



BIODIVERSITY & STEWARDSHIP

EARTH DAY 2021

22nd APRIL 2021



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1. INTRODUCTION

Investors have long known the importance of financial capital as an essential resource for society, the economy, and investment returns. Today, investors are increasingly aware that all forms of capital, including natural capital, contribute to long-term sustainable growth.

Economists, governments, regulators, and investors are looking not only at the impact of climate change on investment risk, but also the role of Biodiversity. So, what is Biodiversity and what part should it play in investment thinking?

April 22nd is Earth Day 2021 and this year is centred on the theme of 'Restore Our Earth'. This Minerva Background Briefing takes a look at some recent developments in the consideration of biodiversity for investors and how it can be integrated into stewardship policies.

Biodiversity - Key Issues

- Biodiversity provides the ecosystem services that businesses rely upon.
- More than half the world's gross domestic product (US\$44 trillion) is moderately or highly dependent on ecosystem services.
- Biodiversity is quickly moving to the top of the ESG agenda, with landmark developments like the creation of the Taskforce on Nature-related Financial Disclosures and the publication of The Dasgupta Review.
- Large investors are committing to addressing biodiversity loss in their portfolios, but the necessary data for a standardised approach is still being built.
- Similar to the climate crisis, countries will lead the way on biodiversity reporting, but investors can act now by applying biodiversity stewardship – engage, allocate, educate.

This briefing comes at a time when biodiversity loss has emerged as a key driver of emerging infectious diseases. The COVID-19 pandemic has caused massive disruption to the global economy and it is now widely agreed that land-use change, and wildlife exploitation increase infectious disease risk by bringing people and domestic animals near to pathogen-carrying wildlife.ⁱ These risks affect the operation of businesses and the livelihoods of many. But public health is not the only risk that biodiversity poses to our economies.

2. WHAT IS BIODIVERSITY?

Very simply, biodiversity means the full range and variety of living organisms on Earth.

Biodiversity is a key health indicator for the ability of the biosphere - the global sum of all ecosystems - to provide the natural capital our society and economy depends upon. When demand for natural capital exceeds the natural regeneration rate of the biosphere, biodiversity loss occurs and the biosphere itself loses value.

Any reduction in the quantity, quality, or resilience of ecosystem services from biodiversity loss poses a significant risk to investors in many sectors.

Biodiversity is recognised in the United Nations SDGs 14 (Life Below Water) and 15 (Life on Land) as foundational for global sustainability.ⁱⁱ More than half the world's gross domestic product (US\$44 trillion) is moderately or highly dependent on ecosystem services, but their importance is just beginning to be understood by ESG investors.ⁱⁱⁱ

“More than half the world’s gross domestic product (US\$44 trillion) is moderately or highly dependent on ecosystem services”.

Paulson Institute, 2020

Biodiversity loss is a risk to businesses through transition, physical, regulatory, and systemic factors. All of which have the potential to affect investment value in the short, medium, and long term. Exposure to biodiversity loss is significant in sectors that rely on large areas of land or sea to operate such as the energy or commodities sectors, but its effects are far wider reaching. For example, the 2011 floods in Thailand hit an industrial area where manufacturers produced more than a quarter of the world's hard drives, causing global prices to increase by 20%-40%. These manufacturers were hit particularly hard due to the lack of natural flood barriers such as mangrove forests and wetlands that had been removed for urban development.^{iv}

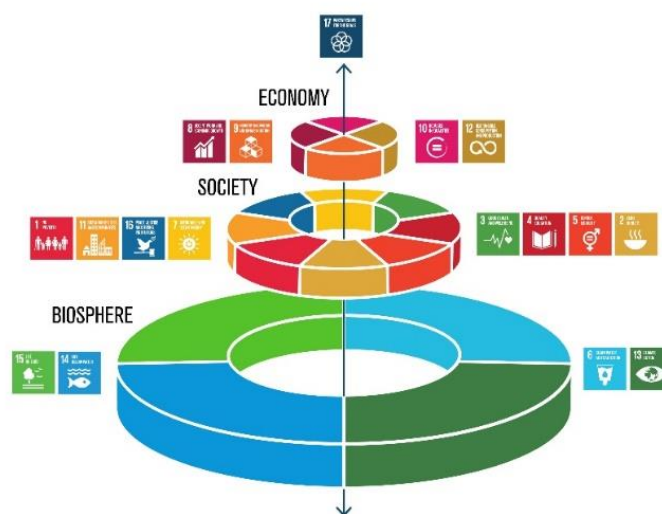


Figure 1 - The SDG 'Wedding Cake' showing biodiversity (SDG 14 & 15) as the foundation of sustainability^v

3. WHERE ARE WE NOW?

The demand for regulation of biodiversity protection has recently increased following the publication of [The Dasgupta Review on the Economics of Biodiversity](#), a published in February 2021 at the request of the UK Treasury. Dasgupta asserts that while Gross Domestic Product (“GDP”) is a useful measure for economic activity it is now defunct. Why? Because it does not account for the depreciation of assets, including the depreciation of natural capital.

