

For professional investors

Robeco's approach to biodiversity

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

White paper

January 2022

Laura Bosch
Michal Kulak
Lucian Peppelenbos
Peter van der Werf

Contents

Introduction	4
Foreword by WWF Netherlands	5
Why is nature loss material to Robeco?	6
Urgency for the planet	6
- Climate change and biodiversity	7
Urgency for the economy and society	9
Urgency for investors	11
What action does Robeco take on biodiversity?	13
Our commitment	13
What's next in our roadmap	14
- Towards relevant metrics and targets	14
- Advancing strategic partnerships	15
Ongoing work	15
- SI governance and risk management	15
- Stewardship activities	15
- Investment processes	16
- Impact Analysis and Sustainable Development Goals (SDG) Framework	17

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.

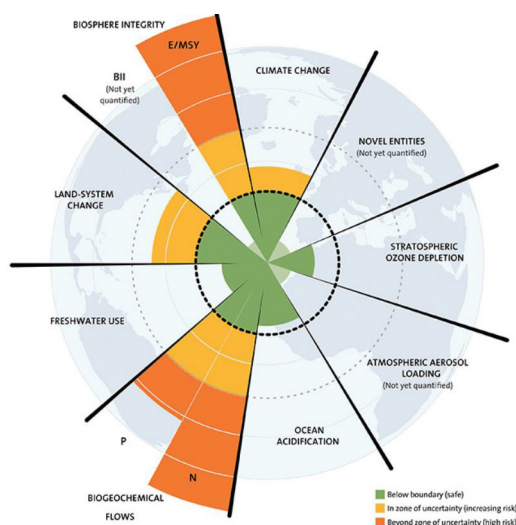
Urgency for the planet

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>

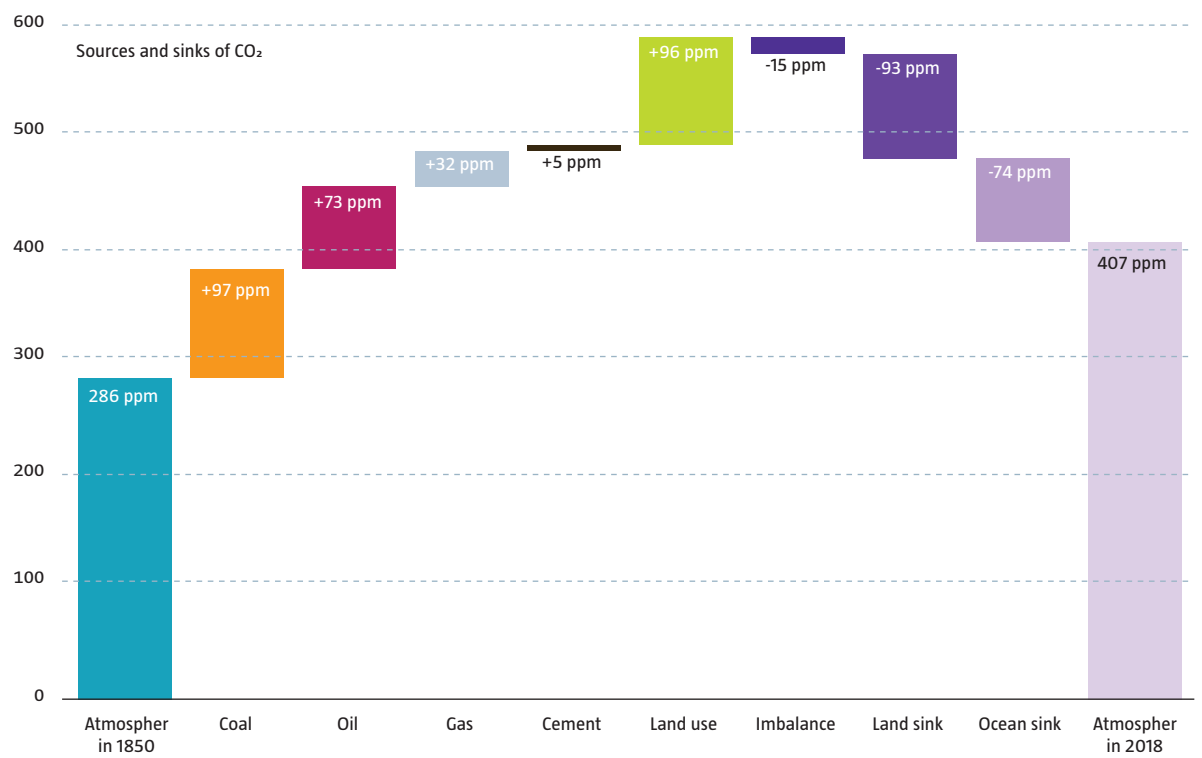
Climate change and biodiversity

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>

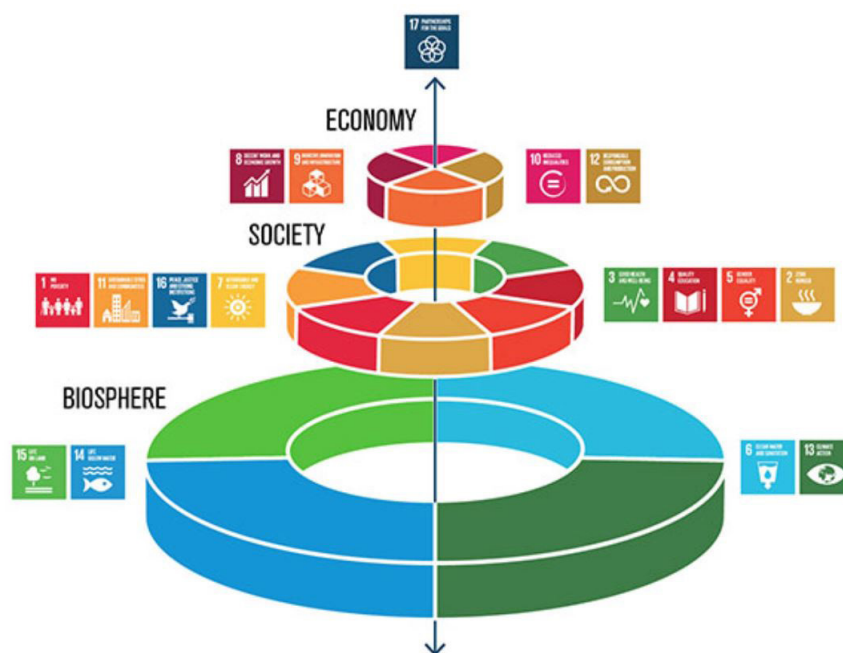
6 Herweijer et al 2020, Nature Risk Rising: why the crisis engulfing nature matters for business and the economy, World Economic Forum

