

Bringing biodiversity into business



...yet often overlooked

As contradictory as it may sound, the largest global concern of the present, is the future. Sustainability is one of the defining words of our century. It's of major interest to us all and vital, even, for the future and longevity of every company. Awareness is growing by the day and so are the demands coming from investors, consumers, and policy makers. Companies are increasingly acknowledging responsibility in taking social as well as environmental action. Environmentally, most efforts are centered around countering climate change. Yet, what is usually overlooked is the interdependence of climate change with another critical issue: A global decline in biodiversity.

Products and services, and in extent our whole economy, rely on natural capital as a basis. The ecosystem services provided by nature (such as food production, purification of water and air, climate control, pollination and recreation) are indispensable, and a rich biodiversity is fundamental for nature to keep producing these. As such, biodiversity lies at the heart of our economy and its degradation is a problem for us all. Today most attention is directed at climate change, but the two are in fact mutually dependent. Climate change determines the abiotic conditions for all organisms and can drastically affect biodiversity, while a declining biodiversity can lead to a reduced capacity for ecosystems to bind carbon dioxide, thus accelerating climate change. This leads to the insight that both challenges should be tackled simultaneously.

Various global initiatives and organizations are starting to recognize the severity of the problem. According to the 2021 Global Risk Report of the World Economic Forum¹, respondents perceived biodiversity loss as one of the top risks, together with climate action failure and infectious diseases. Biodiversity loss was ranked 4th by impact and 5th by likelihood. Fortunately, many international initiatives are going in terms of standardisation of biodiversity measurement and valuation in a business context², biodiversity target setting³ and external disclosure⁴.

¹ http://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2021.pdf

² e.g. Align project, see <u>https://capitalscoalition.org/project/align/</u>

³ e.g. Science Based Targets for Nature, see https://sciencebasedtargets.org/

⁴ e.g. Task Force for Nature Related Financial Disclosures TNFD, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see https://tnfd.global/; and future CSR Directive with a specific pillar on biodiversity and ecosystems, see <a

From compliance... ...to a competitive edge

Guidelines will gradually be refined and sharpened as knowledge and insight on the importance of biodiversity is expanded. As such, companies will be expected to comply to increasingly higher standards over the years. Those that take initiative in an early stage can create a head start. But there's more to be won than solely the prospect of a leadership position. Identifying and averting the risks is a start, but it's when one also maps one's dependencies and even opportunities that the full picture comes into view. There's a great deal of benefits to be gained from setting up a biodiversity strategy and associated action plan. On an ecological level, naturally, but also on economic, legal, financial, and social levels.

Expectations of consumers and investors regarding sustainability are rising, as are those of governments. The requirements to receive sustainable funding will likely evolve to include biodiversity standards as well. Anticipating and accounting for this can strengthen your company's brand and create a competitive edge. From a social point of view, a rich biodiversity is believed to reduce the risk of human exposure to both new and established zoonotic pathogens¹. The importance of which became clearer than ever in the light of the recent pandemic.

¹ https://www.pnas.org/content/118/17/e2023540118



Biodiversity reporting... ...a tool for transition

It is interesting to explore to what extent the increased acknowledgement of the importance of biodiversity in a business context translates into business strategies and actions. One way to assess this is by looking at the way they report about biodiversity. To get a general overview and to facilitate comparison between companies, Arcadis developed a **Biodiversity Reporting Index.** Important to emphasize here is the fact that this index measures the degree of reporting. It is not a reflection of a company's actual biodiversity performance.

Nature is an important part of every company's value chain. Be it upstream, downstream or at its very core. Two sectors that are most closely entwined with – and dependent on – nature are agri-food and retail. Their core businesses revolve around nature, which renders their direct and indirect impact on biodiversity substantial. This is why Arcadis chose to focus its research on these sectors. The 36 biggest agri-food companies¹ and the 26 biggest retail companies² in Europe were selected for analysis. The share of agri-food companies chosen is larger, since these companies have a more direct impact on biodiversity. All available information in their recent sustainability or annual reports as well as on their websites was collected and examined. Since the analysis was not carried out automatically, but via a qualitative manual screening, the number of companies analyzed is limited. This, too, is part of the reason why a sector-focused approach was chosen.

