Effective nature work

Lessons learned and experiences from the pilot project on science-based targets for nature

FIBS | SITRA

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Preface

We are at a crossroads. Our current economic system consumes natural resources in an unsustainable manner, causing irreparable damage to the planet and, ultimately, to all business operations. After all, there can be no business on a dead planet.

However, we can still reverse this alarming development. If we act now and if we apply a science-based approach, we can halt biodiversity loss and, at the same time, restore and regenerate our nature as well as the business sector. By working with nature rather than against it, we can gain more value from our natural capital.

A key principle in Sitra's work is to combat the root causes of the sustainability crisis – particularly the unsustainable use of natural resources, which is one of the main causes of biodiversity loss and of the current climate crisis. Sitra published the Tackling root causes study in 2022. It was the first study to model how the circular economy can halt and reverse biodiversity loss in the food and agriculture, forest, textiles, and construction sectors, while also reducing emissions. The study proved that the circular economy is an important tool in tackling biodiversity loss. The next step was to turn words into action and jump-start the transition to a more nature-positive world in these four sectors.

Science-based targets for nature provide companies with a state-of-the-art methodology for measuring dependencies and impacts on nature and for setting science-based targets for biodiversity and the climate. The goal of the pilot project was to spur Finnish companies to strengthen their position as pioneers in nature work before the publication of Science-based Targets for Nature Version 1 in 2023. Moreover, the project challenged companies to approach nature as a business opportunity and to use the circular economy as a tool for delivering on nature and climate targets.

Many Finnish companies have already developed leading circular solutions, as well as many climate and nature innovations. We believe that by addressing these themes in an integrated manner, Finnish companies can unlock new synergies and gain comparative advantages on the global market. Thanks to the Kunming-Montreal Global Biodiversity Framework we now have in place a global agreement and process for halting biodiversity loss by 2030. We expect that the importance of these issues will only continue to grow in the years to come.

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For the reader

All business depends on the existence of biodiversity and healthy ecosystems – either directly or indirectly through supply chains. In addition to challenging societal well-being, the ever-accelerating global biodiversity loss also poses significant risks to the future operating conditions of businesses. In order to tackle these challenges, many Finnish companies have in recent years launched efforts to study and reduce their impacts on nature.

At present, various tools, frameworks, indicators and reporting guidelines are being developed to support the nature work of companies. The international Science Based Targets Network (SBTN) is currently in the process of developing guidelines for companies and cities for setting science-based targets for nature. The guidelines are a response to the need expressed by companies to find practical tools for promoting truly effective and comparable nature work. A milestone of this work was Science-based Targets for Nature Version 1, which was released in May 2023.

Science-based targets (SBTs) are measurable, actionable and time-bound objectives, based on the best available science, which allow those aiming for them to align with the planetary boundaries and societal sustainability goals. The purpose of the framework developed by SBTN is to provide companies with a straightforward path to adapting their operations to the limits set by the earth's carrying capacity, while also strengthening the sustainability and long-term competitiveness of the company.

In 2015, the Science Based Targets initiative (SBTi) published similar guidelines for climate targets, which has already helped nearly 3,000 companies worldwide to set science-based targets for emission reductions. These targets feed into the science-based targets for nature.

FIBS–Sitra pilot project

Prior to their launch of the Science-based Targets for Nature Version 1, guidelines were available for testing as part of SBTN's Corporate Engagement Programme. The corporate responsibility network FIBS and the Finnish Innovation Fund Sitra offered companies committed to nature work an opportunity to be among the first to pilot the new guidelines in a project carried out in 2022.

The aim of the project was to provide support for the nature work of companies and to strengthen the pioneering role of Finnish businesses, as well as to promote the wider adoption of science-based targets for nature and raise awareness of the topic.

FIBS implemented the pilot project funded by Sitra in Finland. The programme attracted a lot of interest, and a total of 35 companies and organisations applied to take part. Ultimately, 10 applicants were selected for the piloting group: Atria, Kesko, Lassila & Tikanoja, Metsähallitus, Paulig, Reima, Rudus, SOK, UPM-Kymmene and Valio. Moreover, specialists from Ramboll Finland were involved in organising the workshops.

Throughout the selection process, emphasis was placed on companies which, in terms of their size and sector, have significant potential to contribute to halting biodiversity loss (companies representing the most nature-intensive industries such as food and agriculture, textiles, construction and the forest sector, based on the findings of Sitra's study Tackling root causes).

In addition, priority was given in the selection process to companies that had previous experience of SBTs or nature work and that were able to demonstrate their commitment to the project by allocating sufficient personnel resources for it.

The piloting group met five times in 2022 and 2023. During the pilot project, the companies received expert support for testing the guidelines prepared by SBTN, had a chance to share their experiences with other companies participating in the pilot project and receive peer support, were able to improve their ability to commit to the targets and benefit from their implementation among the very first operators in the world, and were able to contribute to the content of the final guidelines by providing feedback on their experiences during the pilot project. However, the most impressive part of the pilot project took place outside the meetings, when the companies implemented the lessons learned by incorporating the guidelines, methods and tools that were either completed or undergoing development by SBTN into their own natural capital work.

The project workshops were based on the content of SBTN's Corporate Engagement Programme. The programme allows companies, consultants, industry unions and financial institutions to collaborate with SBTN during the planning phase. Moreover, the programme participants help SBTN develop the guidelines for science-based targets for nature, to ensure that they are built on feasible nature actions that can be carried out by the companies and that they support the companies' efforts to modify their business activities in the best possible way.

The four workshops, along with the internal work carried out in between, allowed the companies participating in the pilot project to dive deeper into the first two stages of SBTN's five-step framework in particular: assessing their own impacts on nature throughout the entire value chain and prioritising them in order to target actions effectively.

This publication brings together the project participants' experiences and lessons learned on the piloting of science-based targets for nature. It has been prepared on the basis of workshop discussions, interviews with the companies and final reports prepared by the companies (Appendix 1). The publication complements SBTN's development work by offering practical perspectives on the ways in which companies in different sectors can apply the new guidelines and on issues to be considered when setting science-based targets for nature. The sections detailing the framework are based on the preliminary guidelines published by SBTN and on the guidelines issued for public consultations during the development process.

Glossary and abbreviations

IPBES

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, an organisation that assesses the state of biodiversity and ecosystem services at the global level. IPBES has defined direct and indirect pressures which also serve as the starting point for the guidelines developed by SBTN: https://ipbes.net/models-drivers-biodiversity-ecosystem-change.

SBTi

The Science Based Targets initiative. An initiative that has published guidelines for setting climate targets: https://sciencebasedtargets.org.

SBTN

The Science Based Targets Network. A group of organisations that develops guidelines for setting targets for nature: https://sciencebasedtargetsnetwork.org.

Although not an established abbreviation, SBTN is also occasionally used to define “science-based targets for nature”. In this publication, SBTN refers to the network developing targets for nature.

Science-based target (SBT)

A target or goal based on science. A measurable, actionable and time-bound goal based on the best available scientific data.

See a more extensive glossary on SBTN’s framework:
https://sciencebasedtargetsnetwork.org/wp-content/uploads/2023/05/SBTN-Steps-1-3-Glossary_2023.docx-1.pdf

The drivers of biodiversity loss as a starting point

The SBTN framework is designed to guide companies towards a comprehensive analysis of their dependencies and impacts on nature. The starting point of the framework lies in the key pressures driving biodiversity loss, as defined by the intergovernmental nature platform IPBES, and the factors causing those pressures, which are also known as drivers. These key pressures causing biodiversity loss include changes in land and sea use, exploitation of resources, climate change, pollution and invasive alien species.

In practice this means that, for example, when assessing the significance of different impacts, instead of measuring individual nature indicators, the framework guides the user towards assessing the extent to which the company's activities drive biodiversity loss and, as a result, how the activities have an impact on the current state of nature. When implementing the actual measures, the framework is designed to guide the targeting of actions to address the specific impacts that are most essential for both the company and for halting biodiversity loss, meaning those impacts that reduce pressure on biodiversity loss and those that the company can genuinely influence.

The factors identified by IPBES also help create a transformative action strategy within the framework. Essentially, the framework has been designed in a specific way: after a comprehensive examination, companies will be able to recognise the drivers behind the pressures on biodiversity, such as unsustainable production and consumption models. Moreover, when the companies are planning the actual measures, they should also strive to influence these drivers by, for example, modifying their operations to align them with the circular economy.

