

For professional investors

Robeco's approach to biodiversity

Towards the integration
of nature-related risks,
opportunities and
impacts in our
investments

White paper

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Introduction

The financial sector and the asset management industry in which we sit has a crucial role to play in helping to prevent further biodiversity loss. This is not something that is simply 'nice to have' in the context of sustainable investing: it is in the long-term interest of our clients and our investment performance, along with our duty to do our best to use our financial muscle to contribute to protect the planet. For that reason we have set three strategic priorities for our Sustainable Investment strategy: Climate Change, Biodiversity and Human Rights.

Robeco has been addressing biodiversity issues for a number of years, through a dedicated engagement program on commodity-related deforestation, through our palm oil policy, and by assessing biodiversity as a material factor in our ESG integration process. It has been part of our investment process for many years as an element of assessing environmental risk (along with opportunities) among investments.

However, it is clear that there is more that we need to do, both in terms of further engagement, and in our investment decisions. It's no longer just a question of avoiding those companies that are responsible for biodiversity loss through environmentally damaging operations. We must also embrace those that are striving to protect biodiversity, directing more capital towards these sort of sustainable enterprises.

But we can't do it alone – no investor can and we need every stakeholder in society to contribute from corporates, governments to the financial sector. That's why we are delighted to be partnering the World Wide Fund for Nature Netherlands in our endeavors to promote this vital project on a global scale. We will work with them using our roadmap as outlined in this white paper to use investor capital to meet our mutual objectives.

Our general aim is that within the next few years we will be able to measure and steer on our contribution as an investor to the protection of biodiversity and nature in partnership with the WWF and other collaborations such as the Finance for Biodiversity Pledge.

In this positioning paper we describe our journey – why we started it, what we have been doing, and where we aim to be. We hope you will enjoy reading it, and then join us on this vital mission.

Victor Verberk
CIO Fixed Income and Sustainability

Foreword by WWF-Netherlands

The Natural world is in crisis. Never in human history has biodiversity declined as fast as it is doing so today. According to IPBES, human pressures on nature are putting a staggering one million species at risk of extinction, many within decades. Changes in land and sea use, the direct exploitation of organisms, pollution and the introduction of invasive species threaten many ecosystems. However, the nature crisis is not a standalone issue.

Climate change is further exacerbating the drivers of nature loss, which in turn reduces our ability to sequester carbon and thereby mitigate climate change. This negative feedback loop also reduces our ability to withstand the impacts of climate change, since degraded ecosystems do not protect us as well against natural events as healthy ecosystems.

In economic terms, the impact of this nature loss is unprecedented. Ecosystems provide important services to people and businesses alike, for example through provisioning and regulating natural resources. The World Economic Forum estimates that more than half of the world's economic output (USD 44tn) is at least moderately or highly dependent on nature, meaning that if natural systems collapse, so will our economic and financial systems. This is clearly an important issue for anyone involved in any sector on our planet, including its financiers.

At the same time, nature offers many opportunities which are being increasingly recognized worldwide. The Future of Nature and Business report estimates that a nature-positive economy can unlock USD 10 trillion of business opportunities by transforming the three economic systems that are responsible for almost 80% of nature loss, namely food, infrastructure and energy. Ecosystems can be viewed as important assets.

If we compare our economic system to a food chain, the financial sector can be considered to be at the top of it. Finance forms the foundation for our economic system, and enables all types of economic activities, with both positive and negative impacts on nature. The financial sector has, therefore, a crucial role to play in addressing the climate and biodiversity crisis.

In order to act, the financial sector needs information to understand how nature impacts immediate financial performance, as well as the longer-term financial risks and opportunities that may arise. The WWF is one of the proud initiators of the Task Force for Nature-Related Disclosure (TNFD), which aims to build a framework which will allow financial institutions to incorporate nature-related risks and opportunities into strategic planning, risk management and asset allocation decisions. It would though be strategically short sighted for financial institutions to wait until this work was concluded before acting. By starting to act now, institutions are able to dramatically reduce transitions risks.

Robeco's internal biodiversity roadmap, captured in this white paper, is a real step forward. It aims to understand and address nature-related impacts and dependencies across its organization. We look forward to collaborating with Robeco to ensure robust implementation. We hope it contributes to the integration of nature into all financial decision making in order to avoid the catastrophic impacts of the crises we face.

Aaron Vermeulen
Director Green Finance, WWF-NL

Partnership with World Wide Fund for Nature Netherlands (WWF-NL)
Robeco and World Wide Fund for Nature Netherlands (WWF-NL) have joined forces in a new partnership from January 2022 onwards, combining their areas of expertise to highlight the urgency of biodiversity loss, build knowledge and show how investors can take action to integrate biodiversity into asset management.

Working together
to integrate
biodiversity
into asset
management



Why is nature loss material to Robeco?

Biodiversity is declining faster than at any time in human history, and the pressures driving this decline are still increasing. Over half of the global economy is dependent on well-functioning ecosystems. Further loss of biodiversity could pose risks to financial markets. Nature conservation and restoration is therefore in the direct long-term interest of Robeco's clients and our investments.

Nature is vital for human existence, yet it is deteriorating worldwide due to human activity. The production and consumption of food, energy and materials is increasingly at the expense of nature's ability to provide such resources in the future. Reversing biodiversity and ecosystem loss is essential to preserve wealth and well-being. This can only be achieved through transformative changes in economy and society.

