulation, are vital for various industries and sectors. These services, often taken for granted, have significant economic implications. For example, pollinators, including bees and butterflies, contribute to agricultural productivity, enhancing crop yields and ensuring food security. By protecting biodiversity, we safeguard these ecosystem services, reducing economic vulnerabilities and promoting sustainable development.

Resilience and risk reduction

Healthy and diverse ecosystems are more resilient to environmental disturbances and natural disasters. By preserving biodiversity, we enhance the ability of ecosystems to withstand and recover from shocks, such as extreme weather events or disease outbreaks. This resilience is particularly valuable for industries and communities that depend on natural resources. Preserving biodiversity thus minimizes the economic costs associated with recovery and rebuilding after disasters, contributing to long-term stability and sustainability.

Innovation and economic opportunities

The preservation of biodiversity can lead to significant economic opportunities and foster innovation. Diverse ecosystems harbor a wealth of genetic resources and species yet to be discovered, which hold immense potential for various sectors. Bioprospecting, the search for valuable compounds and genes from living organisms, has led to the development of life-saving medicines, new agricultural products, and technological advancements.

Enhanced corporate reputation

In an era of increasing environmental consciousness, businesses are under growing pressure to adopt sustainable practices and demonstrate their commitment to environmental stewardship. Incorporating biodiversity considerations into business operations and supply chains is not only environmentally responsible but also enhances corporate reputation. Consumers, investors, and stakeholders are increasingly valuing companies that prioritize sustainability and biodiversity conservation.

The PBAF Standard

The PBAF Standard works by providing a framework for companies and financial institutions to assess and report on their impact on biodiversity.

What is the concept of biodiversity footprinting?

A biodiversity footprint is a way to assess the biodiversity impacts of a loan or investment. The Institute for European Environmental Policy (IIEP) defines it as the impact of a commodity, company, person, or community on global biodiversity resulting from the production and consumption of goods and services. The PBAF Standard also adopts a similar definition, emphasizing that it quantifies the impact of a portfolio, asset class, project, or company in terms of biodiversity change due to the production and consumption of specific goods and services.

Financial institutions can use this approach to examine their own impacts, such as from their buildings' land use and energy use, as well as the impacts of economic activities they invest in—typically much more substantial. The PBAF Standard primarily focuses on the biodiversity footprint of loans and investments made by financial institutions. This tool serves various purposes, including identifying biodiversity impact hotspots within an investment portfolio or pinpointing the key drivers of biodiversity loss in a financed project.



What is the current status of biodiversity financing?

Biodiversity Financing

Biodiversity financing refers to the mechanisms, strategies, and financial resources allocated to support conservation and sustainable use of biodiversity and ecosystems. It involves funding initiatives and financial instruments that aim to protect and enhance biodiversity, such as grants, government budgets, private investments, biodiversity offsets, and payments for ecosystem services. According to the <u>Paulson Institute Financing Nature report</u>, the annual biodiversity financing gap is estimated at USD 700 billion, but the consequences of not taking action are even more costly. The World Bank suggests that by 2030, if ecosystem services were to collapse, the global annual losses could reach an estimated USD 2.7 trillion, with the poorest countries disproportionately affected.

The Biodiversity Finance Gap

The biodiversity finance gap refers to the disparity between the financial resources needed to effectively conserve and sustainably manage biodiversity and the actual funding currently available for such efforts.



Sustainable Investment

Sustainable investment, also known as socially responsible investment (SRI) or responsible investing, refers to the practice of making financial investments in companies, organizations, or projects that prioritize environmental, social, and governance (ESG) criteria.

Biodiversity Credits

Biodiversity credits, are a market-based conservation approach where organizations compensate for their negative impacts on biodiversity by investing in conservation or restoration projects elsewhere. These credits represent measurable conservation actions that aim to achieve a net gain in biodiversity, ensuring that the overall ecological balance is maintained or enhanced despite development activities.

How should new revenue be generated for closing the biodiversity finance gap?

Even with a reduction in harmful economic activity by governments and companies alike, new sources of funding are still needed to close the biodiversity finance gap. Mechanisms for generating revenue include boosting sustainable investment, making smarter investments, and implementing biodiversity offset mechanisms.