Experiences from the pilot project: change of mindset

Examining a company's nature work by assessing pressures often differs from the way in which nature work was initially launched within the organisation. Many of the companies involved in the pilot project had completed or were in the process of preparing a biodiversity programme or road map; some had restricted their impacts through various policies and certificates authenticating their use of raw materials, and some had project-specific measures in place. Some of the companies had carried out a project-specific or overarching environmental impact assessment, but few had set targets for the company's operations or defined indicators for monitoring their implementation. Typically, a significant part of a company's impact on nature can be found in the company's value chains and not among the company's own direct activities, and because of the local nature of these impacts, all measures taken should also be visible at the local level. The lack of established operating methods and comparable indicators was generally viewed as a challenge for launching systematic nature work that covers entire value chains.

However, the companies had identified a need for a more comprehensive examination of nature issues and for understanding the links between the different environmental themes highlighted in their efforts. The SBTN framework was considered to: offer a more systematic approach to nature work; increase the credibility and comparability of the companies' nature work through a

commonly known and recognised global framework and validation of the goals; boost the effectiveness of the work.

A key difference between the SBTN framework for targets for nature and the typical nature work carried out by companies is that the starting point for companies is usually biodiversity. This, in turn, means that the efforts tend to gravitate toward monitoring and protecting the status and quantity of individual species. As the range of species is wide, this is also an aspect that is often highlighted as a challenge for nature work. In contrast, the SBTN framework examines nature as a broader entity – covering land use, freshwater and oceans – and steers companies towards understanding how their activities accelerate biodiversity loss and what kinds of activities they should invest in to reduce this pressure. This means that instead of monitoring individual species, the framework helps firms set targets for tackling the underlying factors of biodiversity loss, such as reducing water use in certain parts of the value chain. SBTN's internal development work follows this structure and consequently tools, methods and guidelines are developed in three different hubs, namely the Land Hub, Fresh Water Hub and Oceans Hub. Within each of these hubs, work is carried out under the leadership and support of specialists in the relevant fields, and the work also progresses irrespective of the other hubs' timelines – which is why, for example, SBTN's upcoming first official guidance publication include methods related to freshwater and land use, but not to oceans.

Internalising the operating logic of the framework and gradually aligning one's mindset with the framework was found to be an important part of the process. This can be time-consuming and require a wider reassessment of the company's current nature work. However, the process of the pilot project was found, above all, to promote a comprehensive, systems level nature response, based not only on thorough assessments of the impacts and dependencies along the value chain, but also on separate steps for target setting, delivery of the targets and monitoring: very few companies had collected data on individual species, populations or ecosystems, but many were already monitoring features such as water consumption and quality and had relatively easy access to data on land-use changes. As climate change is one of the key pressures driving biodiversity loss, SBTN also recognises measures aimed at mitigating climate change as part of the solutions included in the framework. However, the actual science-based climate targets draw on the framework provided by SBTi (Science Based Targets initiative).

Five-step process of the framework

The SBTN framework consists of a five-step process.

1. **The process begins with an extensive analysis of the company's impacts on nature (step 1: Assess).**
2. **The second step involves identifying the key impacts and prioritising actions (step 2: Interpret and prioritise).**
3. **The third step is all about setting the targets for nature validated by a third party (step 3: Measure, set and disclose).**
4. **The fourth step involves drawing up a specific action plan for achieving the set targets (step 4: Act).**
5. **In the final stage, the company will monitor progress towards the targets and report on the implementation of the targets and measures (step 5: Track).**

During the pilot project, the most advanced steps in the SBTN development process were step 1 (Assess) and step 2 (Interpret and prioritise). SBTN had created tools and technical guidelines for these steps, and the guidelines were open for public comments in autumn 2022. The first version of the methods for setting freshwater targets (step 3) was also completed in the autumn and opened for comments. Overall, the focus of this pilot project was particularly on these steps.

Step 1: Assess

In the first step of the SBTN framework, the company analyses its operations to identify and assess the impacts and dependencies on nature throughout its entire value chain, from initial production to the market. Despite the extensive nature of this step, it has been designed to avoid excessive complexity and time allocation. The goal is to provide the company with an understanding of the IPBES pressure categories that are associated with its activities and explore which parts of the company's value chain have the most negative impacts on nature.

In practice, this step consists of a materiality assessment based on environmental and social materiality, taking into account, among other things, the magnitude, irreversibility, recurrence and probability of the impact of the company's operations. The end result is a preliminary assessment of the company's nature footprint and a long list of potential value chain parts and geographical locations for which the company could set targets for nature.

Experiences from the pilot project: Step 1

> **With regard to a value chain's impacts on nature, understanding and verifying them requires investments from companies, as well as a new type of competence.**

Although the first step of the process is intended to be quick and to only yield an initial estimate based on a screening process, collecting the necessary data may take a lot of time and financial resources. However, the resource intensity of this step depends largely on the company's operations – for a company with extensive product portfolios and complex supply chains, mapping the entire range of both direct and indirect activities can be challenging, but companies with less complex value chains and fewer commodities and unknown sourcing locations may complete the mapping process more quickly. Moreover, the company's previous experience of nature work and data collection in value chains will also have a significant impact on the complexity of this step. However, it is of central importance to invest in this mapping process, as it lays the foundation for future actions that follow from the subsequent steps in the process.

During the pilot project, companies followed the step 1 guidelines to collect and use operational data on their procurements and products, location data on their direct operations and value chain, as well as environmental data on direct operations to assess the relevant pressures. With the exception of these latter datasets, most companies already possessed the bulk of the necessary information.

Instead, the amount of data to be managed posed a challenge: almost all companies participating in the project had extensive product and service portfolios and long and global supply chains. This step highlights the importance of supply chain knowledge – in fact, the companies found it critical to involve their procurement specialists in the SBTN process right from the beginning. Previous work on Scope 3 emissions (i.e. indirect emissions that occur in the upstream and downstream activities of an organisation as defined by the Greenhouse Gas Protocol) was also considered useful. In fact, SBTN encourages companies to set science-based climate targets according to SBTi if such targets are not already in place.

> **Regardless of the sector, setting targets for nature will require extensive acquisition of background information on different supply chains – as well as efforts to analyse them – simply to set the targets and monitor their realisation.**

Step 2: Interpret and prioritise

In the second stage of the SBTN process, the long list of potential value chain parts and geographical locations created in step 1 is limited and specified further. The results of the step 1 assessment work are analysed in order to determine which of the company's activities have the most significant impact on its nature footprint and, consequently, which specific functions need to be managed through target setting.

Prioritisation is carried out for locations, suppliers and the company's overall nature footprint, as well as the value chain in terms of nature, with the aim of determining which of the listed targets require immediate action to improve the state of nature. After this, the priorities can be further specified, if necessary, by assessing the feasibility and strategic significance of the different alternatives. At the end of this step, the company should have a decent understanding of the

geographical locations and parts of the value chain it should focus on when setting science-based targets.

Experiences from the pilot project: step 2

In step 2 of the process, data requirements become more stringent. While in step 1 the focus was on the scope of the data to be managed, step 2 highlights the availability of the necessary data. The locality of impacts on nature means that the company needs accurate and location-specific data on the impacts its activities have on nature. For many companies, long and global supply chains are a reality, meaning that the companies must first investigate the sources of all raw materials used in their operations before they can move on to assessing the magnitude of the impacts of its activities.

> **When setting targets, it is worth noting that the required data may be laborious or even impossible to obtain. It is important to accept shortcomings and rough estimates in the data supply, at least in some parts of the value chains.**

Although SBTN promotes the use of primary data in this context, the pilot project indicates that, at least at the initial stage, a large number of companies are likely to rely on different tools and median data gained from databases (e.g. a country-level average for nature impacts resulting from given amount of land-use change that the company has assessed). Indeed, there is a wide range of tools available, and new ones are continuously being developed. As part of its technical guidance materials, SBTN has published a toolbox which contains a set of tools for nature work. SBTN has for example highlighted tools such as the Integrated Biodiversity Assessment Tool and the Species Threat Abatement and Restoration Metric (STAR). Choosing a suitable tool depends on the operations of the company and is at the company's own discretion. Moreover, it is likely that a combination of several tools will be required at this stage. In fact, with the aim of successfully completing step 2, it is advisable to spend some time getting to know the different tools. The company may also require external support in the process, depending on its internal competence.

