

Theme study

Unraveling biodiversity



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In partnership with



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Preface



Asset owners in the street are beginning to ask a difficult question: who is responsible for financing climate risk and nature's collapse?

Pension fund trustees have a mandate to act 'prudently' with their client's funds. But is investing in companies that destroy nature or pollute our atmosphere acting prudently? If profit is all and planet is nothing, is that the mandate of a fool, who will finance humanity into extinction?

An Asian asset manager once said to me: "In China, we are asking, what's the point of a pension fund, if, when it pays out, you cannot breathe the air and the world is dead?"

There is one number I would like you to focus on: 69. That's the percentage of wildlife populations that have vanished from our Earth since 1970, according to the WWF.¹ That is 69% of wildlife, gone. It's not just half of our economy that is dependent on nature (as calculated by WEF), it is all of it, because without nature's support, our economy would not survive.

This report provides a comprehensive review of how the financial sector, and in particular the pensions and insurance sectors, should consider responding to the daunting challenge of the loss of biodiversity.

The key steps that I believe you should most consider are:

- 1. Get up to speed on this issue.** COVID-19 demonstrated that nature-related risks could increase even faster than the risks posed by climate change and could affect all sectors of our economy. Nature-related risks are not just about bees and butterflies. They're about the collapse of the very infrastructure that keeps the earth safe.
- 2. Screen your portfolios.** Measuring nature-related risks is currently difficult but this is rapidly becoming easier. Tools such as ENCORE enable a portfolio's dependency and impact on nature to be revealed, and more data, metrics and standards will be released every year.

3. Look for opportunities. The big opportunity emerging from the climate crisis is the reimagination of the global energy system. Reform of the global food system will be next, driven by the nature crisis.

Above all, do not sit on your hands. Hire some ecologists who know what they are talking about. And don't be put off by confusion caused by greenwashing or green-hushing (not mentioning sustainability efforts to avoid greenwashing accusations). There are choppy waters to navigate, but there's also a rising tide of change that is not going to stop. Transparency and disclosure will reward leaders and isolate laggards.

With the help of many others, I helped to launch the Taskforce on Nature-related Financial Disclosures (TNFD) with the goal of driving funds towards a more nature-positive economy. If there is one thing I would urge you to do, it is to start using this framework's LEAP approach – Locate, Evaluate, Assess and Prepare – as a way to manage risks and identify opportunities in this new emerging economy.

Those managing long-term funds that are intended to secure their clients a good retirement or to keep them safe and well, need to take account of life on earth. Because without it, life won't be worth living. This report provides a valuable insight into the issue of nature-loss, and shares what you, as asset owners, can do to tackle it.



Andrew W. Mitchell
Vice Chair
TNFD Stewardship Council
Founder, Global Canopy

Introduction

1.1 Context | Our society, let alone our economy, cannot function without what nature provides freely in varying forms: fresh air, clean water and fertile soils. All of these are part of healthy ecosystems. Human activity, however, has led to imbalances in our ecosystems. This is illustrated clearly by an ongoing trend of biodiversity loss at an alarming rate. One million species – of eight million species in total – are threatened with extinction within decades.²

It is crystal clear that this development has a material effect on the viability of our planet and the functioning of the economy. How does biodiversity relate to Dutch pension funds and insurance companies and how do these investors relate to biodiversity? These are key topics we address in this report.

With this report, we intend to increase awareness of the importance of nature and the urgency to act on biodiversity loss, in order to bend the curve. We hope the results of our research and the many biodiversity-related examples in this report, will inspire investors to actively learn from shared experiences.

We analyse the relationship between biodiversity and the Dutch financial sector, including how Dutch insurance companies and pension funds make investment decisions that impact nature. We seek to answer the following questions: do investors take biodiversity into account at all? And if so, what actions are they taking to address biodiversity loss and what challenges do they experience?

1.2 Outline | This report is the result of the following methods of research:

- Desk research was used to provide a theoretical background on biodiversity and to provide a foundation for further study. An overview of the sources can be found in List of endnotes.
- A survey was used to obtain self-reported data from Dutch pension funds and insurance companies on their approach to biodiversity in terms of policies and investment instruments. The questionnaire was sent to 73 financial institutions. It was completed by 17 insurance companies and 43 pension funds, which represent 84% of the research group.
- Semi-structured interviews with experts and investors were carried out so that they could share their perspectives and provide context to the theory and survey results.

These interviews are included within the report.

Chapter 2 describes the subject of biodiversity. Its relevance for investors is clarified through the perspective of biodiversity impact, dependencies, and risks. This chapter also touches on developments on standards and regulation. The analyses and findings are displayed in chapter 3. Chapter 4 presents the conclusions and recommendations.

As mentioned, you will find interviews with experts and investors within the report. We talked to Eric Douma, board member of BPL Pensioen, about taking ownership as a board when it comes to decision-making relating to biodiversity and nature. With Roel Nozeman, we discussed the balance between data and vision and how not to get lost in the data. Pension fund Rail & OV published

a case study on how institutional investors can include biodiversity in socially responsible investment (SRI) policies, which we discussed with Joël Habets and Simona Kramer. Romie Goedicke works for the United Nations Environment Programme Finance Initiative (UNEP FI). She explained its role in the development of the TNFD and the materiality of biodiversity. Finally, we interviewed Pavan Gandhi and Guido Evertz of insurance company Unigarant.



Jacqueline Duiker
Senior Manager Sustainability
and Responsible Investment

2. Biodiversity

In this chapter, we introduce the subject of biodiversity and share how it relates to the financial sector. We also touch on some relevant regulation and initiatives.

2.1 WHY BIODIVERSITY IS VITAL

WWF defines biodiversity as ‘the variety among living organisms from all sources at the level of genes, species or ecosystems.’³ It concerns the living part of nature. Non-living nature is closely related to biodiversity, because air, water, soil and minerals are the conditions that make life possible. The living and non-living parts of nature work together in self-regulating systems, which we call ecosystems. Ecosystems can be as small as a garden or as large as a tropical rainforest or river delta.⁴ If ecosystems have many shared characteristics with regards to vegetation, soil, climate and wildlife, we can group them together in biomes. The five major categories of biomes are aquatic, grassland, forest, desert and tundra. These categories can be further split up in more specific biomes, such as freshwater, savanna, taiga or alpine tundra.⁵

As humans, we depend on and make use of nature through ecosystem services. Depending on their function for society, ecosystem services can be defined as provisioning, regulating or cultural services (see figure 2.1). Provisioning services are the most tangible, encompassing, for instance, fresh water, food and wood. Regulating services include pollination, soil fertility and carbon sequestration. Lastly, nature also provides a wide range of cultural services to people, from Christmas trees (symbolic value), to a walk in the forest (recreative value) and nature excursions (educative value). Besides the intrinsic value of these services, they also create societal and economic value.⁶

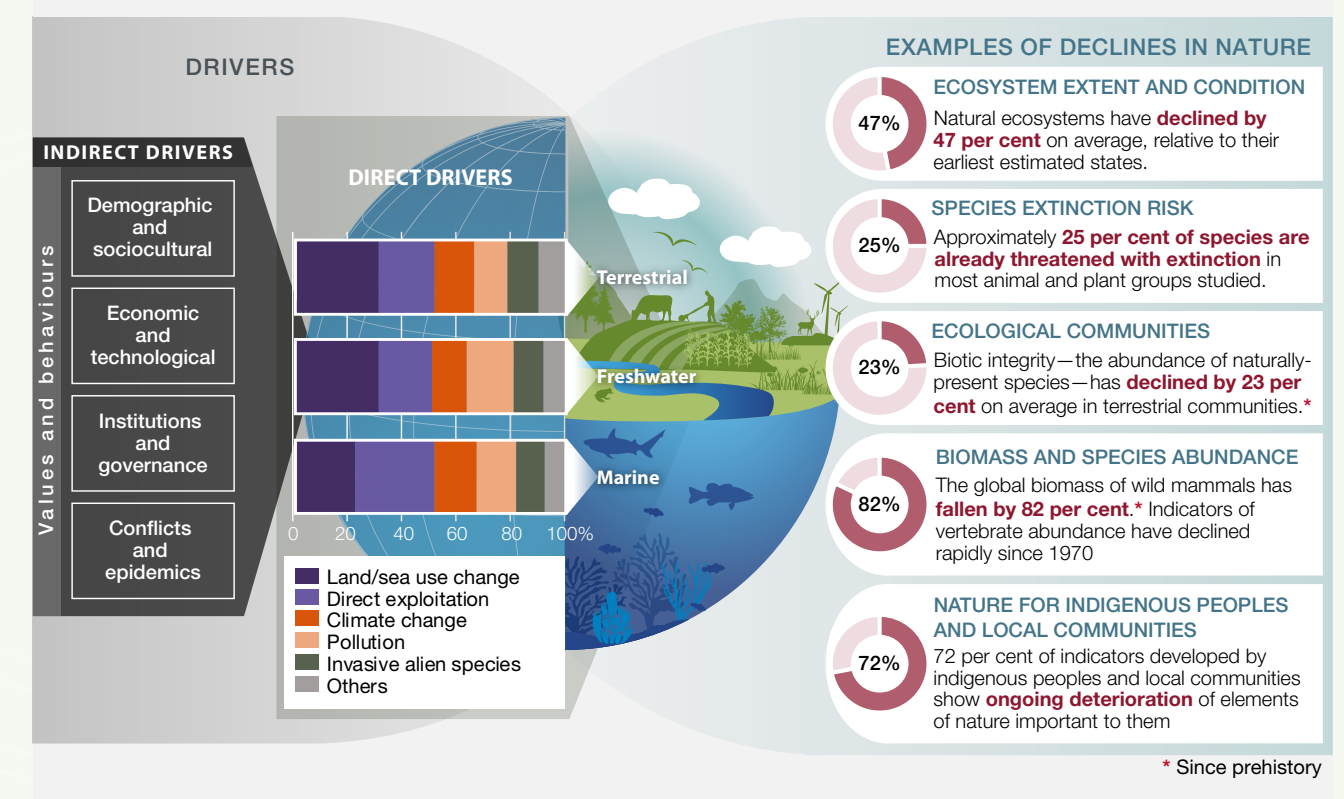
Our human activities also have an impact on biodiversity and are in fact the main reason for its ongoing decline.

Figure 2.1 | An overview of the different ecosystem services



Hebben jullie misschien het originele Shutterstock beeld voor mij?

Figure 2.2 | The IPBES direct and indirect drivers of biodiversity loss⁹



This decline puts pressure on the functioning of ecosystem services. Because of our dependence on them, this puts pressure on our society and economy.⁷ Therefore, the loss of biodiversity is a material topic for the private and financial sectors.

2.2 BIODIVERSITY AND THE FINANCIAL SECTOR

In this section, we will elaborate on the relevance and relationship of biodiversity to the financial sector. This relationship is two-sided. Investors impact biodiversity through the activities they invest in or finance. On the other side, investors are also dependent on biodiversity and so can be affected by the loss of biodiversity.

2.2.1 Impact drivers

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is the equivalent of what IPCC is for climate change. According to IPBES, human activities are the main reason for biodiversity decline. By financing these activities, the financial sector

indirectly contributes to the loss of biodiversity. IPBES distinguishes indirect and direct drivers that impact biodiversity loss.⁸

Indirect drivers

Indirect drivers are the forces that underlie and shape the extent, severity and combination of direct drivers that operate in a given place. They include key institutional and governance structures in addition to social, economic and cultural contexts. They are the underlying causes of biodiversity loss and can be external to the system in question. Indirect drivers almost always operate in concert and across multiple scales and varying levels of proximity from the location in question, from the global (markets, commodity prices, consumption patterns), to the national and regional (demographic change, migration, domestic markets, national policies, governance, cultural and technological change) to the local (poverty, economic opportunities, etc).

Direct drivers

Direct drivers unequivocally influence biodiversity and ecosystem processes. For example:

- **Changes in land and sea use** are the biggest influence that people have on nature. This includes the conversion of land through deforestation and mining, the growing of food and the built environment.
- **Natural resource use and exploitation** concerns activities that exploit animals and plants, such as overfishing, the wildlife trade and mining.
- **Climate change** leads to global warming, rising sea levels and droughts, and it also leads to biodiversity loss. Vice versa, biodiversity loss aggravates climate change, for instance because a loss of nature and soil quality means that less carbon can be stored in nature.
- **Pollution** comes in many forms. Human activities pollute the soil, air and water through, for instance, nitrogen and ammonia emissions from intensive agriculture, plastic and urban waste and oil spills.