Box 1 | Definitions of biodiversity and ecosystem services

Biodiversity includes plants, animals and other organisms and is defined in the Convention on Biological Diversity (CBD) as the variability among organisms from all sources including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part; it includes diversity within species, between species and of ecosystems.

Ecosystem services are the goods and services that biodiversity provides. They include the provisioning services that supply the goods we harvest and extract (food, water, fibers, timber, medicines) and cultural services, such as the gardens, parks and coastlines. But nature's processes also preserve and regenerate soil, control floods, filter pollutants, assimilate waste, pollinate crops, maintain the hydrological cycle, regulate the climate, and fulfil many other functions. Without these regulating and maintenance services, our economy and society as we know it would not be possible.

Urgency for the planet

Leading academics identified nine global boundaries¹ for the planet that, if surpassed, could potentially push the Earth into an uninhabitable state for our species. These global boundaries are represented in Figure 1. They include climate change, freshwater use, ocean acidification and biodiversity loss, among others. For each of these aspects of our biosphere, scientists proposed quantitative planetary boundaries within which humanity can continue to develop and thrive for generations to come. Crossing these boundaries generates the risk of triggering large-scale irreversible environmental changes.

The loss of biosphere integrity (the ability of ecosystems to regulate themselves) and genetic diversity (diversity of species and genotypes within them) already exceed the defined planetary boundary according to the research from the Stockholm Resilience Center. This means that the ability of ecosystems to continue to provide goods and services to human society is in jeopardy. Another planetary boundary that has already been surpassed is nitrogen and phosphorus flows to the biosphere and oceans, triggering social and economic impacts in some countries as showcased in Box 2. Climate change and the conversion of natural forests and ecosystems are also approaching critical values.

¹ Source: <https://www.stockholmresilience.org/research/planetary-boundaries/the-nine-planetary-boundaries.html>

Figure 1 | Planetary boundaries framework



Source: Steffen, W., K. Richardson, J. Rockström, S.E. Cornell, et.al. 2015. Planetary boundaries: Guiding human development on a changing planet. *Science* 347: 736, 1259855

Box 2 | The nitrogen crisis in the Netherlands

About 78% of all the air in the atmosphere consists of di-nitrogen (N₂). This is in an unreactive or inert form. Reactive nitrogen such as nitrogen oxides (NO_x) and ammonia (NH₃) is an essential nutrient within many natural ecosystems and within agriculture. The amount of reactive nitrogen in the biosphere has increased significantly through the discovery of nitrogen fertilizers (whereby unreactive nitrogen from the atmosphere is processed into ammonia) and the burning of fossil fuels (whereby the reactive nitrogen NO_x is released). An excess amount of reactive nitrogen in the soil and water disrupts nature, causing plants and animal species to disappear, whilst affecting the quality of the nearby ground and water. In 2019, the highest Dutch court ruled that the state was miscalculating building-related emissions, meaning it needed to do more to limit the release of pollutant gases such as ammonia. Hundreds of building projects, which also produce harmful nitrogen compound emissions, were put on hold. Speed limits were also reduced to 100 km/h on highways during the day to reduce vehicle emissions. Dutch farmers could be forced to sell land and reduce the amount of animals they keep to help lower ammonia pollution. Farmers have rallied in the streets to protest against reducing livestock numbers. Buying out livestock farmers could cost EUR 14-30 billion, which is a clear indication of the direct economic impact of eutrophication by nitrogen.

In 2019, the Intergovernmental Science Policy Platform on Biodiversity and Ecosystems (IPBES) concluded the most comprehensive study of nature to date. During the past 50 years, we have experienced an unprecedented rate in the global deterioration of nature. The average abundance of native species on land has fallen by at least 20%, mostly since 1900. More than 40% of amphibian species, almost 33% of reef-forming corals and more than one-third of all marine mammals are threatened.²

These changes are driven by the use of land and sea, the exploitation of organisms, climate change, pollution, and the invasion of alien species. Human activity underpins these drivers, most notably through population growth and increased production and consumption. Continued biodiversity loss will pose severe consequences for society and will undermine efforts to achieve international goals, including the Sustainable Development Goals (SDGs) and the Paris Agreement.