> **A successful outcome on minimising the impacts on nature will require co-operation throughout the organisation, both with partners in business operations and supply chains and with other parties operating in the same area.**

In addition, the SBTN framework dictates that local stakeholders and other regional partners should be involved when assessing and prioritising the significance of the impacts on nature in keeping with step 2 of the process. This requirement sparked a lot of discussion during the pilot project, especially among companies with extensive and complex value chains. Although the reasons for local influence were understood and the central role of co-operation in solving global challenges was generally recognised, questions emerged about the amount of resources required for the work and its practical feasibility. Moreover, some hoped that the SBTN guidelines would take into account the extensive value chains of companies and provide more specific support for the implementation of the efforts.

Step 3: Measure, set and disclose

The third step of the process is at the core of the SBTN framework, as it consists of measuring the baseline situation of the goals selected for the process, determining the desired target state and setting the actual targets. During step 3, it is possible to expand the limitation and prioritisation work carried out in the previous stage by assessing the selected target areas in order to determine what opportunities there are for the company to influence the state of nature in relation to others in the area or location.

Even at this stage of the process, the identified drivers of biodiversity loss are crucial for the work, as the targets are specifically set for these pressures based on the desired state of the natural environment – which is contingent on changes to these pressures. This step requires that the underlying pressures are identified, along with the indicators defining the current state of nature. Then the threshold representing the desired state of nature needs to be determined, and a method to weigh the desired state of nature against the pressure level needs to be selected, resulting in the maximum allowable pressure, against which a science-based nature target can be set.

Experiences from the pilot project: step 3

During the pilot project, a preliminary version of the guidelines for target setting in step 3 was completed for freshwater targets, including indicators related to water consumption and nutrient loads (nitrogen and phosphorus). The targets will most likely be expanded, but they were found to be highly feasible in the form in which they were published for public comments, especially in view of the companies' direct operations – in many respects, the targets were in line with the requirements of environmental permits already applied for by the companies.

> **We were slightly surprised by the fact that, for example, water targets must be set specifically for each catchment area and in proportion to the current state of nature in each area. In other words, nature work requires in-depth knowledge of the supply chain. Knowing the location of factories and production sites is not enough, you also need data on the state of nature in the area in question.**

In contrast, more questions touched on whether the goals and indicators are comprehensive enough to account for water-related impacts on nature. However, the published version is only preliminary, and the number of indicators will probably expand as SBTN's work continues to progress. In addition, the setting and monitoring of targets associated with activities and value chains located outside of Finland also prompted some discussion.

> **In the future, it is important to work in close co-operation with the selected raw material suppliers and possibly even involve local experts specialised in assessing the impacts on nature or nature surveyors in the target countries.**

With the aim of determining the carrying capacity of the environment, the framework requires knowledge of other actors in the area and co-operation with them to ensure that water consumption and nutrient loads do not exceed the environmental carrying capacity. In this respect, the final guidelines have an important role to fill in terms of providing concrete examples of successful implementation and of proportioning the requirements to the companies' own opportunities to exert influence.

Step 4: Act

Once the company has defined science-based targets for nature for its operations in step 3 of the process, the work will continue in the fourth stage by defining practical measures for achieving the targets.

For this stage, SBTN will develop what is called an AR^{3}T framework which determines how the actions aimed at reducing the negative impacts on nature should be prioritised. Primarily, companies should strive to avoid causing negative impacts on nature through their activities. Second, they should aim to reduce their impacts and, ultimately, to correct the situation by regenerating or restoring ecosystems. The framework is built on the mitigation hierarchy which, in the context of the framework, will also be expanded to cover transformative actions through which the companies can contribute to the necessary system-level changes both inside and outside their value chains.

Experiences from the pilot project: step 4

Many of the companies participating in the pilot project hoped that the SBTN framework would provide support for the comprehensive examination and management of a company's impacts on nature. However, the project clarified that, as a rule, the SBTN framework focuses on negative impacts on nature, which is already reflected in the pressure-based operating logic as well as in the assessment and prioritisation of the impacts during the first stages. In contrast, the participants realised that their actions also have positive impacts which are not accounted for by the SBTN framework.

> **We also find it important that SBTN recognises the means already in place to reduce impacts on nature. Sustainable use of natural resources, promoting the circular economy in one's own operations and in the supply chain, and taking measures to mitigate climate change and enrich biodiversity are key methods in the biodiversity work of companies.**

At present, step 4 of the framework is still under development, but in its current form (which formed the basis for the simulation of step 4 in the pilot project), the AR^{3}T framework allows for the company's positive impacts to be considered. Moreover, the AR^{3}T framework also helps companies to tackle the pressures driving biodiversity loss, by steering the focus toward current consumption and production models. This means that circular solutions in particular map onto the actions laid out in step 4.

For the pilot project, companies were selected from sectors that have a major impact on biodiversity loss on land: food and agriculture, buildings and construction, fibres and textiles, and the forest sector. According to Sitra's study Tackling root causes, these sectors have the largest potential in terms of halting biodiversity loss by switching to circular solutions. During the pilot project, it was discovered that the most significant impacts on nature were caused by the value chains of the companies, especially in the context of production plant operations and the procurement of raw materials. In view of managing these impacts comprehensively, measures that reduce or completely eliminate the need for virgin raw materials were identified as the most effective. In fact, during the pilot project, several companies identified increasing the use of circular solutions as a key method for reducing their negative impacts and increasing their positive impacts on nature.

Step 5: Track

The final stage of SBTN's five-step process covers the monitoring and measurement of the work carried out in the previous stages and its implementation, as well as transparent reporting and verification of any work carried out by third parties. This stage was not included in the pilot project.

Experiences from the pilot project: benefits and challenges of the SBTN framework

The SBTN framework meets the companies' need for tools to support science-based, and thus genuinely effective and comparable, nature work. As with any new solution still under development, the SBTN framework faces different challenges in terms of its deployment. The key challenges that emerged during the pilot project concerned the incompleteness of the framework and the high resource intensity of the work. In contrast, the benefits discovered at this stage were the comprehensive approach to addressing environmental issues offered by the framework and the comparability and credibility of nature work enabled by it.

Challenges

During the two final steps of SBTN's five-step process (step 4: Act and step 5: Track and report), only the data published in the preliminary guidelines were available during the pilot and the subsequent launch of Science-based Targets for Nature Version 1. Indeed, during the pilot project, the **incompleteness of the framework** emerged as one of the main challenges in terms of setting science-based targets in accordance with SBTN instructions. It was generally felt that the assessment and prioritisation work of the first steps would have been easier if the company had had an idea of the desired type and extent of the targets and the expected level of detail. However, regardless of the companies' decisions to set or not to set science-based targets for nature, many companies are nonetheless facing the obligation to assess their own impacts on and risks to nature as a result of mounting regulatory pressure, not least due to the EU's Corporate Sustainability Reporting Directive (CSRD), which for many large companies already applies to the fiscal year 2024. The fact that clear instructions have been created for the first two steps of the process in particular was viewed in a positive light. In fact, SBTN defines the assessment work of steps 1 and 2 as ”no regrets” measures.

> **This is a massive effort demanding continuous improvement, and it involves developing and testing new operating methods and processes.**

The target setting also involves a lot of data requirements, some of which rely on the use of different tools and databases and some on the involvement of local stakeholders. The participants felt that collecting and managing the necessary data required **significant amounts of time and financial resources** from the company, especially for companies with long and multidimensional value chains. However, especially in the early stages, many of the data requirements set by the framework can be met by using data that the companies already possess, and it is expected that as the need for information on the local impacts on nature increases, the tools and databases supporting this work will expand to serve the needs of multiple companies. On the other hand, the involvement of local stakeholders

raised numerous questions during the pilot project, for which no direct answers were found in the guidelines. Therefore, companies setting targets should be prepared to use time and resources during this stage of the process.

The participants found that in its current form, the **framework does not account for the diversity of companies as well as it should**. For example, the value chains in the retail trade sector are often multidimensional and seasonal. For such operators, local influencing was not always deemed possible or even appropriate during the pilot project. To address this issue, sector-specific guidelines, such as those developed in connection with the science-based climate targets (SBTi), were offered as one solution. If similar guidelines were also to be created for the SBTN framework, it could lower the threshold for many companies to set science-based targets for nature for their operation.