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

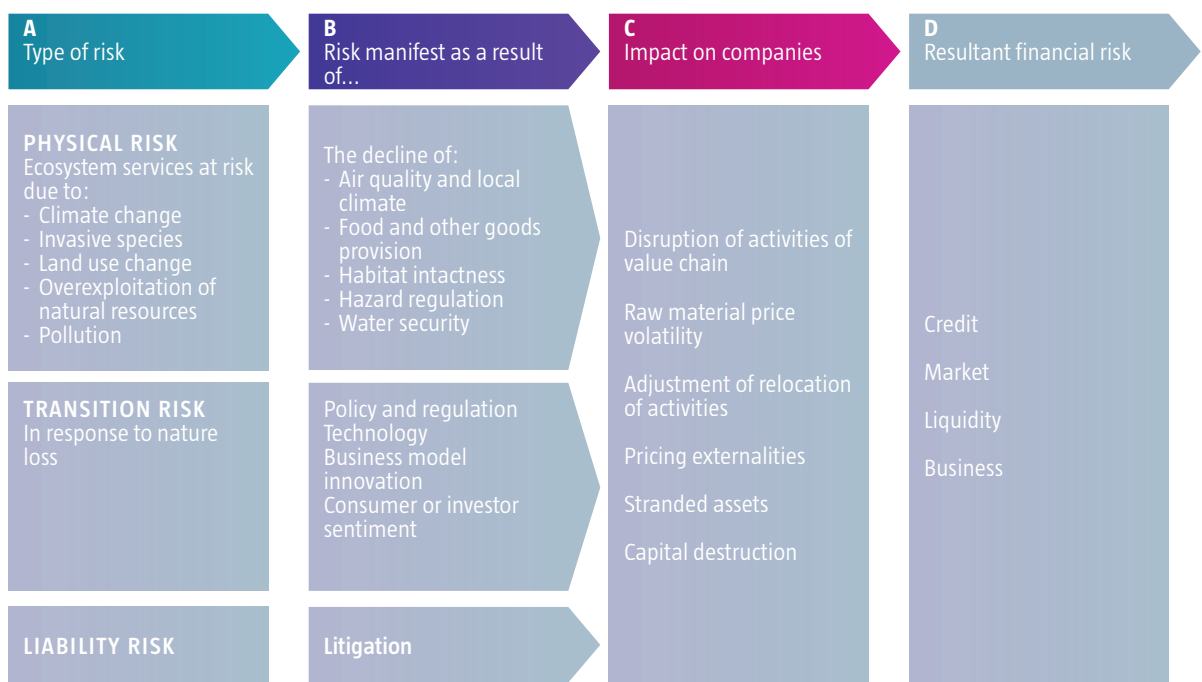
The alarming reports of scientists, such as the IPBES report from 2019, have fueled strong expectations for the global biodiversity summit that will take place in-person in Kunming in early 2022. COP15 represents the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (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

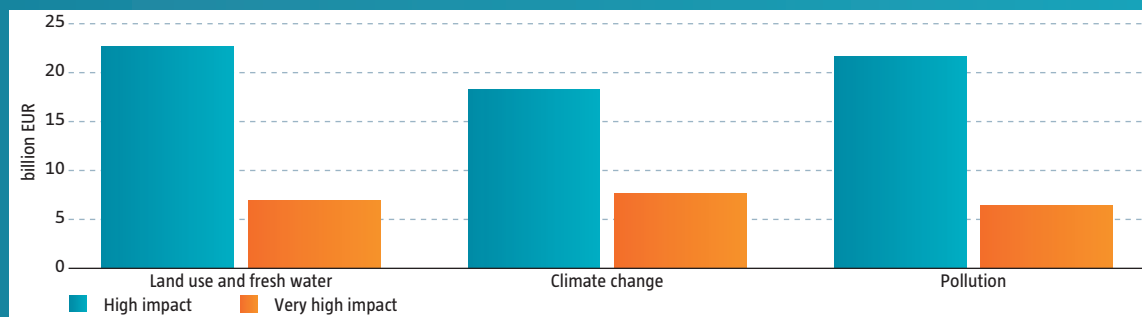
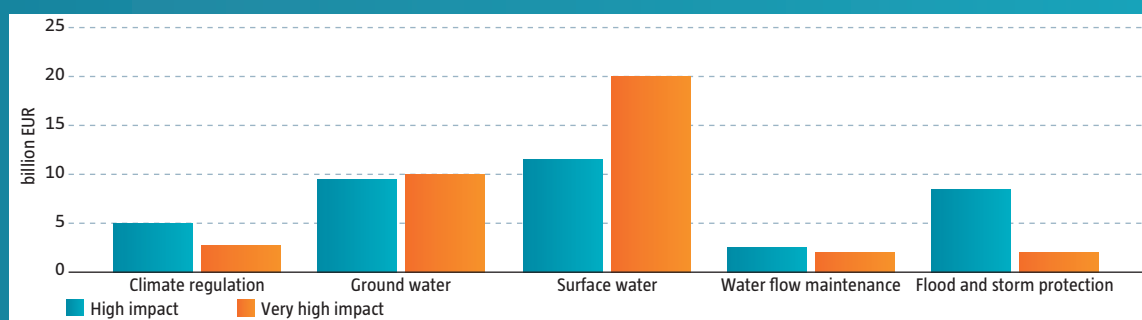


Figure 6 | Robeco's investment exposure to sectors that depend on ecosystem services



