

Biodiversity and Business

Challenges and good practices



Colofon

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Preface

Dear reader,

Biodiversity – the diversity of species – is crucial to the viability of our planet. Our societal progress and global economy depend on the stability of our ecosystems and nature. We require nature for fresh air, clean water and fertile soils, but also for our wellbeing and recreation. As biodiversity declines, so too does the resilience and adaptability of nature. However, we are losing biodiversity at a rapid pace: the WWF Living Planet report concludes that one million species are threatened with extinction.¹ Moreover, the status of conservation of 81% of European protected habitats is ‘poor’ or ‘bad’.²

Faced with such bleak numbers, it can be difficult to stay optimistic. However, inaction is not an option. It gives me hope to see that the attention given to biodiversity is increasing across all levels. In 2022, the Kunming-Montreal Global Biodiversity Framework was adopted, providing a clear vision and targets to take collective action on nature restoration and conservation. Central to the framework is an all-of-society approach, where both governments and businesses play a key role. Within the EU, we are also seeing many developments when it comes to nature- and biodiversity-related regulations, including the EU biodiversity strategy for 2030.³ The upcoming CSRD, which includes new ESRS guidelines developed in partnership with GRI, emphasises the importance of considering biodiversity impacts and dependencies as a business.



“Our societal progress and global economy depend on the stability of our ecosystems and nature”

VBDO has had biodiversity as a central topic in our AGM engagement project for three years. During this time, we have found that companies are increasingly aware of the link between business and biodiversity, but that they struggle to integrate biodiversity risks and opportunities in their business practices. Every company is, in some way, dependent on nature, but it can be challenging to determine exactly where dependencies and impacts lie. There is no ‘magic KPI’ equivalent to CO2 for climate. We feel that it is important to acknowledge these challenges, so they form a central part of this report. Being aware of the current roadblocks is an essential step towards finding solutions.

However, we do not have to start from scratch to find solutions. Some frontrunner companies have already found ways to deal with some of the difficulties of integrating biodiversity. These businesses integrate biodiversity in terms of governance, policy, implementation and/or accountability. While no companies can currently be held up as an example of ‘best practice’, we believe that you’ll find some inspiring examples in this report of how companies can take steps in mitigating biodiversity loss and regenerating nature. I find these developments very encouraging.

This report is written by VBDO with valuable support and assistance from our partner, PwC Netherlands. I would also like to thank the participating companies for the interviews and for their efforts on biodiversity.

We hope you take guidance and inspiration from this report.



Angélique Laskewitz
Executive Director of VBDO

1. Biodiversity and business

An urgent call for change

Biodiversity is essential for the existence of humankind. It can be defined as “the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part.”⁴ Biodiversity does not just provide intrinsic value but is also crucial to the global economy.⁵

Research by the United Nations’ Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) shows how provisioning, regulating and cultural ecosystem services form the foundation for human prosperity (see Figure 1.1). However, IPBES has identified a rapid deterioration of the health of global ecosystems over the last five decades.⁶ Biodiversity is under enormous pressure from human activity. One million species – of an estimated eight million in total – are threatened with extinction. In order to combat this, fundamental and systemic societal changes are necessary.⁷

The role of business

Biodiversity loss is mainly driven by 1) land and sea use change, 2) overexploitation of organisms, 3) climate change, 4) pollution and 5) the introduction of invasive species (see Figure 1.2).⁸ Many of these drivers result from business activities like agriculture, transportation, mining and manufacturing. This means that, if they change the way that they carry out these activities, businesses can play a vital role in halting biodiversity loss and restoring nature. As biodiversity loss undermines the functioning of ecosystem services, taking action is also important to safeguard businesses’ access to natural resources and processes. Physical biodiversity risks like poor soil quality, increasing drought and decreasing pollination can lead to financial risks for companies, such as declining harvests and decreased availability of essential natural resources. In addition, companies face biodiversity transition risks, such as regulations or costs associated with efforts to mitigate biodiversity loss.⁹

Sectoral biodiversity impact and dependency

The dependence and impact of companies on biodiversity are sector and location-specific and can vary depending on the ecosystems and biomes where their activities are carried out.¹⁰ As a result, the extent to which a business is dependent on and impacts biodiversity and ecosystems differs by sector. Businesses in sectors with higher dependencies and impacts on nature are more likely to be financially impacted than others, due to this exposure. The Taskforce on Nature-related Financial Disclosures (TNFD) identified eight priority sectors, 13 subsectors and 19 industries based on high dependencies and impacts on nature (see Figure 1.3). In addition to sectoral differences, location is another determining factor: an organisation in an area where nature is under pressure, could be more exposed to risks if this same organisation is dependent on specific ecosystem services in this area. The impacts of a company’s activities on nature and biodiversity are also more severe in high-risk ecosystems than those of organisations which have their assets and operations in relatively stable ecosystems.¹¹

Figure 1.2 | The five biodiversity-loss drivers



Figure 1.1 | An overview of the different ecosystem services



Because many drivers of biodiversity are present and the negative corporate impact on biodiversity is sector and location-dependent, acting on biodiversity is more

Figure 1.3 | Priority sectors and industries¹³

	Renewable resources and alternative energy	Infrastructure	Extractives and mineral processing	Health care	Resource transformation	Consumer goods	Transportation
Food and beverage	Forestry	Engineering and construction services	Construction materials	Bio-technology	Chemicals	Apparel	Cruise lines
Meat							
Poultry and dairy	Pulp and paper products	Water utilities and distributors	Metals and mining	Pharmaceuticals		Accessories	Marine transportation
Agricultural products	Biofuels	Electric utilities	Oil and gas exploration and production			Footwear	
Beverages and processed foods		Power generators					

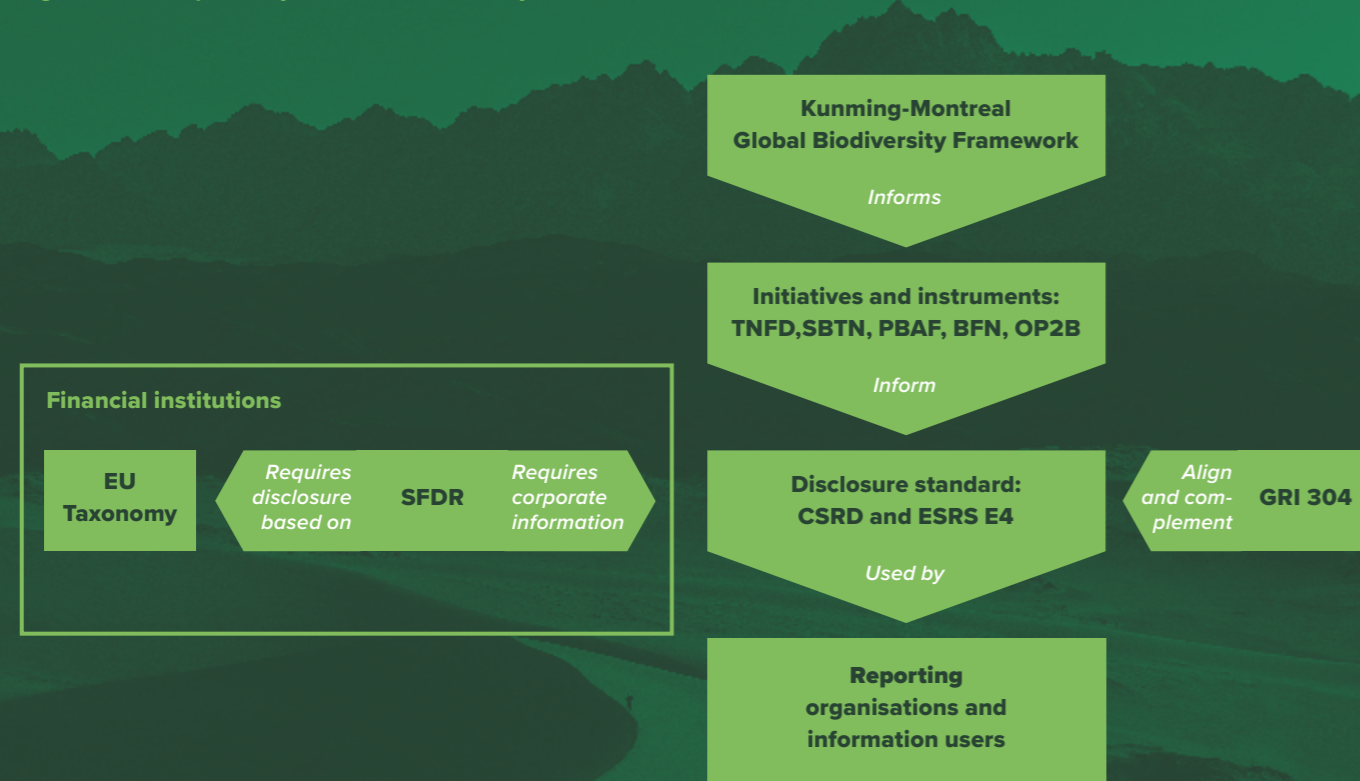
challenging. However, the financial consequences of inaction become increasingly clear.¹² Therefore, governments are introducing regulations that both help and force companies to act on biodiversity.