Benefits

The **comprehensive** nature of the SBTN framework was considered to be one of its key benefits. The structure based on the IPBES pressure categories helps companies link specific entities of their responsibility work to each other and outline both possible conflicts and overarching solutions between, for example, the company's water, climate and biodiversity work. The framework helps companies to focus their often limited resources on the best and most effective measures with a view to halting biodiversity loss and to ensure the continuous improvement of these efforts.

> **While ignorance may be bliss, knowledge sheds light on development areas that must be addressed by each and every operator in order to halt biodiversity loss.**

Although some companies found local-level influencing and collaboration with stakeholders a long way down the value chain challenging, many companies have indeed recognised the **significance of co-operation** in solving global sustainability challenges. In fact, the SBTN framework's ability to steer nature work towards fostering collaboration was viewed as one of its benefits. Moreover, complying with the framework also requires closer co-operation within the organisation, which was found to increase the whole organisation's internal understanding of the company's impacts on nature.

The participants found that once the framework is completed, it will offer long-needed **comparability** for nature work in the form of jointly approved indicators and operating methods. In turn, external validation of the work and objectives boosts the **credibility** of the companies' efforts. As environmental issues become more important for companies' reporting requirements, the SBTN framework was also considered to prepare its users for the future measurement of impacts on nature and for reporting on said measures.

Conclusion

More and more companies are becoming aware of their dependencies on nature and the consequent impacts of their operations, and corporate nature work is developing at a rapid pace. At the same time, many companies have realised that because of nature's multidimensionality and the local aspects of the impacts on nature, efforts to reduce one's own impacts may be more demanding and require a different approach when compared to, for example, the work to minimise greenhouse gas emissions. Therefore, with a view to improving these efforts and halting biodiversity loss, it is important to develop frameworks and tools to support the work of companies.

The companies participating in the pilot project had identified a need for a comprehensive examination of nature work and a framework for boosting the effectiveness of the measures taken in a verifiable manner. Once completed, the SBTN framework will meet this need and provide companies with instructions, methods and tools for adapting their operations to the planetary boundaries in a science-based manner. The framework is still under development, and the work will proceed over the next few years. However, the framework already provides clear guidelines for companies to get started with their nature work. At best, the SBTN framework can become a widely accepted and respected standard, similar to the SBTi climate targets, which enables companies to take part in halting biodiversity loss in a way that is in line with the best available science. This work is in parts complex and time-consuming, but the trailblazer companies all agree that at present the greatest risk for companies is failing to act.

Tips for companies thinking about setting science-based targets for nature

Explore the frameworks and assess your initial situation

In its current form, the SBTN framework provides clear guidelines for launching effective nature work. Depending on your company's operations and starting point for nature work, you may also find it useful to explore other frameworks, such as SBTi's climate targets. The SBTN framework is based on the assumption that the pressures caused by climate change on nature are accounted for in companies through the setting of SBTi targets, which may serve as an easier avenue for many companies to start science-based nature work.

Explore the guidelines

At present, there are preliminary guidelines within the SBTN framework that are publicly available, providing clear instructions on initiating effective nature work. In May 2023, SBTN published the first version of the final guidelines. It is advisable to get started by reviewing the available material and comparing it with the work done in your company as well as your operating methods and available data, and by assessing what your company would need to do differently to comply with the requirements of the SBTN framework.

Explore the tools

It is quite likely that your company does not possess all the data required by the SBTN framework, such as data related to the state of nature. In fact, several tools and databases have been developed for corporate use to facilitate the collection of such data. Determining which tool is suitable for your company greatly depends on the company's operations and the nature of the required data. The Science-based Targets for Nature Version 1 provides a set of SBTN tools (e.g. for assessing key commodities and screening key nature impacts), lists of data needs, as well as a compilation of other resources available, with a focus on steps 1 and 2.

Involve the entire organisation, especially procurement

The SBTN framework requires your company to engage in active co-operation both within the organisation and throughout the value chains. In the initial stages, it is important to discuss the efforts extensively within your company and ensure there is a general commitment to them, and to identify the key internal stakeholders with whom you will review the guidelines and goals of the framework. In particular, it is advisable to involve procurement specialists right from the start, as knowledge of the supply chains plays a key part in the SBTN framework.

Start by piloting

Although the SBTN framework requires you to assess the impacts on nature of your company's entire operations and to set targets based on the assessments, many companies may find it easier to start by limiting the work to, for example, a certain operational sector or a risk-bound raw material on the basis of a rough materiality analysis. Later on, as you gain more knowledge and competence and the SBTN framework develops, the work can be expanded to cover the company's entire operations.

Use your voice

As the SBTN framework is, as of yet, incomplete, it is still possible to influence the final version. By participating in the SBTN Corporate Engagement Programme, companies have an opportunity to ensure that once completed, the framework will support the nature work of companies in the best possible way. In particular, companies that have already come a long way in their nature work should consider participating in the programme, as it also provides an opportunity to be among the first operators in the world to pilot the completed targets.

Appendix: Participants' experiences of the pilot project on the SBTN framework

UPM-Kymmene Oy

UPM has a long history of setting targets for nature. Our very first biodiversity programme was launched in Finland in 1998. At the time, the goal was to increase the share of deciduous forests and protect valuable habitats. By 2006, the programme expanded to cover all UPM timber procurement areas worldwide. In 2018, UPM announced its Net Positive Impact target, which means that we are committed to increasing biodiversity in our own forests in Finland. The target includes nine measurable indicators, including the surface area of protected areas and the number of decaying trees. Moreover, UPM also has specific targets for nature that suit the special characteristics of the area for the company-owned forests in Uruguay and in the United States. Currently, 180,000 hectares of the land owned by UPM worldwide have been protected.

In essence, UPM already has a fairly long history in setting its own targets for nature. Therefore, it was only natural and interesting to become involved with testing and developing the upcoming SBTN framework for setting science-based targets for nature.

We began exploring the SBTN programme by studying the available documentation and comparing the tools and methods contained in the documents to our existing working methods. Moreover, we looked at what kinds of data required by the framework we have previously collected, and what we should do differently, or what kinds of data we need more of to meet the SBTN requirements. We also decided to join the SBTN Corporate Engagement Programme.

We have a wide range of corporate sustainability specialists in UPM's central administration, various business operations and a global procurement system for raw materials, meaning we possess plenty of in-house expertise. However, SBTN requires rather specific operating methods, and, quite naturally, we were not familiar with all of them. The documentation provided by SBTN, webinars and active participation in consultations have facilitated the learning process. As of yet, we have not used any external consultant assistance.

We believe that in the future SBTN will be able to assume a similar role in setting and validating targets for nature as SBTi has had for climate targets. Therefore, SBTN will provide additional credibility to the goals we have set. If SBTN succeeds in its work, we are open to introducing new efficient and effective processes, and, of course, we will actively contribute to the development of the methods.

The SBTN model, in which the impact of companies on nature is assessed on the basis of pressures and the state of nature, seems valid. While the methods for collecting data on the companies' own activities seem rather practical, the requirements and methods presented in the framework for collecting data on supply chains are challenging and their implementation would require enormous resources, as large companies have thousands or tens of thousands of suppliers in their supply chains. Involving the supply chains is extremely important, but it is essential to focus the use of resources on the supply chains with the greatest impact on nature, as it is impossible to do everything. The targets must be ambitious but defining them must be kept relatively simple.

Exploring the available material is crucial for understanding the SBTN framework. However, there is already quite a lot of material available.It could be clarified further in terms of both structure and concrete examples. The concrete examples provide an understanding of how the guidelines should actually be implemented.

As the global requirements for biodiversity continue to increase, we see a lot of potential in the SBTN framework, and we are eager to contribute to the development of functional tools and operating methods that companies can implement across the globe. By involving a large number of participants, the effectiveness of the project can be maximised.

When a company is thinking about setting targets for nature, it is important to study the process carefully and also to understand that the SBTN framework is not yet complete, but will develop over the coming years. The company must ensure it has sufficient resources and, in particular, there need to be extensive discussions about the project within the company to make sure that all the business operations and functions involved are committed to the programme.