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:

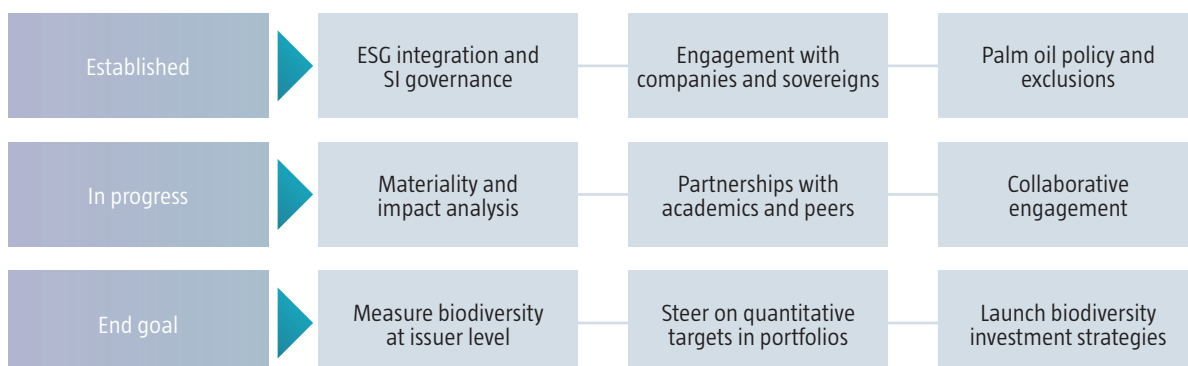
1. Collaborate on the Robeco biodiversity roadmap as presented in this white paper, including impact and dependency measurement and management
2. Co-development of biodiversity investment strategies
3. Inspiring and activating stakeholders in the financial sector to integrate biodiversity into asset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

Working together
to integrate
biodiversity
into asset
management



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 strategies 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>

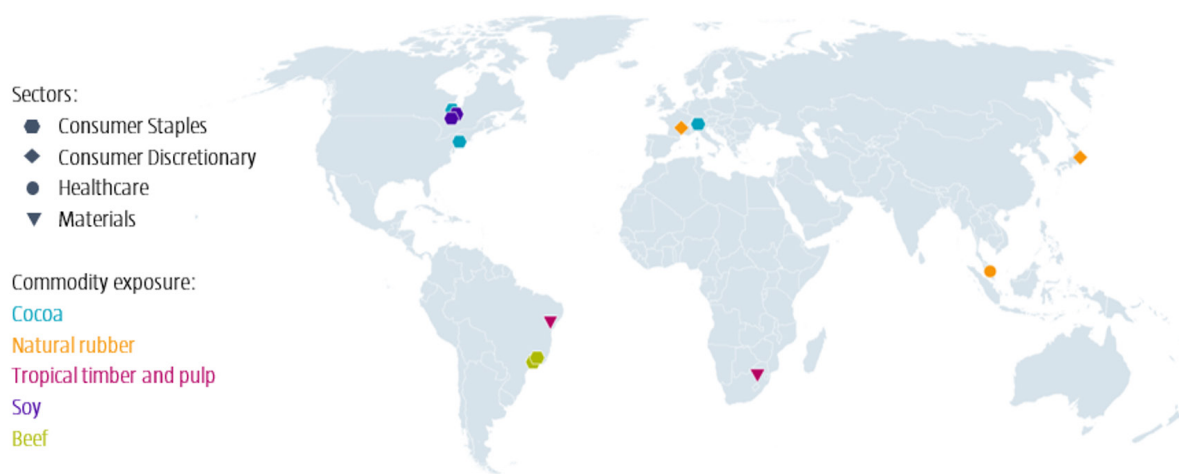
¹⁵ Source: <https://www.robeco.com/docm/docu-robeco-sustainability-policy.pdf>

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.

