



PRACTICAL GUIDE ON BIODIVERSITY FOR SMEs IN THE AGRI-FOOD SECTOR

2022

THE EUROPEAN BUSINESS AND BIODIVERSITY PLATFORM

The EU Business and Biodiversity Platform (EU B@B Platform) provides a unique forum for dialogue and policy interface to discuss the links between business and biodiversity at EU level. It was set up by the European Commission with the aim to work with and help businesses integrate natural capital and biodiversity considerations into business practices.

This document was prepared by the EU B@B Platform. It is the first draft of a practical guide on biodiversity for small- and medium-sized enterprises (SMEs) from the agri-food sector. The guide came into being due to growing demand from various stakeholders. The scope and the format of the guide build on the findings of a survey of European SMEs in 2020, a session dedicated to SMEs during the 2020 edition of the European Business and Nature Summit and a workshop hosted during the WeValueNature 10-day business challenge in March 2021. The guide was also discussed during the first workshop with the SME Working Group established by the EU B@B Platform. Based on the input of the working group, an initial structure for the practical guide was drafted and agreed upon. This first draft of the guide build on input received from the working group, recent literature and publications, as well as existing tools and resources.

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FOREWORD

How does your local brewery impact biodiversity? What is the dependency of your favourite juice producer on ecosystem services such as pollination? How can a family-owned food manufacturer develop products with a minimal or even positive impact on biodiversity?

All these questions are crucial given the dramatic loss of biodiversity observed over the last decades now referred to as the 6th mass extinction. The World Economic Forum estimates that over half of the world's GDP, USD 44 trillion of economic value, is at moderate or severe risk due to nature loss. The loss of biodiversity is not only putting our economic system at risk, but also threatening our overall prosperity, wellbeing and livelihoods. Reversing nature loss over the next decade is therefore crucial.

While businesses cannot address this global crisis on their own, they do have a crucial role to play. Pioneering businesses are already leading the way, taking bold commitments and implementing impactful actions to reverse nature loss. Efforts must now be accelerated and picked-up by a critical mass of businesses if we wish to halt and reverse biodiversity loss by 2030.

Small and medium enterprises (SMEs) represent an essential component of this transition. SMEs represent the backbone of the European economy. There are more than 25 million SMEs operating in the EU employing together around 100 million people. Halting and reversing biodiversity loss over the coming decade will therefore only succeed if SMEs are fully engaged and empowered. This is, however, easier said than done. While SMEs often operate at local level and can, and sometimes already are, implement impactful actions to reduce their impact on biodiversity, they face multiple challenges and typically don't have access to the same level of expertise and resources as large businesses. Existing tools, frameworks and guidance are moreover often targeting large corporates and are not always adapted to the needs of SMEs.

The objective of this practical guide is to break this barrier. Starting with companies operating in the agri-food sector given the direct relationship between this sector and nature, it explains how a focus on biodiversity will enable SMEs to become 'future proof' and 'resilient', showcasing ways to manage biodiversity risks and seize the benefits of integrating biodiversity into business strategies. Starting from concrete examples and typical profiles, the guide helps SMEs to navigate the landscape of existing tools and guidance on biodiversity management that have been developed over the years. Building on the decision tree presented in page 5, the practical guide will help you start and progress on your biodiversity journey!

This first version of the practical guide is however just the beginning. We will further elaborate it based on feedback and are planning to engage with leading SMEs and organisations working with SMEs across Europe to test its relevance and usefulness, foster peer-to-peer learning and reach the critical mass of businesses required to stop and reverse nature loss. We hope this guide helps you to better understand your impact and dependencies on biodiversity and inspires you to start your nature journey.

Do you want to get involved or share your thoughts? You can reach us at the European Business @ Biodiversity Platform.

Jerome Kisielewicz,
Lead Managing Consultant at ICF, Mainstreaming workstream leader
European Business @ Biodiversity Platform



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READERS' GUIDE

Objective of the practical guide

There is significant momentum around more sustainable business practices to protect biodiversity within Europe and beyond. Pioneering companies are taking action to protect biodiversity and reduce their impacts but many corporates are daunted by the complexity of biodiversity, especially small and medium-sized enterprises (SMEs). However, SMEs should not miss the opportunity to start their journey to prepare for regulation and bolster their business against growing scrutiny of consumers.

This practical guide explains how a focus on biodiversity will enable SMEs from the agri-food sector to become 'future proof' and 'resilient', showcasing ways to manage biodiversity risks and seize the benefits of integrating biodiversity into business strategies. The guide helps SMEs to navigate the landscape of existing tools and guidance on biodiversity management that have been developed over the years. Moreover, it aims to fill the gap in available resources tailored to the specific needs and challenges SMEs face.

The suggested actions are based on biodiversity management practices applied by pioneering SMEs to ensure the actions proposed are relevant to SMEs and achievable. This first version of the guide will be further developed and improved based on its use by SMEs, the feedback received and future developments on the business and biodiversity field.

For whom has this practical guide been developed and what is it about?

The practical guide is applicable to SMEs from the agri-food sector targeting all actors along the value chain, from farmers to retailers, independently from the country they operate in. Specific actions are proposed for farmers and all types of food companies depending on their focus and position in the value chain. The guide consists of 4 modules that can be read in consecutive order or separately based on your level of experience and interest. Business in other sectors can use the guide as inspiration for action towards integrating biodiversity into business activities.