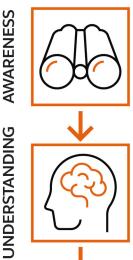
1 FoodDrinkEurope-Data-Trends-2020-digital.pdf

2 <u>Top retailers in Europe by country (retail-index.com)</u>

The Biggest European Retailers for 2018 (thebalancesmb.com)

Arcadis biodiversity reporting index - scope and methodology

This study was conducted in 2021. Reports presenting 2019 results were used to ensure objectivity, because not all 2020 sustainability reports were published at the time of the assessment (first quarter of 2021). An exception was made for companies who only publish two-year reports. In these cases the report from 2017-2018 was used. In addition, the company website was searched for biodiversity-related articles. Only not dated web pages that were online in the first quarter of 2021, or dated articles from 2019 or 2020, were used. The information found was then evaluated using a table of questions developed by Arcadis (see below). The questions are divided into 5 categories that cover the most important steps in the biodiversity reporting process. These are 'awareness', 'understanding', 'strategy', 'action' and 'measuring'. Multiple answers are possible for each question. The better the answer, the more points, with a maximum of 1 point to be gained for each question. Afterwards, a weighting between the categories was applied, making each of the 5 categories account for 20% of the total score. Finally, the total scores as well as the scores per category were examined to get an overview of the degree of reporting in both sectors. The scores reflect the quality of the reporting and not the performance as such.



Arcadis Biodiversity Reporting Index

- 1.1 Does the organisation report on biodiversity on its website or in its annual/sustainability report? 1.2 Is the main information available at corporate or site level?
- 1.3 Does the organisation relate its biodiversity performance to the SDGs?
- 1.4 Does the organisation report an overview of its stakeholder engagement?
- 2.1 Does the organisation relate biodiversity to other environmental problems?
- 2.2 Does the organisation explain its impact and dependencies on biodiversity?
- 2.3 Does the organisation report on biodiversity beyond site level, in other parts of the value chain?
- 2.4 Does the organisation report a materiality assessment? Does it include biodiversity?
- 2.5 Does the organisation report on biodiversity risks?
- 2.6 Does the organisation report on biodiversity opportunities?



STRATEGY

ACTION

MEASURING

3.1 Does the organisation report on its biodiversity strategy?3.2 Does the organisation report clear biodiversity targets?

4.1 Does the organisation report on the actions it took to enhance biodiversity?4.2 Does the organisation report on whether/how biodiversity is embedded in its processes (e.g. procurement, projects, collaboration)



- 5.1 Does the organisation report on the effect of biodiversity actions (monitoring results)?
- 5.2 Does the organisation report its actual biodiversity performance?
- 5.3 Does the organisation report its biodiversity performance in a disaggregated manner?

5.4 Does the organisation report the use of quantitative tools and indicators for measuring biodiversity performance?



The results... ...and a trajectory still to be followed

A large variation was observed in the distribution of all individual scores. A few front-runner companies such as Unilever, Cargilll and Edeka scored up to 87% and more on the biodiversity index, taking an exemplary stance on the biodiversity issue when it comes to reporting. This stands in stark contrast to the general average in the agri-food and retail sectors, which only amounted to 50%.

An average of 50% shows that there is still a trajectory to be followed in the transition towards good biodiversity reporting. To take a closer look at what lies at the core of this challenge, we can break it down into the 5 different categories used in our index. These are 'awareness', 'understanding', 'strategy', 'action' and 'measuring'. These categories represent the different steps in the biodiversity reporting process.