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

Important information

Robeco Institutional Asset Management B.V. has a license as manager of Undertakings for Collective Investment in Transferable Securities (UCITS) and Alternative Investment Funds (AIFs) ("Fund(s)") from The Netherlands Authority for the Financial Markets in Amsterdam. This marketing document is solely intended for professional investors, defined as investors qualifying as professional clients, have requested to be treated as professional clients or are authorized to receive such information under any applicable laws. Robeco Institutional Asset Management B.V. and/or its related, affiliated and subsidiary companies, ("Robeco"), will not be liable for any damages arising out of the use of this document. Users of this information who provide investment services in the European Union have their own responsibility to assess whether they are allowed to receive the information in accordance with MiFID II regulations. To the extent this information qualifies as a reasonable and appropriate minor non-monetary benefit under MiFID II, users that provide investment services in the European Union are responsible to comply with applicable recordkeeping and disclosure requirements. The content of this document is based upon sources of information believed to be reliable and comes without warranties of any kind. Without further explanation this document cannot be considered complete. Any opinions, estimates or forecasts may be changed at any time without prior warning. If in doubt, please seek independent advice. It is intended to provide the professional investor with general information on Robeco's specific capabilities, but has not been prepared by Robeco as investment research and does not constitute an investment recommendation or advice to buy or sell certain securities or investment products and/or to adopt any investment strategy and/or legal, accounting or tax advice. All rights relating to the information in this document are and will remain the property of Robeco. This material may not be copied or used with the public. No part of this document may be reproduced, or published in any form or by any means without Robeco's prior written permission. Investment involves risks. Before investing, please note the initial capital is not guaranteed. Investors should ensure that they fully understand the risk associated with any Robeco product or service offered in their country of domicile. Investors should also consider their own investment objective and risk tolerance level. Historical returns are provided for illustrative purposes only. The price of units may go down as well as up and the past performance is not indicative of future performance. If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. The performance data do not take account of the commissions and costs incurred on trading securities in client portfolios or on the issue and redemption of units. Unless otherwise stated, the prices used for the performance figures of the Luxembourg-based Funds are the end-of-month transaction prices net of fees up to 4 August 2010. From 4 August 2010, the transaction prices net of fees will be those of the first business day of the month. Return figures versus the benchmark show the investment management result before management and/or performance fees; the Fund returns are with dividends reinvested and based on net asset values with prices and exchange rates of the valuation moment of the benchmark. Please refer to the prospectus of the Funds for further details. Performance is quoted net of investment management fees. The ongoing charges mentioned in this document are the ones stated in the Fund's latest annual report at closing date of the last calendar year. This document is not directed to, or intended for distribution to or use by any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, document, availability or use would be contrary to law or regulation or which would subject any Fund or Robeco Institutional Asset Management B.V. to any registration or licensing requirement within such jurisdiction. Any decision to subscribe for interests in a Fund offered in a particular jurisdiction must be made solely on the basis of information contained in the prospectus, which information may be different from the information contained in this document. Prospective applicants for shares should inform themselves as to legal requirements also applying and any applicable exchange control regulations and applicable taxes in the countries of their respective citizenship, residence or domicile. The Fund information, if any, contained in this document is qualified in its entirety by reference to the prospectus, and this document should, at all times, be read in conjunction with the prospectus. Detailed information on the Fund and associated risks is contained in the prospectus. The prospectus and the Key Investor Information Document for the Robeco Funds can all be obtained free of charge at www.robeco.com.

Additional information for US investors

Robeco is considered "participating affiliated" and some of their employees are "associated persons" of Robeco Institutional Asset Management US Inc. ("RIAM US") as per relevant SEC no-action guidance. Employees identified as associated persons of RIAM US perform activities directly or indirectly related to the investment advisory services provided by RIAM US. In those situations, these individuals are deemed to be acting on behalf of RIAM US, a US SEC registered investment adviser. SEC regulations are applicable only to clients, prospects and investors of RIAM US. RIAM US is wholly owned subsidiary of ORIX Corporation Europe N.V. and offers investment advisory services to institutional clients in the US.