² Source: <https://ipbes.net/global-assessment>

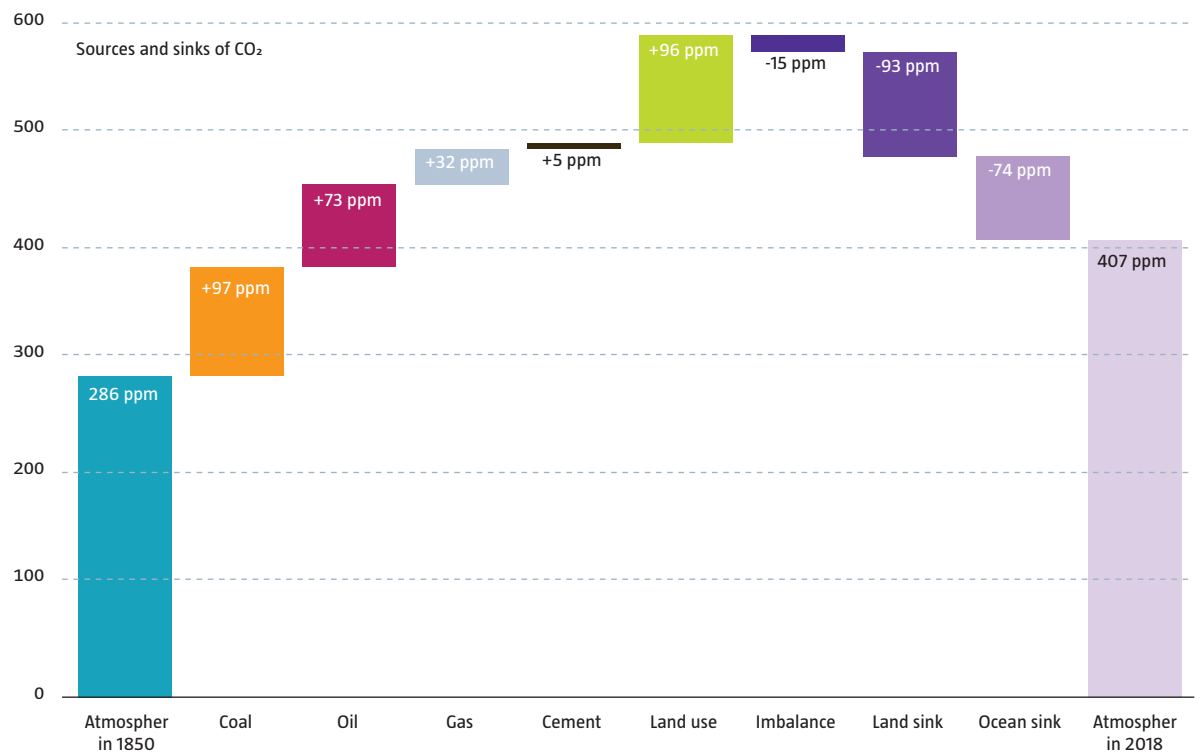
Climate change and biodiversity

Science has demonstrated that climate change and biodiversity are closely connected.³ Climate change is one of the key drivers of biodiversity loss. At the same time, biodiversity is essential for mitigating and adapting to climate change. Degraded ecosystems reduce the ability of nature to withstand climate-related environmental shocks. Healthy ecosystems protect us against physical impacts of climate change, such as storm surges, droughts and floods.

There are some estimates that as much as a 30% of the world’s climate mitigation potential could come from nature. Since pre-industrial times, around half of the carbon emitted has been captured by nature through forests, oceans and other natural carbon sinks (see Figure 2). The remainder of emissions goes into the atmosphere, causing global warming. Conserving natural terrestrial, freshwater and marine ecosystems and restoring degraded ecosystems is therefore essential in our fight against climate change.⁴

Yet, the climate mitigation function provided by natural sinks is at a delicate balance. As seen in Figure 2, land use is also a major source of CO₂ emissions, mainly through deforestation and land conversion for agriculture, practically offsetting land-based sequestration. While our oceans sequester most CO₂ emissions in net terms, when high levels of atmospheric CO₂ dissolve in the ocean, there is a reduction in the ocean’s pH levels, making the ocean more acidic. Ocean acidification causes severe loss in coastal and marine ecosystem services, posing risks to food and income security for many economies.

Figure 2 | Emission and sequestration of greenhouse gasses, cumulative since 1850



Source: Global Carbon Project

³ Source: <https://www.cbd.int/climate/intro.shtml>

⁴ Source: <https://www.globalcarbonproject.org/carbonbudget/20/highlights.htm>

Box 3 | Robeco's net zero roadmap

In December 2020, Robeco committed to achieve net-zero greenhouse gas (GHG) emissions by 2050 across all its assets under management. Robeco made this commitment as a founding signatory of the Net Zero Asset Manager Initiative, which currently has 220 signatories representing USD 57 trillion in AUM.

In October 2021, Robeco published its net zero roadmap with concrete interim targets for 2025 and 2030. The roadmap is grounded on three pillars with six underlying actions:⁵

Pillar 1: Decarbonize our activities, reaching -30% in 2025 and -50% in 2050. This is an average trajectory of 7% decarbonization year-on-year, in line with what science indicates is required for remaining below 1.5 degrees Celsius of global warming.

- Action 1: Decarbonize our portfolios
- Action 2: Reduce our operational emissions

Pillar 2: Accelerate the transition, leveraging our influence as a shareholder and bondholder to accelerate climate action by companies and countries.

- Action 3: Accelerate the transition of companies
- Action 4: Call for climate action by countries

Pillar 3: Promoting climate-aligned investing, in collaboration with clients, peers, standard setters and relevant stakeholders in the industry.

- Action 5: Work with clients on decarbonization
- Action 6: Collaborate to promote net zero investing

Urgency for the economy and society

Nature underpins all economic activities through the provision of ecosystem services. These include pollination, fresh water, clean air, carbon capture and protection against floods. More than half of global GDP is dependent on nature and its ecosystems.⁶ More than 75% of global food crops, including fruits and vegetables, rely on animal pollination. The total global value of ecosystem services is estimated at EUR 100-120 trillion per year, equivalent to one and a half times the volume of global GDP.⁷ Yet the world's ecosystems have deteriorated by 47% compared to estimated baselines⁸, which poses a severe risk to our economies and businesses.