The practical guide is also meant for intermediaries, including financial institutions and network organisations, engaging with SMEs, that can use this practical guide to trigger actions with their members/clients.

The structure

The practical guide aims to recognise the significant amount of work that has been undertaken in this field and tries to build on well-established concepts, approaches and initiatives focusing on business and nature in general, and agri-food SMEs and biodiversity more specifically. Throughout the guide reference is made to key resources in the field of business and biodiversity, which SMEs can consult if they wish to learn more. The guide is written in a way that no prior knowledge of existing initiatives is needed.



GUIDE TO THE GUIDE: WHERE TO START YOUR JOURNEY?

Module 1. Biodiversity Basics

Are you new to biodiversity? Start with the basics and learn why biodiversity matters to your company. This module introduces the concept of biodiversity, how it underpins nature and how it fits within the broader natural capital and ecosystems thinking. It also helps you to better understand biodiversity-related risk and opportunities the agri-food sector is facing. Finally, it showcases four case studies of SMEs that integrated biodiversity management practices and reduced their negative impact on biodiversity.

Module 2. Easy Biodiversity Impact Assessment

You are familiar with the concept of biodiversity and understand it is a material issue for your company, but you are not sure how your specific company has an impact on biodiversity. Before you can take action, it is crucial to understand your company's position in the value chain and the direct and indirect impacts your company has on biodiversity. This module introduces four different types of business explaining typical impacts such companies could have based on general approaches. As a company you will be able to relate with one of the personas, which will help you in your next steps taking meaningful action.

Note that this easy impact assessment uses a simplified framework. It is based on general approaches and assessment tools using proxies to gain insights in the biodiversity-related impacts of SMEs across the agri-food

value chain. As a next step businesses can start assessing their specific impact on biodiversity. The EU B@B Platform has developed different research papers on existing tools and approaches to assess the impact of your activities on biodiversity.

Module 3. Time for action

Based on your level of experience and knowledge, you can start at different levels along the biodiversity journey. Depending on where you are in your journey you can take different actions. The actions proposed are tailored to the different stages on the journey: (i) Stage 1: Just starting, (ii) Stage 2: Taking first steps or (iii) Stage 3: Developing.

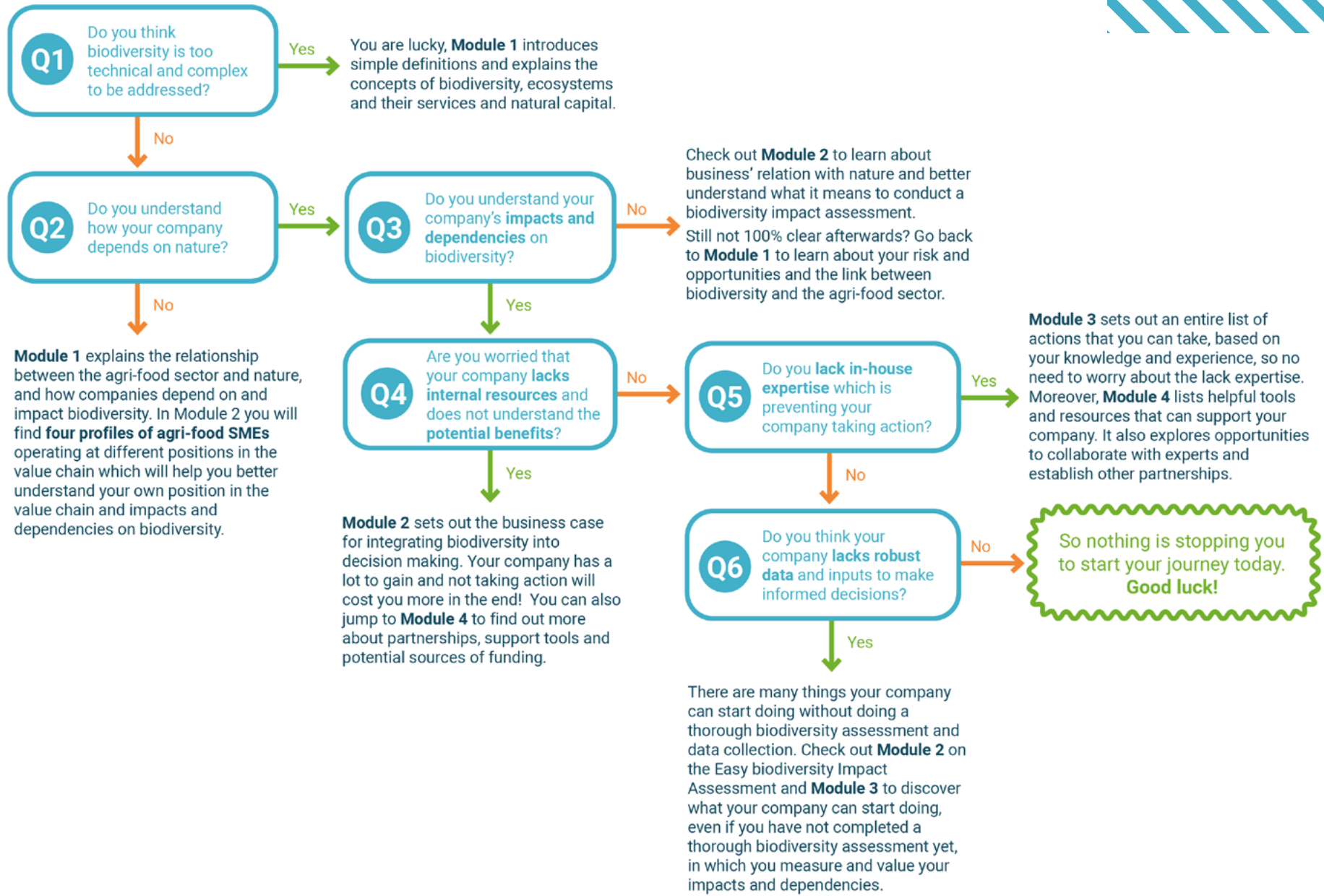
Module 4. You don't have to make this journey by yourself