Acting on biodiversity

Many agreements, initiatives and regulations that help and require companies to act on biodiversity are already in place. Figure 1.4 shows the interconnectivity between all these initiatives, which are explained in more detail in Appendix 2. For example, on an international level, there is the Post-2020 Global Biodiversity Framework (GBF) – an international treaty that was adopted during the UN Convention on Biological Diversity in 2022 and signed by more than 190 countries.¹⁴ For this framework, ambitious goals and targets have been formulated to mitigate nature-related risks by addressing the direct drivers of biodiversity loss. In addition, the EU developed a biodiversity strategy for 2030, which is in

line with GBF to a high degree.¹⁵ Moreover, frameworks, such as those by the Taskforce on Nature-related Financial Disclosure (TNFD), Science Based Targets for Nature (SBTN), Partnership for Biodiversity Accounting Financials (PBAF), One Planet Business for Biodiversity (OP2B), Business for Nature and Finance for Biodiversity, help companies and financial institutions to report and act on biodiversity. Furthermore, the voluntary biodiversity reporting standard GRI 304 is already in place, which businesses can use to report in a standardised way on biodiversity. GRI is a useful tool for businesses to adhere to the mandatory reporting requirements, the CSRD. Not only are these disclosures necessary for corporate responsibility and accountability, but financial institutions also need this information from companies to comply with the Sustainable Finance Disclosure Regulation (SFDR).

Figure 1.4 | The pathway towards biodiversity action



2. Reporting on biodiversity

The previous chapter provides an overview of the current landscape of biodiversity-related regulations and initiatives. When it comes to legislative pressure on businesses, reporting is a key subject. While GRI has provided a voluntary non-financial reporting standard, large companies within the EU and/or operating within the EU will be obliged to report in line with the CSRD from the 2024 financial year onwards. Many European companies that already report on biodiversity use the standards from GRI.¹⁶ This section will provide insight into how companies can transition from GRI to the CSRD.

GRI 304

Disclosure 304 is a 'topic standard' that allows an organisation to report its impact on biodiversity and ecosystems. The latest GRI biodiversity standard was published in 2016, but the GRI is in the process of updating this standard. Many companies which report on biodiversity, still report in accordance with the GRI 304 2016 standard. The current standard includes the following disclosures:

- Management approach to biodiversity disclosures.
- Disclosure 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.
- Disclosure 304-2 Significant impacts of activities, products, and services on biodiversity.

- Disclosure 304-3 Habitats protected or restored.
- Disclosure 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations.¹⁷

CSRD & ESRS E4

Reporting in line with GRI is voluntary, but with the advent of the CSRD companies will be obliged to report non-financial disclosures. This process will be phased in on different timelines for different types of businesses (see Figure 2.1). For companies already reporting in line with GRI, the CSRD will not require a fundamental change in how the company reports biodiversity-related information.

If the company's double materiality assessment leads to the conclusion that biodiversity is a material subject for the company, it should comply with the topical disclosure requirements set out in ESRS E4:

General disclosure

- **E4-1: Transition plan in line with the targets of no net loss by 2030, net gain from 2030 and full recovery by 2050 (voluntary disclosure)**

Companies should disclose a biodiversity transition plan. This plan should show how the company ensures the compatibility of its business model and strategy with the preservation and restoration of global biodiversity and ecosystems in the transition to a



sustainable economy for the company's upstream, downstream and own operations.

Impact, risk and opportunity management

- **E4-2: Policies related to biodiversity and ecosystems**

Companies are expected to disclose their biodiversity policies, outcomes and risks. This includes reporting on how the company mitigates its negative impacts and maximises its positive impact on biodiversity through its value chain, and how biodiversity-related dependencies and impacts are integrated into the company's strategy.

- **E4-3: Actions and resources related to biodiversity and ecosystems**

The biodiversity and ecosystem-related actions that are taken and planned should be disclosed, including the corresponding targets and resources allocated to the action.

Metrics and targets

- **E4-4: Targets related to biodiversity and ecosystems**

Companies should disclose their specific targets on nature-loss mitigation, protection and restoration actions, including the aspects of biodiversity covered by the objectives and how the targets are compatible with 'no net loss by 2030' and 'net gain by 2050'. The target-setting and monitoring process should be clear.

Figure 2.1 | The CSRD timeline

January 5th 2023,
the CSRD entered
into force.

From the financial year 2024 onwards, all companies that are covered by the Non-Financial Reporting Directive (NFRD) and which meet two of the following three requirements will have to report according to the CSRD standards:

- > 500 employees
- > 40€ million in net turnover
- > 20m€ in assets

From the financial year 2025 onwards, companies that meet two of the following three requirements will have to report according to the CSRD standards:

- > 250 employees
- > 40€ million in net turnover
- > 20m€ in assets

From the financial year 2026 onwards, listed SMEs that meet two or more of the following requirements will have to report according to the CSRD standards:

- > 10 employees
- > 700,000€ in net revenue
- > 350,000€ in assets

From the financial year 2028 onwards, non-EU companies with more than 150€ million turnover within the EU with a branch or subsidiary in the EU will have to report using the CSRD standards.



- **E4-5: Impact metrics related to biodiversity and ecosystem change**
Metrics that accurately indicate the relation between the organisation and biodiversity – in the form of impacts and dependencies - should be disclosed, to allow for a performance evaluation. Determining good performance measures on biodiversity and ecosystems is an ongoing topic of development.
- **E4-6: Potential financial effects from biodiversity and ecosystem-related impacts, risks and opportunities¹⁸**
Companies should report on the short-, medium- and long-term financial effects of biodiversity and

ecosystem-related impacts, risks and opportunities. This disclosure is subject to a phase-in time of three years, where providing qualitative data instead of quantitative data is allowed.

From GRI to CSRD

The GRI has been a key contributor to the development of the ESRS and, therefore, these standards are in close alignment. In Figure 2.2 you can find an overview of some of the main similarities and differences between the CSRD and ESRS.

Figure 2.2 | Similarities and differences between CSRD and ESRS

Some similarities between GRI 304: Biodiversity 2016 and ESRS E4	Some differences between GRI 304: Biodiversity 2016 and ESRS E4*
<ul style="list-style-type: none"> - Identification of protected areas or high biodiversity areas in or nearby operations - Identification of habitats and description of restoration activities - Specification of protected or endangered species affected by operations - Identification and description of business activities with significant impact on biodiversity 	<ul style="list-style-type: none"> - ESRS E4 requires a description of how the strategy and business model relates to biodiversity impacts, dependencies, risks and opportunities - Specific alignment with global (public) biodiversity goals (UN, EU or national level) - Implementation requirements in place: policies, action plans and resources - Disclosing (impact) metrics and targets, and potential financial effects

* Q4 2023 GRI will launch the updated GRI 304 Biodiversity Standard which aims to reflect global un practice on biodiversity management to support companies in addressing their impacts and strengthens among other additions the interoperability with E4.