The growth of our global economy in the last decades has come at the expense of the biosphere. Businesses and policies have had direct and indirect adverse impacts on biodiversity and ecosystem services. For instance, economic incentives and policies in the fisheries sector have led to the over-exploitation of 76% of the world's marine fish stocks, as monitored by the Food and Agriculture Organization of the United Nations (FAO). The deterioration of nature may fuel social instability and conflict. For example, between 1 and 1.5 billion people depend on forests for their food and livelihoods.⁹ Preserving a healthy biosphere is crucial to delivering a broader range of societal and economic SDGs, as depicted in Figure 3.

5 Source : <https://www.robeco.com/en/insights/2021/10/roadmap-outlines-plan-for-move-towards-net-zero-emissions.html>

6 Herweijer et al 2020, Nature Risk Rising: why the crisis engulfing nature matters for business and the economy, World Economic Forum

7 Source: <https://www.oecd.org/environment/resources/biodiversity/G7-report-Biodiversity-Finance-and-the-Economic-and-Business-Case-for-Action.pdf>

8 Source: <https://naturalcapital.finance/wp-content/uploads/2020/06/Beyond-Business-as-Usual-EN.pdf>

9 Agrawal et al (2013), Economic contributions of forests. United nations Forum on forests, Istanbul, 8-19 April 2013.

Figure 3 | Achieving the Sustainable Development Goals will depend upon a healthy biosphere



Source: Azote Images for Stockholm Resilience Centre, Stockholm University

Box 4 | Convention on Biological Diversity: COP15

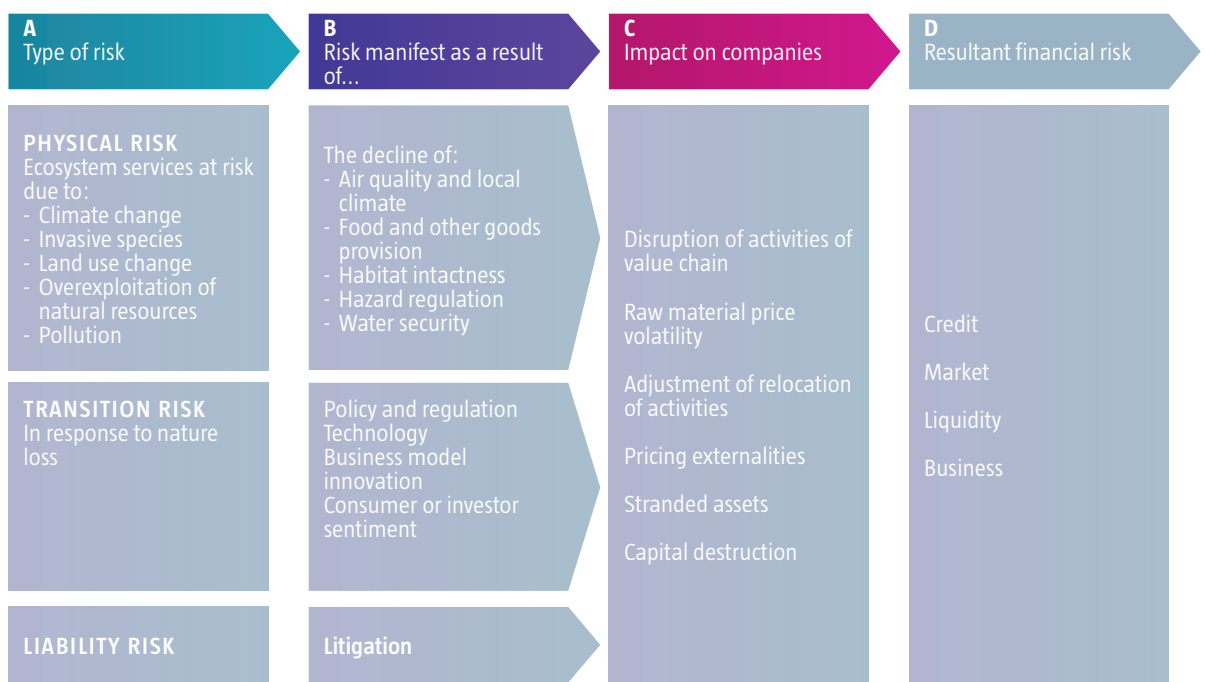
The alarming reports of scientists, such as the IPBES report from 2019, have fueled strong expectations for the global biodiversity summit that will take place in-person in Kunming in early 2022. COP15 represents the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD), a treaty adopted at the 1992 Earth Summit in Rio de Janeiro.

Scientists, experts and government officials have been working in the last few years on a global framework to be adopted at COP15 that will set targets for how we manage nature through to 2030. Countries are expected to reach an agreement on targets to conserve 30% of the world's oceans and land by 2030, introduce controls on invasive species and reduce plastic pollution. The WWF and initiatives like the Leaders' Pledge for Nature (representing 93 countries) and the G7 2030 Nature Compact are supporting a more ambitious objective of becoming Nature Positive by 2030.

Urgency for investors

The dependency of the global economy on nature and biodiversity is ultimately also a financial risk. Similar to climate change, nature-related risks for financial institutions can be described through the lenses of physical and transition risks. Physical risks emerge from the dependencies of industries on ecosystem services, for example power utilities that require abundant access to water for cooling purposes. Transition risks arise from the impact that industries have on nature. Industries with high impact will sooner or later be subject to tighter policy and regulation, and to changes in technology and consumer preferences. The Cambridge Institute for Sustainability Leadership's framework adds a third dimension of liability risk as showcased in Figure 4, which can be regarded as a sub-category of transition risk.