This landmark review will shape the international response to biodiversity loss, using financial and economic principles to set out a framework for recognising businesses impact on nature. Specifically, it has the potential to be a key input for the upcoming Convention on Biological Diversity (UNCBD) COP15, and the influence of the review is likely to shape discussions at the UN Framework Convention on Climate Change (UNFCCC) COP26 where nature-based solutions are already set to be a key focus of negotiations.

The Dasgupta Review – Key Points

1. GDP does not account for the depreciation of natural capital as a major constraint for long-term value creation.
2. The finance sector has a responsibility to develop better biodiversity metrics.
3. Companies should pay for ecosystem services.
4. Asset managers need more education on biodiversity and must move towards positive screening for net positive contributions.

The Dasgupta Review also comes at a time when biodiversity is quickly moving to the forefront of investors priorities. For example:

- The EU taxonomy requires investors to explain their contribution to biodiversity conservation and present their biodiversity-related risks.
- The Taskforce on Nature-related Financial Disclosures was also recently launched with the goal of creating a framework of measurable items that will help financial institutions be better stewards of their impact on biodiversity.

As pressure mounts for a fundamental change to the way we account for our planetary impacts, the UN Environment Programme has developed an open tool for countries to centrally collect and curate environmental data for national reporting on biodiversity-related conventions. Though biodiversity awareness and reporting are many years behind the current state of global climate reporting, recent developments set a strong precedent for companies to report their own biodiversity data.

4. WHAT CAN INVESTORS DO?

Biodiversity is not an entirely new investment theme. Responsible investors currently target acute instances of biodiversity loss such as illegal animal trade or aim to prevent biodiversity loss through the pursuit of environmental targets.

For example, excluding deforestation from a portfolio may meet an asset manager's carbon targets, but it also prevents biodiversity loss. However, the materiality of biodiversity loss remains little understood. Whereas investors have boiled down the climate crisis to measurable material risks, biodiversity considerations change far more drastically between different products and services offered by companies.

Some of the world's largest fund managers are starting to show awareness of the risk that biodiversity loss poses to their portfolios. Reflecting the early stage at which biodiversity is at within ESG reporting, many of them have started with public disclosures of support, as detailed in the table below.

However, if these policy commitments are to be translated into material results, almost USD 1 trillion each year, starting now, will need to be allocated to supporting biodiversity if the decline in biodiversity is to be reversed by 2030 in line with UN targets.^{vi}

Public Commitment to Biodiversity by the World's Top 10 Asset Managers				
Rank	Manager	Country	Total Assets (2019, €bn)	Biodiversity Commitment?
1	BlackRock	US	5,251	✓
2	Vanguard Asset Management	US	4,257	✗
3	State Street Global Advisors	US	2,196	✓
4	Fidelity Investments	US	2,096	✓
5	BNY Mellon Investment Management	US	1,498	✓
6	J.P. Morgan Asset Management	US	1,486	✓
7	Capital Group	US	1,467	✓
8	PIMCO	US/Germany	1,452	✓
9	Amundi	France	1,425	✓
10	PGIM	US	1,205	✓
Total			22,333	

5. HOW CAN INVESTORS START?

As biodiversity loss becomes a serious risk consideration for investors, key questions loom – how can we quantify the risk? Where is the data? Can it be trusted? What can we do to manage and mitigate the risk? As stewards of our natural capital, what are our managers and investee companies doing?

5.1 FINDING BIODIVERSITY DATA

Data is a persistent constraint when incorporating ESG considerations into your portfolio. The complexity of biodiversity makes business impacts hard to measure. The data is out there, such as species population and ecosystem health data gathered by academics and the third sector, but it has not yet been translated into the appropriate asset and company-level figures that would enable standard assessment of company performance and investment impact.

Efforts to consolidate and collect biodiversity data are being led by the UNCBD COP15, where countries have formulated a [Post-2020 Global Biodiversity Framework](#) for reporting on the many Multilateral Environmental Agreements (MEAs) concerning biodiversity. The Framework is under development, set to be negotiated and finalised at the 15th meeting of the conference in May 2021. New [tools](#) and alliances are being created for the collection of biodiversity data, and although the results will not be felt by investors for some time, now is the time to prepare.

5.2 ACTIONS FOR INVESTORS

Despite the current limitations of data, investors can mitigate the impact of biodiversity risks to their portfolios in several ways. The overlap of biodiversity risks with broader climate and environmental risks makes it easy to **address biodiversity as a systemic risk to investments**. Avoiding and minimizing the risk by expanding environmental considerations will be important in the short and medium-term.