3. Biodiversity challenges and opportunities

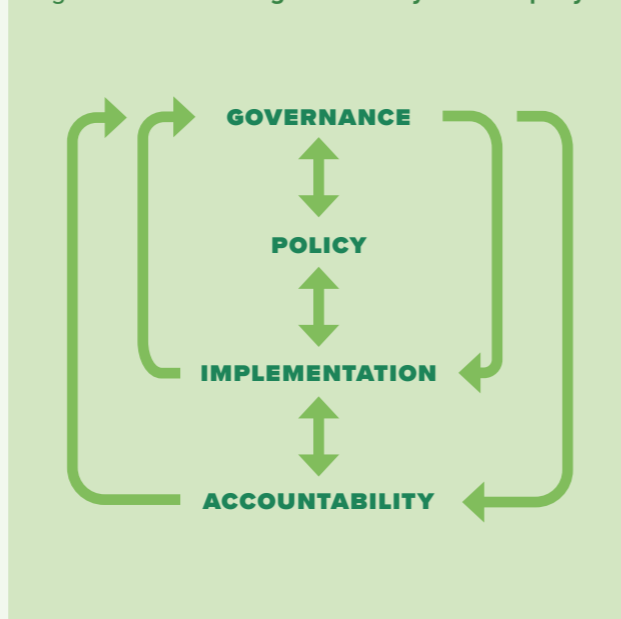
Addressing the issue

Managing the impacts and dependencies of companies on biodiversity is a complicated task. The following chapter will highlight four of the most important areas that will need to be improved in order for a business to be successful on the issue of biodiversity (see Figure 3.1). We have included a description of what good practice looks like for each area and the challenges that companies often face. You'll also read about companies that are already moving in the right direction. The challenges and examples of good practices have been determined through interviews.

When it comes to biodiversity, no company is operating at best practice level across the whole of its operations yet. However, there are companies which have already integrated biodiversity in governance, developed good biodiversity policies and implemented biodiversity solutions and/or which (at least to a certain extent) report on their biodiversity impact and dependencies. While the integration of biodiversity within these companies is not yet perfect, they do show that companies can take effective steps to addressing biodiversity-loss.



Figure 3.1 | Addressing biodiversity at a company



3.4. BIODIVERSITY AND GOVERNANCE

Governance relates to how a board is constituted, how it shows leadership and how it incorporates the right set of resources and incentives to address biodiversity loss throughout the organisation.

With regards to biodiversity, a company's board should create a sense of internal and external urgency and enable others throughout the organisation to take appropriate action. One way to do this is by making biodiversity a priority focus for resource allocation. In order to successfully do the above, it is essential that board members are aware of both the impact of their company on biodiversity and the financial risks of biodiversity loss.

For companies in sectors that significantly impact biodiversity, this awareness should translate into the board's recognition of biodiversity as a material topic. Furthermore, board members and managers should be incentivised to act on biodiversity, e.g. by incorporating biodiversity in the company's remuneration policy.

The following table provides an overview of the essential elements of good practice relating to governance and the related challenges. The challenges are discussed further in the next section.

Requirement	Description	Challenges
Vision at the top	Board members should understand the importance of biodiversity for the organisation and communicate this internally and externally to create a sense of urgency.	Biodiversity is a multidimensional topic, which means that it's difficult to comprehend and translate into a strong, linear strategy and message. Also, growing legal and societal pressure on companies has created a hesitance to consider biodiversity a material topic, due to fears of more regulatory and societal burdens.
Naming biodiversity as a priority topic for resource allocation	Sufficient in-house biodiversity knowledge and capacity is crucial in order to deal with the sector- and location-specific biodiversity challenges.	Many organisations prioritise certain themes with the introduction of ESG regulations like the CSRD, often this priority is climate-change mitigation. While this is to be welcomed, addressing more complex and, therefore, more costly topics like biodiversity is often postponed.
Incorporating biodiversity-related incentives	Biodiversity should be integrated into the company's remuneration policy and into the KPIs of high, middle and lower management.	Due to the many drivers of biodiversity loss, along with measurement issues and the absence of one standardised measurement methodology, it is difficult to set one clear biodiversity KPI.

Vision at the top

If a board of directors (hereafter board) does not show strong leadership on biodiversity, the negative effects will trickle down throughout the organisation and have considerable ramifications, including to the detriment of relevant policies. To achieve strong biodiversity leadership, it is vital that board members are aware of both the impact of their company on biodiversity and the financial risks of biodiversity loss. This awareness should translate to the board recognising biodiversity as a material topic.^{10, 19}

Currently, only 33% of the companies we assessed have included biodiversity in their materiality matrix.²⁰ In addition, only half of all companies have identified biodiversity risks. The reason for this is twofold: firstly, biodiversity is a sector- and location-dependent topic, which makes it difficult to set and communicate a clear vision. The impact of the company on biodiversity and the financial impact of biodiversity loss on the company are hard to quantify and understand. There are no standardised metrics or methods that can be easily applied. There is no single indicator that captures

biodiversity loss or gain that's equivalent to measuring CO2 for climate change. Secondly, addressing different drivers of biodiversity loss can, in some cases, lead to conflicting outcomes. Addressing climate change challenges can increase as well as decrease biodiversity loss. For instance, the energy transition decreases one driver of biodiversity loss - climate change - while increasing other drivers of biodiversity loss through mining activities for the required metals. These hurdles make it harder for the board to communicate and set a clear strategy.

With the upcoming CSRD and increasing societal pressures about sustainability, companies are hesitant to consider biodiversity as material because this leads to more reporting requirements. Companies are also afraid to make mistakes in their reports and to be held accountable for these mistakes by stakeholders.

Naming biodiversity as a priority topic for resource allocation

If the board does not consider biodiversity to be a material topic, corporate sustainability teams will not

receive the necessary internal support (in other words, sufficient resources) they need to address biodiversity issues. This support is crucial, because taking effective action and reporting accurately on biodiversity requires extensive knowledge and considerable time. Since a company's biodiversity impact is context-specific, comprehensive ecological knowledge and research is needed to fully understand and mitigate that impact. For example, companies in the construction or agriculture sector need to obtain detailed information about local soil types and quality in order to fully understand the impact of the company on biodiversity in different areas. Only then can they adjust their corporate activities to avoid or minimise their negative impact on biodiversity.

In addition, due to upcoming sustainability regulations and societal expectations, companies' sustainability teams need to address multiple issues at the same time. Due to the complexity of biodiversity loss and the relatively high labour costs involved in tackling it, taking action on biodiversity issues is often postponed and other sustainability issues are addressed instead. Furthermore, it can be a challenge for companies to recruit experts in sustainability and biodiversity experts, especially in the current labour market.

Incorporating biodiversity-based incentives

If a company does not set clear biodiversity targets for all relevant management levels, it is unlikely that it will effectively address biodiversity challenges. Setting such targets starts at the top-management level, by including biodiversity targets in the remuneration policy of a company. As well as motivating the company's board members to act on biodiversity challenges, this demonstrates to stakeholders that the company takes the issue of biodiversity loss seriously. However, in order to create a remuneration policy that is linked to biodiversity results, clear biodiversity targets and metrics are necessary.

This is something companies struggle with. The difficulty of determining one clear biodiversity KPI is due to the many drivers of biodiversity loss, which are interconnected and context specific. Many metrics are involved in measuring biodiversity, which makes it hard to integrate them into the remuneration policy.

GOOD GOVERNANCE PRACTICES

HEIJMANS – RESOURCE ALLOCATION TO BIODIVERSITY

Heijmans is a Dutch property development, construction, technical services and infrastructure company. An important part of good governance on biodiversity is the allocation of sufficient resources for improving biodiversity, mitigating biodiversity loss and enhancing knowledge throughout the organisation. Heijmans meets this expectation by employing ecologists on a permanent basis. This enables the company to make more informed biodiversity decisions, develop robust strategies, provide effective nature-friendly services and better understand its biodiversity impact.

Moreover, Heijmans seeks cooperation with knowledge partners, such as universities or research institutes, for many of its projects. An example is the partnership between Heijmans and Naturalis Biodiversity Center to conduct joint research into nature-inclusive building applications that enhance the entire local biodiversity.

At Heijmans' 2023 AGM, CEO Ton Hillen stated that Heijmans' Nature Ladder, a biodiversity-related policy, will likely become as important as Heijmans' Safety Ladder. Since the construction sector is, generally, more focused on safety than on environmental topics, this statement shows a clear vision that has also positively influenced the development of a biodiversity policy, as will be seen in the 'policy' section of this report.

UNILEVER – VISION AT THE TOP

Unilever is a multinational consumer packaged goods company. It has a corporate responsibility committee in place, which oversees Unilever's performance on sustainability topics, as set out in the Unilever Compass. This includes monitoring biodiversity topics such as the regeneration of nature and agriculture. The committee reviews sustainability-related risks as well as reputational matters, and also provides guidance and recommendations to Unilever's board of directors.