 Awareness is where it all starts. Companies, especially within the agri-food and retail sector, should recognize that their actions

 and those of their stakeholders – impact
 biodiversity in one way or another. The amount of biodiversity-related information that can be found on corporate websites and in annual and sustainability reports, can tell a lot about a company's involvement. Attention for biodiversity-related SDGs such as 'life on land' or 'life below water', but also indirectly related ones such as 'clean water (and sanitation) for all' and 'climate action', can also be indicative of a

 company's awareness. Ideally, thought is given to all 17 SGDs since these comprise one strategy and should be regarded in a holistic way. A typical visualization of this is the wedding cake perspective¹, where the SDGs are divided into three layers of a 'cake'. The base layer contains the four biosphere-related SDGs mentioned before, the middle layer contains those related to society and the top layer is related to the economy. This accentuates the fact that the economy is fundamentally dependent on resources derived from the biosphere. Another holistic view that is often used is the Rockström planetary boundaries² model. Framing the biodiversity reporting within such a holistic framework can enhance a company's perception of the issue.

2. A deeper **understanding** of the problem and its context is the next step. Biodiversity should be related to the other environmental issues by which it is influenced. These include groundwater extraction, wastewater discharge,

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¹ For image of the wedding cake, see https://www.researchgate.net/figure/The-SDG-Wedding-cake-shows-the-biosphere-as-the-foundation-of-economies-and-

² https://www.stockholmresilience.org/research/planetary-boundaries.html

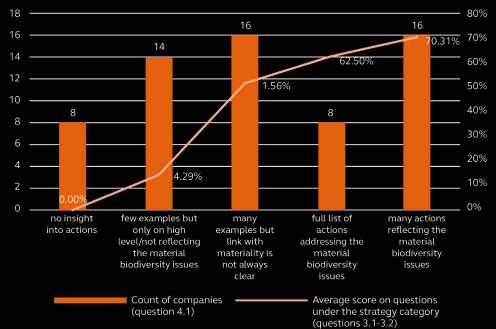
greenhouse gas emissions and intensive agriculture. The materiality of biodiversity along the whole value chain should be examined, and all dependencies, impacts, risks and opportunities should be mapped to allow for understanding. Internal as well as external stakeholder consultation is key.

- 3. When all the required information is gathered, a structured biodiversity **strategy** can be developed. Preference is given to quantitative, timebound and ambitious targets. Two good examples are an incorporation of timebound No Net Loss (NNL) and Biodiversity Net Gain (BNG) goals. NNL would mean that a company reduces its negative impact on biodiversity to zero, while a BNG goal is the next step, where a reversed, positive impact is created.
- 4. The strategy should then be converted into an **action** plan or roadmap, which primarily focuses on those parts of the value chain where biodiversity is most material. Biodiversity should be integrated in the processes of the organization like procurement, projects and collaborations.

5. The results of each action should be **measured** and monitored in order to adjust where needed. The final step is a transparent reporting on biodiversity performance. The use of quantitative tools and indicators such as KPIs can aid in comparing results over time and visualizing and communicating progress. This results in a more clear and objective communication, which can then inspire others to take action.

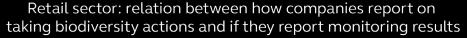
Some of the most remarkable results are visualized below. The agri-food and retail sector score best on the awareness and action categories, but it's clear that there is still room for improvement on every one of the five process levels. Often only ad hoc actions are taken, which are not embedded in a biodiversity strategy. Because of this, they are usually not monitored as well, or they miss the places in the value chain where biodiversity is most material. This shows the importance of integrating actions into a well-defined biodiversity strategy. This can also be seen in figure 1, where the relation between the thoroughness of reporting on actions and the average achieved score on the strategy category is depicted. Figures 2 and 3 further illustrate that companies that report more and better underpinned actions, also tend to report in more detail on the monitoring results of each action.