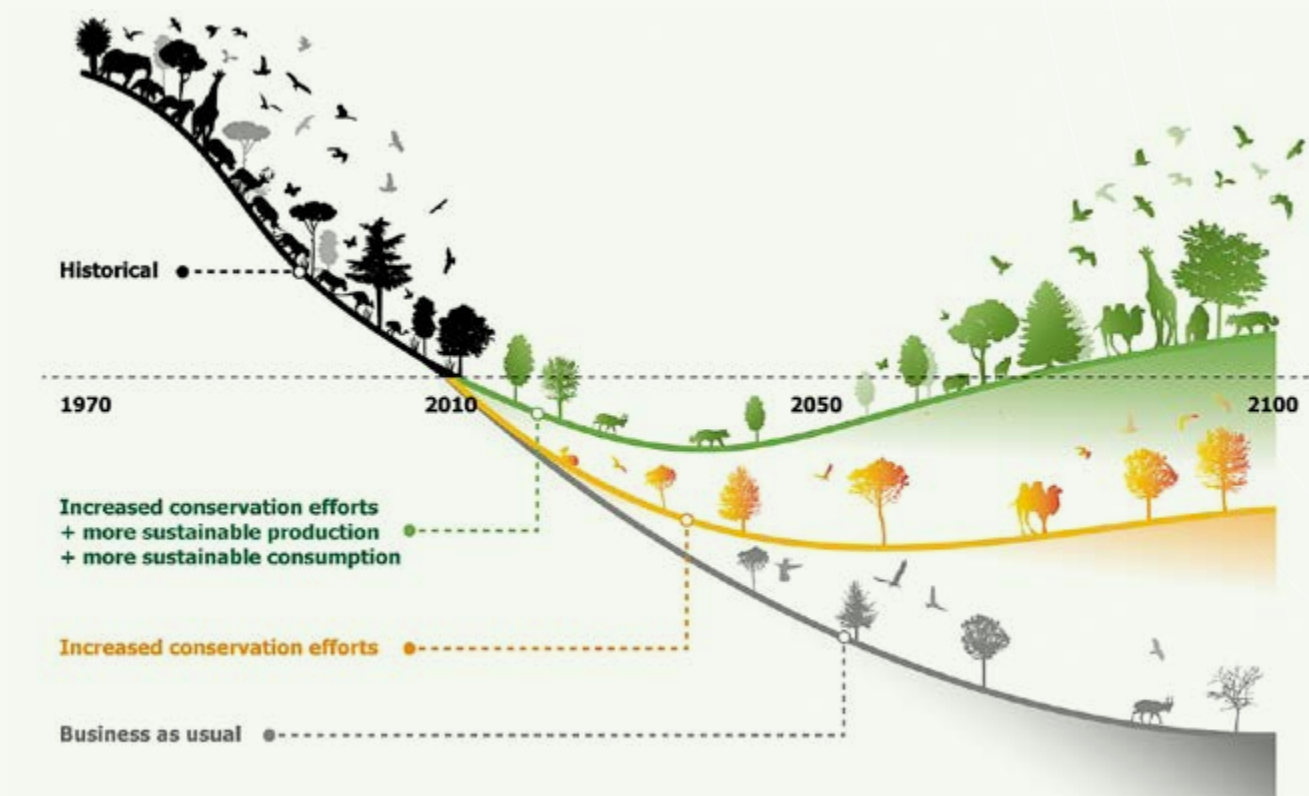
- **Invasive species** are non-native species that can disrupt the local ecosystems and cause native species to die out.

Direct drivers are interconnected

Trying to understand and manage biodiversity loss often leads to a focus on one or a few drivers. However, it is important to keep in mind that these drivers are interconnected and all drivers need to be addressed in order to 'bend the curve' on biodiversity loss (see figure 2.3).

For example, climate change is one of the direct drivers of biodiversity loss. Global warming alone can drive many species to extinction, with extinction numbers rising with global temperatures. On top of that, extreme weather events as a result of climate change negatively affect habitats and ecosystems. At the same time, biodiversity loss decreases the functioning and resilience of our climate system. Healthy ecosystems act as carbon

Figure 2.3 | Bending the curve of biodiversity loss¹¹



This artwork illustrates the main findings of the article, but does not intend to accurately represent its results (<https://doi.org/10.1038/s41586-020-2705-y>)



LOCATION- AND CONTEXT-SPECIFIC IMPACT AND DEPENDENCY

Whichever sector a company is in, the level of its dependence and impact on nature will depend, at least in part, on the location where its activities are carried out. The same activity can have a very different impact depending on its location. Assets and operations located in more vulnerable areas and biomes will have a greater impact on nature and biodiversity than those in less vulnerable areas. However, it is important to consider both direct and indirect impact, not just where the company's own operations are based. The energy and agricultural sector, for example, causes substantial direct harm to biodiversity, whereas the food and apparel sector mainly causes harm through its suppliers.

sinks by absorbing greenhouse gases. They also act as a buffer to climate impacts, for instance by protecting landscapes from flood risks.¹⁰

Climate change mitigation can lead to biodiversity loss as well, because of the minerals that are needed for the energy transition and the impacts of wind- and solar-power facilities on nature. This poses a challenge,

since the interconnectedness of biodiversity loss and climate change means that we cannot approach these issues separately, we have to tackle both.

2.2.2 Dependencies

All economic activity depends on the availability of ecosystem services, such as water purification, flood protection, pollination, and nutrient recycling. The Dutch Central Bank (DNB) estimated that €510 billion of investments of Dutch financial institutions have a high or very high dependency on at least one ecosystem service.¹²

Sectors that have the highest negative impact on biodiversity, are often also those most dependent on biodiversity. The Task Force on Nature-Related Disclosure (TNFD) has identified the eight sectors and accompanying industries that this most applies to:

- Food and beverage: meat, poultry and dairy, agricultural products, beverages, and food processing
- Renewable resources and alternative energy: forestry, pulp and paper products, and biofuels
- Infrastructure: engineering and construction services, water utilities and distributors, and electric utilities and power generators
- Extractives and mineral processing: construction materials, metals and mining, and oil and gas exploration and production
- Health care: biotechnology and pharmaceuticals
- Resource transformation: chemicals
- Consumer goods: apparel, accessories and footwear
- Transportation: cruise lines and marine transportation.¹³

Interview with Guido Evertz and Pavan Gandhi (Unigarant)

We spoke with Guido Evertz, Sustainability Manager, and Pavan Gandhi, ESG Advisor for Investments, from Unigarant NV. (Unigarant NV also acts on behalf of the insurance company UVM Verzekeringsmaatschappij NV; hereafter, the two companies are jointly referred to as 'Unigarant'). Both companies are part of the ANWB group. As such, themes such as mobility, tourism and recreation are central to Unigarant. Unigarant originated as a solution to a societal problem – the need for specialist insurance for mopeds. Societal values are central to Unigarant, and these extend to sustainability and the conservation of nature. We discussed the role of Unigarant in relation to these topics and the balancing act between feasibility, reliability and sustainability.



How do you see the role of Unigarant when it comes to the topic of biodiversity?

When it comes to biodiversity, Unigarant has an integrated approach. We see biodiversity as an integral part of our overarching people-planet-profit approach. Due to limited capacity and upcoming regulations, we need to focus our efforts. Following a double materiality assessment, we defined carbon reduction, circularity and social sustainability as our focus areas. We have not defined biodiversity as a priority topic as such, but our focus areas all definitely link to biodiversity. We are adopting an active approach towards our focus areas, starting with learning about feasible and monitorable targets on biodiversity. We want to prepare ahead of time. That way, when Unigarant is ready to go public about our

views on this topic, we'll be able to define our strategy relatively quickly.

What approach does Unigarant take in its areas of focus?

Our targets are in line with existing policies, such as the Paris Agreement, and with the United Nation's SDGs 8 (Decent Work and Economic Growth), 12 (Responsible Consumption and Production), and 13 (Climate Action). To amplify the reach of our responsible investment strategy, we are planning to refine our exclusion and engagement to supplement the ESG screening we have already implemented for our investments.

Co-operation with suitable partners is important for our engagement activities. As a medium-sized insurance company, joining forces enhances

our message and contributes towards effective investor-investee dialogue. Besides the increased influence of collective engagement versus single party engagement, we appreciate the opportunity to gain experience of stewardship practices in topics such as water use and waste production. These are important topics to us and very relevant to ANWB. 'Recreation' as a responsible interaction between humanity and nature is central to ANWB, which makes our engagement on nature and biodiversity-related topics consistent with our values.

How does the size of Unigarant affect the risks it can take?

We are a medium-sized investor from the insurance sector, with a low-risk profile. As such, we have limited room for equity or illiquid investments. Reliability is a key feature of our identity as an insurer. In line with that, any goals that we set must be feasible.

This means that we aim to set achievable goals and take a pragmatic approach.

Simultaneously, climate change and biodiversity loss are also a risk in themselves. Transition risks, in particular, are increasingly relevant in the light of sustainability and biodiversity. New regulations have made sustainability an integral part of discussions on risks, returns and asset allocation. In this manner, social return and risk-avoidance has become an integral part of investing.

is why our focus is currently on complementing our ESG investing strategy by further calibrating the implementation of exclusion, engagement and voting instruments, to increase the deliberate thematic impact of our investment portfolio. These are instruments that we can apply independently of the risk budget. We believe that there are many ways that lead to Paris and Montreal.

to implement them is at least as essential as measuring the effectiveness of their strategies using measures that can be captured in numbers (such as CO2 emissions).

This is a matter of measuring at the 'front', i.e. the ambition level, or at the 'back', i.e. the success of implementation. Currently, ESG performance measurement by investors and businesses is carried

“Sustainability should be about more than measuring carbon emissions. It should also be about good governance”

How do you decide what is feasible for you?

Our decisions are made according to the requirements of the Solvency II framework and the available ESG screening instruments. We pick the instruments that are investable, accessible and liquid. For instance, to be successful in impact investing, we have picked green bond strategies and sustainable equity indexes. To go beyond that, we would need more financial space and expertise in our operational set-up in order to manage the associated risks. We set the risk budget based on own risk appetite, and then see what room there is for other goals within the risk budget. We certainly have ambition when it comes to sustainability, but we do not want to overpromise what we are capable of. That

What would help you in the process of becoming more nature-positive?

It would be great if there was more attention paid to creating non-numerical indicators on sustainability, as an upfront measure to show companies' willingness to act more sustainably, in terms of goals and follow up actions. Right now, sustainability mainly takes place in the non-financial reporting sphere, where there is an emphasis on quantifying sustainability outcomes and measurable indicators. There is little focus on measuring ambitious commitments, however. We find this equally important, as long as the announced commitments are acted on accordingly. The willingness of boards to speak out about their sustainability ambitions and how they intend

out retrospectively, by measuring sustainability indicators such as water use and carbon emissions. However, if we want long-term returns on sustainability, it is crucial that businesses are publicly open about their intentions and set good targets. This is an important factor in our engagement trajectories as well. In other words, sustainable investing and reporting on sustainability should be about more than just measuring carbon emissions; it should also be about good governance.

2.2.3 Risks

In its Global Risks Report 2023, the World Economic Forum (WEF) states that ‘Biodiversity loss and ecosystem collapse’ is the fourth most urgent risk of the coming decade. The only risks considered greater than this are the failure to mitigate climate change, the failure to adapt to climate change and the occurrence of natural disasters and extreme weather events All of these are still nature-related risks.

Loss of biodiversity leads to significant financial risks. WEF estimates that \$44 trillion of economic value is highly dependent on ecosystem services. This equates to more than half of global GDP.¹⁴ At the same time, the increase of economic activities is a key driver of biodiversity loss. By balancing these interests, the financial sector can play a key role in valuing biodiversity and reducing the risk of biodiversity loss.

The relationship between the financial sector and biodiversity works both ways: the effect that biodiversity and, therefore, biodiversity loss has on investees, and the effect that a financial institution has on biodiversity through the activities of its investees. Because of this double materiality – where both financial materiality and impact materiality are considered – biodiversity loss creates several risks for investors. Generally, three types of risk are considered: Physical risk, transition risk and systemic risk.¹⁵

Physical risk

Physical risk arises from biodiversity loss leading to material destruction, which can result in direct economic and financial losses. Physical risks can be chronic and acute. An example of a chronic physical risk is declining harvests because of the overexploitation of soil, a decline in pollinators, and increasing droughts. Biodiversity loss can also limit pharmaceutical developments and drug availability and discovery, as 80% of registered medicines come from plants or are inspired by natural products.¹⁶

Damage to assets is an acute physical risk. For instance, water damage can be caused by decreased coastal protection and more extreme weather conditions, both of which are consequences of biodiversity loss.

Transition risk

Transition risk results from policy measures, litigation,

changing consumer preferences, and technological developments.