Boosting sustainable investment

Financial institutions have a crucial role to play in generating revenue for biodiversity conservation. They can expand investment opportunities in green financial products to direct more capital towards nature-focused initiatives. This can involve the creation and promotion of green bonds, low-interest green loans, and other sustainable investment instruments. By increasing the availability and attractiveness of these financial products, investors can be encouraged to allocate their capital towards projects that benefit biodiversity. Governments can also support these efforts by providing incentives, clear guidance, and standards for such investments, creating an enabling environment for sustainable finance.

Smarter, targeted investments

In addition to generating new revenue, how existing public and private financial resources are invested must be adjusted to support biodiversity conservation. Governments and institutions already allocate significant funds to infrastructure, climate mitigation, and development assistance. By making strategic policy changes, more of these investments can be directed towards projects that yield positive outcomes for nature. This can include increasing official development assistance for biodiversityrich nations, where funds are provided in the form of debt forgiveness, direct grants, and technical assistance to support biodiversity initiatives. Additionally, investment in natural infrastructure, such as reefs, forests, and wetlands, can offer cost-effective solutions that provide habitats for wildlife and deliver important ecosystem services.

Biodiversity credits

The One Forest Summit held in March 2023 sparked significant attention to biodiversity credits, including biodiversity-positive carbon credits and nature certificates. <u>Carbone4's paper on biodiversity credits</u> emphasizes the need for credible measurement, scaling demand and supply, equitable distribution of rewards, and robust governance. The aim is to create structured biodiversity credit markets that deliver positive outcomes for nature, climate, and people. However, it is crucial to acknowledge the associated risks and challenges with biodiversity credits. These mechanisms should strictly follow a reduce, avoid, and compensate process, similar to carbon credits, to ensure they complement, rather than substitute, efforts to prevent biodiversity loss. It is important to note that there may never be a strict equivalence between an actual loss of biodiversity and a potential gain through restoration processes, as human-led restoration may not fully replicate natural pristine states within short time frames (e.g., 10 to 30 years).

France and the UK propose an open and inclusive process, a Global Roadmap to Harness Biodiversity Credits, to collaborate with countries and partners and scale up the use of biodiversity-positive carbon credits and certificates. A high-level Advisory Panel will deliver recommendations to a coalition of countries and non-state actors committed to biodiversity credits, ensuring their integration into international conventions and processes. The ultimate goal is to move from theory to delivery and secure financing for biodiversity conservation and restoration at scale. By implementing these mechanisms, governments, financial institutions, and industries can generate new revenue streams and direct existing resources towards biodiversity conservation. A collaborative effort is needed to ensure that financing for nature is integrated into investment decisions and practices across sectors.



Mean Species Abundance

This is a metric used to describe the average population size of individual species within a given area or community. It provides insights into their relative distribution and abundance, helping researchers understand the ecological dynamics and diversity patterns within an ecosystem.

How else can investors drive positive change?

As well as making direct financial commitments to funding the biodiversity gap, investors have a further role to play in reversing nature loss.

Quantifying their contribution to pressures on biodiversity

By measuring their impact in specific terms, such as square meters (m²) of land conversion or cubic meters (m³) of water consumption, investors can gain valuable insights into their relationship with biodiversity. This granular approach helps identify the direct pressures that their investment activities may exert on nature. For instance, understanding the amount of land converted or water consumed by portfolio companies can shed light on potential risks to ecosystems and species. With such clear metrics in place, investors can then progress to adopting more comprehensive indicators like mean species abundance (MSA) to develop effective biodiversity strategies and align with nature conservation goals.

Setting specific goals and adopt biodiversity roadmaps

Effective action requires specific goals. Investors can align with the scientific ambition of reversing nature loss by 2030 and adopt biodiversity roadmaps. Prioritizing key biodiversity topics, such as reducing plastic pollution or deforestation, can guide investment decisions. To achieve these goals, investors need a combination of environmental, social, and governance (ESG) data, stewardship practices, and strategic capital allocations.

Engaging in systemic change and effective stewardship

Recognizing that nature loss poses a systemic risk, investors should engage in efforts to address the underlying drivers of biodiversity decline. This engagement must be guided by the best available scientific knowledge. Merely relying on portfolio management techniques will not sufficiently protect investors from biodiversity risks. Effective stewardship includes public policy advocacy and implementing measures to reduce the drivers of nature loss.

Leading by example

Financial institutions have a crucial role to play in understanding and mitigating biodiversity harm resulting from private investment capital. Recognizing the risks to reputation, regulatory compliance, and investor demand associated with the status quo, financial institutions should proactively manage biodiversity risks. This can be achieved through systemic changes in internal structures, incentives, policies, and metrics, ensuring that biodiversity conservation becomes integrated into all investments.