Starting your biodiversity journey can be overwhelming. Luckily there are many initiatives and organisations that are supporting SMEs that are willing to take action. Creating the right partnerships is key to succeed and it will make it all a lot easier. This module identifies key partners and initiatives at European level, where SMEs can turn to for support. It also provides advice on how to find support at the national level. Finally, a list of tools and resources is pulled together to support agri-food SMEs at the start of their journey, but also for the ones that want to take it a step further and start measuring.





If you aren't sure where to begin, follow the decision-tree below to know where to start!



MODULE 1: BIODIVERSITY BASICS

1. Biodiversity Basics

Are you new to biodiversity? Start with the basics and learn why biodiversity matters to your company. This module introduces the concept of biodiversity, how it underpins nature and how it fits within the broader natural capital and ecosystems thinking. It also helps you to better understand biodiversity-related risk and opportunities the agri-food sector is facing. Finally, it showcases four case studies of SMEs that integrated biodiversity management practices and reduced their negative impact on biodiversity.

2. Easy Biodiversity Impact Assessment

3. Time for action

4. You don't have to make this journey by yourself



1 INTRODUCTION: HOW SMES CAN CONTRIBUTE TO A SUSTAINABLE AGRI-FOOD SECTOR

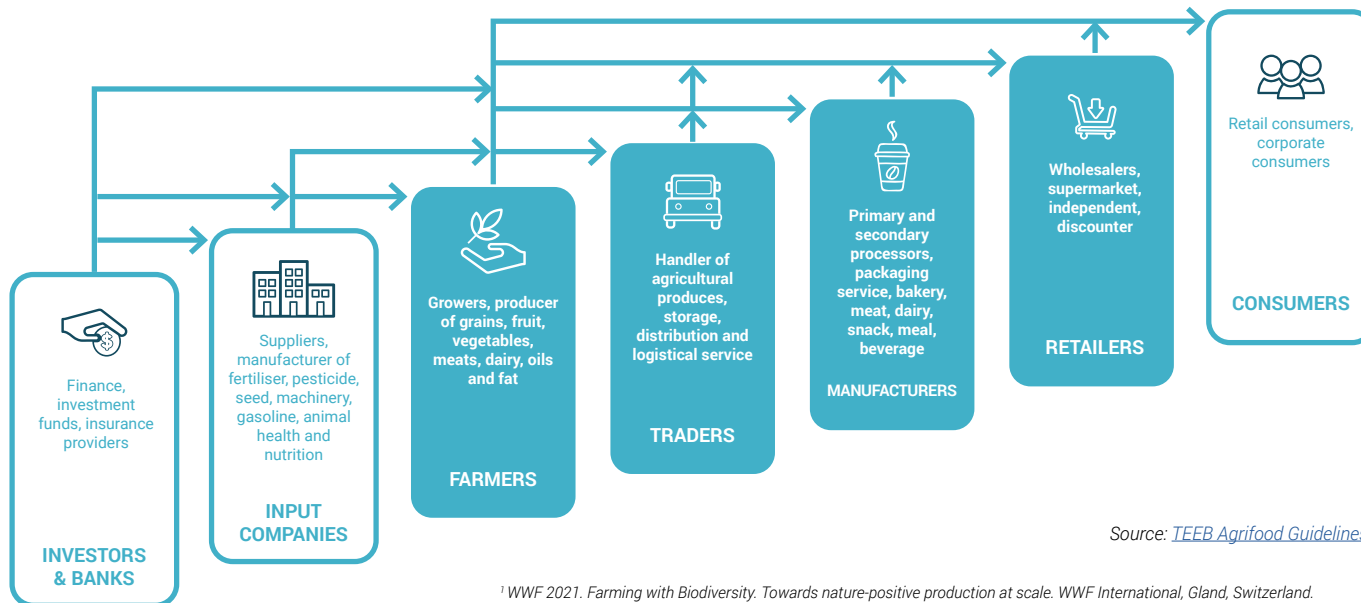
1.1 EUROPEAN SMES AND THE AGRI-FOOD VALUE CHAIN

99% of all businesses in the EU count less than 250 employees and therefore qualify as small and medium enterprises (SMEs). This represents more than 25 million SMEs employing together around 100 million people. SMEs form the backbone of the European economy and are key to the EU's transition to a climate neutral and nature positive economy. SMEs need to be fully engaged if the EU wishes to achieve its climate and environmental objectives.