3.2 BIODIVERSITY AND POLICY

Developing a biodiversity policy helps a company to translate its biodiversity vision, which is set by the board, into operational procedures. It is important that a company's actions on biodiversity are led by a science-based biodiversity policy. This way, a company can implement the policy and achieve real-world outcomes by adequately mitigating its negative biodiversity impact and its financial biodiversity risks,

Sustainability is also included in Unilever's remuneration policy through the Sustainability Progress Index (SPI). The SPI consists of eight KPIs, which represent the sustainability pillars of Unilever's Compass. These KPIs are determined by the corporate responsibility committee and the compensation committee, and meeting them is a requirement of Unilever's long-term share incentive plan.

The sustainability targets included in the Compass include biodiversity objectives related to deforestation-free supply chains; land, forest and ocean regeneration; sustainable sourcing of crops; water stewardship programmes; plastic reduction and net-zero carbon emissions. Finally, the internal audit committee, which includes at least three non-executive directors, audit the progress made on these targets and related biodiversity risks on a quarterly basis. By doing so, they ensure oversight of Unilever's progress regarding its Compass.

WIDE OPEN AGRICULTURE – INCORPORATING BIODIVERSITY-BASED INCENTIVES IN THE ORGANISATION

Wide Open Agriculture (WOA) is an Australian regenerative food and agriculture company. It has several brands, which produce food in a way that restores local ecosystems. At WOA, awareness about the urgency to act on biodiversity is integrated into its governance. For example, in the company's remuneration policy, a KPI is included that focuses on restoring biodiversity for healthy and resilient landscapes.²¹

In addition, research teams have been installed to investigate the company's impact on biodiversity. This helps to ensure that the company has sufficient knowledge about its impact on biodiversity. Finally, WOA has close partnerships with its many suppliers. Due to good governance, WOA ensures the company's biodiversity standards are safeguarded and farmers are aligned with the purpose of the business: To build a new food and farming system to make a healthier world.

and putting in place targets to preserve, regenerate and restore natural capital where possible.^{22, 23}

Before a company develops such a policy, it is important that it investigates how and where it impacts biodiversity the most. One way of translating the company's research on its biodiversity impacts into a clear and implementable policy is by considering an incremental approach using the mitigation hierarchy (see box 2).²⁴

A successful policy should lead to specific, measurable, achievable, relevant and time-bound (SMART) objectives, which are also linked to the company's biodiversity vision and remuneration policy.²⁵

Determining significant biodiversity impacts and risks, and setting SMART biodiversity targets

If a company does not set SMART biodiversity targets, it cannot properly address biodiversity challenges. However, because biodiversity is such an encompassing concept, and can have very different meanings depending on level of interest (e.g. endangered species, or ecosystems) companies often struggle to such objectives.

When it comes to climate change, companies can use the 'CO2 equivalent' to measure and steer their climate impact. In contrast, with biodiversity, it is challenging to find and/or determine a specific biodiversity indicator that can be used to measure biodiversity and determine clear biodiversity objectives. Because biodiversity is highly dependent on the local context and changes over time, determining indicators that can be used at a group level to measure a company's impact on biodiversity and to set corresponding SMART targets is difficult.

Impactful biodiversity policies usually require impactful organisational changes

If a company does not systemically address biodiversity issues, it will not be able to appropriately minimise its negative impact on biodiversity. However, companies experience societal pressure to undertake short-term biodiversity actions.

Unfortunately, there are no simple solutions that companies can implement to address biodiversity. Instead, companies need to first thoroughly investigate their biodiversity impact, and then, based on the outcomes, implement biodiversity policies following the mitigation hierarchy (as seen in Figure 3.2). In short, companies firstly need to avoid as much of the negative impact of their activities as possible; secondly, minimise the remaining negative impact; thirdly, restore biodiversity where possible; and fourthly, compensate for any unavoidable negative impact.

However, it is tempting to neglect the first step: avoid making a negative impact on biodiversity in the first place. Generally, avoiding making a negative impact requires more research and changes to the company's business model, which is usually costly, risky and time-consuming. In addition, a lack of clarity often exists on the best ways to avoid making a negative biodiversity impact.

The trade-off between climate change and biodiversity

If a company creates a climate change or biodiversity-related policy, it has to take the interconnectivity of the drivers of biodiversity loss and climate change into account. A solution for climate change can both positively and negatively affect biodiversity loss.

A concrete example of such a trade-off can be found in the farmed fish industry. Companies that want to make biodiversity-positive choices must also consider the impact of their feed. A plant-based feed could be a more nature-positive alternative to fish-based feed. However, besides the disadvantage of the higher price of plant-based feed, there is also a risk that plant-based feed may have higher carbon emissions compared to

fish-based feed, especially if the fish mainly comes from residual waste from the fish industry.²⁶ These conflicting outcomes make it more difficult for companies to determine 'good' biodiversity strategies.

Addressing a company's impact on all biodiversity drivers

If a company aspires to create a strong biodiversity policy, it should incorporate actions to be taken on its most relevant drivers. As previously mentioned, the IPBES identified five direct drivers of biodiversity loss: 1) changing use of sea and land, 2) direct exploitation of organisms, 3) climate change, 4) pollution and 5) invasive non-native species.²⁷ The interrelatedness between the different drivers highlights the complexity of biodiversity as a topic and the necessity for a comprehensive understanding of a company's impact on all relevant drivers.

Many companies have already developed a climate change strategy, and therefore, indirectly address biodiversity issues. On the one hand, this is a positive step because this could indicate that companies already have relevant information available to address

BOX 2 – THE MITIGATION HIERARCHY

The hierarchy consists of four steps: avoid, minimise, restore and offset (see Figure 3.2). These steps are in order of importance according to the reliability of their impact. Avoiding biodiversity loss is more reliable in terms of environmental impact than trying to restore or offset lost biodiversity.²⁸

An example of avoiding making a negative impact is not placing infrastructure or operations in key biodiversity areas or vulnerable ecosystems. It is easiest to avoid making an impact at the beginning of a project, so ideally biodiversity should be considered from the start. Any remaining negative impact can then be minimised by implementing measures that reduce effects such as pollution, noise and emissions.

Restoring biodiversity, meaning to improve degraded ecosystems, is the third step. The best way to return an area to its original state depends on the type of ecosystem. For instance, native species of trees could be planted in forests and on mountains, more diverse crops could be grown on farmlands (using natural fertiliser), and efforts might be taken to grow coral reefs, mangroves and seagrass in oceans and along coastlines.²⁹

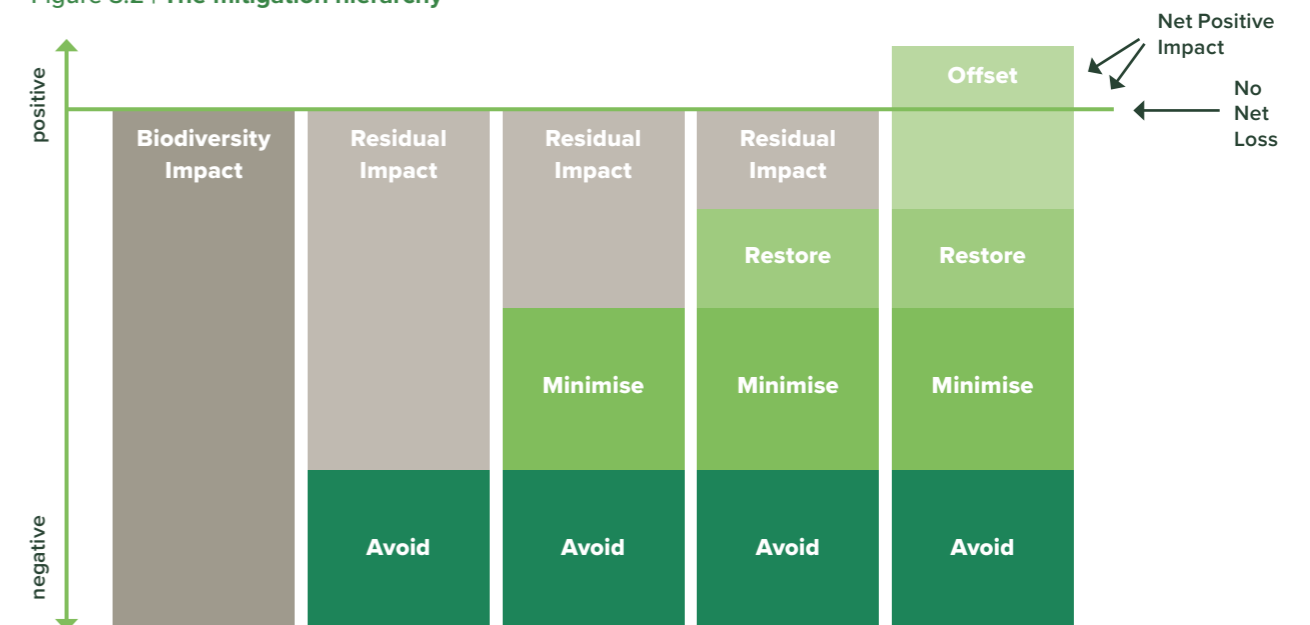
After taking steps to avoid, minimise and restore biodiversity loss, a company can then take the step of offsetting any residual negative impact. This fourth and final step can be taken to achieve 'no net loss' or even a 'net gain' of biodiversity. However, biodiversity offsetting is an imperfect science, because of the uncertainty of impact and outcomes. For example, it