Investors and investees that fail to adapt to these developments towards a nature-positive economy are exposed to potential financial losses. Examples of transition risks include increasing regulatory pressure, such as the maximum amount of carbon or nitrogen emissions allowed; increasing biodiversity-related disclosure requirements; and the recently adopted EU Deforestation Regulation.¹⁷

Failure to adapt to these types of developments can lead to adverse financial consequences for a company, such as legal repercussions, reputational damage or a drop in sales. If investors do not account for biodiversity in investment decisions, they are exposed to these same risks through their investments, potentially leading to decreased returns, stranded assets or reputational damage.¹⁸

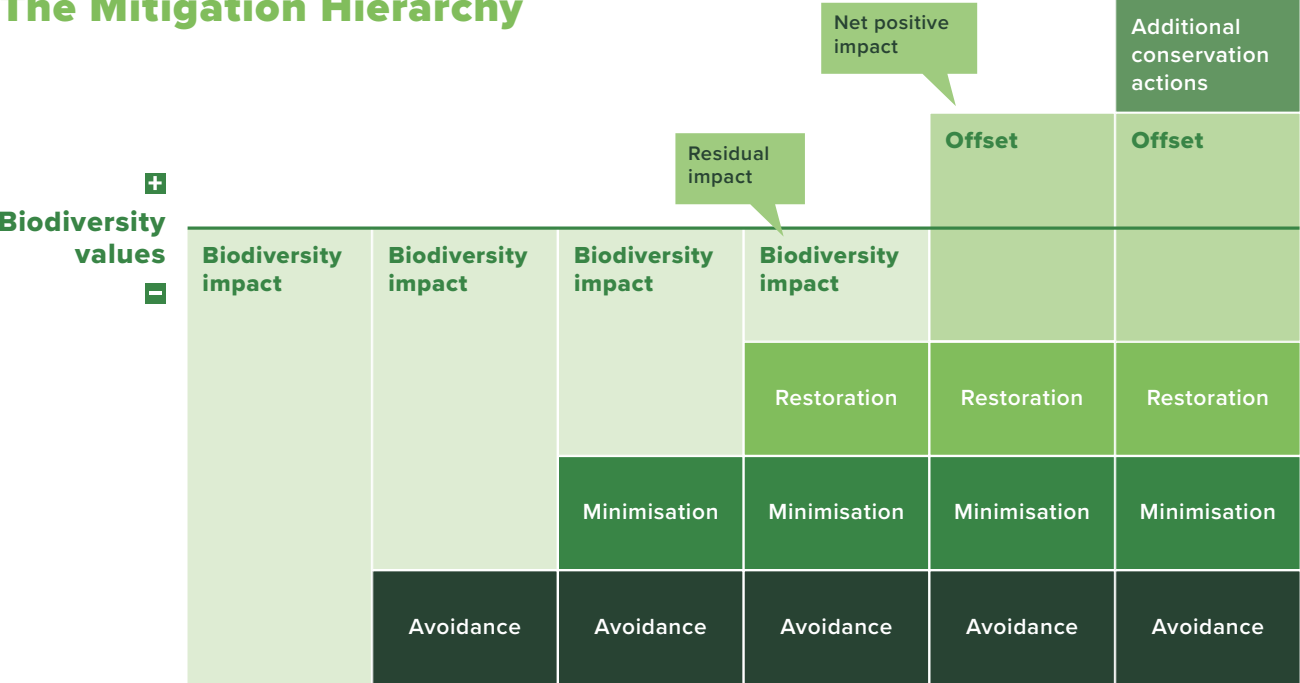
Systemic risk

Systemic risk refers to the larger scale risk of the breakdown of an entire system. Ongoing biodiversity loss will lead to tipping points where restoration is no longer feasible. Moreover, tipping points can amplify and accelerate each other, so the collapse of one ecosystem can

EXAMPLE

Deforestation and hotter and drier conditions are causing a dieback of the Amazon rainforest. At the same time, the dieback of the rainforest also reinforces the decrease in rainfall and increase in biodiversity loss, creating feedback loops.¹⁹ Eventually, this could lead to a biome shift from rainforest to savannah in the Amazon. This will drastically reduce biodiversity and the capacity of this region to sequester carbon dioxide, increasing climate change. The socio-economic costs as a consequence of the Amazonian forest dieback are estimated to be ten to a hundred times more than the costs of acting now to prevent deforestation and restore the ecosystem of the Amazon.²⁰

The Mitigation Hierarchy



affect other ecosystems or geographic areas, creating a domino effect of nature loss. The consequences of disrupting ecosystems will affect economic systems as well as financial systems. For investors, systemic risks can be regarded as overall macro risks that are not specific to an individual investee, but which can be mitigated by its activities.

MITIGATION HIERARCHY

Due to the increasing awareness of the urgency to address biodiversity loss, many organisations are developing policies and plans. However, these often have a wide range of focuses and ambitions, and don’t always set out the organisation’s priorities, which can make it more difficult to make a significant impact on any one area. The mitigation hierarchy is a useful tool which illustrates the different steps and stages towards a nature-positive society (see figure 2.4): avoid, minimise, restore and offset biodiversity loss. These steps are ordered according to the reliability of their potential impact. For example, avoiding biodiversity loss is a more reliable way of making a positive environmental impact than trying to restore or offset lost biodiversity.²¹

An example of avoiding negative impacts is not placing infrastructure or operations in key biodiversity areas or vulnerable ecosystems. It is easiest to avoid impact at the beginning of a project, so ideally biodiversity should be considered from the start. Organisations can then look at mitigating any remaining negative impact, for example by implementing measures that reduce pollution, noise and emissions. Restoring biodiversity is the third step, in other words improving degraded ecosys-

tems. The best way to return an area back to its original state depends on the type of ecosystem. For instance, native trees might be planted in forests and on mountains; a more diverse range of crops might be grown on farmlands, using natural fertiliser; and efforts might be undertaken to grow coral, mangroves and seagrass in oceans and along coastlines.²²

If any residual, adverse impacts remain after full implementation of steps to avoid, minimise and restore biodiversity loss, a company can take the step to offset these residual negative impacts. However, biodiversity offsetting is an imperfect science, because of the uncertainty of impact and outcomes. This has to do with the impossibility of quantitatively comparing multiple ecosystems, because of the location-specific value of ecosystems and its services. Degraded or lost biodiversity and ecosystems in one place cannot simply be replaced with increasing biodiversity in another place. Therefore, it should be used as a last resort if all other steps have been taken and still lead to residual impact.²³

Financial institutions are in a position to drive significant change and play an important role in reversing the loss of biodiversity and restoring ecosystems. To do so, they must consider biodiversity in investment decisions. In order to fully implement the mitigation hierarchy, financial organisations need to be aware of the nature-related risks they are exposed to and the impact they have on biodiversity loss. Once you know this, the mitigation hierarchy can be applied to any project or sector in order to achieve nature-related goals.²⁴

2.3 REGULATION AND INITIATIVES

The importance of integrating biodiversity in decision making is underlined by regulatory requirements, including non-financial reporting.

Global frameworks

- **The Global Biodiversity Framework (GBF):** This was adopted during the 15th UN Convention on Biological Diversity in December 2022. The Post-2020 Global Biodiversity Framework is an international agreement that outlines ambitious targets and actions to halt and reverse biodiversity loss, promoting the conservation and sustainable use of biological diversity on a global scale. The GBF advocates for a whole-of-society approach.
- **Sustainable Development Goals:** Life on Land (SDG 15), Life Below Water (SDG 14), Climate Action (SDG 13) and Clean Water and Sanitation (SDG 6) are the key SDGs that concern the biosphere.

EU Regulation

- **The Sustainable Finance Disclosures Regulation (SFDR)** for the financial sector compels financial market participants and advisors with 500 or more employees to provide transparency regarding ESG aspects of their investment products, as well as their integration of sustainability risks. To do so, investors must publish a Principal Adverse Impact (PAI) statement of their portfolios on their websites.
- Companies that are subject to the Corporate Sustainability Reporting Directive (CSRD) must now report using the European Sustainability Reporting Standards (ESRS). These can be used to report on a range of non-financial information, including biodiversity. The European Financial Reporting Advisory Group is responsible for drafting the ESRS. ESRS E4 is a disclosure standard on biodiversity and ecosystems that companies can use to assess their impact and dependencies on nature and to comply with the CSRD.
- **The EU Taxonomy classification system** sets out criteria for determining whether an economic activity is environmentally sustainable. The system is part of the EU's efforts to promote sustainable finance and investment. The SFDR refers to this system and requires disclosures based on the classification described in the EU Taxonomy. Financial institutions can use the EU Taxonomy to determine whether an investment contributes to biodiversity protection and restoration (objective 6) and other EU Taxonomy objectives.
- **The EU Deforestation Regulation (EUDR)** requires European companies with cocoa, coffee, soy, wood, palm oil, rubber and cattle in its supply chains to conduct closer due diligence. From 30 December 2024, these companies are obliged to ensure that (the production of) their goods did not result from recent deforestation, forest degradation or breaches of local environmental and social laws.
- **The proposal of the Nature Restoration Law**, as part of the European Green Deal and the 2030 Biodiversity Strategy, calls to put in place measures to recover 20% of EU's land and 20% of sea areas by 2030, and to recover and protect all ecosystems in poor quality by 2050. Moreover, it includes ecosystem-specific targets and obliga-

tions. To successfully implement the law, European governments are obliged to create national restoration plans, including concrete measures and monitoring plans.

Voluntary initiatives and frameworks

In order to navigate the complexity of biodiversity and integrate biodiversity in decision making, investors can turn to existing initiatives and commit to voluntary measurement and disclosure frameworks. These include:

Collective initiatives

- **Finance for Biodiversity Pledge:** The Finance for Biodiversity Foundation initiated this pledge, which financial institutions can sign to commit to using their financial activities and investments to protect and restore biodiversity. The five steps of the pledge are:
 1. Collaboration and sharing knowledge
 2. Engaging with companies
 3. Assessing impacts
 4. Setting targets
 5. Reporting publicly on the above before 2025.
 Moreover, the Finance for Biodiversity Foundation is undertaking collective action with the signatories of the pledge.

Active ownership

- **Nature Action 100:** Nature Action 100 is a global investor engagement initiative focused on driving greater corporate ambition and action to reverse nature and biodiversity loss. The initiative engages companies in key sectors that are deemed to be systemically important in reversing the loss of nature and biodiversity by 2030. It was conceived by a group of institution-

al investors known as the Launching Investor Group.

Reporting standard

- **Global Reporting Initiative (GRI):** GRI 304 guides organisations in reporting their impacts on biodiversity, ecosystems and ecosystem services, therefore helping them to disclose their efforts and outcomes related to preserving and enhancing natural habitats and biodiversity.

Measurement and disclosure instruments

- **The Partnership for Biodiversity Accounting Financials (PBAF):** the PBAF Standard provides guidance for financial institutions to assess and disclose the impact and dependencies on biodiversity of their loans and investments. It generates information and data needed to execute these assessments, so

that financial institutions can report on their nature-related risks and opportunities.

- **The Taskforce on Nature-related Financial Disclosures (TNFD):** the TNFD is a risk management and disclosure framework that helps organisations to report and act on nature-related risks. The framework is developing guidance for all sectors, as well as guidance for specific sectors and biomes. Generally, the recommendations on disclosures and target-setting are categorised under four pillars: governance; strategy; risk and impact management; and metrics and targets. The risk and opportunity assessment is based on four main steps:
 1. Locate the interface with nature
 2. Evaluate dependencies and impacts
 3. Assess material risks and opportunities
 4. Prepare to respond and report

- **Science Based Targets Network (SBTN):** SBTN aims to transform economic systems and protect nature across the globe – air, water, land, biodiversity and oceans. It is responding to the demand for more methods, guidance and tools to set science-based targets (SBTs) for all of Earth's systems. The five distinct steps in the process of setting nature-related SBTs are: assess, prioritise, measure, act and track.
- **Accountability Framework:** The ICO's Accountability Framework guides financial institutions on how to establish policies for responsible lending and investment in the food, agribusiness and forestry sectors. It also helps financial institutions to screen and engage with their portfolios to fulfil these policies.

Figure 2.5 | Overview of biodiversity regulations, frameworks and initiatives



Interview with Roel Nozeman

Roel Nozeman is Head of the biodiversity team at ASN Bank and Programme Director at the Partnership for Biodiversity Accounting Financials (PBAF). ASN Bank is the first bank in the world to set itself the goal of realising an overall net-positive effect on biodiversity in 2030 from its investments and loans. In this interview, we discuss ASN's strategy to reach this goal, how pension funds and insurers should approach biodiversity, and the importance of vision versus data and measuring.



A net-positive effect on biodiversity is a very ambitious goal; what is your approach?

It's certainly an audacious challenge. Biodiversity and ecosystems are complex, and mitigating negative impacts on biodiversity is difficult. Right now, we have a much greater negative impact on biodiversity than a positive impact through our investments, even though we have very strict sustainability policies in place. So how to go from here to a net-positive impact?

We have developed five strategies to realise our long-term goal.

- 1) The development of an open-source methodology to measure the impact we have on biodiversity (the Biodiversity Footprint Financial Institutions (BFFI)). We started this complex work in 2015 and were one of the first financial institutions globally to work on such a tool. It's great to see the development of new tools, methodologies and data since then.
- 2) Decreasing our negative impact on biodiversity. We have developed strict sustainability policies to prevent and minimise the

negative impact we have on biodiversity. Since 2015, we have used the BFFI to measure and decrease our negative impact on biodiversity.

- 3) Increasing our positive impact on biodiversity. To be able to invest in activities that contribute to the protection and restoration of biodiversity, we needed to create a new vehicle for investing. For this reason, ASN Impact Investors has developed the ASN Biodiversity Fund. This fund invests in four themes: sustainable forestry; sustainable agroforestry and regenerative farming; sustainable seas and oceans; and ecotourism. We have also started exploring opportunities in this market with our bank's lending department.
- 4) Contributing to the much-needed standardisation of biodiversity impact and dependency assessments via the initiation and support of the development of the PBAF Standard.
- 5) Support of civil society and nature partners and projects, e.g. Natuur & Milieu, IVN and De Rijke Noordzee.