Biodiversity has a cross-cutting importance for the agri-food sector

Transforming our food system is key to address the most important challenges humanity is facing today: climate change, environmental degradation, and growing food insecurity are only a few of them. The global food system is putting our planet under unforeseen pressure and it compromises our capacity to produce food in the future. The global food system, including all the interactions along the food value chain - from input supply and agricultural production to household consumption - has a huge impact on the environment. It is responsible for one third of greenhouse gas emissions (GHG), 80% of deforestation and 70% of biodiversity loss. The global food system is the primary driver of the loss of biodiversity.¹ **Agriculture alone poses a threat to 24,000 of the 28,000 (86%) species at risk of extinction.**² This means that changing agricultural practices has a huge potential to reverse nature loss.³

Figure 1 Actors in the agri-food value chain



Source: TEEB Agrifood Guidelines

¹ WWF 2021. *Farming with Biodiversity. Towards nature-positive production at scale.* WWF International, Gland, Switzerland.

² UNEP 2021. Our global food system is the primary driver of biodiversity loss. Press Release Nature Action. (3 Feb 2021). Available at: [https://www.unep.org/news-and-stories/press-release/our-global-food-system-primary-driver-biodiversity-loss#:~:text=Year%20for%20Nature.,Our%20global%20food%20system%20is%20the%20primary%20driver%20of%20biodiversity,the%20past%2010%20million%20years.\(Accessed on 13 January 2022\)](https://www.unep.org/news-and-stories/press-release/our-global-food-system-primary-driver-biodiversity-loss#:~:text=Year%20for%20Nature.,Our%20global%20food%20system%20is%20the%20primary%20driver%20of%20biodiversity,the%20past%2010%20million%20years.(Accessed on 13 January 2022))

³ The New Scientist (2021). "Untouched nature was almost as rare 12,000 years ago as it is now" by Loyal Liverpool (19 April 2021). Available at: <https://www.newscientist.com/article/2274704-untouched-nature-was-almost-as-rare-12000-years-ago-as-it-is-now/> (Accessed on 23 April 2021)

⁴ Investors, input companies and consumers as well as the food service sector and non-food purpose sector are both beyond the scope of the guidelines.



The European agri-food sector is diverse and complex

The agri-food sector in Europe is a diverse sector with a complex value chain involving companies of all sizes ranging from family-owned farms to big supermarkets. [The Economics of Ecosystems and Biodiversity for Agriculture and Food programme \(TEEBAgriFood\)](#) tries to consider the entire complex and extensive eco-agri-food value chains. The true economics of agriculture can only be understood after recognizing and accounting for all significant "externalities" along these value chains. Building on the established [TEEBAgriFood Operational Guidelines](#) for Business, developed by the [Capitals Coalition](#), the actors in the value chain that will be addressed by this guide are:

- Farmers, such as growers, producers of grains or dairy farmers
- Traders, such as handlers of agricultural producers or storages
- Manufacturers, such as bakeries or beverage processors
- Retailers, such as wholesalers or supermarkets⁴

TEEB is a global initiative focused on “making nature’s values visible”. TEEBAgriFood programme seeks to provide a comprehensive economic evaluation of the “eco-agri-food systems” complex revealing the interdependencies between the different actors in the value chain as well as the overall dependency of the agri-food system on nature.

Agri-food supply chains vary in length and complexity, with long international and global supply chains existing beside short, local or national ones. For the sake of clarity, this practical guide will only focus on SMEs in the EU.

What is an SME?

Small and medium-sized enterprises (SMEs) are defined in the EU based on:

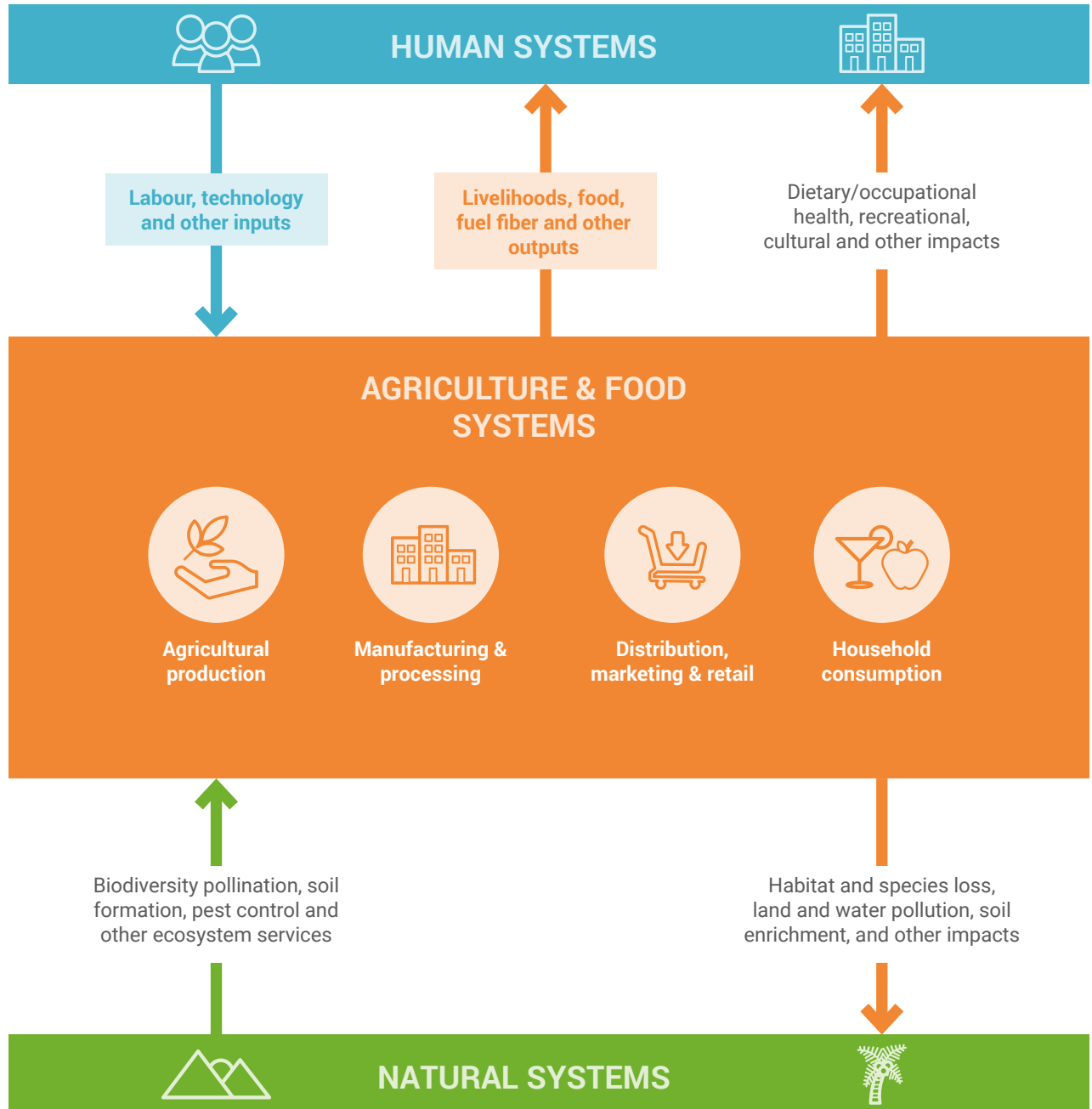
The main factors determining whether an enterprise is an SME are