Figure 4 | Biodiversity's financial materiality



Source: Cambridge Institute for Sustainability Leadership

In June 2020, the Dutch Central Bank and the national Environmental Assessment Agency published a report describing the exposure of the Dutch financial sector to biodiversity risks.¹⁰ It has been estimated that Dutch financial institutions have EUR 510 billion of exposure to companies that are either highly or very highly dependent on one or more ecosystem service. This exposure to physical risk is equivalent to 36% of their portfolios; EUR 28 billion of assets were dependent on pollination alone.

The impact and dependencies of investments on biodiversity are also integrated into the requirements of the European Union's Sustainable Finance Disclosure Regulation (SFDR). As part of the SFDR, investors will need to report to their clients on how investments have adverse impacts on biodiversity. While the EU Taxonomy currently addresses climate change mitigation and adaptation objectives, it will also include other environmental objectives, including biodiversity and ecosystems. These legislative requirements will enhance disclosures from companies and improve both the data quality and availability of biodiversity-related metrics.

¹⁰ Source : https://www.dnb.nl/en/binaries/Indebted%20to%20nature%20_tcm47-389172.pdf

Box 5 | Emerging insights from Robeco's biodiversity materiality assessment

In 2021, Robeco conducted a heatmap assessment using ENCORE data¹¹ to understand the exposure of our investments to biodiversity risks. This analysis allowed us to identify asset classes and sub-industries with the highest exposure to dependencies and impacts on specific ecosystem services. The results stemming from this analysis are in line with the findings from research by DNB¹² and other peers in the industry. Here are some of our key insights:

- Around one-quarter of our assets under management are either highly or very highly dependent on at least one ecosystem service. The provision of ground and surface water alone proved to be the most material, followed by climate regulation and water flow maintenance.
- Around 29% of our investments are in sectors that have potentially high or very high impacts on key drivers of biodiversity loss. Use of land and freshwater was identified as the largest impacts, followed by climate change, pollution and direct disturbances. In Figure 5 we showcase Robeco's investment exposure to sectors severely impacting these key drivers of biodiversity loss.
- The highest exposures with impacts and/or dependencies were found in the Pharmaceuticals, Integrated Telecommunication Services, Specialty Chemicals, Packaged Foods and Meats and Apparel, Accessories and Luxury Goods industries.
- A high number of sectors are highly dependent on five ecosystem services, and we displayed our investment exposure to these in Figure 6. Within our investments, we confirmed that Agricultural Products are directly exposed to the widest range of ecosystem services, followed by Forest Products and a range of industries including Electric Utilities and Telecommunications.

In 2022, we will increase the granularity of this assessment so that we can better understand and compare the biodiversity performance of individual companies within high-risk sub-industries. Going forward, we expect that specific exposure of individual issuers to biodiversity risks and impacts will become an integral part of our investment processes.

Figure 5 | Robeco's investment exposure to sectors that impact key drivers of biodiversity loss

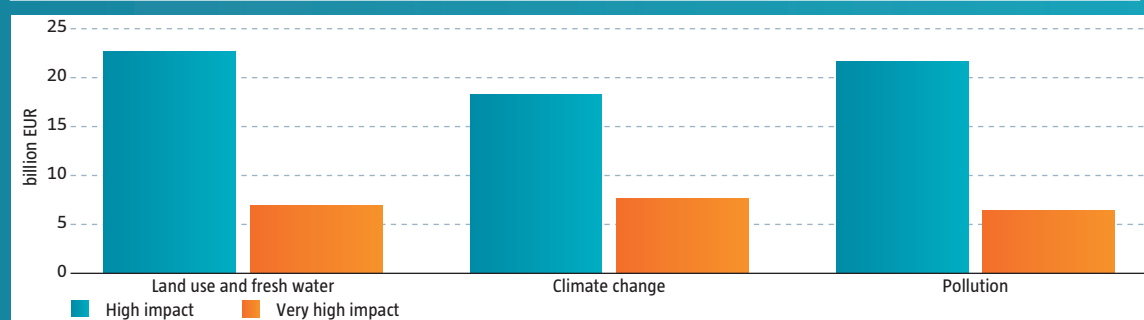
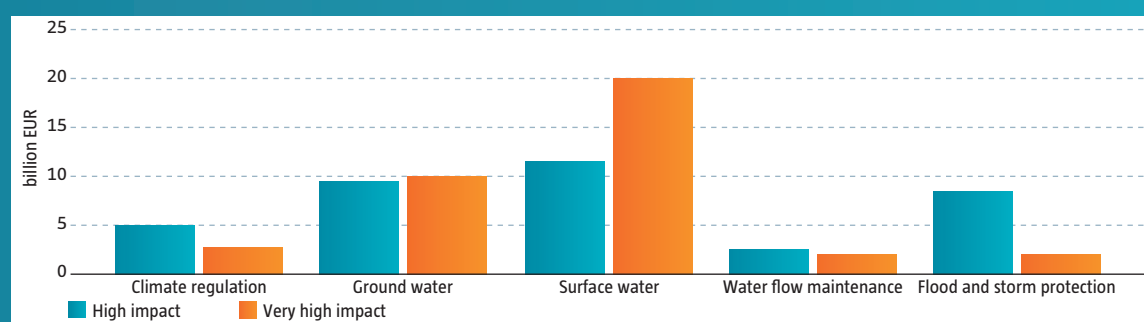


Figure 6 | Robeco's investment exposure to sectors that depend on ecosystem services



Source figure 5 & 6: Robeco, ENCORE

11 Source: <https://encore.naturalcapital.finance/en/about>

12 Source: https://www.dnb.nl/en/binaries/Indebted%20to%20nature%20_tcm47-389172.pdf

What action does Robeco take on biodiversity?