is impossible to quantitatively compare different ecosystems, because of the location-specific value of each ecosystem and its services. Degraded or lost biodiversity and ecosystems in one place cannot simply be replaced by increasing biodiversity in another place. Therefore, offsetting should be used as a last resort if all other steps have been taken and there is still some residual impact.³⁰

One important condition to using the mitigation hierarchy is the need to be aware of the nature-related risks you are exposed to and the impacts you have on biodiversity loss. If you know this, the mitigation hierarchy can be applied to any project or sector to achieve nature-related goals, such as 'no net loss' or 'net gain' of biodiversity.

Requirement	Description	Challenges
Determining significant biodiversity impacts and risks, and setting SMART biodiversity targets	The company should identify its main impacts on biodiversity as well as how it is most dependent on nature (and therefore exposed to risks). In addition, a company should install SMART and group-wide biodiversity targets.	There is not one stand-alone biodiversity indicator that can be used to measure a company's biodiversity impact and be used to set one SMART biodiversity target. Biodiversity loss has multiple, interconnected drivers, is highly dependent on the sector and location and changes over time.
Making impactful organisational changes where necessary to support biodiversity policies	In order to effectively address biodiversity loss-related challenges, companies often need to structurally adjust their business models in order to avoid or reduce their negative impacts and restore lost biodiversity where necessary.	Many companies are aware of the need to address biodiversity loss, and following frameworks such as the mitigation hierarchy can lead to significant biodiversity improvements. However, the most effective biodiversity approaches are often also the more research-intensive and require more organisational changes.
The trade-off between climate change and biodiversity	The company should address biodiversity loss as well as climate change.	Solutions for climate change can both positively and negatively affect biodiversity loss. Therefore, conflicting interests can exist within a company's sustainability policy.
Assessing a company's impact on all biodiversity drivers	A company should have a clear biodiversity policy that aims to address the company's most relevant biodiversity-loss drivers.	Many companies already address biodiversity via one biodiversity loss driver: climate change. Therefore, there can be an internal debate about whether to develop a policy for each of the different biodiversity-loss drivers or one for biodiversity as a whole.

Figure 3.2 | The mitigation hierarchy³¹



biodiversity issues. On the other hand, it can lead to an internal debate on whether to develop independent topical policies that relate to addressing biodiversity loss – climate policies, circularity policies, plastic policies, deforestation policies and so on – or to address biodiversity through one stand-alone policy. The topical approach could be easier to implement,

since it means that companies can address issues case by case, which could make taking action more manageable. However, focusing on single topics prevents companies from taking a systematic approach, where all drivers of biodiversity loss are assessed and addressed. In that case, certain biodiversity issues might stay undiscovered and so be insufficiently addressed.

GOOD POLICY PRACTICES

CORBION – DETERMINING SIGNIFICANT BIODIVERSITY IMPACTS AND RISKS, AND SETTING SMART BIODIVERSITY TARGETS

Corbion is a Dutch food and biochemical company. It has set many sustainability-related targets, including the ambitious target to achieve 100% verified deforestation-free key agricultural raw materials by 2025. The five key raw materials are sugarcane, palm oil, soy, wheat and corn. Corbion has already made considerable progress on many of its targets.³²

The company tracks progress on its targets and reports this in its annual report. Moreover, Corbion has policies in place to limit the adverse impact that its key raw materials may cause, such as policies on deforestation, air quality, water stewardship, climate change, and sustainable agriculture and soil quality.

HEIJMANS – DETERMINING SIGNIFICANT BIODIVERSITY IMPACTS AND RISKS, SETTING SMART BIODIVERSITY TARGETS, AND MAKING IMPACTFUL ORGANISATIONAL CHANGES

Heijmans has incorporated biodiversity and climate adaptation in its area development projects for several years. By carrying out baseline assessments before starting a project, it is able to set area-specific targets to determine effective measures to improve biodiversity. In addition, Heijmans can measure its impact by comparing the outcomes of the project to the baseline assessment.

This strategy highlights the importance of good knowledge throughout the company, since Heijmans developed this measurable biodiversity approach with knowledge partners, such as Naturalis and Staatsbosbeheer. Moreover, together

with NL Green Label, Heijmans developed a framework to systematically incorporate seven priority themes in each construction or infrastructure project, including biodiversity, climate adaptation and circularity.

As well as these assessments, Heijmans' ambition is to leave every area of operation in a better state than they found it. In order to make it easier for the whole sector to improve biodiversity through its projects, Heijmans has developed the Nature Ladder (Natuur ladder), in collaboration with Dura Vermeer. This tool is meant to make building in a nature-inclusive way feasible and to measure to what extent projects are nature-inclusive, improve climate adaptivity, and contribute to a more nature friendly environment. The Nature Ladder makes it possible for companies to take concrete action to realise targets for nature-inclusive and climate-conscious construction (see Box 3).

SIGNIFY – ASSESSING A COMPANY'S IMPACT ON ALL BIODIVERSITY DRIVERS

Signify is a Dutch lighting company, which sells its products globally. It has formulated a biodiversity roadmap, 'Better Lives, Better World 2025', which includes a number of targets to be achieved by 2025. This is a research-based approach to biodiversity, where the future paths are determined by carrying out impact assessments on Signify's value chain.

In 2022, Signify did an initial assessment to determine the biodiversity impact of its operational footprint, using the Integrated Biodiversity Assessment Tool (IBAT) and the TNFD Framework. In 2023, Signify is carrying out an impact assessment on its complete value chain. Based on the outcome, Signify will determine which biodiversity actions to take in order to reduce Signify's biodiversity footprint.

3.3 BIODIVERSITY AND IMPLEMENTATION

Once a company's board has strong, clear views about biodiversity, and it has created a robust, research-based

biodiversity policy, it then needs to fully implement this policy throughout the organisation. The only way for a company to have a positive impact on biodiversity is by

BOX 3: HEIJMANS' NATURE LADDER

The Nature Ladder consists of five steps. Step (1), 'nature unconscious' means building without considering the impact on nature. Step (2), 'nature friendly', means carrying out ad hoc

nature-inclusive initiatives. Step (3), 'nature conscious', means carrying out nature-inclusive construction in a structural way, by identifying opportunities for nature and discussing these with the construction's developer. Step (4), 'nature inclusive', requires the involve-

ment of other stakeholders, in addition to the contracting party. The aim of this step is to improve local biodiversity and natural capital. Step (5), 'nature adaptive', means building together with nature. This is a way of building that fully integrates biodiversity and climate adaptation.

Element	Description	Challenges
Implementing the company's vision and policy consistently	The biodiversity vision of the company should be fully implemented across the organisation. Therefore, concrete biodiversity targets for the operational management level are needed.	It is difficult to set concrete and measurable biodiversity targets, due to the complexity of the subject and the many drivers of biodiversity loss. This makes it challenging to hold operational management accountable.
Reducing the supply chain's negative impact on biodiversity	Generally, the largest biodiversity impact is made by the company's supply chain. Therefore, companies need to improve biodiversity via supply chain companies.	Large, listed companies often have a large supply chain, which includes numerous small companies. These small companies are difficult to reach and have few financial incentives to implement biodiversity measures.
Safeguarding and monitoring a long-term positive impact on biodiversity	Improving biodiversity often takes time. Therefore, companies need to ensure that their biodiversity projects have a long-lasting impact and that this impact is monitored.	Companies that run short-term projects, such as those in the construction industry, often struggle to ensure that the positive biodiversity impact is kept and monitored once the project is completed and the company has moved on.

implementing effective biodiversity measures. Therefore, good biodiversity implementation should lead to the avoidance and mitigation of biodiversity loss. This should include an effective and structural monitoring mechanism.