Can you tell us more about the biodiversity funds that now exist?

Globally, there are approximately 20 funds that aim to improve biodiversity. However, there is quite a big difference in the approach they take; in my opinion, they vary from grey with a green label to dark green with real impact. For example, there is New Forests, which focuses on forestry and

forest conservation to support biodiversity as well as climate goals. Other funds combine environmental and social solutions. For instance, Clarmondial invests in sustainable smallholder farmers in Sub-Saharan Africa through its Food Securities Fund, and the Amazon Biodiversity Fund directs its investments towards inhabitants of the Amazon who work on improving biodiversity in this area.

The aim of the ASN Biodiversity Fund that was developed by ASN Impact Investors is to invest in projects and companies that regenerate and conserve biodiversity. The fund has a focus on sustainable forestry; sustainable agroforestry and regenerative farming; sustainable seas and oceans; and ecotourism. It's the first listed biodiversity fund that is open to both retail and institutional investors. This accessibility makes it easier for us to reach our goals. However, the fund still needs to grow significantly if we're to reach our ultimate goal of becoming net positive. Fortunately, the fund has a lot of potential to grow. And institutional investors are well suited to play a role in scaling up the fund and the underlying projects.

Would there be enough projects and companies to invest in if the Biodiversity Fund was to grow?

This is a chicken and egg discussion. The number of projects is not the main problem; there is enough development in the market's pipeline. The appetite of investors should really increase, however. Of course,

it takes time for project developers to develop new projects, but the number and feasibility of projects also relies on active demand. Right now, we mainly invest in listed funds, in which governments and institutions like the World Bank are often involved. However, government finance alone is not sufficient to restore nature, so it is really important that more institutional investors and listed companies also take responsibility.

What approach should pension funds and insurers take?

I could start a whole story about the importance of impact assessment, but it is actually much simpler than that: make sure that there is a

For some topics, like biodiversity, I would like to see investors adapting the traditional framework on which their investment choices are normally based. Biodiversity is too important to ignore or to just see as a cool new theme; it should be part of the framework, both as a condition to mitigate negative impact and as an investment opportunity to contribute to a liveable planet and future.

So, what do you think is more important: ambition or impact assessment?

The question is: what is the best way to activate people and organisations? Climate awareness and action has increased among

footprinting; now there is an increasing number of other methods of assessing the expected impact of investments on biodiversity, like satellite, eDNA, a database of protected areas, dependencies etc. We have several working PBAF groups to share and discuss different methods and sector-level data with financial institutions.

In this way, PBAF supports financial institutions to stay abreast of the rapid, ongoing developments in this field. We also have a helpdesk to support financial institution members in their journey and help them with assessing and disclosing their impact and dependencies on biodiversity. However, the role

“Measuring can become a way of delaying if you get lost in it”

good policy on biodiversity in place, which contributes to the regeneration and protection of nature. It is best if this policy has specific goals for different biodiversity issues or that there are separate policies for different issues. For instance, investors could have a specific section for deforestation in their biodiversity policy, or a separate policy for this one issue. Creating such a policy is taking the 'low-hanging fruit', because you do not need much external help to take this step: have a good discussion about your vision on biodiversity, your dependencies on nature and what targets to set. Also, consider the expected (financial and biodiversity impact) returns for the choices you make. This does not mean that measuring your impact on biodiversity isn't important, however, as this is a good step to take next.

financial institutions and companies. It is time to also take biodiversity seriously into account. This is not so much about ambition as it is about common sense and being realistic. Both setting up and adhering to ambitious policies and measuring impact is important, as long as these contribute to achieving the overall goal. Measuring can become a way of delaying if you get lost in it. Don't wait for the perfect data before you start; instead try to make a positive impact every single day.

How can investors measure effectively without getting lost in the data?

Working with the other PBAF partners, ASN Bank has developed many requirements and recommendations for data and impact assessment methods. The first approach we used was biodiversity

of measuring is not only to gather data, but also to raise awareness of institutions' huge dependency and impact on nature and to take steps to mitigate their negative impact. In order for people to take biodiversity and nature into account in their decisions, it is essential that they realise its value and our dependency on it. As mentioned, investors must not become so focused on measurement that they delay taking action. Reducing your negative impact and increasing your positive impact is not always easy, but it is crucial. One thing you can do is follow the frontrunners and learn how they tackled the challenges on their journey.

3. Results

This chapter presents the results of VBDO’s research into the 60 Dutch financial institutions (43 pension funds and 17 insurance companies) that responded to a questionnaire on how they embed biodiversity in investment decision making. Questions ranged from whether the board leads on biodiversity and if so, how, to the use of investment instruments (exclusion, ESG-integration, engagement, voting and impact investing), the assessment of biodiversity impacts and the disclosure of the institution’s ambitions and results. Where there are notable differences between pension funds and insurance companies, we separate the results. Otherwise, the presented findings represent the entire group of investors.

3.1 BOARD AWARENESS AND COMMITMENT TO INITIATIVES

A crucial step towards recognising and integrating nature-related risks in investment decisions is the board being aware of financial institutions’ role in biodiversity loss and understanding what can be done to prevent such loss. According to our survey results, biodiversity is currently considered moderately relevant by the average pension fund and insurance company board (see graph 3.1). On average, the relevance of biodiversity is rated 3.2 (out of 5). Almost half (45%) of the respondents rate the relevance of biodiversity to the board as a 3: moderately

relevant. 14 (23%) other respondents find it more relevant and indicate this with a score of 4 out of 5. On the extreme sides of the spectrum are similar-sized groups: eight (13%) respondents give the relevance of biodiversity to the board a 1, indicating that it is not considered a relevant topic at all. A slightly bigger group of nine (15%) believe that biodiversity is a very relevant topic to the board and indicate this by scoring it as a 5.

A concrete step that is being taken by several respondents to increase board awareness is organising study sessions on biodiversity specifically for the board. Some

respondents do clearly understand the importance of awareness and involvement of the board on biodiversity matters, as is indicated by our interview with Eric Douma, board member of BPL Pensioen (a pension fund for the agricultural sector). He explains the importance of the board taking ownership and being involved with every step of the process, from knowledge building to decision making.

Measurement standards and initiatives

One good place to start with integrating biodiversity as a financial institution is to find support, resources or collaboration opportunities by using standards and joining initiatives relating to biodiversity. As discussed in chapter 2, biodiversity regulation and initiatives are in rapid development.

We asked the financial institutions whether they support, commit to or use the following six well-known standards: The Post-2020 Global Biodiversity Framework, objective 6 of the EU Taxonomy, the Finance for Biodiversity Pledge, Science Based Targets initiative (SBTi) Finance Sector Framework, the ICO Accountability Framework and Nature Action 100.

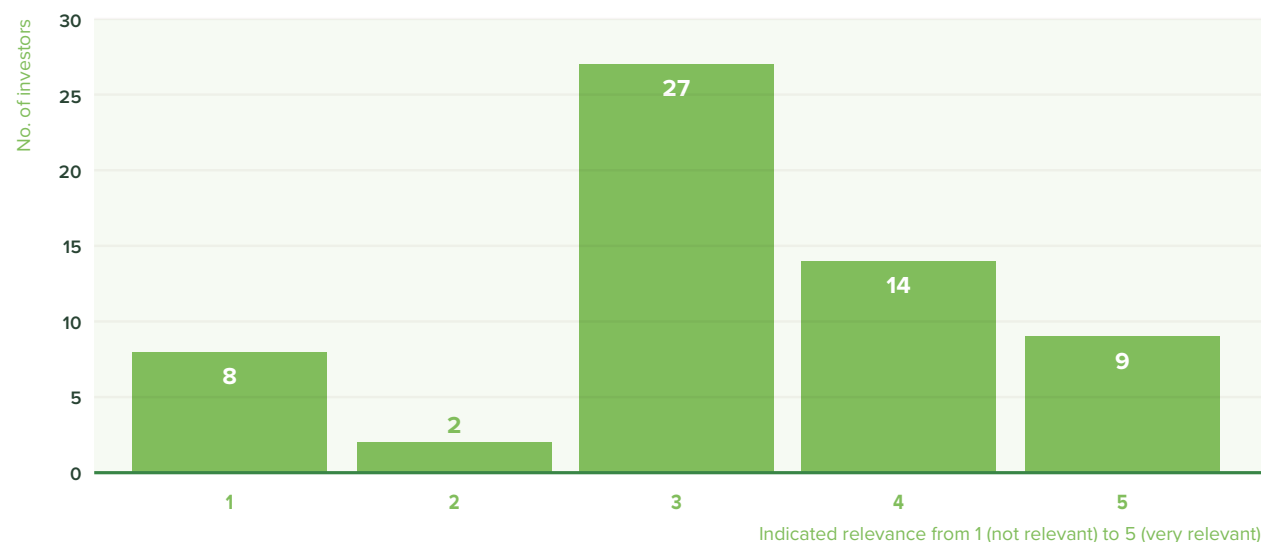
We found that 65% of the respondents support or commit to at least one of these initiatives. There was no signifi-

cant difference between insurance and pension funds. Most respondents indicated that they support or commit to the EU Taxonomy’s biodiversity objectives. Other initiatives that receive a lot of support are the collective engagement programmes of Nature Action 100 and the Finance for Biodiversity Pledge, either directly by the respondent or indirectly by the asset manager of the respondent. Five (8%) respondents commit to the Pledge and eight (13%) others support it. In two cases, the asset manager of the respondent signed the Pledge, while the respondent – the asset owner – did not. These two respondents indicated that they support the Pledge and find it useful and valuable, although they did not sign it.

None of the respondents have committed to other initiatives, but the SBTi Finance Sector Framework and the Post-2020 Global Biodiversity Framework does get support from one in six (17%) of respondents. The ICO Accountability Framework was mentioned by only four (7%) financial institutions. None of the financial institutions were an initiating party of any initiative.

Other initiatives to the above were also mentioned by respondents. The UN Principles for Responsible Investment (PRI)’s financial sector statement on biodiversity for COP15 was supported or signed by eight (13%) respondents. The following initiatives were mentioned once:

Graph 3.1 | Relevance of biodiversity according to the board



Interview with Eric Douma (BPL Pensioen)

Eric Douma is a board member of BPL Pensioen: the pension fund for the agricultural sector. Besides this, he also represents agricultural entrepreneurs as a member of the board of LTO Noord, the Agriculture and Horticulture Organisation for North-Netherlands, and as a portfolio holder for LTO Nederland. Last but not least, he is also a farmer himself.



Can you describe how your experience and your different roles have formed your vision on sustainability and biodiversity?

I have been involved with sustainability topics for some time now. At first, my focus was mainly on climate and clean energy. About ten years ago, biomass used to be seen as a clean energy solution. This made me realise that sustainability is not at all a black and white issue. In the case of biomass, your actual approach determines your impact on nature. For instance, you have to think about whether you use waste or grow new crops for biomass, and it makes a huge difference whether you chop wood by hand (powered by a peanut-butter sandwich) or by using a diesel-powered engine. These choices require knowledge and involvement, and this understanding is also essential to prevent greenwashing. This approach, of making well-informed decisions, is central to our biodiversity strategy at BPL Pensioen.

What is BPL's approach to biodiversity?

BPL Pensioen developed a vision paper on biodiversity a few years ago. Our vision is to aim for a stable pension on a healthy planet for all our participants. This is now the foundation of our investment policies. From there, we decided that societal needs, such as a viable climate, water and biodiversity, are essential topics to focus on. These are all topics where we saw opportunities for improvement and stable returns, and where we wanted to make an impact. To continue making informed decisions, we feel it is important to regularly reflect on our policies and assess the actual impact of our choices.

We did not start out by thinking from a financial perspective; instead, we began from where we saw opportunities. This might seem an unusual approach; however it allowed us to do a deep-dive and gain an insight into what biodiversity entails beyond the financial frameworks. Then, we went back and looked at how we could apply our insights in the context of BPL Pensioen.

Can you describe the role of the board in this process?

Our entire board has been involved in every step of the process. We started small, building up our knowledge with partners such as LTO and through edu-

cation sessions with knowledge institutes such as CREM. We took the time to get together and develop our understanding of biodiversity. This requires commitment and an investment in time. But it has paid off, not only in additional knowledge, but also in alignment within the board. This has improved our decision-making process on biodiversity. We have more ownership and make better informed decisions. My advice would be to immerse yourself in the topic and don't take the easy way out.

How do you translate all this to investment decisions?

Let's take real estate as an example: for instance, investing in a real estate fund. We assess the sustainability issues in this asset class and analyse where we can make the most impact. In the case of real estate, the first thing is sustainable energy and insulation. Here, a lot of impact can be made by, first, reducing energy use and, second, using a sustainable source for the remaining energy needed. Another aspect is the avoidance of embodied carbon by choosing or reducing specific building materials. If we use wood, we look to reuse wood instead of using new timber. Then we see how we can improve the external and surrounding areas, to make the urban area greener and more biodiverse. In this way, we

integrate our vision step-by-step in the construction process. This is our approach for illiquid assets, where we really seek to make an impact. For investments in listed companies, our focus lies more with ESG-integration.