1. staff headcount
2. either turnover or balance sheet total

These ceilings apply to the figures for individual firms only. A firm that is part of a larger group may need to include staff headcount/turnover/balance sheet data from that group too.

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

Figure 2 Interrelationships and interdependencies between human systems, agriculture and food systems, and natural systems



Source: [TEEBAgriFood initiative](#)

EUROPEAN AGRI-FOOD SMES IN NUMBERS



**€529
billion**
TURNOVER



**€103
billion**
VALUE ADDED



**2.8
million**
EMPLOYEES



99.1%
OF FOOD & DRINK
COMPANIES

Contribution of SMEs and large companies
to the EU food and drink industry (2014%)



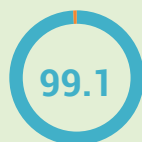
Turnover



Value added



Number of
employees



Number of
companies

■ SMEs

■ Large companies

Source: *Small Scale. Big Impact. SME FoodDrinkEurope.*



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1.2 ENVIRONMENTAL PERFORMANCE: FOUNDATION OF SUSTAINABILITY

SMEs are acting on the environment but the scale of the challenge ahead is huge

The good news is that many SMEs are already taking action to reduce their negative impact on the environment and the climate and are thereby contributing to a more sustainable food industry. Plenty of companies are improving their energy efficiency or changing their land management practices to reduce their GHG emissions, seeking sustainable sourcing solutions, improving the environmental performance of their packaging and waste management or increasing their resource efficiency. Despite these efforts the challenges ahead remain important and further steps are required.

Not only is the sector a big contributor to GHG emissions, but agriculture is also highly exposed to the effects of climate change. Luckily, the sector is unique in its ability to reduce both its own sector emissions while also driving down global GHG emissions through the absorption of carbon emissions from the atmosphere. The biophysical potential of the land and the agricultural sector to contribute to solving the climate crisis is unrivalled.

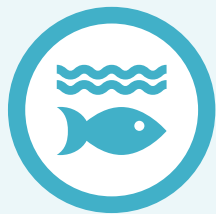
Even though the decarbonization of the economy is hugely important, it is not enough to save our planet as long as pressure on nature continues or even increases. This is because all life on Earth is interconnected and the biophysical interactions in the Earth system amplify human impacts.