Materiality Assessments

Materiality assessments are a process used by businesses and organizations to identify and prioritize the most significant environmental, social, and governance (ESG) issues that may impact their operations and stakeholders.

Enhancing disclosure and assessment of biodiversity impacts

Financial institutions should disclose the biodiversity impacts of their investments using appropriate disclosure frameworks (listed in the section below). Furthermore, they should require the companies in their investment portfolios to do the same. Building internal capacity to assess how investment decisions contribute to biodiversity loss and managing associated risks is crucial.

Evolving fiduciary duty

Financial regulators and fiduciaries need to adopt a broader understanding of fiduciary duty that considers not only short-term financial returns but also the positive and negative collateral effects of investments.

<u>Double materiality</u>, which is an important requirement in a number of recent legislation pieces, extends the traditional concept of what accounting standards consider 'material' by recognizing that ESG issues not only affect a company's financial performance (financial materiality) but also have broader societal and environmental impacts. This revised understanding should allow for the consideration of nonfinancial benefits, including the value of biodiversity, in the analysis of investment choices.

Advocating for policy and collaborative efforts

Governments should develop and implement policies and legislation that mandate financial institutions to implement biodiversity risk disclosure frameworks. International organizations, financial institutions, and NGOs, including academia, should collaborate to develop metrics, methodologies, and platforms for sharing data on the impacts of investments on biodiversity.



What are the current key biodiversity frameworks?

Biodiversity framework

A biodiversity framework is a structured and comprehensive plan or set of guidelines developed at the national, regional, or global level to address and conserve biodiversity effectively. It typically includes objectives, targets, and strategies to promote the sustainable use, protection, and restoration of ecosystems and their associated species, aiming to halt biodiversity loss and promote ecological resilience. A number of frameworks have emerged in recent years to guide and encourage sustainable practices and biodiversity conservation:

The Kunming Montreal Global Biodiversity Framework

The Kunming Montreal Global Biodiversity Framework is an international agreement that aims to set new targets and actions to halt biodiversity loss and restore nature by 2030. It was adopted at the 15th Conference of the Parties (COP15) to the Convention on Biological Diversity (CBD) in Kunming, China and has been named "The Paris Agreement for Nature".

Science-Based Targets Network (SBTN)

The <u>PBAF</u> is a framework designed to help financial institutions assess the biodiversity impact of their portfolios. It provides a systematic approach for evaluating the biodiversity risks and opportunities associated with investments and enables informed decision-making to support biodiversity conservation. By integrating biodiversity considerations into portfolio management, the PBAF empowers financial institutions to drive positive change and contribute to the protection of biodiversity.

Portfolio Biodiversity Assessment Framework (PBAF)

Recognizing that nature loss poses a systemic risk, investors should engage in efforts to address the underlying drivers of biodiversity decline. This engagement must be guided by the best available scientific knowledge. Merely relying on portfolio management techniques will not sufficiently protect investors from biodiversity risks. Effective stewardship includes public policy advocacy and implementing measures to reduce the drivers of nature loss.

Global Reporting Initiative (GRI)

The Global Reporting Initiative (GRI) is an international standard-setting organization that promotes sustainability reporting across organizations. While not exclusively focused on biodiversity, GRI's reporting framework includes indicators and guidelines for disclosing environmental impacts, including biodiversity-related aspects. By incorporating biodiversity metrics into sustainability reporting, GRI encourages organizations to measure, manage, and disclose their biodiversity performance, fostering greater transparency and accountability.

In summary

Closing the biodiversity finance gap requires a collaborative and multi-faceted approach. By boosting sustainable investment, making smarter allocations of financial resources, implementing biodiversity offset mechanisms, and driving positive change through investor actions, we can work towards a future where nature thrives. Through these strategies, we can bridge the funding shortfall, preserve biodiversity, and create a sustainable and resilient planet for generations to come.

Join us in becoming a Forever Company.

How Sweep can help

Sweep enables you to:

- · Assess the biodiversity impact of your investments.
- · Conduct a sector based materiality analysis.
- Measure the dependency materiality of your portfolio on the 21 ecosystem services.
- Engage with your portfolio companies of biodiversity topics
- Comply with SBTN, PBAF, TNFD, CSRD and SFDR requirements on biodiversity.

Get started today (>)

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