Implementing the company's biodiversity vision and policy consistently

When a company has determined its biodiversity vision and policy, it is important that this is translated into clear objectives at the operational management level. However, for many companies, this is challenging due to the lack of clear biodiversity KPIs that can be used at an operational level. For example, it is tricky to set effective KPIs for operational management in order to achieve an overarching target such as 'no net biodiversity loss before 2050'.

However, if no KPIs are set, then operational management has insufficient incentives to correctly implement biodiversity policies.

90% of the companies that VBDO assessed implement measures to reduce their negative biodiversity impact and 60% implement measures to restore biodiversity. Whilst these percentages sound positive, many of these implemented measures do not address the core issue of biodiversity loss. For example, many companies choose to predominately focus on the recycling of plastic, rather than using less plastic. Another example is companies that support projects focussed on planting trees, beekeeping or installing birdboxes, rather than avoiding deforestation and biodiversity loss to begin with.

Although these examples can have a positive impact on biodiversity and are relatively easy to implement, they cannot replace efforts to reduce the negative impacts of the business activities of the company and its supply chains. If strict KPIs are not formulated to hold operational management accountable, there are fewer incentives to address core biodiversity loss.

Reducing the supply chain's negative impact on biodiversity

The largest corporate impact on biodiversity is often via a company's supply chain. For example, tech companies

make a significant impact on biodiversity due to the mining of minerals in their supply chains; the mining industry has a notorious reputation for making a severe negative impact on biodiversity. Another example is grocery retailers, which make a considerable negative impact on biodiversity via the products they sell, even though they do not produce food themselves.

This makes it harder to address the core issues of biodiversity loss, especially as the countries where the negative impact is usually made generally do not have the same environmental standards as Europe.

GOOD IMPLEMENTATION PRACTICES

ALBERT HEIJN – REDUCING THE SUPPLY CHAIN'S NEGATIVE IMPACT ON BIODIVERSITY AND SAFEGUARDING AND MONITORING A LONG-TERM POSITIVE IMPACT ON BIODIVERSITY

Albert Heijn, a Dutch supermarket brand owned by Ahold Delhaize, partners with approximately 1100 farmers, growers and suppliers for its 'Better for Nature and Farmer' programme. The programme has been developed in close collaboration with farmers and growers, and covers the production of dairy, chicken, pork, eggs and Dutch fruit and vegetables.

Better for Nature and Farmer aims to reduce carbon emissions while improving biodiversity and to increase animal health and welfare. It also improves the revenue model of the farmers, including through a commitment to long-term contracts and guaranteed purchase agreements.

The programme is audited annually by independent certifying bodies, and Milieu Centraal³³ reviews it for ambition, reliability and transparency.

DSM-FIRMENICH – IMPLEMENTING THE COMPANY'S VISION BY DEVELOPING A SUSTAINABLE ALTERNATIVE TO FISH OIL

DSM-Firmenich is a multinational nutrition, health and beauty company. It has introduced transformative products that avoid some of the common negative effects on biodiversity of these types of products. At the same time, this focus on biodiversity has provided some great business opportunities for the company. For example, in the omega-3 area, the company has developed an algae-based solution that can replace fish-based omega-3 sources.

Veramaris algal oil is rich in omega-3, so provides a sustainable alternative to fish oil in animal feed and feed for farmed

fish. Algae-based omega-3 is also used instead of fish-based omega-3 in the dietary supplement life's[®]OMEGA. The supplement is vegan-friendly and provides the omega-3 fatty acids EPA and DHA. DSM-Firmenich's algae-based omega-3 oils are helping both the human and animal nutrition industries to rely less on fish-based omega-3, thereby avoiding the strain caused on marine ecosystems by overfishing.

JDE PEET'S – REDUCING THE SUPPLY CHAIN'S NEGATIVE IMPACT ON BIODIVERSITY AND IMPLEMENTING THE COMPANY'S VISION AND POLICY CONSISTENTLY

JDE Peet's is keenly aware of its dependency on nature for the production of its coffee. To decrease the impact of coffee production on biodiversity, JDE Peet's works closely with coffee farmers, as well as with local authorities, NGOs, cooperatives, exporters, suppliers, roasters and local communities. Regenerative agriculture and responsible land-use practices are used, among other things, on farms to increase soil quality, improve water management, mitigate and adapt to climate change, and improve the overall livelihood of the farmers, their families and communities.

When it comes to halting deforestation, JDE Peet's has the ambitious target to not only achieve a deforestation-free supply chain, but to also support producing countries in their journey towards a deforestation-free coffee sector. This inclusive approach is supported by the analysis and accuracy-assessment of high-definition satellite imagery to map forest- and coffee plots, assess the risk of coffee-related deforestation and implement mitigation measures to prevent or remediate deforestation. Through its farmer initiatives, JDE Peet's is already working on several restoration and reforestation projects in countries like Honduras, Peru and Indonesia, and is also actively involved in targeting the root causes of deforestation, including poverty.

The difference between suppliers is also a factor. For example, in a grocery retailer's supply chain there can be hundreds or more relatively small, family companies. It is more difficult and costly to install measures avoiding or mitigating biodiversity loss for such groups, especially if it is in lower-income regions.

Finally, acting on biodiversity in the supply chain is costly and, in the short run, does not lead to direct financial benefits. Consequently, suppliers have few to no financial incentives or means to undertake actions reducing biodiversity loss or restoring biodiversity,

e.g. avoiding or minimising deforestation or restoring forests. What's more, without a direct financial incentive, for example compensation for choosing sustainable suppliers, there is a risk that companies will choose suppliers with lower biodiversity standards, as these generally have lower purchasing prices.

Safeguarding and monitoring a long-term positive impact on biodiversity

If companies take action on biodiversity but do not take measures to safeguard and monitor the work carried out, previous efforts might be in vain. Positively im-

KINGFISH – IMPLEMENTING THE COMPANY'S VISION BY USING LAND-BASED FISHERY TO PROTECT LOCAL BIODIVERSITY

Kingfish is a Dutch-farmed fish company providing a transformative solution to the generally negative biodiversity impact of salt-water fisheries. Kingfish's fish farms are land-based, which prevents fish from invading the local ecosystems. The sustainable technology is based on recirculating aquaculture systems using seawater. The water is returned to the sea after being sterilised. Through this system, the company prevents water pollution and invasive species from entering the sea.

In general, the fishery prevents negative impacts on the surrounding areas by creating a separate ecosystem. Moreover, the company's fish have a low feed conversion ratio (FCR), meaning that they require less feed to produce the same body weight compared to other animal proteins. To further increase the sustainability of the fish feed, Kingfish aims to develop more plant-based feed.

NESTLÉ – IMPLEMENTING THE COMPANY'S VISION BY ADVOCATING FOR NATURE-POSITIVE LEGISLATIVE CHANGES

Nestlé is a Swiss multinational food and beverage company. It has strong engagement and advocacy on nature. It speaks out for clear, robust and ambitious regulation and collective action on biodiversity. Nestlé has been involved with several advocacy activities related to nature and climate, sometimes in partnership with other companies, coalitions and associations.

In 2022, Nestlé was present at the CBD COP15 in Montreal, where it publicly supported the Business for Nature campaign, which called for the mandatory assessment and disclosure of impacts and dependencies on biodiversity.³⁴ Moreover, Nestlé advocated for an ambitious agreement

during the negotiation processes with government representatives, and shared platforms with stakeholders to talk about the importance of addressing biodiversity loss and supporting effective biodiversity policies as businesses.

On a European level, Nestlé has been a supporter of several nature-related policies. When it comes to the development of legislation on deforestation-free supply chains, Nestlé and other business leaders supported the European Union in increasing supply chain transparency and traceability for products that could be associated with deforestation.³⁵ In 2023, Nestlé was part of a group of more than 100 businesses that called on the EU to adopt an ambitious and legally binding EU Nature Restoration Law, because of the dependence and impact of business on nature.³⁶

PAPYRUS AUSTRALIA – IMPLEMENTING THE COMPANY'S VISION BY USING BANANA WASTE AS AN ALTERNATIVE TO PLASTIC AND PAPER PACKAGING

Papyrus is the developer of a sustainable technology that converts banana plantation waste into biodegradable food packaging products. This is a transformative product that is a sustainable alternative to plastic and paper packaging. Moreover, this process avoids the methane emissions that would have been released if the banana waste had decomposed in nature.