DRIVERS LINKED TO FOOD PRODUCTION CAUSE 70% OF TERRESTRIAL BIODIVERSITY LOSS

70%
TERRESTRIAL
BIODIVERSITY LOSS



DRIVERS LINKED TO FOOD PRODUCTION CAUSE 50% OF FRESHWATER BIODIVERSITY LOSS

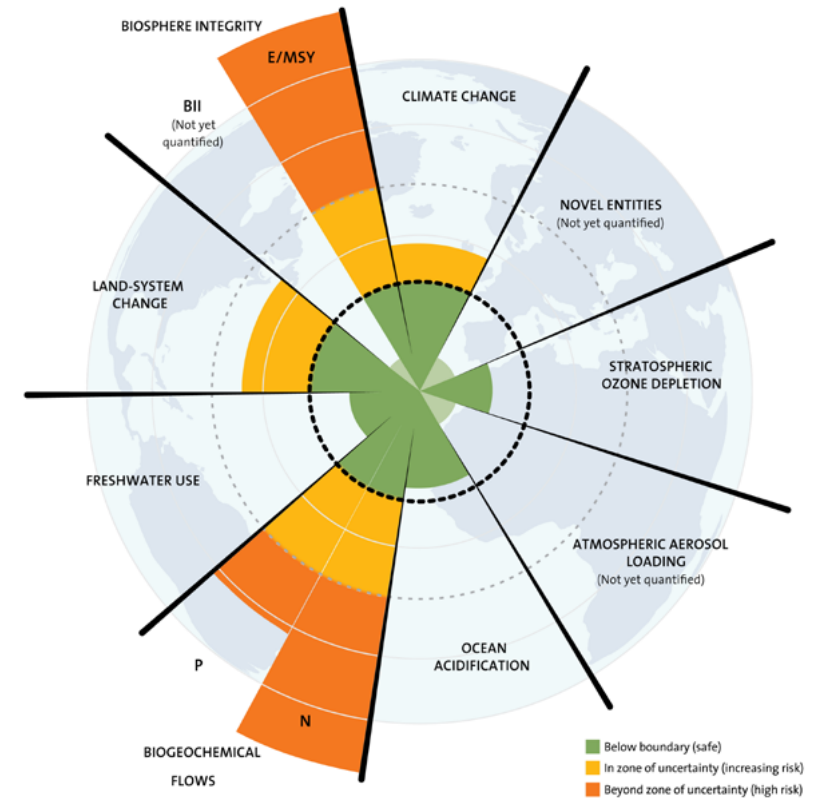


50%
FRESHWATER
BIODIVERSITY LOSS

Source: [WWF, Farming with Biodiversity, 2021](#).


⁵Lóránt A & Allen B (2019) Net-zero agriculture in 2050: how to get there? Report by the Institute for European Environmental Policy. Accessed on 15 July 2021: https://ieep.eu/uploads/articles/attachments/eeac4853-3629-4793-9e7b-2df5c156afd3/IEEP_NZ2050_Agriculture_report_screen.pdf?v=63718575577

Figure 3. Planetary Boundaries



Source: [Stockholm Resilience Centre](#)

In 2009, a group of Earth system and environmental scientists, led by Johan Rockström from the [Stockholm Resilience Centre](#) and Will Steffen from the [Australian National University](#), introduced the concept of [planetary boundaries](#) which involves Earth system processes that regulate the state of the planet, such as climate change, ocean acidification and land-system change. Unsustainable consumption of the Earth's resources has brought the global economic system out of balance compared to what the planet can sustain. To restore this balance, and simultaneously guarantee continued socio-economic development and prosperity, humanity must operate within a "[safe operating space](#)", which sets the preconditions for sustainable development.



The biophysical potential of the land and the agricultural sector to contribute to solving the climate crisis is unrivalled

Protecting and restoring nature is imperative so humanity can continue to develop and thrive for generations to come. Turning the tide of nature loss requires a combination of nature conservation and a shift to sustainable production and consumption.

Biodiversity and climate are two sides of the same coin

Did you know that climate change and biodiversity are interconnected? Biodiversity loss cannot be addressed without tackling climate change, but it is equally impossible to tackle climate change without addressing biodiversity loss. Not only does climate change negatively affect biodiversity, with negative consequences for our society and business, many measures to protect biodiversity also contribute to climate-change mitigation and adaptation. Biodiversity action is therefore critical to address the climate target and will also help your company to achieve its climate targets as these are mutually supporting goals. Simultaneously addressing the climate and nature crisis will help us to drive a swift transition to a nature-positive, carbon-neutral future. This a win-win: sustainable solutions amplify their effects!

Despite the challenges ahead, the good news is that biodiversity and climate are two sides of the same coin. Addressing climate change and biodiversity in an integrated way will generate socioeconomic benefits. Biodiversity forms the bedrock of the food production: without biological diversity, no fertile soils; without pollination, no yields; without aquatic ecosystems, no water and no agriculture;

hence no food. The green transition also provides many opportunities for the wider economy and for the agri-food industry to increase its resilience. An economy enhancing and contributing to nature, can unlock \$10 trillion of business opportunities by transforming the three key economic systems: food, infrastructure and energy. These are responsible for almost 80% of nature loss.⁶

Biodiversity action is often perceived as putting another burden on SMEs as they are busy with the day-to-day running of their company. Capitalising on the business opportunities that biodiversity offers is often challenging for many SMEs, who do not have the resource required to address this issue or consider this as too burdensome. SMEs often do not have the time to collect data and conduct lengthy impact assessments to set targets and measure progress. On the other side SMEs are often much more agile than large corporates and have demonstrated numerous times their ability to innovate. On top of this, there are improvements that any SME in the food sector can easily implement and integrate into existing sustainability frameworks. There are also many examples to learn from. No need to re-invent the wheel. And the good thing is that there is much to gain: each burden can be turned into an opportunity and become a unique selling point!



Important definitions to get you on your way.

“Biological diversity or biodiversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.”

“Ecosystem means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.”
Article 2, Convention on Biological Diversity (CBD)

“Natural capital is the stock of renewable and non renewable natural resources (e.g., plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people.”
Natural Capital Protocol, the Capitals Coalition

How are natural capital and biodiversity related?

Natural capital is a way of thinking that views the environment as a stock of all living and non-living natural resources that generate a flow of products and services, such as food, water and clean air. Biodiversity refers to the whole of the living resources while ecosystem services include all of the flows that benefit society. Viewing nature as ‘natural capital’ is looking at the environment from an economic perspective.

2.1 SMES RISKS AND OPPORTUNITIES

Understanding biodiversity and ecosystem services in an economic context: business impacts and dependencies

Businesses and biodiversity are intrinsically linked, but the extent to which companies depend on, and impact, biodiversity varies between companies and sectors.