Additional information for investors with residence or seat in Australia and New Zealand

This document is distributed in Australia by Robeco Hong Kong Limited (ARBN 156 512 659) ("Robeco"), which is exempt from the requirement to hold an Australian financial services license under the Corporations Act 2001 (Cth) pursuant to ASIC Class Order 03/1103. Robeco is regulated by the Securities and Futures Commission under the laws of Hong Kong and those laws may differ from Australian laws. This document is distributed only to "wholesale clients" as that term is defined under the Corporations Act 2001 (Cth). This document is not for distribution or dissemination, directly or indirectly, to any other class of persons. In New Zealand, this document is only available to wholesale investors within the meaning of clause 3(2) of Schedule 1 of the Financial Markets Conduct Act 2013 ("FMCA"). This document is not for public distribution in Australia and New Zealand.

Additional information for investors with residence or seat in Austria

This information is solely intended for professional investors or eligible counterparties in the meaning of the Austrian Securities Oversight Act.

Additional information for investors with residence or seat in Brazil

The Fund may not be offered or sold to the public in Brazil. Accordingly, the Fund has not been nor will be registered with the Brazilian Securities Commission – CVM, nor has it been submitted to the foregoing agency for approval. Documents relating to the Fund, as well as the information contained therein, may not be supplied to the public in Brazil, as the offering of the Fund is not a public offering of securities in Brazil, nor may they be used in connection with any offer for subscription or sale of securities to the public in Brazil.

Additional information for investors with residence or seat in Canada

No securities commission or similar authority in Canada has reviewed or in any way passed upon this document or the merits of the securities described herein, and any representation to the contrary is an offence. Robeco Institutional Asset Management B.V. is relying on the international dealer and international adviser exemption in Quebec and has appointed McCarthy Tétrault LLP as its agent for service in Quebec.

Additional information for investors with residence or seat in the Republic of Chile

Neither Robeco nor the Robecofunds have been registered with the Comisión para el Mercado Financiero pursuant to law no. 18.045, the Ley de Mercado de Valores and regulations thereunder. This document does not constitute an offer of, or an invitation to subscribe for or purchase, shares of the Funds in the Republic of Chile, other than to the specific person who individually requested this information on his own initiative. This may therefore be treated as a "private offering" within the meaning of article 4 of the Ley de Mercado de Valores (an offer that is not addressed to the public at large or to a certain sector or specific group of the public).

Additional information for investors with residence or seat in Colombia

This document does not constitute a public offer in the Republic of Colombia. The offer of the Fund is addressed to less than one hundred specifically identified investors. The Fund may not be promoted or marketed in Colombia or to Colombian residents, unless such promotion and marketing is made in compliance with Decree 2555 of 2010 and other applicable rules and regulations related to the promotion of foreign Funds in Colombia.

Additional information for investors with residence or seat in the Dubai International Financial Centre (DIFC), United Arab Emirates

This material is being distributed by Robeco Institutional Asset Management B.V. (DIFC Branch) located at Office 209, Level 2, Gate Village Building 7, Dubai International Financial Centre, Dubai, PO Box 482060, UAE. Robeco Institutional Asset Management B.V. (DIFC Branch) is regulated by the Dubai Financial Services Authority ("DFSA") and only deals with Professional Clients or Market Counterparties and does not deal with Retail Clients as defined by the DFSA.

Additional information for investors with residence or seat in France

Robeco Institutional Asset Management B.V. is at liberty to provide services in France. Robeco France is a subsidiary of Robeco whose business is based on the promotion and distribution of the group's funds to professional investors in France.

Additional information for investors with residence or seat in Germany

This information is solely intended for professional investors or eligible counterparties in the meaning of the German Securities Trading Act.

Additional information for investors with residence or seat in Hong Kong

The contents of this document have not been reviewed by the Securities and Futures Commission ("SFC") in Hong Kong. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice. This document has been distributed by Robeco Hong Kong Limited ("Robeco"). Robeco is regulated by the SFC in Hong Kong.

Additional information for investors with residence or seat in Italy

This document is considered for use solely by qualified investors and private professional clients (as defined in Article 26 (1) (b) and (d) of Consob Regulation No. 16190 dated 29 October 2007). If made available to Distributors and individuals authorized by Distributors to conduct promotion and marketing activity, it may only be used for the purpose for which it was conceived. The data and information contained in this document may not be used for communications with Supervisory Authorities. This document does not include any information to determine, in concrete terms, the investment inclination and, therefore, this document cannot and should not be the basis for making any investment decisions.