The mitigation hierarchy

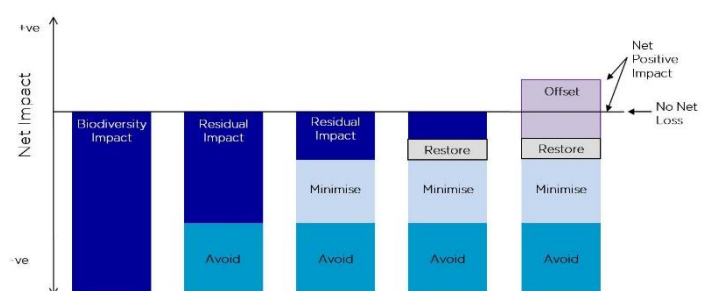


Figure 2: The Mitigation Hierarchy (The Biodiversity Consultancy)

In the long-term as data is translated to the business world, investors may be able to positively screen for companies that actively restore biodiversity to have a net positive impact.^{vii}

In this short and medium-term period, managing biodiversity risks at a system level through stewardship will play a valuable role. An increasing number of investors are already engaging with companies whose activities are known to effect biodiversity such as palm oil suppliers. Although there have also been several targeted shareholder resolutions on plastic waste and deforestation in the USA, routine consideration of biodiversity in shareholder voting and engagement is rare.

5.3 WHAT OPTIONS DO SHAREHOLDERS HAVE?

Broadly, there are 3 ways to add biodiversity to your stewardship programme, and **Minerva can help investors integrate biodiversity** in these ways across the full range of stewardship activities from portfolio benchmarking through to shareholder voting and reporting.

Three Steps to Becoming a Biodiversity Steward

1. Engage

- Add Biodiversity governance to your portfolio monitoring criteria
- Vote and Engage investee companies on reducing negative biodiversity outcomes and work on stewardship approaches to creating positive biodiversity outcomes;
- Collaborate with peers to encourage and enhance environmental financial disclosures.

2. Allocate

- Allocate capital to sectors that are known to be proactively reducing biodiversity loss or contributing to ecosystem restoration;
- Consider green funds, bonds, commodities, managed in accordance with certification schemes that support strong biodiversity standards;
- Consider using the SDGs as a core ESG framework.

3. Educate

- Engage policy makers, especially as they negotiate the post-2020 biodiversity framework;
- Incorporate biodiversity in training materials; and,
- Explore new tools to understand how investments and biodiversity affect each other.

While a lack of agreed standards has previously made biodiversity difficult to incorporate, this is now rapidly changing. Minerva, together with our strategic shareholder, [Solactive](#), are ready to help investor managers integrate biodiversity into their strategy with a range of ESG and SDG-aligned tools and data.

To find out more, say hello@minerva.info

About Minerva

Minerva helps investors and other stakeholders to overcome data disclosure complexity with robust, objective research and voting policy tools. Users can quickly and easily identify departures from good practice based on their own individual preferences, local market requirements or apply a universal good practice standard across all markets.

For more information, please email hello@minerva.info or call +44 (0)1376 503500

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- Shareholder Rights Directive II
- Sustainability and Remuneration
- Tax Secrecy
- Regulatory Round-up
- Voting Trends



ENDNOTES

ⁱ OECD. "Biodiversity and the Economic Response to COVID-19: Ensuring a Green and Resilient Recovery," no. September (2020): 1–26. <http://www.oecd.org/coronavirus/policy-responses/biodiversity-and-the-economic-response-to-covid-19-ensuring-a-green-and-resilient-recovery-d98b5a09/>.

ⁱⁱ Sustainable Development Solutions Network. "Achieving the SDGs with Biodiversity," 2021.

ⁱⁱⁱ World Economic Forum. "Nature Risk Rising: And the Economy Nature Matters for Business Why the Crisis Engulfing." New Nature Economy Project, no. January (2020).

^{iv} Responsible Investor, and Credit Suisse. "Unearthing Investor Action on Biodiversity," 2021.

^v Rockstrom, Johan, Pavan Sukhdev, and Azote Images. "Contributions to Agenda 2030 - Stockholm Resilience Centre." Stockholm Resilience Centre, 2016.

^{vi} Deutza, Andrew, Geoffrey M. Heal, R. Niu, E. Swanson, Terry Townshend, L. Zhu, A. Delmar, A. Meghji, S.A. Sethi, and J. Tobin-de la Puente. "Financing Nature: Closing the Global Biodiversity Financing Gap," (2020), 256. <https://www.nature.org/en-us/what-we-do/our-insights/reports/financing-nature-biodiversity-report/>.

^{vii} The Biodiversity Consultancy Ltd. "Net Positive and the Mitigation Hierarchy." Accessed April 21, 2021. <https://www.thebiodiversityconsultancy.com/approaches/mitigation-hierarchy/>.



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