Sakari Suuriniemi

Senior Manager, Global Forest Affairs

UPM-Kymmene

Lassila & Tikanoja

”Lassila & Tikanoja’s understanding of the impact of nature work increased during the pilot study: circular economy solutions play a key role in the mitigation of biodiversity loss. Lassila & Tikanoja has long been engaged in ambitious climate work, guided by science-based climate targets (SBTi). Therefore, the setting of science-based targets to also mitigate biodiversity loss through the Sitra–FIBS pilot programme seemed like a natural continuum for L&T’s responsibility work. In 2022, biodiversity was also added to the corporate responsibility programme.

In recent years, L&T has actively worked to promote biodiversity. We have acknowledged the importance of biodiversity in our operations and in the solutions and services we provide to our clients. Our goal is to promote biodiversity especially in the built environment, and we believe that circular economy solutions can effectively combat biodiversity loss. Moreover, we boost biodiversity through various solutions for nature, such as converting grass areas into meadows and removing invasive alien species from the environment.

During the pilot project, the SBTN framework was still being developed, which made its full implementation challenging. At times, it was difficult to transform SBTN’s global ecosystem targets for nature into appropriate and proportionate company-specific targets. In contrast to the science-based targets for climate, there is no single measurable standard indicator for biodiversity (such as CO_2 emissions), but the impacts are local and ecosystem-specific. As a result, this approach requires companies to accumulate new kinds of expertise and to adopt a mindset that differs from what they are used to in terms of, for example, climate work.

During the project, we acknowledged that the model should also consider existing methods familiar to companies, such as various certificates, standards or mapping tools, and include solutions for developing them further. These would make it possible to increase effectiveness in a supply chain with poor transparency at the regional level, for instance.

We also find it important for SBTN to recognise the means already in place to reduce impacts on nature. The sustainable use of natural resources, promoting the circular economy in one’s own operations and in the supply chain and taking measures to mitigate climate change and enrich biodiversity are key aspects if the biodiversity work of companies. These have a direct impact on the company’s nature footprint and it is already easy to integrate them into the company’s operations. We hope that these indirect measures will also become more visible in the further development of the SBTN framework.

Although the framework is partly incomplete, this does not prevent companies from starting work to promote biodiversity. The SBTN model provides companies with a functional tool for mapping the impacts on nature of their own activities. During the pilot project, L&T gained a better understanding of the process itself and of the factors that should be considered in nature work. Assessing the impacts on nature requires companies to engage in active competence building and a new kind of internal stakeholder co-operation.

During the year, we have received support for preparing materiality assessments, gained a better understanding of the impacts on nature of our own activities and clarified our own biodiversity framework. In addition, we made biodiversity one of the key targets of our responsibility programme.

In terms of the procurement chain, our work is just beginning, and we have launched our efforts by mapping the baseline and building competence. The pilot project increased our understanding of why the work carried out in the supply chain is so important. At the same time, however, we also noticed that we still need extensive groundwork in terms of impact assessments as well as monitoring and development work. Assessing the impacts of procurement chains is challenging, as transparency in the chains is inadequate, the systems and assessment tools do not fully support the impact assessments, the indicators are not clear and the operators’ own understanding of the topic is limited.

Science-based targets for nature are suitable for companies that are already familiar with SBTi’s climate targets and that have identified biodiversity as part of their responsibility work. To set targets for nature, the company must possess in-depth knowledge of the impacts of its operations and supply chain. In the early stages of the process, it is advisable to identify the key internal stakeholders, such as the production, product development, quality and procurement sectors, and to discuss the targets and content of the framework with them.

The targets for nature are based on measurable environmental data available on the company’s operations as well as regional data. Therefore, it would be a good idea to start the process by analysing what kind of environmental data the company already measures and, on the other

hand, if the company has any gaps in its knowledge. At the same time, it is advisable to determine what kind of data is available on the supply chain.

To assess the impacts of the company's own operations and those of the value chain as dictated by the SBTN framework, companies need a level of competence that is unprecedented in climate work. Therefore, it may be reasonable to consider using outside support to make sure that the work is targeted at entities that are essential for the activities.

Senja Forsman-Katainen
Senior Sustainability Manager
Lassila & Tikanoja

S Group

S Group carries out long-term sustainability work based on openness, transparency and achieving concrete impacts. It sets ambitious targets, such as the goal set in our sustainability programme, “Together we will make a better place to live”, for achieving carbon negativity in our own activities by the end of 2025. We also have science-based climate targets in place. Moreover, strengthening biodiversity is one of the focus areas of our sustainability programme.

The significance of stakeholder co-operation in nature work is at a whole new level in comparison to climate work.

The S Group’s framework for biodiversity comprises the promotion of sustainable consumption, the minimisation of impacts and emissions and the strengthening of protection measures. In addition to nature conservation, key features include our climate work and recycling. As practical measures, we have drawn up policies on raw materials, such as our own fisheries policy and deforestation policy. We have also placed a strong emphasis on reducing food waste and promoting climate-smart eating and carbon farming. Our biodiversity work also includes promoting the sustainable use of water. We have been monitoring the development of water consumption in our own operations for a long time and taken measures to reduce our consumption. In addition to our own activities, it is important to investigate the impacts of our value chain, and we have started mapping the water risks in our procurements. With regard to our network of facilities, it is important to conduct nature surveys before launching projects and to minimise the impacts during construction work and operation.

Even before piloting the SBTN framework, we had already started a project with JYU.Wisdom at the University of Jyväskylä to investigate the harmful impacts on nature of our entire group. In addition, the project is aimed at creating a methodology to be made available to all companies for assessing negative impacts on nature on the basis of financial accounting. The development work is funded by S Group and Sitra. We aim to use the results of JYU.Wisdom’s research in the first step of the SBTN framework – “Assess”. Step 2, “Interpret and prioritise”, will be confirmed once step 1 is completed.

The pilot project on SBTN’s framework also strengthened our belief that setting targets for nature differs significantly from climate work. Emissions released into the atmosphere are equal in value regardless of the location, and, similarly, the released emissions can be reduced anywhere, even without stakeholder co-operation. In terms of climate impacts, a commonly used and uniform unit exists. In contrast, the measured units and target levels associated with impacts on nature vary.

The project confirmed that science-based targets for nature should be set locally based on a third-party nature assessment or, for example, a catchment area analysis, and in collaboration with other local operators and stakeholders. Moreover, any tangible improvement or restoration measures must be verified by a third party.

A successful outcome on minimising the impacts on nature will require co-operation throughout the organisation, both with partners in business operations and supply chains and with other parties operating in the same area.

One of the lessons we learned was that although the impacts of our own activities on greenhouse gas emissions are minimal in relation to the impacts of the entire value chain, our activities may still cause locally significant harmful effects on nature – and hopefully have positive impacts on it as well. Indeed, the SBTN framework advises users to begin setting their targets for nature by minimising the direct impacts. Moreover, compensation is also essential in minimising the impacts on nature.

In the retail sector, the framework’s approach involving locally set targets on the impacts of specific units is challenging. The length of the value chains makes it difficult to identify the origin of all raw materials. Moreover, there is some dispersion in the supply chains by seasons, which means that from a business perspective it is sometimes impossible to set long-term targets for single geographical locations if the delivery location or manufacturer changes during the target period. The starting point for SBTN is a local third party’s assessment of the current state of nature, which is used as the foundation and yardstick for the targets. A successful outcome on minimising the impacts on nature will require co-operation throughout the organisation, both with partners in business operations and supply chains and with other parties operating in the same

area. In essence, the significance of stakeholder co-operation in nature work is at a whole new level in comparison to climate work.

Although the correlation between harmful impacts on nature and the availability of raw materials has already been identified, there are at present no common tools similar to climate indicators for measuring harm caused to nature. To make the SBTN framework a generally established tool for corporate nature work, there must be a way to make comparisons between the different targets. Moreover, the incompleteness of the framework also created challenges along the way. At this point, the guidelines are being prepared only for freshwater ecosystems.

The joint SBTN pilot project strengthened our views on the need to maintain and promote ambitious nature work.

Satu Kuoppamäki SOK Sustainability
Terhi Naukkarinen SOK Sustainability
Saara-Kaisa Törmälä SOK Sustainability
S Group

Rudus Oy

Rudus Oy's LUMO programme, which safeguards and promotes biodiversity, celebrated its 10th anniversary last year. The programme focuses on the impacts on nature of the company's direct activities, and splendid results have indeed been achieved over the past 10 years, especially in soil extraction areas all over Finland. With the help of science-based targets for nature, we will further develop our programme and expand it to cover our entire value chain. By doing so, Rudus will maintain its position as a construction sector pioneer in terms of safeguarding biodiversity.