Figure 1



Relation between how companies report on their biodiversity actions and how they score in terms of reporting on their biodiversity strategy

Figure 2



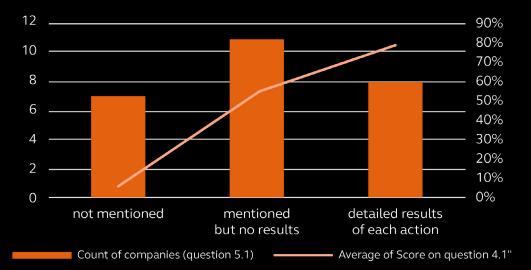
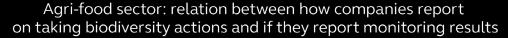
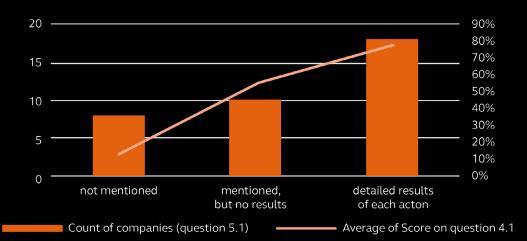
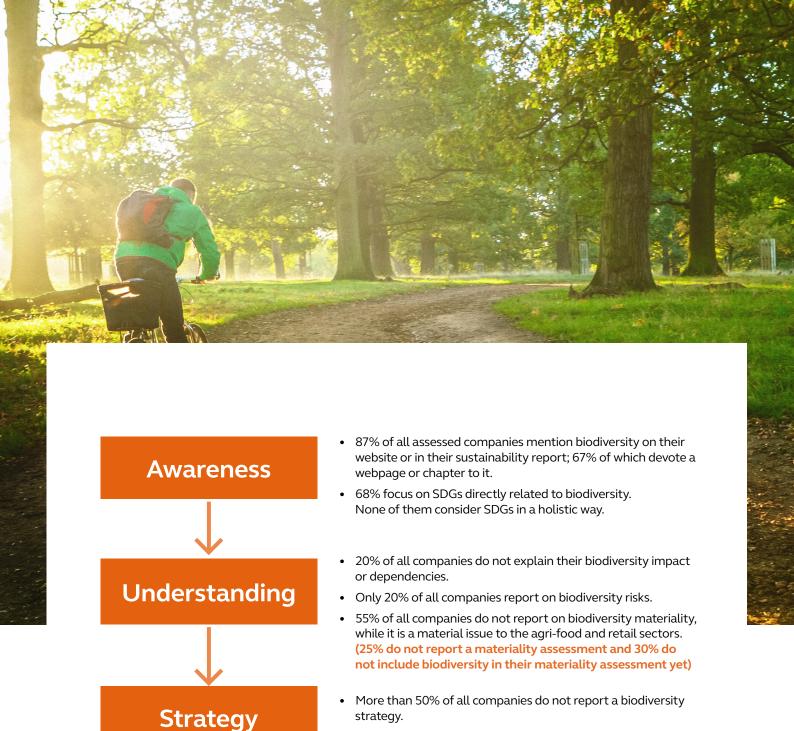


Figure 3





Bringing biodiversity into business ⁸



Action

Measuring

- Nearly 40% do not report any biodiversity targets yet.
- Nearly 90% of all companies already report on actions related to biodiversity.
- But only about 40% undertake actions that reflect the material biodiversity issues.
- 40% of all companies report detailed results of each action.
- Less than 20% use quantitative indicators such as KPIs.

While only agri-food and retail companies have been analyzed, it can be expected that the general findings – eg., that there's still a lot of room for improvement on biodiversity reporting – will hold true for other sectors as well, maybe even more so. As mentioned before, agri-food and retail are closely connected to biodiversity and nature in general, so one could predict that the degree of biodiversity reporting would be more mature in these sectors.