Unlike most of the other companies in the paper and pulp industry, Papyrus uses no chemicals and does not contribute to deforestation. Papyrus' process only requires electrical energy and heat as inputs. The company output is not only the food packaging products, but also the retained nutrients from the banana waste in the form of an organic liquid. This liquid can be returned to the farms, where it can be applied back to the soil to improve soil health and reduce the risks of pests and diseases.

pacting and restoring biodiversity requires a long-term investment. Actions to, for instance, improve soil quality and decrease pollution can be taken relatively quickly, but it will take time before these measures show results and improve biodiversity. In addition, these actions should be executed on a continuing basis (e.g. by systematically using eco-friendly fertilisers). This can be challenging for companies working on a project basis in a specific area, which plan to leave the area after finishing a project.

Since the biodiversity impact is often only apparent months or even years after the project has been completed, companies must continue evaluating their impact even when the specific project is finished. For example, if a company launched a project together with local farmers aiming to avoid deforestation and restore the forest, the company still needs to monitor whether the forest remains intact and is indeed restored after the project is finished. If this does not happen, no one can be held accountable if the future outcomes of the project do not live up to the expectations.

3.4 ACCOUNTABILITY AND BIODIVERSITY

To complete the circle of taking responsibility for biodiversity, the company needs to be transparent by

reporting in line with existing sustainability reporting standards. This is important for internal as well as external stakeholders.

Internally, clear and consistent biodiversity reporting leads to better biodiversity governance, policies and implementation. Externally, reporting is crucial because it is only when companies are transparent that external stakeholders can hold them accountable. In addition, financial institutions require sustainability information from companies to guide their responsible investment process and, for that reason alone, companies need to report on their sustainability performance. Our research shows that 70% of the assessed financial institutions feel that the lack of corporate biodiversity data is the biggest challenge for integrating biodiversity into their investment portfolios.

Structural and transparent biodiversity reporting is essential for proper accountability. Biodiversity reporting should go beyond merely reporting on the company's own activities; it should also include the activities of the company's value chain. Companies should align with initiatives, such as the SBTN and TNFD, for reporting. Moreover, it is important that the biodiversity information is being audited by an independent organisation.^{37, 38}

Moreover, the company uses natural capital accounting (NCA) and soil organic carbon (SOC) assessments to determine a baseline of suppliers' natural capital. NCA quantifies the full ecosystem of a farm, which allows farmers to improve sustainable farm management and provides WOA with the data to identify the relationship between natural capital and farm performance. SOC assessments measure soil health, the ability of the soil to retain moisture, and the capacity of the soil to sequester carbon. Soil quality is also an important indicator of biodiversity health.

WOA's 2023 Annual Regeneration Report provides four examples of farms that have applied these methods, and gives the outcomes. WOA also works with AxisTech to map the impact of regenerative farming practices on one of WOA's key beef suppliers, using the NCA, SOC and greenhouse gas emissions data. Lastly, a comprehensive overview of the company's carbon offsets is included in the report. This data supports its claim of having the first regenerative, carbon-neutral certified oat milk brand.

GOOD ACCOUNTABILITY PRACTICES

WIDE OPEN AGRICULTURE – REPORTING COMPREHENSIVELY ON THE COMPANY'S IMPACT ON BIODIVERSITY, IN LINE WITH REGULATORY AND SOCIETAL EXPECTATIONS

WOA has an Annual Regeneration Report, in which it provides information on the social and environmental impact of its activities. For one of its brands, Dirty Clean Food, farming suppliers have to develop a regenerative farm plan based on key regenerative agriculture principles. These principles are divided into four categories: soil health, biodiversity, water and nutrient cycles and commitment to a learning journey. When it comes to biodiversity specifically, farmers have to determine how they will increase diversity in production systems; integrate livestock; and enhance above-ground biodiversity and ecosystem health. The plans of the farmers are monitored regularly and reviewed annually.

Element	Description	Challenges
Using a universal biodiversity framework	Companies would like to use a universal biodiversity framework as this makes reporting easier and enables the performance of different companies to be compared.	Since a company's biodiversity impact and dependency are context specific and differ per sector, it is difficult to apply one universal framework to all companies.
Determining who is responsible for which biodiversity losses in a specific area	Companies need to report about the negative biodiversity impact they have made in every relevant areas.	Often, there are many different actors that negatively impact biodiversity in one specific area. Therefore, it can be difficult to determine and measure the impact of a specific company
Reporting comprehensively on the company's impact on biodiversity, in line with regulatory and societal expectations	With the upcoming CSRD and increasing interest from a number of stakeholders, companies are now expected to report biodiversity-related information more extensively and consistently.	Companies experience pressure to report on many different sustainability topics in a short time. Alongside this, inexperience with this type of reporting creates a fear of reporting inaccurately and a fear of the financial and societal consequences of such a mistake.

Using a universal biodiversity framework

Because of the sector- and location-specific nature of biodiversity, universal biodiversity indicators can be too general for certain contexts. Several companies stated that, while there are a number of biodiversity frameworks, these frameworks are not applicable to their business due to the context-specific nature of biodiversity. In addition, collecting biodiversity data is difficult and expensive.

For example, if companies in the grocery retail sector want to accurately map their indirect biodiversity impact, they need to regularly investigate the flora and fauna affected in their supply chain. Since these supply chains generally consist of many suppliers, sub-suppliers and farms all over the world, this is not a realistic expectation. In addition, grocery retailers contribute to different drivers of biodiversity loss than, for example, mining companies.

Determining who is responsible for which biodiversity losses in a specific area

If multiple companies are active in one area, it becomes difficult to determine which actor is responsible for which part of the loss of biodiversity in that area. Biodiversity is location-specific and there are often multiple drivers of biodiversity loss at play in a certain

location. If on top of that, the driving factors are coming from different sources, determining who is responsible becomes even more difficult.

For example, biodiversity in marine environments is decreasing rapidly due to all five drivers of biodiversity loss and all drivers are accelerated by multiple companies at the same time. It is important to take collective responsibility and not resort to pointing fingers, refusing to take action or relying on other companies to fix the problem.

Reporting comprehensively on the company's impact on biodiversity, in line with regulatory and societal expectations

Finally, now more companies feel pressured to report on biodiversity information, especially with the upcoming CSRD. Companies are trying to comply with the CSRD and other regulations, but doing so is challenging due to the lack of best practices, clear guidelines, resources and time. In addition, many companies have little or no experience of reporting this kind of non-financial information. Coupled with the challenges discussed earlier, this creates fear among companies that they will report information that later turns out to be inaccurate and then be punished for doing so.

4 Conclusion

“We have found 11 companies that are already implementing good practices that address some of the challenges”

The link between business and biodiversity is well established and now increasingly recognised by companies as well as by government regulation. It is essential that biodiversity becomes an integral part of business practice for two reasons. Firstly, because global biodiversity is decreasing at a fast pace, impacting our nature, society and economy. Secondly, there is a direct and two-way relationship between business and biodiversity. Business activities negatively affect biodiversity and, at the same time, decreased biodiversity affects businesses because of their dependencies on ecosystem services. This double materiality aspect is central to current regulation and needs to be taken into consideration when businesses decide how to approach the issue of biodiversity.

It is clear that action on biodiversity loss is necessary, but how to put this into practice is another question. We have identified challenges relating to the categories of governance, policy, implementation and accountability. The challenges vary, but the recurring themes in every category are the complexity of the subject of biodiversity, due in part to the location- and sector-specific nature of it. The right measures must be determined based on the specific context of the company and the areas where the company operates. In addition, different biodiversity-loss drivers interact with each other, and what works to mitigate pollution, for example, might not work to decrease invasive species. Besides this, loss of biodiversity cannot be captured in a singular KPI that can be easily implemented and monitored. However, just because these challenges exist does not mean that it is impossible to take action. Being aware of the difficulties enables us to start solving them, and some companies have already started to do so.