We began the SBTN framework process by focusing on one of our main products, the production of ready-mixed concrete, and started combing through its supply chains. We received help from our company's procurement officers and together we reviewed the total annual costs of our raw material procurements and made preliminary observations on their significance. Subsequently, we mapped the suppliers of significant chains and the material flows associated with their products by using public data and existing tools developed for this purpose. This allowed us to detect preliminary global "hotspots", where our activities may cause significant adverse impacts on local nature.

The key is knowing your own value chains, especially in view of long supply chains, and to go through them as extensively as possible. Moreover, the work also requires experience and competence in procurement-related processes, as well as in assessing the impacts on nature and their significance. As the work progresses, it is also necessary to explore the existing frameworks and tools.

Although our own team possesses strong expertise in the assessment of procurement processes and impacts on nature, it is likely that in the future we will need external expert assistance to assess the significance of impacts on nature and to identify suitable and effective working methods to achieve sufficient progress in our efforts. Our own resources – mainly timewise – are insufficient to analyse all that is needed, no matter how willing we may be. This is an enormous effort demanding continuous improvement, and it involves developing and testing new operating methods and processes. There is a huge number of tools and frameworks, and they are still incomplete. Here, as in many other contexts, the path of a pioneer is not an easy one.

In addition to our environmental team, we also involved our company's procurement officers and production personnel during the pilot phase. In the future, we should also involve important operators in our supply chain and launch collaboration and exchange information with them to ensure that our efforts are as effective and efficient as possible.

This is an enormous effort demanding continuous improvement, and it involves developing and testing new operating methods and processes.

Not only does the framework allow us to expand our LUMO programme to our entire value chain and gain a global perspective on our adverse impacts and different means to prevent and mitigate them, but it also allows us to prepare in the best possible way for potential future EU and national requirements for measuring impacts on nature and reporting on the measures taken.

At the moment, the assessment and consideration of positive impacts on nature can be challenging with the current framework. In our opinion, this is an unfortunate deficiency in the framework. In addition, the indicators already developed appear slightly unilateral and may not cover all potentially harmful parameters or impacts of a specific category (such as bodies of water).

As we are already so far ahead in terms of assessing the impacts on nature of our direct activities, we were able to put the SBTN framework to use quickly. We can draw on previously obtained information and move on to analysing operations beyond our direct activities. We will continue to include direct activities in our future efforts, and we will examine and develop the indicators and targets associated with them.

Terhi Rauhamäki Quality and Environmental Manager
Heli Kanto Environmental Specialist
Lotta Kölli Environmental Specialist
Ilkka Ojalehto Environmental Specialist
Rudus Oy

Paulig Oy

As a food industry company, Paulig is completely dependent on nature and the products it offers. In line with our goal “For a life full of flavour”, we want to offer our customers versatile flavour experiences now and in the future, which is why the availability of raw materials is an extremely important issue to us – in addition to the fact that biodiversity in itself is valuable and worth preserving, and companies must take responsibility for the impacts their activities have on biodiversity loss.

We launched our SBTN work by familiarising ourselves with the draft guidelines for setting targets for nature, which provided a good overview of the target-setting process. We were already familiar with the process itself in many respects, as we set ourselves science-based climate targets a few years ago. Any new and unclear issues we encountered were related mainly to the assessment of the current state, the available tools and the data and information sources needed for the assessment.

In terms of nature work, it is essential to know the value chain and the origins of raw materials as well as possible.

As regards our nature work focus areas, we were quickly able to identify the raw materials and value chains that hold the most weight for our operations and product portfolio – including coffee, wheat, corn, oils, black pepper and bell peppers. At the same time, however, it is also challenging to draw the lines, as even raw materials that may be minor in terms of volume can be crucial for spices, for example, but as far as the impacts on nature go, the determining factors are procurement volumes and the areas of origin. Of course, we have also been contemplating the significance of our own production facilities, packaging materials and logistics for the whole system, but we soon concluded that, at least in the initial stages, the analysis of the current state should focus specifically on the production of the main raw materials.

In terms of nature work, it is, of course, essential to know the value chain and the origins of raw materials as well as possible. Although full traceability does not yet extend to the farmers’ level, for example, we already have a good idea of the farmer communities with regard to many raw materials. Products that we buy pre-processed from our partners are, of course, more challenging at this stage, because the traceability of the raw materials is less straightforward. However, as we work on traceability in other respects, we are aware of the challenges posed by the current situation and are preparing plans for improving traceability as we speak.

It is also essential to understand farming practices, such as in which areas irrigation is used and for which spices plant protection agents and pesticides play a particularly important role in the farming process. Coffee farms are also very different depending on the location, and the use of fertilisers, protection agents and pesticides varies. Moreover, the impacts of farming on local water bodies also require more thorough examination, yet in this area we are fully dependent on our suppliers and their employees who visit the farms and deal with the farmers.

Drawing the overall lines regarding the relevant value chain parts and raw materials was easy, but we needed more information on the tools available for assessing the local impacts.

We decided early on that at this stage, we would mainly involve representatives of our sustainability team and procurement section in the project in order to gain a better understanding of what should be done to assess the current situation regarding our impacts on nature and what kinds of targets we could set in practice. In the future, it is important to work in close co-operation with the selected raw material suppliers and possibly even involve local experts specialised in assessing impacts on nature or nature surveyors in the target countries. Furthermore, we are involved, for example, in joint projects in the coffee sector aimed also at assessing impacts on nature, and this work will certainly benefit us in our own impact assessments and target setting in the future.

In Paulig’s case, the SBTN framework meets the need to incorporate impacts on nature more strongly into the sustainability programme and set measurable targets for them. Ultimately, we hope to gain a concrete and credible target or targets to guide our nature work. At present, we are still waiting for the detailed guidelines on biodiversity to be published. Moreover, it remained unclear how extensively the biodiversity guidelines will, for example, cover the available databases and assessment instructions in terms of analysing the current situation in practice.

At present, complying with the SBTN framework is useful for the initial stages of mapping the current state of impacts on nature and understanding the different targets. For Paulig, the most straightforward parts of the framework were the first steps aimed at identifying the parts of the

value chain that are essential for our own operation. In contrast, it remained unclear how the different tools will be used in practice, whether primary data on our own supply chains is needed for target setting in the current state, and if so, how much data is needed or if more general, regional data is sufficient.

The SBTi target is simpler because there are precise instructions for calculating climate impacts in place, and, after all, there is only one category of environmental impact. With regard to the targets for nature, we must examine several perspectives at the same time, and there is no database information available to a similar extent owing to the local nature of the impacts. The basic process and logic seem similar to the SBT system, but the data and consideration for the local context set the two systems apart.

The targets for nature, similar to climate targets, require some getting used to, and, of course, the company must have internal and possibly external resources available for this work. It is also advisable to determine to what extent the targets for nature and climate can support each other and in what areas the targets – or measures taken to achieve them – may conflict with each other.

Reima Europe Oy

As a company, we have long made certain choices and decisions that help us minimise our negative impacts on nature. For example, our certified materials, which are manufactured with strict regulations on all chemicals to prevent harmful chemicals from ending up in nature. However, we have never systematically analysed the impacts of our activities on nature or set actual targets for nature.

We joined the pilot project on the SBTN framework because we wanted to adopt a more systematic approach to nature work and develop our expertise in this area. We have already committed ourselves to the SBT climate initiative and set science-based climate targets. In terms of the climate, we feel that SBT provides companies with a clear-cut road map and ensures that the targets set are in line with the planetary boundaries. Therefore, we were keen to familiarise ourselves with the guidelines for science-based targets for nature in the early stages of our own nature work.

We started the work by analysing where the impacts on nature of our activities come from – and also by exploring what we can actually influence. At this stage, we found it helpful to have already completed a carbon footprint calculation for our entire value chain in accordance with the GHG Protocol. However, assessing impacts on nature differs from the assessment of climate impacts in certain respects, including that there is, at least at present, no generally accepted standards for measuring the impacts on nature (cf. GHG Protocol). Moreover, there are also more things to measure.

There is another major difference between climate work and nature work: the impacts on nature – and therefore also the targets for nature – are local by nature. We were slightly surprised by the fact that, for example, water targets must be set specifically for each catchment area and proportioned to the current state of nature in the area in question. In other words, nature work requires in-depth knowledge of the supply chain. Knowing the location of factories and production sites is not enough, but you also need data on the state of nature in the relevant area.