We recognize that the financial sector has a crucial role in preserving natural capital and biodiversity. Robeco engages with companies on commodity-related deforestation and addresses biodiversity as a material factor in ESG integration. We are partnering with academics and peers to develop the methods and data so that we can measure and steer on biodiversity impacts throughout our investment portfolios.

Our commitment

In September 2020, Robeco signed the Finance for Biodiversity Pledge. This pledge has been endorsed by more than 55 signatories representing more than EUR 9 trillion in assets, committing to protect and restore biodiversity through their finance activities and investments. The pledge's signatories are committed to collaborate, assess the biodiversity impact of their portfolios, and set targets and report on biodiversity matters by 2024 at the latest.

In November 2021, we signed up to the Financial Sector Commitment on Eliminating Agricultural Commodity-Driven Deforestation. Signatory financial institutions commit to work on eliminating agricultural deforestation risks in our investment portfolios by 2025. This pledge was announced during COP26 and has been endorsed by more than 30 financial institutions with more than EUR 8 trillion in assets under management. This commitment complemented one of the key deals from the climate summit where more than 100 countries promised to end and reverse deforestation by 2030.

Box 6 | Partnership with World Wide Fund for Nature Netherlands (WWF-NL)

Robeco and World Wide Fund for Nature Netherlands (WWF-NL) have joined forces in a new partnership from January 2022 onwards, combining their areas of expertise to highlight the urgency of biodiversity loss, build knowledge and show how investors can take action to integrate biodiversity into asset management.

Robeco and WWF-NL have defined three overarching work streams for this partnership:

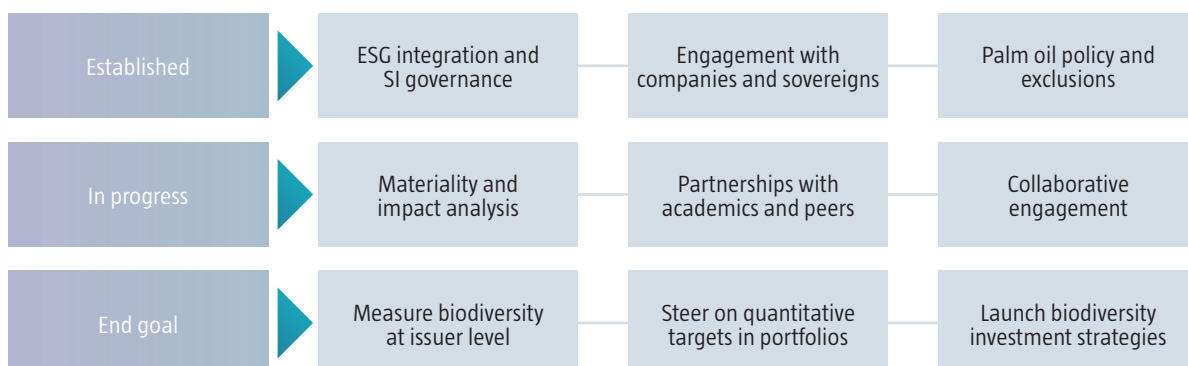
1. Collaborate on the Robeco biodiversity roadmap as presented in this white paper, including impact and dependency measurement and management
2. Co-development of biodiversity investment strategies
3. Inspiring and activating stakeholders in the financial sector to integrate biodiversity into asset management.

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Robeco established an internal Biodiversity Taskforce (BTF) in 2020, with the purpose of coordinating and driving our organization's approach to biodiversity in an overarching and leading strategy. The BTF consists of representatives from Robeco's investment teams and Sustainability Investing Center of Expertise. The BTF has defined a roadmap to deliver on the commitments mentioned above. Robeco's current efforts and ambitions on scaling up their work on biodiversity are summarized in Figure 7.

Figure 7 | Robeco's efforts on biodiversity



Source: Robeco

What's next in our roadmap

Towards relevant metrics and targets

An important milestone in our roadmap consists of publishing a biodiversity policy before 2023. We will prioritize our areas of action in line with the findings from our biodiversity materiality assessment, where we identify high-risk industries to which we have investment exposure and the relevant key ecosystem services that are under pressure. We have the ambition to incorporate this information in the portfolio construction process for relevant investment strategies. This will also shape our target-setting strategy, where we will aim to reduce the negative impacts of our portfolios on biodiversity. We will also explore and develop investment strategies and solutions designed to generate positive impacts on biodiversity, in collaboration with WWF-NL. Integrating biodiversity considerations into our risk management systems will also be a crucial part of our biodiversity policy.