How do you make sure that policies have the intended impact?

By remaining critical of the solutions offered, continuing to ask questions and seeing

ments, we do visit. In those cases, you don't necessarily need a lot of quantitative data to ensure that you make an impact. What you need is a clear goal to work towards, and realistic and measurable steps to reach that goal. An example is that we decided that 20% of the agricultural land that we own can be used to create more space for biodiversity, instead of using 100% of the land for agriculture. We understand that promoting nature will create

claims and to maintain a consistent story for the participants and other stakeholders.

However, we can't know everything. There comes a point that you have to decide whether you want to keep gathering data or take action. You never know the exact moment when you know just enough to take the first step; you just have to take it. For that, you need a conviction on what is important first and

“We did not start out by taking a financial perspective, instead, we began from where we saw opportunities”

for ourselves whether the story on paper also exists in real life and whether the data is correct. Policies are important, especially for an investor working with frameworks and data. However, sustainability does not only exist on paper. It is not abstract; it is real. That is also the case for impact, or rather it should be. That is why you have to actually go out there and see if the real impact matches the intended impact. If you make such policy choices as a fund, you must also consider in advance that this will involve a time commitment.

There is not a one-size-fits-all method. We cannot visit every one of our investees. However, when it comes to our real estate and agricultural land invest-

value in another way in the long term, instead of receiving short-term exploitation returns on that land. For the rest of our portfolio, we are more dependent on external data. Minimising ESG risks is the focus here; biodiversity risk is one of those risks.

What is the role of data?

Data plays an important role in justifying choices to our participants and in providing a clear perspective for the future. We don't gamble with our participants' money, and we should be able to measure and monitor the results of our choices to evaluate whether we realised the intended goals. If you only base your choices on circumstantial evidence, it is much harder as a board member to validate your

foremost. Other sustainability topics also used to lack data, but we started working on them anyway from a clear and strong conviction. More and better data eventually became available for these subjects, and I believe that, in the future, we will also have that for biodiversity.

At BPL Pensioen, we are convinced that we must and can deploy the capital under our responsibility to take a step forward towards a liveable world with a lifelong income that is stable in value. We have a long-term horizon, which fits well with sustainability as long as we make the right, well-informed decisions.

the Marine Stewardship Council (MSC), the Investors Policy Dialogue on Deforestation (IPDD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the UNESCO World Heritage and Ramsar Convention on Wetlands and the Cerrado Manifesto.

Not all respondents take part in these types of initiatives; about 35% indicated that they follow none. The reasons given for this differed, but an often-mentioned reason was that the board is still considering which ESG themes to focus on or that the focus is on other ESG themes. Others indicated that the standards and initiatives are used for inspiration and valuable input, but not explicitly followed, or that the asset manager has committed to the Finance for Biodiversity Pledge and Nature Action 100, but the financial institution itself has not. Another reason that came up is that biodiversity is integrated into the investment process but not by signing up to initiatives.

3.2 ASSESSMENT OF NATURE-RELATED RISKS, DEPENDENCIES AND IMPACTS

As described in chapter two, the relationship of biodiversity with the financial sector multifaceted. Investors impact biodiversity through the activities they finance. They are also dependent on biodiversity and bear the financial risk caused by the loss of biodiversity.

In this section, we analyse how insurance companies and pension funds perceive this double materiality.

Risk

60% of our respondents stated that they perform nature-related risk assessments. The assessment of physical risks and transition risks are prioritised over systemic risks, and are each assessed by 50% of the respondents. Systemic risks are assessed by 17 (28,3%) respondents (see graph 3.2).

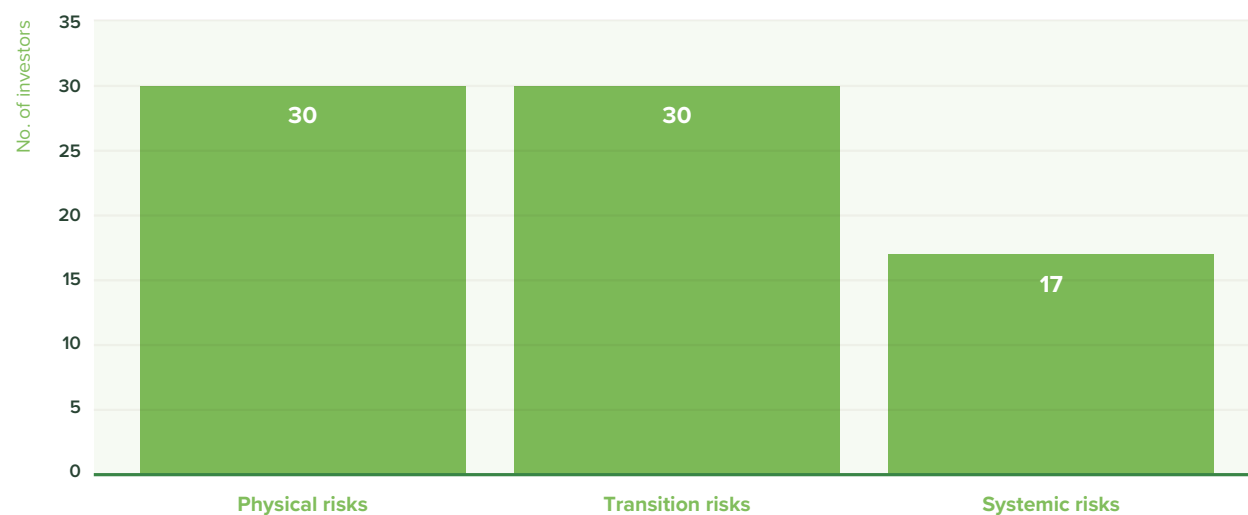
Physical risks

Results show that physical risk assessments are generally carried out when there is reason to believe that an asset has high dependency on specific ecosystem services and/or the potential to cause a significant impact on specific ecosystem services. Investors use asset class-specific approaches to assess physical risk. For example, the risk of flooding might be assessed for mortgage investments.

For most respondents, lack of data is the main reason not to carry out a physical risk assessment. Three (5%) respondents only consider biodiversity within climate risk assessments and one other respondent specifically mentioned the challenge of finding nature-related KPIs for listed assets. A small number of respondents



Graph 3.2 | Type of risks considered in risk-assessment



mentioned that tools and frameworks such as Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE), Climate Value-at-Risk (CVaR) and TNFD are useful for researching physical risks through, for instance, heatmapping or climate change scenario analyses.

Transition risks

We found that financial institutions take three main approaches to transition risks relating to biodiversity:

- The first one is focused on reputation. Transition risks are part of the ESG screening process, including reputational risks due to involvement in severe events. Some respondents added to this that they recognise that transition risks go further than reputation and that this needs to be addressed in the future.
- The second approach is based on identifying investees that are operating in the regions and ecosystems that are most vulnerable to nature-related physical risks. These investees could potentially be subject to

more strict regulation, industry standards or changing consumer behaviour. These areas are, for instance, classified as protected or hotspot biodiversity areas, high conservation-value forests, protected nature areas, peatlands, marine protected areas and no-take zones (an area where no extractive activity is allowed).

- The third approach is a sector-based risk assessment. For example, one respondent mentioned the protein transition for a more sustainable food system. This transition could affect sectors such as fast-moving consumer goods, food and agriculture.

Dependencies

A majority (73%) of the insurance companies and pension funds do not (yet) map the dependencies on biodiversity of their investments. Many respondents indicated that they do not (yet) have the tools and/or data to map biodiversity dependencies. However, several said that they will start doing this when they feel that the data and measuring methods are adequate. Some have joined

PBAF for this reason and are already exploring tools and methodologies. A number of respondents are still reviewing their policy and considering whether biodiversity will become a more central theme.

27% of investors (16 respondents) do map their dependencies on biodiversity. More specifically, 41% of insurance companies and 21% of pension funds do so. Graph 3.3 illustrates that for the respondents that do map dependencies, the most important factor considered in the mapping process is the sector (14 respondents). The activities and the location of the investee are other important factors, which are both considered by ten respondents (17%). The specific biome and ecosystems that are affected through investments are considered the least when mapping dependencies: only five respondents (8%) take this factor into account.

Impact

When it comes to impact assessment, 50% of respondents assess the impact on biodiversity for one or more of the IPBES biodiversity-loss drivers. Similar to risk and

dependency assessments, a larger percentage of insurance companies than pension funds assess the impact of their investments: 65% compared to 44%.

Of all the biodiversity-loss drivers, climate change impact is assessed the most, by 33% of all respondents. This is closely followed by the impact of investments on changes in land and sea use, which is assessed by 32% of respondents. The direct exploitation of organisms and pollution come after that; the impact of both of these drivers are assessed by 23% of respondents. The impact of investments on invasive species is only considered by 13% of respondents, making it the least considered driver for both pension funds and insurance companies (see graph 3.4).

Of the 30 respondents that indicated that they do not assess the biodiversity impact of their investments, 13% stated that they are investigating tools to do so or that they have joined PBAF as a step towards future impact and dependency assessments.

3.3 INVESTMENT INSTRUMENTS

In this section, we analyse how financial institutions integrate biodiversity in the following investment instruments: exclusion, ESG-integration, active ownership and impact investing.

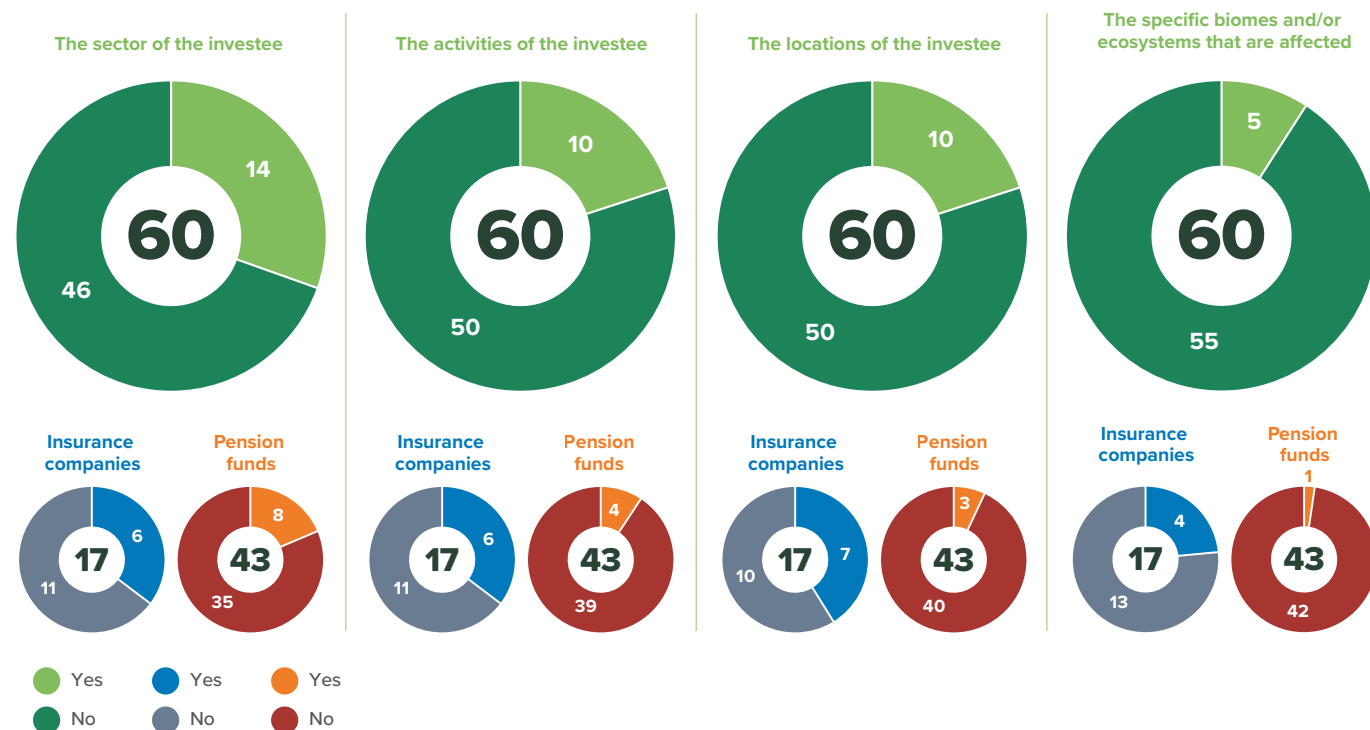
Exclusion

Almost half of the respondents (48%) indicated that biodiversity is included in the exclusion criteria. This means that just over half (52%) of the respondents do not consider biodiversity in their exclusion criteria. Some of these respondents stated that they do have normative exclusions on climate change and other SDG or ESG themes, but not specifically on biodiversity. Other reasons given for not integrating biodiversity were that it has not been discussed yet and that there is insufficient biodiversity data to determine the biggest risks, dependencies and impacts.