Additional information for investors with residence or seat in Japan

This document is considered for use solely by qualified investors and are being distributed by Robeco Japan Company Limited, registered in Japan as a Financial Instruments Business Operator, [registered No. the Director of Kanto Local Financial Bureau (Financial Instruments Business Operator), No. 2780, Member of Japan Investment Advisors Association].

Additional information for investors with residence or seat in Mexico

The funds have not been and will not be registered with the National Registry of Securities, maintained by the Mexican National Banking and Securities Commission and, as a result, may not be offered or sold publicly in Mexico. Robeco and any underwriter or purchaser may offer and sell the funds in Mexico on a private placement basis to Institutional and Accredited Investors, pursuant to Article 8 of the Mexican Securities Market Law.

Additional information for investors with residence or seat in Peru

The Fund has not been registered with the Superintendencia del Mercado de Valores (SMV) and is being placed by means of a private offer. SMV has not reviewed the information provided to the investor. This document is only for the exclusive use of institutional investors in Peru and is not for public distribution.

Additional information for investors with residence or seat in Shanghai

This material is prepared by Robeco Overseas Investment Fund Management (Shanghai) Limited Company ("Robeco Shanghai") and is only provided to the specific objects under the premise of confidentiality. Robeco Shanghai was registered as a private fund manager with the Asset Management Association of China in September 2018. Robeco Shanghai is a wholly foreign-owned enterprise established in accordance with the PRC laws, which enjoys independent civil rights and civil obligations. The statements of the shareholders or affiliates in the material shall not be deemed to a promise or guarantee of the shareholders or affiliates of Robeco Shanghai, or be deemed to any obligations or liabilities imposed to the shareholders or affiliates of Robeco Shanghai.

Additional information for investors with residence or seat in Singapore

This document has not been registered with the Monetary Authority of Singapore ("MAS"). Accordingly, this document may not be circulated or distributed directly or indirectly to persons in Singapore other than (i) to an institutional investor under Section 304 of the SFA, (ii) to a relevant person pursuant to Section 305(1), or any person pursuant to Section 305(2), and in accordance with the conditions specified in Section 305, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, or any other applicable provision of the SFA. The contents of this document have not been reviewed by the MAS. Any decision to participate in the Fund should be made only after reviewing the sections regarding investment considerations, conflicts of interest, risk factors and the relevant Singapore selling restrictions (as described in the section entitled "Important Information for Singapore Investors") contained in the prospectus. You should consult your professional adviser if you are in doubt about the stringent restrictions applicable to the use of this document, regulatory status of the Fund, applicable regulatory protection, associated risks and suitability of the Fund to your objectives. Investors should note that only the sub-Funds listed in the appendix to the section entitled "Important Information for Singapore Investors" of the prospectus ("Sub-Funds") are available to Singapore investors. The Sub-Funds are notified as restricted foreign schemes under the Securities and Futures Act, Chapter 289 of Singapore ("SFA") and are invoking the exemptions from compliance with prospectus registration requirements pursuant to the exemptions under Section 304 and Section 305 of the SFA. The Sub-Funds are not authorized or recognized by the MAS and shares in the Sub-Funds are not allowed to be offered to the retail public in Singapore. The prospectus of the Fund is not a prospectus as defined in the SFA. Accordingly, statutory liability under the SFA in relation to the content of prospectuses would not apply. The Sub-Funds may only be promoted exclusively to persons who are sufficiently experienced and sophisticated to understand the risks involved in investing in such schemes, and who satisfy certain other criteria provided under Section 304, Section 305 or any other applicable provision of the SFA and the subsidiary legislation enacted thereunder. You should consider carefully whether the investment is suitable for you. Robeco Singapore Private Limited holds a capital markets services license for fund management issued by the MAS and is subject to certain clientele restrictions under such license.