We will continue our work on assessing how our investments are exposed to biodiversity impacts and dependencies. We aim to extend our assessment beyond the sub-industry level to understand how issuers are themselves exposed to biodiversity risks and impacts. This analysis will be crucial to develop a biodiversity framework that will enable us to measure the impact and dependencies of companies throughout our investment process. The economic and financial valuation of biodiversity at company level poses serious methodological challenges, as showcased in Box 7, but we believe it is a necessary step for integrating biodiversity into our investment decisions. We are currently addressing these methodological challenges with data providers and research groups, aiming to use the best available science to measure biodiversity impacts and dependences at the company level.

Box 7 | Challenges in measuring biodiversity at issuer level

Consider an apparel company with global operations. Biodiversity impacts will manifest themselves across the value chain beyond operational fence lines, usually at a local level impacting different ecosystems. Furthermore, these ecosystems have varying vulnerabilities and exposure to threats and require interventions aligned to those conditions. Sourcing raw materials such as cotton is linked to large amounts of water consumption and the use of agrochemicals and can lead to soil degradation and habitat loss. Textile dyeing and other materials treatments require large amounts of water, which also put a strain on freshwater sources. The disposal of apparel can contribute to biodiversity loss, as textile waste ends up in landfills, where it may contribute to habitat loss. Synthetic or treated textiles can also release pollutants into the surrounding landscape. The challenge here is to aggregate the impacts and dependencies on biodiversity linked to this single company, considering the number and diversity of local ecosystems affected across several geographical locations.

Advancing strategic partnerships

Collaboration and sharing knowledge is fundamental to being able to create the data and tools that we need to progress in the area of biodiversity. Robeco is therefore active in a number of collaborative initiatives with academia and practitioners. In line with our commitment from the Finance for Biodiversity Pledge, we collaborate and share knowledge on the assessment of methodologies, biodiversity-related metrics and financing approaches for positive impact.

One of our collaborations has been to help prepare the launch of the Taskforce for Nature-related Financial Disclosures (TNFD). The TNFD aims to support a shift in global financial flows toward nature-positive outcomes by delivering a framework for companies to report and act on evolving nature-related risks. Robeco has also been involved with the Platform Biodiversity Accounting Financials (PBAF) since its inception, contributing to the development of a set of harmonized principles underlying biodiversity impact assessments for the financial industry.

Understanding the type of risks that companies will face in light of the depletion of nature is crucial to our investments. We are collaborating with the Cambridge Institute for Sustainable Leadership (CISL) to advance academic research in this field. A major step forward was the publication of the handbook for investors on nature-related risks in 2021.¹³ Based on this handbook, we are developing case studies with a financial assessment of the nature-related risks on companies and their financiers.¹⁴

On the stewardship front, we recognize that collaborative engagement efforts are an effective way of signaling a strong sense of urgency to companies. Together with a core group of investors, we are driving the development of an investor-led initiative seeking to work with research organizations and conservation NGOs to create a list of 100 companies with the largest exposure to impacts and dependencies on nature and biodiversity. Global investors will be invited to sign up to the Nature Action 100 program and lead on individual dialogues on behalf of the global investor community.

Ongoing work

SI governance and risk management

The governance body for sustainable investing at Robeco is the Sustainability and Impact Strategy Committee (SISC), composed of 12 people, including members of Robeco's Executive Committee, as well as senior managers and sustainability specialists who oversee and drive sustainable investing across the company. The SISC has the authority to approve policies and set practical guidelines for the implementation of Robeco's sustainable investing strategy.¹⁵ The BTF is one of the specialized committees that oversee the individual core components of Robeco's sustainable investing activities. Topics related to biodiversity are reported by the BTF to the SISC when appropriate.

In our process of sustainability risk identification we identified biodiversity as a key factor that can have a material financial impact on an investment.¹⁶ Biodiversity loss is a material (physical) risk with a potentially significant impact in that it threatens the ecosystem on which numerous economic activities depend. Investment funds and discretionary mandates may run potential risks through their investments in companies whose supply chains are exposed to high biodiversity risks. We aim to mitigate principal adverse impacts in relation to the biodiversity metrics in line with the SFDR.¹⁷

Stewardship activities

It is part of our investment stewardship role to leverage our influence as a shareholder and bondholder to influence how companies and governments impact society and the environment through their activities. Environmental issues in the agricultural sector, such as deforestation and the impact of agrochemicals in crop production, have been a recurring topic in our engagement with companies. A dedicated engagement program focused on biodiversity was

¹³ Source: <https://www.cisl.cam.ac.uk/resources/sustainable-finance-publications/handbook-nature-related-financial-risks>

¹⁴ Source: <https://www.cisl.cam.ac.uk/resources/publications/assessing-nature-related-financial-risks>

¹⁵ Source: <https://www.robeco.com/docm/docu-robeco-sustainability-policy.pdf>

¹⁶ Source: <https://www.robeco.com/docm/docu-robeco-sustainability-risk-policy.pdf>

¹⁷ Source: <https://www.robeco.com/docm/docu-robeco-principal-adverse-impact-statement.pdf>

launched in 2019. This focuses on the impact on biodiversity from deforestation and land conversion linked to five high-risk crop commodities as showcased in Figure 8. Expectations included in our engagement program are that companies commit to zero deforestation and conduct biodiversity impact assessments. We also aim to drive more biodiversity stewardship from our investee companies. This means that companies shall look beyond their own operations and supply chains, aiming to mobilize and transform together with other stakeholders globally in order to find solutions to reverse nature loss.