Natural ecosystems which are transformed into agricultural lands for crop production or pasture have been the principal cause of habitat loss, hence reducing biodiversity and increasing pressure on species. Reducing the variety of landscapes and habitats has detrimental effects on the breeding, feeding and nesting of birds, insects and other animals. It also destroys many native plants.

Most conventional agriculture is intensive and relies on industrial farming methods which are harmful to the environment. Habitat degradation happens first through land use change and is sustained through unsustainable farming practices, such as monocropping or heavy tilling. Intensified agricultural production degrades soils and ecosystems, impacting the productive capacity of the land. Conventional food production is also heavily resource intensive: it depends on the use of fertilisers, pesticides, energy, water and land, affecting habitats and ecosystems. As result, the degradation of habitats caused by industrial agricultural practices has forced species to migrate to new locations, bringing them into contact and competition with each other, leading to the emergence of infectious disease, like COVID-19.

The agri-food sector is putting major pressure on biodiversity while heavily depending on the services it delivers

The agri-food sector not only has an impact on biodiversity, it also heavily depends on biodiversity as an input to sustain their activities, either directly or indirectly. **Agriculture depends on healthy ecosystem services underpinned by biodiversity, such as fresh water, soil fertility, nutrient**

cycling, pest regulation and pollination. A farmer's harvest directly depends on pollination. Bees, butterflies and other pollinators contribute to the increase and the quality of the farmer's crop yields. The decline of pollinators would not only affect the farmer's business but also indirectly impacts the brewery that purchases the barley.

Moving towards more sustainable forms of agriculture helps to minimise negative impacts on nature. [The International Union for Conservation of Nature \(IUCN\)](#) explored the pathways towards the future of farming, identifying various approaches to sustainable agriculture, such as agroecology, permaculture and organic farming.⁷ **In principle, extensive agriculture is the only approach that can have a positive impact on biodiversity by creating cultural landscapes with a high crop variety on which various species in Europe depend.** Other agricultural practices only reduce the negative impacts on biodiversity without having a positive impact.

Biodiversity loss, as part of the overall environmental impacts, not only leads to economic and financial loss, due to decreased of productivity, it also leads to direct social well-being costs affecting our livelihoods. The socio-economic impacts include increased public costs, increased food prices, pesticide exposure and many more.

Further destruction of ecosystems and habitats will threaten the future generation's ability to thrive. [The Global Risk Report 2022](#), published by the World Economic Forum, analyses the key risks emanating from current economic, societal, environmental and technological tensions. In the report "biodiversity loss" is ranked as one of the top three most severe risks that will pose long-term threats to the world, following "climate action failure" and "extreme weather".

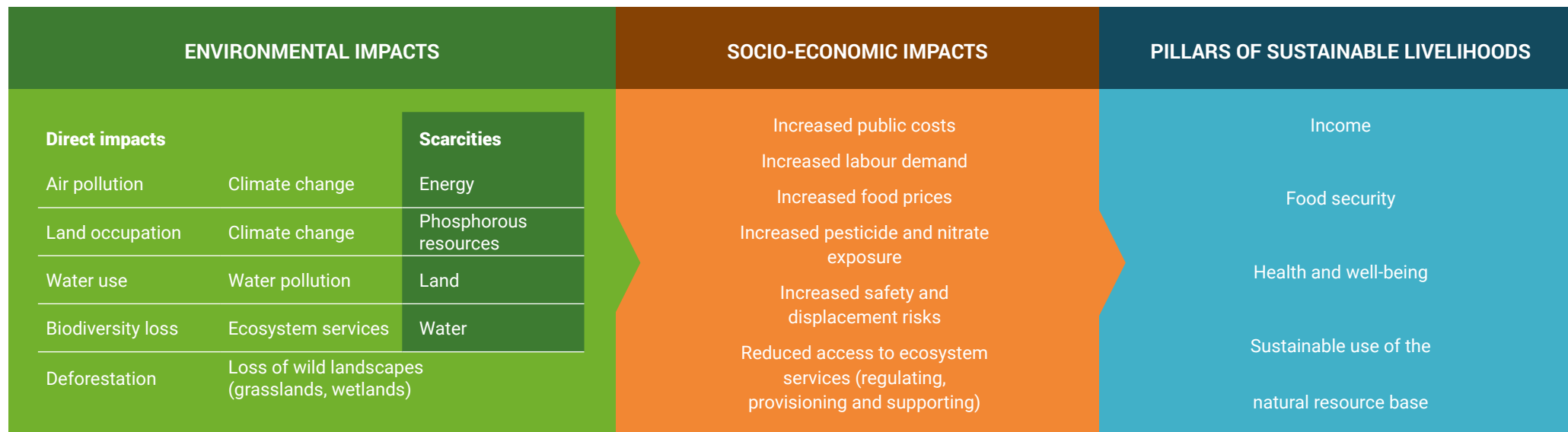
The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is the independent intergovernmental body established in Panama City, on 21 April 2012 by 94 Governments. They are the authoritative voice bridging science and policy for people and nature. IPBES identified the key drivers of change in nature.

The five main drivers of biodiversity loss induced by the agri-food sector are:

- *Changes in land and water use and management destroying and fragmenting species' habitats*
- *Pollution of soil, water and air*
- *Overexploitation of natural resources, such as fish and water*
- *Greenhouse gas emissions and climate change*
- *The introduction of invasive species harmful to the local environment*

On top of these drivers, people's consumption patterns and the growing population are putting additional pressures on biodiversity.