To verify this, we can look at the results of a similar study from Ecogain¹. Their 2021 Ecogain Biodiversity Index (EBI) examined the top 100 Nordic and the top 50 Baltic companies from several different sectors. The sector that scored best overall was the materials sector, followed closely by the energy sector. Consumer staples, the sector that shows most resemblance to the agri-food and retails sectors examined by Arcadis, comes third in this ranking. All other sectors (eg., finance, industrials and consumer discretionary) scored on average substantially lower, indicating a less developed biodiversity reporting. Ecoacsa also conducted a study², reviewing the degree of biodiversity reporting of the IBEX 35. Here, too, the energy sector and materials sector came out best, with energy taking the definite lead. No agri-food or retail companies were included in this study. All three studies together seem to indicate that the sectors energy, materials and agri-food/ retail are more advanced in the field of biodiversity reporting, although the company samples are too limited to draw sound conclusions. However, looking at the highest average sector scores being about 50% (Arcadis, agri-food), 25% (Ecogain, materials) and 53% (Ecoacsa, energy), it becomes clear that there's still need for significant improvements in each sector.





Taking the next step... ...bringing biodiversity into your business

Biodiversity is not quantified and controlled as easily as greenhouse gas emissions. It's a complex and local matter, influenced by many different factors and is hard to capture in a measurable metric. This explains the current imbalance between the urgency for the private sector to take a stance for biodiversity, and the shortcomings in biodiversity reporting. The Science Based Targets Network (SBTN), which is known globally for guiding companies in setting up climate goals, is currently developing science-based goals for biodiversity. Numerous projects are examining the possibilities of creating metrics for biodiversity that will allow for efficient monitoring and reporting of progress. Sooner rather than later, biodiversity reporting will become mainstream. **Now is the time for companies to take initiative and future-proof growth.**

Exploring the materiality of biodiversity along the value chain; mapping impacts, dependencies, and opportunities; or developing a solid and integrated biodiversity strategy and action plan, Arcadis can provide support in every step along the way.

"Science-based target setting makes business sense – it future-proofs growth, saves money, provides resilience against regulation, boosts investor confidence, spurs innovation and competitiveness – while also demonstrating concrete sustainability commitments to increasingly-conscious consumers." Source: https://sciencebasedtargets.org/how-it-works



General recommendations... ...a good starting point

With the aim of inspiring action, we'd like to conclude with a couple of general recommendations that are essential for developing a good biodiversity reporting:

- Educate yourself on the topic of biodiversity and its relevance for your business. Enroll on a training course, consult experts or join a network. The EU Business @ Biodiversity Platform provides great opportunities for networking and sharing experiences with like-minded peers as well as opportunities for participating in working groups or engaging directly with EU policy makers.¹
- Perform a materiality assessment and locate where biodiversity is most material in your value chain. Map, measure and value your dependencies and impacts as well as risks and opportunities. This will highlight where action is most urgent and provide you with a solid basis on which to build your strategy.
- 3. Develop a biodiversity vision and strategy for your company. Start by identifying your baseline and then determine your goals for the future. Set intermediate targets that are timebound and preferably quantitative (SBTN provides an excellent guideline on this). Develop a roadmap with actions to get there.

- 4. Dare to be ambitious about your targets and policies.
- 5. Engage stakeholders and require them to meet the planned targets.
- 6. Monitor your actions by using quantitative tools and indicators (eg., KPIs). New insights might be gained, which can be used to fine-tune your strategy.
- 7. Report on your biodiversity performance in a clear and transparent way. Devote a webpage or chapter in your sustainability report to biodiversity. In addition, you can communicate your progress via social media posts to showcase your engagement and raise awareness to the public.
- 8. Start now. Be ahead of the masses and demonstrate your sustainability commitments by taking a stance for biodiversity.

¹ The EU Business @ Biodiversity Platform | Home (europa.eu)



About Arcadis

Arcadis is the leading global Design & Consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are 28,000 people, active in over 70 countries that generate \in 3.3 billion in revenues. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

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