Of course, long and complex supply chains make the task even more challenging. We hope that in the future the SBTN guidelines will address the role different material certificates can play in the nature work of companies. When the production chains are long and extend over a wide geographical area, these certificates aim to ensure that the production of raw materials and the entire production chain comply with certain criteria. Therefore, we hope that they could also be utilised in nature work aligned with the SBTN framework.

Nature work is such an extensive entity that it is essential to prioritise and establish certain limits. With regard to climate targets, the SBT criteria for the limitations are very clear: they indicate when the company must also set a Scope 3 target and how much of the emissions must be included in the target. We hope that SBTN will develop equally unambiguous criteria for the scope of the targets for nature, as well. For example, if the targets are location-specific, how much of the value chain should the selected locations cover? When should a company set a target related to land use, for example, and when is it acceptable to determine that the topic is not relevant to the company's operations?

Nature work is such an extensive entity that it is essential to prioritise and establish certain limits.

It is very clear that the SBTN framework and, in part, the nature work indicators are still undergoing development. We look forward to seeing these tools in their final form, and hope that SBTN will also develop sector-specific guidelines for nature work. We believe that once completed, SBTN will be an effective framework for setting targets aimed at reducing the negative impacts on nature.

However, it is difficult to verify what is called the nature handprint with the help of such indicators, and measures that are essentially positive, such as extending the life cycle of a product, are not visible in the indicator system. This is, however, only an observation – the same challenge is present not only in nature work but also in other areas such as climate work.

From Reima's staff, two sustainability specialists and the research and development manager took part in the SBTN work. Moreover, discussions related to the efforts were also attended by the development manager, procurement director and product director. In the future, we will involve our procurement specialists in particular, as they know our subcontractors and are well versed in our supply chains.

Mirka Vesala

Sustainability Specialist

Reima Europe Oy

Kesko Group

Consideration for biodiversity aspects is becoming increasingly important, and this is also visible in Kesko's sustainability strategy, updated in 2022. Based on a materiality analysis conducted in autumn 2020, we identified four focus areas for our sustainability strategy: climate and nature, the value chain, our people and good governance.

Biodiversity has emerged as an issue equal in importance with climate considerations in terms of sustainability work; we respect the planetary boundaries by minimising negative impacts and maximising positive impacts on climate and nature.

The goal of our responsibility strategy is to prevent biodiversity loss both in our own activities and throughout our value chain. We will intensify our biodiversity work by creating a biodiversity road map and setting sector-specific goals for our own operations as well as for the supply chain. Assessing our impacts on nature and setting science-based targets for nature form an essential part of our efforts to draw up a complete roadmap.

The main benefits of the guidelines for science-based targets for nature are the framework and comparability.

As in many other companies, our climate work and the setting of climate targets have advanced over the past few years well ahead of the efforts related to biodiversity. However, we had already analysed risks and opportunities related to biodiversity loss before the pilot project.

Our operations and procurement activities are guided by sustainable development policies that steer the procurement of all products containing raw materials which, in terms of social and environmental responsibility, are deemed critical. For example, our fish and shellfish statement was published as early as 2008, and our palm oil policy in 2011. In addition, we have chosen avocados as an example and assessed their water risks by using the WWF Water Risk Filter.

From Kesko, the pilot project was attended by some of the group's specialists, but also by representatives of the grocery trade sector and the building and technical trade sector. The SBTN framework pilot project increased our understanding of the complexity of the topic and made it crystal clear that nature work is a challenging task.

The main benefits of the guidelines for science-based targets for nature are the framework and comparability. When different operators can assess their impacts on nature and set their own targets for nature based on the same framework and criteria, the essential perspectives are always taken into account and comparability is improved.

The model of science-based targets for nature is unambiguous and easy to grasp in terms of its structure. However, challenges arise from the nature of our operations and the complexities of the supply chain. Moreover, we are forced to wait and see how the role and importance of certifications turn out in the future development of nature work: can we rely on the certifications to improve the state of biodiversity and meet the relevant requirements?

As for the generation of greenhouse gas emissions, our impacts on biodiversity are largely tangible beyond our national borders, namely in the complex supply chains of the products we sell. Our biggest challenge is to identify the products, product groups, production areas and raw materials among our selection that have the most significant negative impact on biodiversity.

To this end, sector-specific frameworks could facilitate the work and possibly account for sector-specific special features. At present, the setting of science-based targets for nature takes place at a highly theoretical level, and the concrete application of the instructions requires extensive work from companies. Nature work and the setting of targets for nature follow the same pattern as climate work: analyse the impacts, set targets, measure and monitor. Although many of these aspects present more of a challenge in this context, there is no time to wait. While ignorance may be bliss, knowledge sheds light on development areas that must be addressed by each and every operator in order to halt biodiversity loss.

As a whole, the mapping of impacts on biodiversity and target setting form quite a time-consuming process. However, reserving the time and resources for this work is worth it: if Sitra's

Megatrends 2023 report is anything to go by, the importance of this topic will only continue to grow.

Maiju Sirviö Manager, Climate and Environment
Matti Kalervo Vice President, Corporate Responsibility
Hanna Lehmuskoski Environmental Manager
Kesko Group

Valio Group

Science-based work incorporates a third-party assessment into nature work and contributes to Valio's efforts to achieve its goal of halting biodiversity loss and strengthening biodiversity. Valio was already familiar with SBT work, as Valio was the second Finnish food company to set scientifically assessed SBTi climate targets.

We started the work by assessing and mapping the impacts on nature of our value chain. We analysed the significance of different business operations through turnover and selected the most significant operations for the examination. Valio's vision is to grow into a multifaceted food company, and already the company's operations include plant-based products and wholesale activities with more complex value chains. Although these business sectors are still minor in relation to dairy, their impact on biodiversity may still be significant. Ultimately, we decided to start with the main activities that Valio can influence directly, but we aim to constantly analyse other value chains as well.

Valio's value chain is long, extending from primary production to stores and to the consumers, making it a challenge to analyse. We know the value chain of our core business sector, dairy, extremely well. But the value chains of the plant-based sector can be long and complex and therefore more difficult to manage from the perspective of impacts on nature. We are able to assess the impacts on nature of Valio's own industrial activities and the milk procurement value chain in a reliable manner. We have a long history of supporting and promoting biodiversity work with dairy farms and we are aware of the positive and negative impacts the farms have on nature. In terms of the value chain of dairy products, we need more information on the impacts that result later in the chain, meaning between us and the stores and consumers. Moreover, we must improve our information management capacity with regard to our other functions and procurements.

The 1.5°C SBTi climate targets set by Valio were approved in early 2021. The setting of SBTi targets is based on a GHG inventory of the value chain in accordance with the International GHG Protocol. Based on the inventory, companies can establish the baseline for the target and monitor any progress. Of course, the GHG Protocol and the calculation data of operators require some further development, but the calculation method is well established. In fact, a significant amount of data has already been gathered, the emissions from different activities can be assessed – at least roughly – and the life-cycle emissions can be easily calculated to form a picture of the overall impact.

Currently there is a distinct difference between SBTi and SBTN work in that SBTN's methods are still incomplete and pose challenges. There are unanswered questions, such as the following: How are the baseline and progress measured, and how can the harmfulness of different environmental impacts be compared? How are the impacts calculated and what kinds of limits are there for the life-cycle assessments? The level of ambition of the SBTi targets is categorised based on the point at which the rate of emission limitations would halt global warming (at the 1.5°C target or below the 2°C target). In terms of targets for nature, we would need to predict in the same way what the different forms of biodiversity loss mean in the longer term. Therefore, the science-based approach links the setting of both climate and targets for nature. Other common factors include investigating "hotspots" by means of inventories and setting targets in a way that makes both climate and nature work genuinely effective when the targets are met.

When setting targets, it is worth noting that obtaining the required data may be laborious or even impossible. It is important to accept shortcomings and rough estimates in the data supply, at least in some parts of the value chains.

We included specialists and management personnel from the procurement, sustainability, primary production and climate programme teams in the work on the science-based targets for nature. In the future, we will also collaborate more closely with staff in production, wholesale operations and product development. Moreover, in addition to our core business (dairy), the value chains of other business activities will also be studied more comprehensively in the future.