Additional information for investors with residence or seat in Spain

Robeco Institutional Asset Management BV, Sucursal en España with identification number W0032687F and having its registered office in Madrid at Calle Serrano 47-14^a, is registered with the Spanish Commercial Registry in Madrid, in volume 19.957, page 190, section 8, sheet M-351927 and with the National Securities Market Commission (CNMV) in the Official Register of branches of European investment services companies, under number 24. The investment funds or SICAV mentioned in this document are regulated by the corresponding authorities of their country of origin and are registered in the Special Registry of the CNMV of Foreign Collective Investment Institutions marketed in Spain.

Additional information for investors with residence or seat in South Africa

Robeco Institutional Asset Management B.V. is registered and regulated by the Financial Sector Conduct Authority in South Africa.

Additional information for investors with residence or seat in Switzerland

The Fund(s) are domiciled in Luxembourg. This document is exclusively distributed in Switzerland to qualified investors as defined in the Swiss Collective Investment Schemes Act (CISA). This material is distributed by Robeco Switzerland Ltd, postal address: Josefstrasse 218, 8005 Zurich. ACOLIN Fund Services AG, postal address: Affolternstrasse 56, 8050 Zurich, acts as the Swiss representative of the Fund(s). UBS Switzerland AG, Bahnhofstrasse 45, 8001 Zurich, postal address: Europastrasse 2, P.O. Box, CH-8152 Opfikon, acts as the Swiss paying agent. The prospectus, the Key Investor Information Documents (KIIDs), the articles of association, the annual and semi-annual reports of the Fund(s), as well as the list of the purchases and sales which the Fund(s) has undertaken during the financial year, may be obtained, on simple request and free of charge, at the office of the Swiss representative ACOLIN Fund Services AG. The prospectuses are also available via the website www.robeco.ch.

Additional information relating to RobecoSAM-branded funds/services

Robeco Switzerland Ltd, postal address Josefstrasse 218, 8005 Zurich, Switzerland has a license as asset manager of collective assets from the Swiss Financial Market Supervisory Authority FINMA. RobecoSAM-branded financial instruments and investment strategies referring to such financial instruments are generally managed by Robeco Switzerland Ltd. The RobecoSAM brand is a registered trademark of Robeco Holding B.V. The brand RobecoSAM is used to market services and products which do entail Robeco's expertise on Sustainable Investing (SI). The brand RobecoSAM is not to be considered as a separate legal entity.

Additional information for investors with residence or seat in Liechtenstein

This document is exclusively distributed to Liechtenstein-based duly licensed financial intermediaries (such as e.g. banks, discretionary portfolio managers, insurance companies, fund of funds, etc.) which do not intend to invest on their own account into Fund(s) displayed in the document. This material is distributed by Robeco Switzerland Ltd, postal address: Josefstrasse 218, 8005 Zurich, Switzerland. LGT Bank Ltd., Herrengasse 12, FL-9490 Vaduz, Liechtenstein acts as the representative and paying agent in Liechtenstein. The prospectus, the Key Investor Information Documents (KIIDs), the articles of association, the annual and semi-annual reports of the Fund(s) may be obtained from the representative or via the website www.robeco.ch.

Additional information for investors with residence or seat in the United Arab Emirates

Some Funds referred to in this marketing material have been registered with the UAE Securities and Commodities Authority (the Authority). Details of all Registered Funds can be found on the Authority's website. The Authority assumes no liability for the accuracy of the information set out in this material/document, nor for the failure of any persons engaged in the investment Fund in performing their duties and responsibilities.

Additional information for investors with residence or seat in the United Kingdom

Robeco is subject to limited regulation in the UK by the Financial Conduct Authority. Details about the extent of our regulation by the Financial Conduct Authority are available from us on request.

Additional information for investors with residence or seat in Uruguay

The sale of the Fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627. The Fund must not be offered or sold to the public in Uruguay, except in circumstances which do not constitute a public offering or distribution under Uruguayan laws and regulations. The Fund is not and will not be registered with the Financial Services Superintendency of the Central Bank of Uruguay. The Fund corresponds to investment funds that are not investment funds regulated by Uruguayan law 16,774 dated September 27, 1996, as amended.

© Q1/2021 Robeco