Figure 8 | Scope of corporate engagement on biodiversity



Source: Robeco

Robeco has engaged since 2010 with companies producing, trading, or procuring palm oil used in consumer or household products. In January 2019, we included palm oil as a topic under the controversial behavior category in Robeco's exclusion policy. We defined a set of principles and expectations that guide our interaction with the palm oil sector. The multi-faceted sustainability issues facing the industry can't be completely resolved by certification schemes alone. However, leading schemes such as the Responsible on Sustainable Palm Oil (RSPO) play an important role in leveraging the uptake of best practices and increasing transparency.

Robeco currently excludes companies with 50% or less of their plantations RSPO certified. Other palm oil producing companies are part of an engagement program where Robeco requires them to make progress towards full RSPO certification and addresses potential controversies and breaches of the UN Global compact. Palm oil producing companies that do not reach 80% RSPO certified plantations by 31 December 2024 will then be excluded.

While engaging with companies is important, halting deforestation requires government action. Robeco has been involved in the Investor Policy Dialogue on Deforestation (IPDD) initiative since it was founded in early 2020. This collaborative initiative focuses on mitigating the risk to investors posed by the increasing rates of deforestation around the globe. The IPDD seeks to engage directly with governments (or related organizations) to convince them of the value attached to preserving natural assets and to discourage potentially unsustainable land use. The first sovereign engagement initiated by the IPDD was in June 2020 with Brazil, and since October 2020 it has expanded to Indonesia.

Investment processes

As part of our fundamental investment processes, sustainable investment analysts assess the environmental, social and governance (ESG) risks and opportunities of our investee companies. The analysis of key ESG factors includes exposure to a number of nature-related impacts and dependencies on ecosystem services. The analyst's view is expressed in a sustainable investment) rating, which describes the extent to which the sustainability factor is expected to affect business fundamentals. These impacts and dependencies are then taken into account by financial analysts and portfolio managers when adjusting valuations and subsequently the weights in portfolios.

- **Climate change:** One of the key drivers of biodiversity loss, climate change is always among the key fundamental factors assessed by a sustainable investment analyst. This includes analysis of climate related risks, opportunities and the company's lower-carbon transition plan, allowing us to identify companies with lower exposure to climate change.
- **Product impact:** SI analysts assess not only direct operations but also the contribution of products and services that the issuer provides to society and the environment across the whole value chain. The biggest positive and negative impacts often occur outside of direct operations. For some sectors such as fast-moving consumer goods, these impacts are closely linked to nature and biodiversity. Biodiversity considerations would then be taken into account by the SI analyst. Regulators tend to ultimately internalize the positive and negative externalities of products (in the form of taxes or outright bans), which affects issuers' cash flows and the performance of our investments.
- **Other key ESG factors:** Based on financial materiality, SI analysts will select a number of additional nature or biodiversity-related key ESG factors for their analysis. For example, supply chain management and raw material sourcing are factors that are considered in detail for more than 40 different sub-industries. This analysis will typically include the assessment of levels of biodiversity-linked sustainability certification from organizations such as the Roundtable for Sustainable Palm Oil or the Marine Stewardship Council for fish, among other supply chain-related criteria. Operational eco-efficiency is another biodiversity-linked factor that is assessed, primarily in the heavy industries sector. Operations that are more energy and water efficient will tend to have lower impacts on biodiversity, except for the few regions where energy and water resources are abundant. Product stewardship is included for over 20 industries. The analysts evaluate here whether the company is measuring environmental impacts across product life cycles and this often includes biodiversity. Seven sub-industries (primarily within the mining sector) have 'biodiversity' stated as a specific and separate key ESG factor. Here, the analyst would evaluate the potential impact of mining sites on high biodiversity value areas.

Box 8 | Case study of biodiversity-related risks in fundamental equity ESG integration, SI research and engagement

In our emerging markets portfolio we hold a Brazilian beef and patties producer for whom 70% of its production is related to the US market. Our SI analyst flagged that the company's sourcing strategy in the Amazon raises concerns over deforestation risks. In light of the limited traceability of the cattle locally, our fundamental equity analyst attributed a high ESG risk to the company that detracted from its return potential.

The company was included in our biodiversity engagement program. In 2020, we identified encouraging developments after the company made a public commitment to cattle traceability in its supply chain and set a target for zero exposure to deforestation in the Amazon and Cerrado biomes. Certainly, pressure from global investors and retail groups has pushed the company to adopt this new policy. Should the company's targets materialize, reducing its ESG risk, this can become a positive driver of shareholder return, leaving additional space for share price appreciation.

Impact analysis and the Sustainable Development Goals (SDG) framework

Robeco developed a proprietary framework for assessing the contribution of companies to the United Nations Sustainable Development Goals (SDGs).¹⁸ It consists of three steps:

- Step 1: Assessing the impact of companies' products and services on the SDGs
- Step 2: Analyzing how companies' operations influence the SDGs
- Step 3: Checking whether companies are involved in controversies that harm progress on the SDGs .

Following these steps, a company receives an SDG score for the goals that are most impacted by its activities. Two of the 17 goals (SDG 14: Life below water and SDG 15: Life on land) are directly linked to biodiversity. The SDG framework is used to inform investment processes in a number of strategies such as our SDG Credits, SDG Equity, and Global SDG Engagement Equity strategies.

¹⁸ Source : <https://www.robeco.com/en/insights/2021/09/translating-universal-goals-into-sdg-impact.html>

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