The SBTN framework provided us with practical tools for analysing our value chain through IPNES-defined pressures on biodiversity. This has facilitated the assessment of our value chain's negative impacts on nature and it will also contribute to the future monitoring and target-setting efforts. On the other hand, the framework excludes the impact of positive drivers, and the framework was still largely incomplete during the pilot project, making it impossible to plan and set targets in a specific manner. With regard to a value chain's impact on nature, understanding and

verifying it requires investments from companies, as well as a new type of competence. At present, there are few or no unambiguous indicators for the targets, meaning that defining the indicators and collecting measurement data are among the challenges posed by the nature target framework.

When setting targets, it is worth noting that obtaining the required data may be laborious or even impossible. Furthermore, it is important to accept shortcomings and rough estimates in the data supply, at least in some parts of the value chains.

Nature work is always incomplete, but that does not mean that it should not be started!

Atria Plc

Atria's operations are very closely linked to nature, and Atria has been taking measures to reduce harmful impacts on nature for more than 20 years. The Science Based Targets initiative (SBTi) has officially approved Atria's emission-reduction targets. The company has also committed to the UN Global Compact standards and signed a commitment with the Baltic Sea Action Group. In addition, Atria has made commitments regarding water, soy, palm oil, free-range eggs, and material and energy efficiency.

For Atria, SBTN's science-based targets for nature and measures aimed at minimising the negative impacts on nature are comprehensive methods for further developing food chain operations. The targets for nature fit in well with our company's nature work. In Atria's view, global, science-based and commonly used guidelines are essential for this work. However, as impacts on nature are in many respects local, nature work should also start with local and regional reviews and measures. In addition to minimising harmful impacts, it is also important to consider the positive impacts of our value chain and strengthen them even further.

Atria's executive vice president of sustainability, the sustainability team and specialists from our different organisational fields took part in the STBN framework pilot project. Initially, we chose high-risk raw materials, Finnish meat and investment projects for more detailed examination, and used our ongoing poultry investment as a case in point. Our team aimed to identify the adverse impacts of our activities in accordance with the framework, as well as assess their significance and our opportunities to influence them. We learned that in SBTN work, it is essential to start as quickly as possible by identifying the issues, be they big or small, that the company may be able to influence easily, and move on from these towards more challenging measures. Moreover, we also conducted background research based on literature and other studies.

We have acknowledged that primary production is one of the key aspects of our operation. We are already very familiar with the domestic impacts of our operations, and the impacts of Finnish primary production on water bodies can be studied according to different catchment areas, as partly required by SBTN. In contrast, the international raw material supply chains and their local impacts on nature will require extensive additional research.

Once completed, the SBTN framework will most likely meet our company's need to assess, reduce and develop the local impacts on nature of our value chain through a common, well-known and recognised global framework. However, in our view, a significant shortcoming in the framework is that it includes no guidelines for identifying, measuring and verifying the positive impacts on nature. We believe that the assessments of negative and positive impacts should not be separated from each other, as boosting the positive impacts is equally important. Furthermore, we feel that working in accordance with SBTN will be useful at any point of a company's nature work.

> **It is essential to start as quickly as possible by identifying the issues, be they big or small, that the company may be able to influence easily, and move on from these towards more challenging measures.**

Compared to climate targets, impacts on nature are associated with more perspectives, levels and areas, which makes the matter much more complex. However, it is beneficial to examine the different impacts on nature in a versatile manner within the same framework, as some climate-related measures may conflict with biodiversity.

Companies thinking about setting science-based targets for nature should reserve plenty of time and resources for the background studies. Regardless of the sector, setting targets for nature will require extensive acquisition of background information on different supply chains – as well as efforts to analyse them – simply to set the targets and monitor their realisation.

Sanna Kivimäki Sustainability Manager
Teija Paavola Sustainability Manager
Atria Finland

Metsähallitus

Promoting biodiversity and halting biodiversity loss are included in Metsähallitus' strategic objectives. Metsähallitus oversees state-owned land and water areas – about one third (12.6 million hectares) of Finland's entire surface area. We aim to mitigate biodiversity loss through active measures, maintain and promote biodiversity, and prevent and minimise the harmful impacts our operations cause to the environment. We strive to act systematically to protect the environment and ensure the sustainable use of natural resources. Our goal is to be a pioneer of responsibility and sustainable development.

Approximately 24 per cent of the state-owned land areas managed by Metsähallitus constitute statutory conservation areas or are covered by conservation programmes. In these areas, the main aim of land use is maintaining and increasing biodiversity. In addition, 15 per cent of the land area is designated statutory wilderness area, in the north of the country. Approximately 38 per cent of the state-owned lands are covered by multiple-use forests in commercial forestry use, but there are various restrictions in place in over 20 per cent of these forests for the purpose of encouraging biodiversity and other objectives. Forest management accounts for approximately 90 per cent of the annual turnover of Metsähallitus, in addition to which the development of wind power is a significant and constantly increasing business sector.

At the heart of all our work is better reconciliation of multiple societal objectives, and we advance this goal through the natural resource planning process. Alongside our work for biodiversity, we implement Metsähallitus' Climate Programme while making sustained efforts to mitigate both biodiversity loss and climate change.

From Metsähallitus, the persons involved in the SBTN framework pilot included specialists who primarily work on strategic development, environmental management and sustainability. There are five steps in the setting of science-based targets for nature: assess, interpret and prioritise, measure, set and disclose, act, and track.

With regard to the assessment, interpretation and prioritisation stages, we examined Metsähallitus' ongoing and previously completed responsibility efforts and their materiality and compared the practices included in the environmental system, forest certifications and Metsähallitus Forestry Ltd's environmental guidelines against the requirements of the SBTN framework. During the work, we identified the core activities that have the greatest impact on nature and made progress in identifying the significance of Metsähallitus' activities as part of the value chain.

The setting of SBTN-compliant targets for nature is based on measuring the footprint of operations, which would require more extensive research by Metsähallitus, as well as a common framework for measuring and comparing the impacts in a manner similar to the climate targets. However, general, regional and local operational targets have been set for biodiversity and climate change in commercial forests managed by Metsähallitus, all aimed at preventing and reducing harmful impacts and complying with the relevant forest and nature management guidelines.

Metsähallitus will prepare a water management guide for all state-owned areas, and it could even serve as a means for trialling the more detailed guidelines of the SBTN framework in inland waters. Moreover, Metsähallitus is involved in the preparation of the EU LIFE Fund's strategic and nationally most important nature project called Priodiversity, which is aimed at developing areas used by a network of nature reserves as well as commercially used forests to halt biodiversity loss. In the near future, Metsähallitus strives to increase the impact of biodiversity work and expand its efforts by, for example, planning a site-specific work process for each catchment area.

Metsähallitus' value creation model describes the impact of our strategy and responsibility work and shows what type of value we create for society in terms of the economy, the environment, nature and social perspectives. In terms of commercial forests, we comply with the principles of sustainable forestry, but the framework also recognises other benefits of the activities. Metsähallitus complies in all its operations with the best responsibility practices and sector-specific regulations, but due diligence and the global developments in sustainability inspire us towards more ambitious goals.

We are committed to promoting the UN Sustainable Development Goals (2030 Agenda) and the UN Guiding Principles on Business and Human Rights. Through our responsibility work, we have identified specific goals that hold the most weight for our own operations and our stakeholders and that we can influence through our Fostering our Future strategy. Our goal is to promote the achievement of these goals and reduce the negative impacts on them, but we do not report on the implementation as part of the global SDG process.

With regard to targets and measures associated with specific SDG ecosystems, Metsähallitus has also, among other things, set quantitative restoration targets (ha/year) for commercial areas and monitors the realisation of said targets. In terms of biodiversity, key indicators include those that catalogue the structural features of forests, such as the amount of decaying wood (m^3/ha). In accordance with Metsähallitus' guidelines, data on the occurrence of endangered species is taken into account in all forestry activities by excluding the species from active operations or by otherwise acknowledging them in forestry work by means of suitable forest and nature management methods.

The SBTN framework can provide Metsähallitus with an internationally recognised and comparable framework for the objectives of nature work.

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Towards a more sustainable world

FIBS is the largest corporate responsibility network in the Nordic countries. Our goal is to accelerate the change towards a more sustainable world by capacity-building of companies. We serve as a hub of corporate responsility and sustainability expertise and offer trainings, webinars, and peer learning opportunities to our members of our network.

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