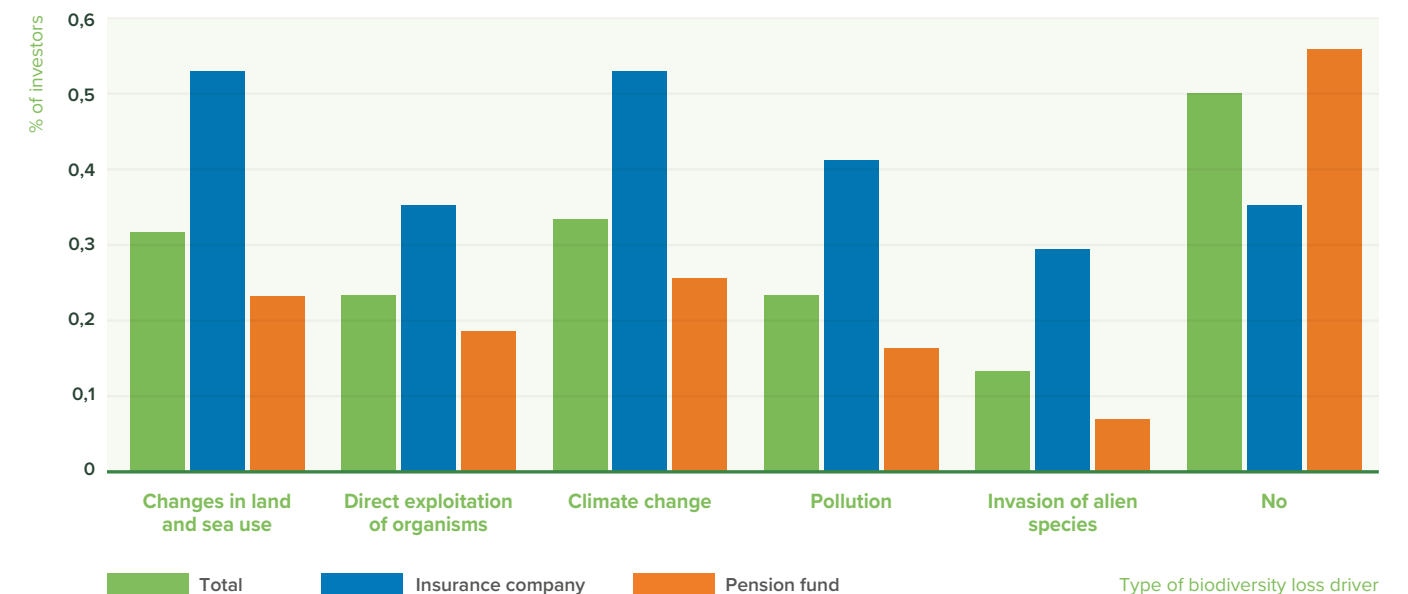
EXAMPLES OF REASONS FOR EXCLUSION

The criteria for exclusion are mostly based on environmental controversies and the breaching of international agreements, such as the UN Global Compact, UN Convention of Biological Diversity, the CITES treaty for animals or plant species threatened with extinction, the UNESCO World Heritage Convention, and the IUCN Protected Areas. Other biodiversity-related exclusion criteria that are mentioned are the use of certain products or uncertified products, especially palm oil. The use of deforestation can also be a reason for exclusion for some respondents. More generally, respondents mentioned that structural negative environmental impact, misalignment with SDGs 14 (Life Below Water) and 15 (Life on Land), and low environmental ESG scores can lead to exclusion. In some cases, exclusion is the result of escalation when engagement has not led to sufficient improvement.

Graph 3.3 | Factors that are considered in mapping biodiversity-related dependencies



Graph 3.4 | Biodiversity loss drivers that are considered in biodiversity-related impact assessments



ESG-integration

Our results indicate that 58% of the respondents take biodiversity into account in the selection of investments. More specifically, this is the case for 88% of the insurance companies and 47% of the pension funds. However, this number decreases to 29% and 28% for insurance companies and pension funds, respectively, when we look at financial institutions that not only consider biodiversity in the selection of investments, but also in the monitoring of investments (see graph 3.5). A possible explanation for this is that some investors may consider biodiversity as an element of general ESG-integration and do not select or monitor on biodiversity specifically. The three main reasons given for not including biodiversity in ESG-integration are: missing or low-quality data; a focus on climate; and the use of a general ESG rating with no focus on biodiversity or other specific topics. Other reasons given include that the institution's approach to biodiversity is still being developed or discussed. Lastly, some respondents hand over responsibility for ESG-integration to an asset manager that does not specifically integrate biodiversity in its strategy.

Engagement

The most often used strategy to include biodiversity in investment decisions is engagement: 78% of financial institutions engage on biodiversity (see graph 3.6). Relatively more insurance companies (84%) than pension funds (77%) do so. Both the risk and impact side of biodiversity loss are equally addressed in engagement: 20% of the respondents indicated that, when deciding which

EXAMPLES OF ESG-INTEGRATION

Most respondents that consider biodiversity in the selection of their investments do this using ESG ratings that have biodiversity indicators and by then choosing best-in-class companies based on these ratings. Respondents also screen their portfolios on biodiversity-related controversies, which can lead to engagement or exclusion.

Four respondents (7%) mention that SDGs 14 and 15 have a role in ESG-integration, either by selecting specific funds or by using asset managers that have a focus on these SDGs.

A few frontrunner respondents have active investment policies that include biodiversity. This can translate to, for example, giving biodiversity scores to farmland investments by measuring the usage of pesticides; by considering the drivers of biodiversity loss in the screening process of the investable universe; or by selecting companies that prioritise biodiversity conservation in their supply chains.

companies to engage with, they choose investees that represent the highest material nature-related risk and 18% choose investees with the highest impact on biodiversity. The other 40% that engage on biodiversity use different strategies for selection. Many of these financial

EXAMPLES OF ENGAGEMENT

When it comes to sectors, companies in the agricultural, chemical, transport, extraction, materials, utilities, fast-moving consumer goods and financial sectors are most often included as part of an engagement trajectory due to their dependency and impact on biodiversity. Biodiversity-related themes that respondents engage on include land use and deforestation, plastics circularity, water stewardship, waste and pollution. Sometimes this is done through a collective engagement programme such as FAIRR's programme on waste and pollution.²⁵ ACTIAM's 'satellite-based engagement towards no deforestation'²⁶ (which has a goal of zero deforestation by 2030) was mentioned seven times. Another deforestation-related programme is the Finance Sector Deforestation Action (FSDA) initiative²⁷, which is an effort by more than 30 investors to end deforestation caused by agricultural commodities in all investment and financing activities by 2025.

Some concrete examples of respondents' engagement trajectories include setting up due diligence processes and setting traceability and deforestation targets for companies in the food, forestry and automotive industries. One respondent focuses specifically on engaging with mining companies on setting up nature-positive targets, improving their environmental strategies and joining the TNFD. Others are more focused on the governance aspect and engage on integrating a nature perspective in the central governance of different divisions of Associated British Foods. Maersk and Bayer AG are engaged by respondents on identifying, assessing, measuring and disclosing each company's impacts and dependencies on biodiversity, including associated risks and opportunities.

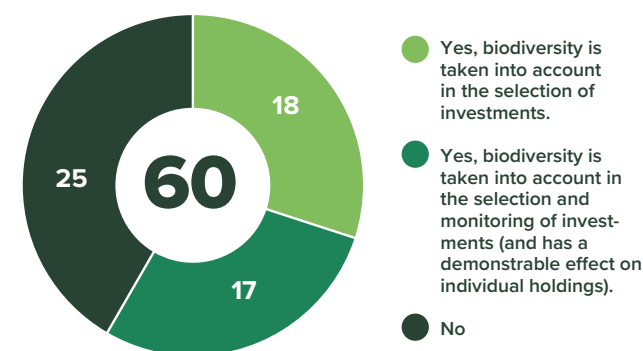
institutions or their engagement providers use for instance a more sectoral or thematic approach for engaging.

22% of the respondents do not engage on biodiversity. Reasons given for this are similar to the reasons given for not including biodiversity in ESG-integration or exclusion strategies: the respondent has a focus on climate; the strategy around biodiversity is in development; or the engagement manager does not include biodiversity in its strategy. Some respondents did state that in cases of severe violations of international norms and conventions on biodiversity, the institution will engage with the company and exclude them when necessary.

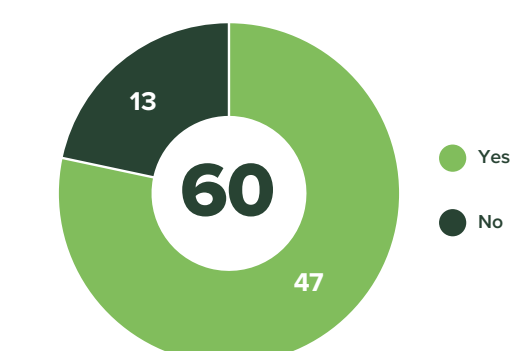
Voting

Biodiversity has been included in the ESG criteria used for voting decisions by 53% of the respondents (see graph 3.7). Slightly more pension funds than insurance companies (53% compared to 47%) have done this. The reasons given for why respondents do not include biodiversity in the voting policy are similar to the reasons given for why they do not integrate biodiversity in other investment instruments. Firstly, many institutions stated that they focus on climate when it comes to ESG themes. Some are still collecting data on biodiversity or are in the process of developing a biodiversity strategy so still need to consider whether voting will be part of this strategy. Moreover, many respondents use an external provider for proxy voting, and that provider does not have biodiversity as a specific voting topic. Lastly, a few institutions said that they only invest in funds and thus do not vote at all.

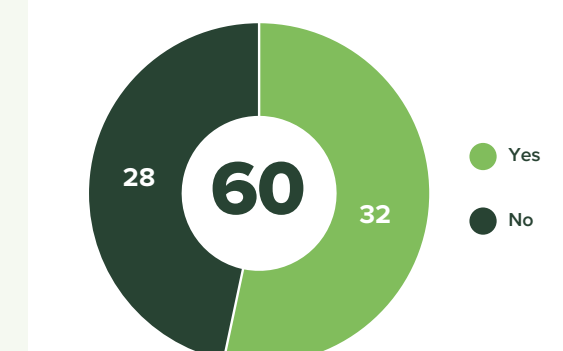
Graph 3.5 | Inclusion of biodiversity in ESG-integration



Graph 3.6 | Inclusion of biodiversity in engagement



Graph 3.7 | Inclusion of biodiversity in voting



Impact investing

Biodiversity-related impact investing is carried out by 40% of respondents (53% of insurance companies and 35% of pension funds).

Looking at the five direct IPBES drivers of biodiversity loss to assess for which drivers impact investing was used, we found that most impact investments focus on solutions and adaptations to climate change; 37% of all respondents make climate change-related impact investments. This number significantly decreases for the other four drivers of biodiversity loss. Just 18% invest to make an impact on changes in land and sea use and 15% invest to make an impact on pollution. Even fewer investors make impact investments related to direct exploitation (8%) and the invasion of alien species (5%). This distribution is similar for pension funds and insurance companies (see graph 3.8).

Institutions gave a lack of nature- and biodiversity-positive opportunities as the main reason why they do not include biodiversity more often when impact investing.

EXAMPLES OF IMPACT INVESTING

The examples given of biodiversity-related impact investments mostly focus on climate change, specifically renewable energy. Green bonds are also popular. Equity or funds related to sustainable agriculture, sustainable real estate, responsible forestry, nature-inclusive land management, and waste recycling were mentioned as well. Some respondents invest in companies that offer transformative technologies, for instance, plant-based protein, sustainable alternatives to chemical herbicides, waste-based bioplastics, and technology that measures the diversity of species using DNA samples.