Although there is not yet one company that can be held up as demonstrating best practice in every area of biodiversity, we have found 11 companies that are already implementing good practices that address some of these challenges. These good practices include, for example, integrating biodiversity into the remuneration policy; working with research institutes and other knowledge partners on policy development; and creating innovative and transformative products that help move the company towards nature-positive business practices.

All the good practices we have found demonstrate the importance of collaboration, whether this is with knowledge partners, local suppliers or policymakers. It is essential to collectively address biodiversity loss. In order to further advance this process, VBDO will work towards developing a biodiversity benchmark for businesses using the categories mentioned in this report: governance, policy, implementation and transparency. This benchmark will help companies to tackle biodiversity loss. Moreover, it will help in determining and highlighting more good examples that can educate and inspire others.

Appendix I - Methodology



This report was written by VBDO in collaboration with PwC. The goal of the report is to highlight the importance of biodiversity for businesses, gain a better understanding of the current challenges for businesses when it comes to taking action on biodiversity loss, and share some good practices of companies to give ideas for how companies can deal with biodiversity-related challenges. This study is based on various research methods, as follows:

First, our research of 17 Dutch insurance companies and 43 pension funds comprised:

- Desk research to set a theoretical background on biodiversity and to provide a foundation for further study;
- A survey of Dutch pension funds and insurance companies about their approach to biodiversity in terms of policy and investment instruments, based on self-reporting. The questionnaire was completed by 17 insurance companies and 43 pension funds, which represents 82% of the research group;
- Semi-structured interviews with experts and investors to share their perspectives and provide context to the theory and survey results.

Second, our research of 33 Dutch listed companies comprised an assessment and engagement dialogues. The assessment contained ten criteria, the results of which have been used to indicate a company's biodiversity performance. These criteria related to the company's biodiversity strategy, its risk assessment, the implementation of the policy and the level of transparency. The initial assessment results were shared with the company and an opportunity to provide feedback was given. In addition, during engagement dialogues, biodiversity challenges were discussed.

Third, we conducted semi-structured interviews with 11 listed companies, where we discussed biodiversity good practices relating to governance, policy, implementation and/or accountability. The interviews had the goal of determining whether these were indeed good practices, what the good practices look like, and what these companies considered to be challenges when it comes to biodiversity.

A concise overview of the topics we discussed in these interviews:

- The company's approach to biodiversity;
- Use of a mitigation hierarchy;
- Involvement of the board and/or committees;
- Risk and impact assessment methods;
- Materiality;
- Biodiversity policy and strategy development;
- Determining biodiversity targets;
- Sustainability standards of suppliers;
- External audit of biodiversity-related information;
- Biodiversity challenges.

Appendix 2 - Biodiversity regulation and initiatives

Global biodiversity framework

Post-2020 Global Biodiversity Framework (GBF)

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.

Measurement instruments

Taskforce on Nature-related Financial Disclosure (TNFD)

The TNFD is an international effort aimed at creating a framework for companies and financial institutions to assess and disclose their dependencies and impacts on nature. It has developed general guidance, as well as sectoral and biome-specific guidance. Generally, the recommendations on disclosure and target-setting are categorised into four pillars: governance, strategy, risk and impact management, and metrics and targets.

Science Based Targets for Nature (SBTN)

The Science Based Targets for Nature (SBTN) initiative establishes scientifically informed goals for businesses and organisations to address and mitigate their impact on nature and biodiversity. It provides guidance to companies in setting science-based targets by following a five-step approach: assess, prioritise, measure, act and track.

Partnership for Biodiversity Accounting Financials (PBAF)

PBAF is a collaborative initiative focused on developing and implementing biodiversity-related accounting practices and metrics within the financial sector to enhance sustainable decision-making.

Business for Nature

Business for Nature initiative is a global coalition of more than 80 businesses and organisations committed to advocating for the protection and restoration of nature and achieving a nature-positive economy by 2030 by driving business action and policy ambition.

One Planet Business for Biodiversity (OP2B)

OP2B is a global initiative launched in 2019 by a group of leading food, cosmetics and textile companies that are committed to addressing biodiversity loss and promoting sustainable practices in their operations and supply chains, specifically through scaling up regenerative agriculture, enhancing cultivated biodiversity, and protecting high-value ecosystems.

Finance for Biodiversity

The Finance for Biodiversity foundation initiated a pledge that financial institutions can sign to call on global leaders and to commit to using their finance activities and investments to protect and restore biodiversity. Moreover, the Finance for Biodiversity foundation undertakes collective action with the signatories of the pledge.

EU regulation

Corporate Sustainability Reporting Directive (CSRD)

The CSRD is a regulation established by the EU that requires large companies to disclose information about their ESG performance using ESRS, and requires auditing of the disclosed data. It is based on a double materiality principle, meaning that companies should consider the materiality of sustainability aspects from a dependency as well as from an impact perspective.

Sustainable Finance Disclosure Regulation (SFDR)

The SFDR is an EU initiative that compels financial market participants and advisors to provide transparency regarding ESG aspects of their investment products, as well as their integration of sustainability risks.

EU Taxonomy

The EU Taxonomy is a classification system that sets out criteria for determining whether an economic activity is environmentally sustainable within 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.

Disclosure standards

Global Reporting Initiative (GRI) 304

GRI 304, from the Global Reporting Initiative (GRI), is a disclosure standard that guides organisations in reporting their impacts on biodiversity, ecosystems and ecosystem services, helping them to disclose their efforts and outcomes related to preserving and enhancing natural habitats and biodiversity.

European Sustainability Reporting (ESRS) E4 (part of the CSRD)

ESRS E4 is a disclosure standard on biodiversity and ecosystems, which companies can use to assess their impact and dependencies on nature and to comply with the CSRD.

Appendix 3 - About VBDO

The Dutch Association of Investors for Sustainable Development (VBDO) is a not-for-profit multi-stakeholder organisation. Our mission is to make capital markets more sustainable. Members include insurance companies, banks, pension funds, asset managers, NGOs, consultancies, trade unions and individual investors. VBDO is the Dutch member of the international network of sustainable investment fora. VBDO's activities target both the financial sector (investors) and the real economy (investees) and can be summarised as follows:

Engagement

For more than 27 years, the core activity of VBDO has been engagement with 40+ Dutch companies listed on the stock market. VBDO visits the annual shareholders' meetings of these companies, asking specific questions and voting on environmental, social and governance (ESG) themes. The aim of this engagement is to promote sustainable practices and to track progress towards the companies becoming fully sustainable, thereby providing more opportunities for sustainable investments.

Thought leadership

VBDO initiates knowledge building and sharing of ESG-related issues in a pre-competitive market phase. Recent examples of this include: three seminars on climate change-related risks for investors; the development of guidelines on taking natural capital into account when choosing investments; and organising round tables about implementing human rights in business and investor practices. In addition, we regularly give training on responsible investment both to investors and NGOs.

Benchmarks

Benchmarks are an effective instrument to drive sustainability improvements by harnessing the competitive forces of the market. They create a race to the top by providing comparative insight and identifying front runners, thus stimulating sector-wide learning and the sharing of good practices. VBDO has extensive experience in developing and conducting benchmarking studies. VBDO has conducted annual benchmarking exercises, for example, since 2007 on responsible investment by Dutch pension funds, and since 2012 on responsible investment by Dutch insurance companies. This has proven to be an effective tool in raising awareness of responsible investment and stimulating the sustainability performance of pension funds and insurance companies. VBDO is one of the founding partners of the Corporate Human Rights Benchmark, which ranks the 500 largest companies worldwide on their human rights performance and makes the information publicly available to drive improvements. VBDO's Tax Transparency Benchmark ranks 104 listed multinationals according to the transparency of their responsible tax policy and its implementation.

For more information about VBDO, please visit our website: www.vbdo.nl/en/

Appendix 4 - About PwC

At PwC, the purpose is to build trust in society and solve important problems. PwC is a network of firms in 152 countries with nearly 328,000 people who are committed to delivering quality in assurance, advisory and tax services.

At PwC in the Netherlands over 5,300 people work together. Find out more by visiting www.pwc.nl.

Centre for Nature Positive Business

PwC's global Centre for Nature Positive Business unites more than 500 nature specialists from across its network. Bringing together knowledge in biodiversity, water, forestry, regenerative agriculture and geospatial analysis, the Centre is accelerating the global transition to a nature positive and net zero future.

Please see <https://www.pwc.com/gx/en/issues/esg/nature-and-biodiversity.html> for further details.

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