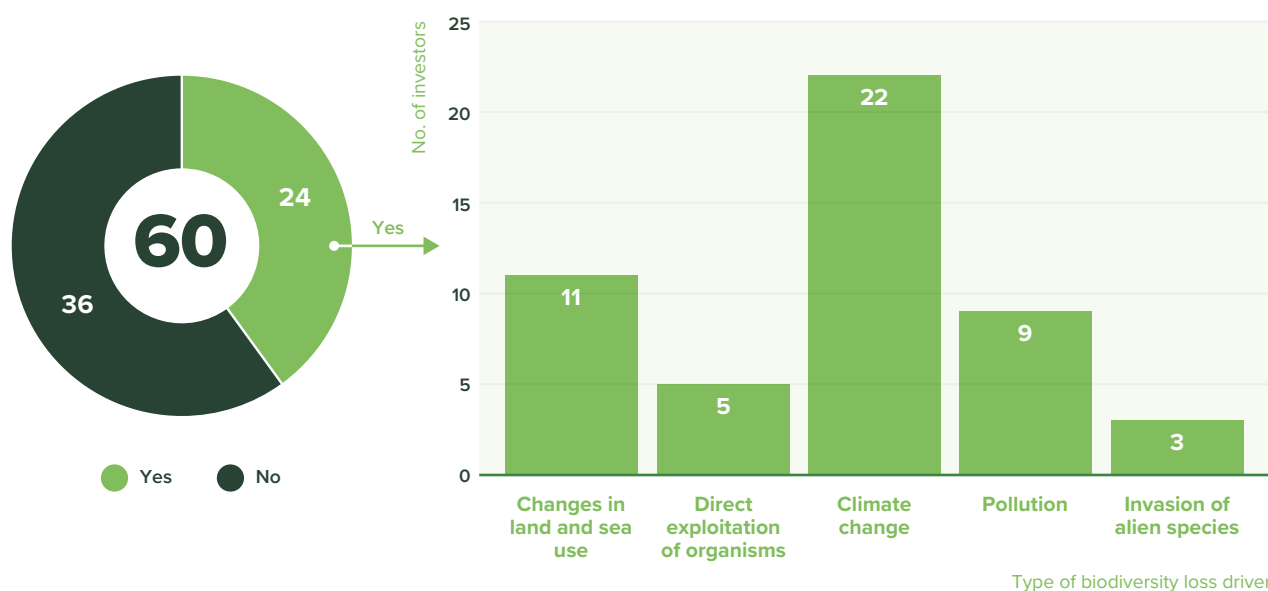
To summarise, our analysis of the use of investor instruments shows that financial institutions mostly consider biodiversity in engagement (78%), ESG-integration (58%) and voting (53%), whereas less than half of the respondents indicated that biodiversity is a factor in exclusion (48%) and/or impact investing (40%).

Reporting and disclosure

Despite the lack of data, investors are increasingly required to report on biodiversity. To do so, 55% of respondents use one or more reporting standard or framework. 48% of respondents indicated that they use Principal Adverse Impact (PAI) indicator 7 of the SFDR, which is unsurprising. Insurance companies, mentioned CSRD ESRS E4 the most, with 11 out of 14 stating that they report in line with this regulation. Even though the CSRD is mandatory for most insurance companies, ESRS E4 is only mandatory if considered material.

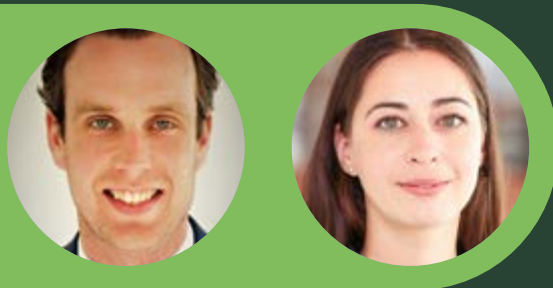
Voluntary reporting frameworks TNFD and PBAF are used for reporting as well but less often than the regulatory reporting frameworks. A quarter (25%) of the respondents use the TNFD and 22% use PBAF. Usage mostly overlaps, however; only one respondent stated that they use PBAF without also using TNFD. Moreover, GRI 304 is only used by four insurance companies. The Sustainability Accounting Standards Board (SASB) metrics on biodiversity impacts (environment EM-MM-160a) are only used by one pension fund and one insurance company.

Graph 3.8 | Inclusion of biodiversity in impact investing



Interview with Joël Habets and Simona Kramer (Pension fund Rail & OV)

In 2023, pension fund Rail & OV published a case study on biodiversity, exploring how institutional investors can include this topic in socially responsible investment (SRI) policies. We spoke with Joël Habets, Senior Investment Strategist, and Simona Kramer, Portfolio Manager for Socially Responsible Investing (SRI) at pension fund Rail & OV, to find out more.



Why did you choose to focus on biodiversity specifically?

When we updated our SRI policy in 2021, we realised it was important to set priorities, as it appeared impossible to focus on all SRI topics at once. Our first priority in this respect became the integration of selected Sustainable Development Goals. In addition to that, Rail & OV decided to choose at least one topic every year to explore in more detail. In 2021, this was climate change, resulting in our climate policy. In 2022, Rail & OV selected biodiversity. We chose biodiversity because we recognised that the topic is becoming increasingly important and we expect it to be a topic that could potentially dominate the field of SRI for decades to come.

We soon realised that biodiversity is like a many-headed monster and we were not sure

where would be a good place to start. Therefore, we looked for a partner who had experience with the topic and could help us to explore it. We collaborated with WWF-NL, which was especially useful in this first exploration phase. WWF could answer our questions about where our focus and contribution should be, and was extremely helpful as a knowledge and discussion partner.

What is the added value for the pension fund of this exploration?

It is a good basis for our next steps: developing a policy and implementing a biodiversity strategy in our investment portfolio. By developing this report, we have built up knowledge and raised awareness of the relevance of the topic. The case study was a very useful way to start discussions with external managers and with peers within

the sector as now we have something tangible to refer to and to share.

Let's look at where we stand on climate compared to biodiversity. On the topic of climate change, discussions on whether or not it is important aren't needed anymore. We have clear commitments and have concrete expectations of asset and portfolio managers in terms of climate change and alignment to the Paris Agreement. We aren't at that point yet for biodiversity, but the discussions we've had and the knowledge we've developed in constructing the case study, are helping us to define similarly clear commitments and concrete expectations for biodiversity.

What are the next steps?

Last year served as a kickstart, and now we're moving on to the next phase of developing a policy plan. A lot of the lessons we've learned from developing our climate policy will help us in formulating our next steps when it comes to planning a policy for biodiversity. And we're also seeing a quicker uptake of the issue of biodiversity at other pension funds, data providers,

engagement providers and asset managers, compared to the time it took to integrate climate change as a policy issue. We can all save time because we don't have to start from scratch, even though biodiversity remains a far more complex topic than climate change. One example of the developments we're seeing in the market are collective initiatives, which are also crucial to our own next steps. We are also looking at how we can integrate biodiversity in our own responsible investment instruments, such as voting, engagement and/or setting criteria for selection.

on a number of topics, but Paris alignment engagements are an essential block of our engagement strategy. We are looking into how we can broaden engagements on climate change to include biodiversity. In our case study, it became clear for which sectors biodiversity is a material topic and we will look at ways to use this information for setting the priorities of our engagement policy.

Does this mean that biodiversity is part of your selection criteria?

We have made a start on integrating biodiversity into our investment decisions by making

to explore further. But integrating biodiversity as a topic in our investment cases is a useful starting point for us. It helps us to explore the topic further and hopefully in the future we will get to the point where we can indeed formulate these clear goals and objectives.

What did you learn that you want to pass on to other investors?

Don't be put off by the fact that biodiversity is a complex theme, because it will remain so if you keep waiting. Just start and learn while doing, for instance by including biodiversity in your investment policy and asking your

“Finally, it can be useful to get involved in one of the many existing biodiversity initiatives and reach out to knowledge partners to help you.”

What is your approach to active ownership?

On an annual basis, we update our voting policy. We pay attention to whether a company has a biodiversity policy and whether biodiversity is a material topic. We hope that we can integrate biodiversity more in our voting policy and are discussing this with our proxy advisor. Again, we see quick developments when it comes to action on biodiversity. We see changes now that didn't seem possible a few months ago.

Another part of active ownership is engagement. Knowing the companies that we invest in is part of our responsibility as an asset owner. We engage

it part of our investment cases. This means that we take the topic of biodiversity into account when it comes to deciding whether or not an investment category is a good fit for Rail & OV, how the investments in the specific category should be constructed and what we expect from our managers who manage the assets in those categories.

However, this does not mean that we are already able to make use of measurements that make it clear whether or not an asset category meets our biodiversity standards or that we are able to decide whether something has a positive impact on biodiversity. We don't have these criteria yet, as these are all things we have

managers questions about what they do on biodiversity. Finally, it can be useful to get involved in one of the many existing biodiversity initiatives and reach out to knowledge partners to help you.

3.4 CHALLENGES

Data

70% of the respondents said that missing or low-quality data is the biggest challenge when it comes to integrating biodiversity in investment decisions. More specifically, investors stated that they lack a universal method or set of indicators to measure biodiversity impact and a market standard on how to classify biodiversity investments.

In line with this, the lack of useful data is an often-mentioned reason for not integrating biodiversity in decision-making. For 38%, this was given as the main reason they do not yet use any sources for biodiversity data. Investors that do use biodiversity data rely on a mix of data inputs: external ESG-data providers, the investor's

own assessments and data published by NGOs. Most respondents (47%) rely on external data providers such as asset managers and data service providers, along with sectoral data providers such as ENCORE and SBTN.

Interpretation

In our analysis of the use of various instruments, we found that investors have different interpretations of whether and how they embed biodiversity. For some respondents, 'biodiversity integration' can mean that biodiversity is taken into account indirectly through general ESG ratings; for others, it refers to having a specific policy on biodiversity.

For example, around a third of the respondents that answered 'yes' to the question on whether biodiversity is part of their ESG investing, illustrated this by saying

that biodiversity is covered by the general ESG ratings. However, just under half of the 'no' voters explained their answer by saying that they do not have a specific biodiversity policy, but that biodiversity is part of their general ESG policy. So, while these groups have answered the question differently, in practice, they appear to have a similar approach to biodiversity integration.

For engagement, also, there seems to be a difference in interpretation of what it means to carry out engagement on biodiversity. Some respondents said that they do not engage on biodiversity because biodiversity is just part of their general ESG engagement, whereas others give the same reason as an explanation for why they do engage on biodiversity. This difference in interpretation is usually related to the respondent's actions on climate change. We found that biodiversity risk is often

addressed via climate risk assessments, for instance, through climate change scenario analyses or by setting a carbon footprint reduction target based on climate impact.

Some respondents said that biodiversity is included together with climate change in an overarching ESG policy and responsible investment strategy. Other respondents only include biodiversity in the climate policy. One respondent mentioned that biodiversity is seen as a more acceptable ESG theme by board members and pension scheme participants when it's linked to climate change. This difference in interpretations illustrates the complexity of biodiversity and the need for more and uniform knowledge throughout and among organisation.



Interview with Romie Goedicke

Romie Goedicke co-heads the nature theme at the United Nations Environment Programme Finance Initiative (UNEP FI). She also leads the work on nature-related risks and disclosures and manages the work on mainstreaming and capacity building. In these ways, she supports the work of aligning financial flows with the goals of the Global Biodiversity Framework. Romie joined UNEP FI in 2021. Prior to joining, she led the work of engaging with the financial sector and businesses for IUCN Netherlands.



How did the Taskforce on Nature-related Financial Disclosures (TNFD) originate?

For more than 30 years, UNEP FI has been bringing the UN and financial institutions from around the world together to shape the sustainable finance agenda. We've established the world's foremost sustainability frameworks, which help the finance industry to address global environmental, social and governance (ESG) challenges. And, as such, we found it part of our core mission to be part of the establishment of the TNFD, alongside the United Nations Development Programme (UNDP), WWF and Global Canopy. We have been providing technical support to the TNFD since then.

Financial institutions and companies are still missing the information that is needed to understand how nature impacts immediate financial performance or the longer-term financial risks that may arise from the organisation's interactions with nature. Better information will play a key role in allowing financial institutions and companies to incorporate nature-related risks and opportunities into their strategic

planning, risk management and asset allocation decisions. The TNFD is developing a risk management and disclosure framework for organisations to report and act on evolving nature-related risks, with the ultimate aim of supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

The purpose of UNEP FI's work on nature-related risks and disclosures is to translate this new topic into actionable steps for financial institutions, enabling them to take advantage of UNEP and UNEP FI's experience of existing programmes. This includes steps to identify nature-related risks, conduct relevant risk analyses, manage these risks and identify nature-related opportunities. The approach starts from a risk lens and then uses peer-to-peer learning, via the UNEP FI-led piloting programme in support of TNFD, to provide a shared learning journey. This shall drive the three industry groups' increased awareness and resulting collective commitment towards nature-positive goals.

How has UNEP FI supported the development of the TNFD since its inception?

UNEP FI has led the financial sector pilots – testing the beta-framework with over 50 financial institutions across geographies and sectors to ensure it meets the ambitious needs of the market. The pilots ensured that financial institutions

could participate in the design of the TNFD framework, providing lessons learned, recommendations and insights for future iterations.

'Yes, we can.' The pilot process showed that financial institutions are ready and able to apply the proposed recommendations set out by the TNFD. For one thing, there is clear awareness of the need to address nature-related risks as these form an emerging material risk. In addition, organisations are building experience and expertise in order to apply the TNFD framework for themselves. Although most participants saw the pilot as a starting point in their TNFD journey, they almost all intend to continue this work with more piloting work via UNEP FI (a second deep-dive pilot is starting soon) or via other processes.

With regards to the piloting process itself, one interesting outcome was the fact that many participating financial institutions see TNFD's proposed LEAP²⁸ approach as an iterative rather than linear process. As with any reporting approach, the real value lies in the journey, rather than the end result, and the LEAP approach helps financial institutions to take a coherent approach to nature-related risks.

Some companies state that biodiversity is not a material topic for them; is that still credible?

According to industry experts, biodiversity is 'the fastest devel-

oping ESG theme in global capital markets.' Our entire economic system and lives rely on nature – half of the world's GDP (~\$44 trillion of economic value generation) is moderately or highly dependent on nature. The WEF study mentions that the other half is also dependent on nature, but just to a lesser extent. We are of course all dependent on ecosystem services, since we all need air to breathe, water to drink, food to eat, clothes to wear, and so on. All these resources impact and depend on nature in some way or another.

Beyond nature's intrinsic value, there is an increasing awareness of the impact of nature loss on the economy and, in turn, global financial stability. In 2022, the central banks and supervisors' Network for Greening the Financial System

(NGFS) published a 'Statement on nature-related financial risks', which acknowledges that nature-related risks, including those associated with biodiversity loss, could have significant macroeconomic implications, and that failure to account for, mitigate and adapt to these implications is a source of risks relevant for financial stability. At COP15, support was shown by various initiatives in the financial sector and individual financial institutions for an ambitious set of commitments on finance in the GBF. This, alongside market-led developments such as the aforementioned TNFD, shows that private sector actors are ready to step up on nature.

As such, nature is a material topic for each forward-looking organisation, yet the pathways and metrics to measure related risks are under development. So, if you embed

biodiversity in your financial institution, you might not be able to do so in detail for every sector yet. This means you need to experiment; tools like ENCORE²⁹ can be a useful starting point to assess portfolios and determine action points.

How does the TNFD relate to other standards and regulations?

Climate change and biodiversity are intrinsically linked. Climate change is one of the five key drivers of biodiversity loss, affecting the survival of plant and animal species as well as impacting other environmental processes. Three of the five most effective strategies for cutting greenhouse gas emissions are nature-based solutions: ecosystem protection; restoration; and the improved management of farmlands. Nature-based solutions

that's why we now have different task forces for different topics.

Data availability is often mentioned as a challenge; how can investors overcome that?

The participants in our TNFD pilot often highlighted the need for better data and tools and specific guidance on tools, alongside the need for consistency and comparability. The journey from nature-negative towards nature-positive requires a 'whole-of-society' approach. Financial institutions are often dependent on the quality of data provided by their clients. Poor and non-inclusive client-related data can make it significantly challenging for financial institutions to make informed decisions. However, with nature now declining at rates unprecedented in human history, financial institutions don't have the

"Yes we can"

can deliver around 30% of the emission reductions needed to align with the Paris Agreement. Nature also provides adaptation solutions, such as flood prevention and regulating water cycles.

Many of the UNEP FI members have started their journey on the topic of climate change. Mainstreaming taking action – in this case climate action - has paved the way for similar nature action. Climate change and nature loss are now presented as two sides of the same coin. The work of the TNFD has been mirroring that of the Task Force on Climate Related Financial Disclosures (TCFD) to ensure effective market-usage. If we had a time-machine, we would go back and create one broader environmental risk and disclosure framework. However, when the TNFD was initiated, the TCFD had already existed for some years, so

luxury of waiting for better corporate data. Action is needed now, and this requires collaboration between industries.

The pilot also highlighted that the standardisation of data and metrics is crucial. While there are currently significant variations in the data and metrics used to assess nature-related risks and dependencies across sectors and geographies, there is a growing recognition of the need for greater consistency and comparability.

Data is an important part of the picture, but the lack of data should not become an excuse to do nothing. To tackle biodiversity loss, we need a whole-of-society approach, as mentioned in the GBF. However, we do recognise that it is still a challenge to access sufficient quantitative and qualitative data.

4. Conclusions and recommendations

In the previous chapters, we discussed how developments on biodiversity affect the financial sector and what action the financial sector is taking to address biodiversity in the investment decision-making process. In this chapter, we share our final findings and recommendations, based on desk research, interviews and the survey results of 60 Dutch pension funds and insurance companies.

CONCLUSIONS

Insurance companies seem to be slightly ahead compared to pension funds

Overall, pension funds and insurance companies showed similar results.

However, in most cases where there were – often small – differences, insurance companies had higher scores.

The majority of boards do not prioritise biodiversity

For most boards, biodiversity seems to be of moderate importance and not a priority. Boards generally take little ownership on biodiversity. The few boards that are serious about biodiversity, stressed the importance of knowledge within the organisation, alignment between the board and the management team, and the active involvement of the board in the process of developing strategies on biodiversity and evaluating effectiveness.

Investors are starting to look into biodiversity

Taking effective measures against biodiversity loss as a financial institution starts with knowing where your impacts and dependencies lie. Half of our respondents did not assess biodiversity-related risks yet, even less assessed their biodiversity impacts. This pattern is also visible in most investment instruments: about half of investors consider bio-

diversity in ESG integration, voting, and exclusion, while the other half does not. Slightly less than half do biodiversity-related impact investing. Respondents mostly include biodiversity through engagement (78%).

Biodiversity is often perceived as a substitute for, or an add-on to, climate change

Investors that do have a focus on biodiversity, interpret the theme in different ways. This is especially the case when it comes to the connection between biodiversity and climate change. Some respondents consider biodiversity and climate change as distinct issues. Others view biodiversity loss as part of the overarching issue of climate change, which is reflected in their approach. For instance, when it comes to impact investing, climate change is the biodiversity-loss driver most often considered, whereas other important drivers like land use change (e.g. deforestation) or invasive species receive less attention.

Different interpretations of biodiversity-integration lead to mixed signals

Different interpretations of what constitutes biodiversity-integration have affected the survey results. For example, high results on implementation in the questionnaire is paralleled with investors stating they are not yet ready to do a lot on biodiversity. Also, the context of

biodiversity in ESG or in relation to climate change is viewed in various ways.

Developments are advancing rapidly

The results of this study may already be out of date, as biodiversity appears to be one of the fastest-developing ESG themes in global capital markets. Investors that already focus on biodiversity also recognise that this is a quickly changing landscape.

Varying degrees of commitment

Some investors consider that biodiversity is automatically covered in ESG or climate change policies. Others only support stand-alone biodiversity initiatives, although this usually does not affect their investment decisions. Others have ambitions for specific aspects of biodiversity (e.g. deforestation) and actively monitor the effectiveness of their investment approach in this respect.

Data needs improvement

Data is often mentioned as an impediment to embedding biodiversity in investment decisions. Many investors do not have enough data (70%). Others have a great deal of data, but want to see greater standardisation.

RECOMMENDATIONS

Ensure commitment from the board on biodiversity

The importance of commitment from the board cannot be underestimated. This commitment begins with immersing yourself in the topic: develop awareness and knowledge of the state of nature and the enormous risk inaction poses. However, awareness alone is not enough. Internal discussions should ideally lead to internal alignment on the subject of biodiversity and the ambition of the investor. These can then result in goals being set for asset managers. As biodiversity is often new territory for pension funds and insurance companies, it is important that the board is actively involved to assess the effectiveness of decisions.

Be clear on what you're talking about and what you need to know

It is apparent that there is some confusion amongst investors on what the term 'biodiversity' actually covers, and therefore also what biodiversity integration means. Biodiversity is not a straightforward topic, but in order to take effective measures it is important (and possible) to minimise the confusion, both internally and in relation to other stakeholders.

This links back to the importance of board commitment. The board should be involved in defining the investor's ambitions and ensuring that the organisation is clear on the approach to take on integrating biodiversity. Make sure that there is a robust policy on biodiversity that contributes to both the regeneration and the protection of nature. It is best if this policy is specific to biodiversity and has distinct goals on different areas relating to biodiversity, such as deforestation. To make sure this policy targets the most material biodiversity topics, the organisation should be aware of its most important biodiversity impacts and dependencies. A biodiversity risk- and impact-assessment, for in-

stance by using the LEAP approach or ENCORE, can be a very useful tool to make this concrete.

Do not procrastinate because of data

Having a clear understanding about which biodiversity topics you are planning to focus on also makes it easier to find relevant data. However, it is also important to remember that it is not necessary to have perfect data in order to steer the financial institution towards both mitigating biodiversity risk and increasing biodiversity impact. Considering the state of biodiversity, there is simply no time to wait with taking concrete steps because better data might be available tomorrow. Focus on actions that can already be taken, such as heatmapping, reviewing and updating existing policies and engagement using free public resources such as ENCORE, IBAT, the WWF Risk Filter Suite, SBTN and TNFD. Use these as filtering tools to identify sectors, value chains and/or geographies to target first. The TNFD framework includes a full overview of relevant tools and resources and guidance on how to deal with data limitations.

Collaborate and reach out to knowledge partners

Biodiversity loss is a global problem that cannot be solved by one organisation or even one industry. During the Convention on Biological Diversity it has been made clear that mitigating the nature crisis requires a "whole-of-society approach". Collaborative action is necessary to produce the large-scale and fast change that is necessary to stop the destruction of nature. This can be done through for instance collective engagement with other financial institutions, such as Nature Action 100 (see the list of initiatives in chapter 2 of this study for more inspiration); by advocating for biodiversity action together with knowledge partners; or by looking at peers for inspiration and sharing your own policies and experiences with peers.

Consider the full spectrum of biodiversity

Climate change is an important driver of biodiversity loss. However, in order to ensure a well-rounded approach, it is imperative that financial institutions develop strategies that reflect the full spectrum of biodiversity loss drivers. For instance, investors can start by mapping their dependencies on ecosystems and the ways they are contributing to all five biodiversity loss drivers. Tackling the drivers of biodiversity loss can be done using a step-by-step approach and considering the full spectrum of investment instruments. The approach should be grounded in a comprehensive vision on biodiversity and eventually resulting in a strategy that includes all five drivers of biodiversity loss.

Actively demand and search for opportunities

Identifying and finding nature-related opportunities is considered a challenge by many respondents, and the main reason as to why biodiversity is not yet a part of impact investing for most. However, a lack of opportunities is partly due to the lack of active demand of investors for biodiversity opportunities (see p.22 for our interview with Roel Nozeman). There are plenty examples of alternatives that avoid or minimise biodiversity loss, or solutions that restore biodiversity, but the number and feasibility of these projects rely on the available capital. For instance, in food production. The food system for biodiversity loss is what the energy system is for the climate crisis: it is one of the main causes, but also where many of the solutions can and should be found. Sustainable agricultural practices can promote soil health, efficient land and water use, and less pollution. However, time and capital are needed to transform the food system and decrease biodiversity loss as a whole. If you, as an investor, are clear about your biodiversity vision and goals, and actively demand and search for opportunities, there will be more than enough.

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- ²⁸ LEAP (locate, evaluatie, assess, prepare) is an integrated assessment process for nature-related risk and opportunity management, developed by TNFD.
- ²⁹ ENCORE (Exploring Nature Capital Opportunities, Risks and Exposure) is an online tool where organisations can explore their exposure to nature-related risk, dependencies and impacts.

Appendix: list of respondents

INSURANCE COMPANIES

- Achmea
- Allianz (Nederland)
- a.s.r.
- Athora
- CZ Groep
- De Goudse Verzekeringen
- DELA
- Klaverblad
- Menzis
- Monuta
- ONVZ
- Scildon
- Unigarant
- UVM
- VGZ
- ZLM
- Zorg en Zekerheid

PENSION FUNDS

- Bedrijfstakpensioenfondsen Schilders
- Algemeen Burgelijk Pensioenfonds (ABP)
- Bedrijfstakpensioenfondsen voor de Bouwnijverheid (bpf BOUW)
- Pensioenfonds voor Woningcorporaties (SPW)
- Bedrijfstakpensioenfonds Zorgverzekeraars (SBZ)
- Pensioenfonds Rail & OV
- Pensioenfonds van de Metalektro (PME)
- Pensioenfonds Metaal en Techniek (PMT)
- Bedrijfstakpensioenfonds Koopvaardij
- Pensioenfonds PGB
- Pensioenfonds MITT
- Pensioenfonds Huisartsen (SPH)
- Pensioenfonds SNS Reaal
- Pensioenfonds Werk en (re)Integratie (PWRI)
- Bedrijfstakpensioenfonds voor de Media (PNO Media)
- Rabobank Pensioenfonds
- Philips Pensioenfonds
- Pensioenfonds KPN
- Pensioenfonds Achmea
- Pensioenfonds voor Fysiotherapeuten (SPF)
- Ahold Delhaize Pensioen
- Pensioenfonds Medisch Specialisten (SPMS)
- Pensioenfonds BPFL
- Bedrijfstakpensioenfonds Schoonmaak
- Pensioenfonds Vervoer
- Pensioenfonds DSM Nederland (PDN)
- Pensioenfonds IBM Nederland
- Pensioenfonds ING
- Pensioenfonds UWV
- Pensioenfonds TNO
- Bakkers Pensioenfonds
- Pensioenfonds Hoogovens
- Pensioenfonds KLM Cabinepersoneel
- Algemeen pensioenfonds KLM
- Pensioenfonds Vliegend Personeel KLM
- Pensioenfonds Medewerkers Apotheken (PMA)
- Pensioenfonds Vlees- en Vleeswarenindustrie en de Gemakvoedingindustrie (VLEP)
- Pensioenfonds Delta Lloyd
- Progress (Unilever APF)
- Heineken Pensioenfonds
- Pensioenfonds PostNL
- Pensioenfonds APF
- BPL Pensioen



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