Figure 4 Direct and indirect impacts in loss of productivity and overall welfare due to biodiversity loss



Source: *Measuring What Matters: a Synthesis Report, TEEBAgriFood Synthesis*

Strategic reasons to consider your company's relation with biodiversity

Biodiversity-responsible practices are on the rise across Europe. The agri-food sector can provide biodiversity benefits through conservation and restoration activities but, more importantly, through the adoption of sustainable management systems and innovative practices. In France, about 300,000 hectares of land are managed using agroecological principles.⁸ With its usable agricultural area of nearly 30 million hectares, only 1% of the land is agroecologically farmed. Despite Member States' efforts to incentivise and promote agroecological practices, we are still far off from achieving the EU's objective to reach 25% of agricultural land under organic farming by 2030.⁹ Landowners and farmers understand that managing their dependencies and impacts on biodiversity is key to increase their company's resilience and contribute to the sustainable transition. This is not only true from a risk management perspective that continuing business-as-usual would entail, but also from strategic point of view.

There are many strategic reasons to consider your company's relation with biodiversity. Entrepreneurs reinventing their business models are experiencing the benefits and values of integrating biodiversity into their daily business and are future proofing their company. SMEs have many opportunities to seize. They are the most flexible and dynamic sector within the agri-food value chain and are able to create future proof solutions accelerating the uptake of biodiversity in business models.

The Natural Capital Protocol, a decision-making framework for companies to assess their impacts and dependencies on natural capital, outlines potential business applications of considering your company's relation with nature. A business application is defined as the intended use of the results of your assessment, to help inform decision-making, and thus showing how it could be relevant to your business. The following business applications linked to strategic objectives and benefits, have been identified:

- 1. Risks and opportunities:** Assess the nature and magnitude of natural capital impacts and/or dependencies, and their associated business risks and

- 2. Compare options:** Compare, contrast, and select from a range of alternative options, while considering their relative natural capital impacts and/or dependencies.
- 3. Assess impacts on stakeholders:** Ascertain which stakeholders are affected by changes in natural capital due to your business activity, and by how much, which can help you define the level of required compensation.
- 4. Estimate total value and/or net impact:** Determine the total value of natural capital linked to your business activities, which may be useful for valuing landholdings or managing property or other environmental assets owned by the business.
- 5. Communicate internally or externally:** Communicate natural capital impacts and/or dependencies to internal or external stakeholders, which you can use as a marketing strategy to external stakeholders or attracting investors and customer.

The same strategic reasons apply for acting on biodiversity. Even without a quantitative biodiversity impact assessment, you can make your business future proof and generate economic, financial and social benefits!



The business case for SMEs

Make your business **future proof**.

- Respond to the demand of third parties, such as multinationals, banks or customers, requesting their suppliers to meet certain conditions.
- Comply with European norms and be ahead of policy changes and future legal requirements.
- Avoid losing your company's license to operate.
- Avoid additional operational costs and loss of revenue due to biodiversity decline.
- Improve profitability through better management of dependencies on nature.

Seize **opportunities** and enjoy economic, financial and social benefits.

- Create a competitive advantage and become a preferred supplier.
- Improve your access to capital.
- Create new markets with innovative products and services.
- Attract new customers.
- Build your brand reputation and turn your challenge into a unique selling point.
- Increase resource efficiency.
- Improve your employee satisfaction.
- Attract and retain talent.

The transition to sustainable food systems is an important economic opportunity. The European Union recognises this opportunity for business, including SMEs. Together with the [EU Biodiversity Strategy for 2030](#) and an associated Action Plan, the European Commission adopted the [Farm to Fork Strategy](#) for a fair, healthy and environmentally responsible food system in May 2020. The two strategies are mutually reinforcing, bringing together nature, farmers, businesses and consumers for jointly working towards a competitively sustainable future. Consumers' expectations are evolving and changing the food market. Farmers, fishers and aquaculture producers, as well as food processors and food services, have the opportunity integrate biodiversity into their business models and create a competitive advantage before their competitors outside the EU do so.



Did you know?

Did you know that sustainability linked brands are growing at a rate 4 times higher than companies continuing business as usual?

Source: Club B4B, Factsheet: Agriculture and Agrifood.



2.2 CASE STUDIES OF SMES INTEGRATING NATURE INTO THEIR DECISION-MAKING

SMEs at different positions along the value chain are taking action

Even if biodiversity is still new to you or if your company has already started to think about measuring biodiversity, you will see that it is closely linked to concepts you already know. You should look at biodiversity as additional lens which allows you to uncover important issues for your company to help you to implement your sustainability strategy. Many SMEs have done this before you. Understanding and acting on biodiversity has helped them to connect the dots between various ongoing sustainability efforts. Integrating biodiversity into their company's decision-making has helped them to achieve multiple social, environmental and business goals.

1. **EOSTA: Dutch medium-sized fruit and vegetable distributor**

Who are they? Eosta is an international distributor of fresh organic and fair fruits and vegetables, with a focus on overseas and tropical fruit. They maintain a close working relationship with more than a thousand growers in six continents. They provide consumers with transparency about their organic products. Responsibility, togetherness and authenticity are at the heart of their innovative approach.

What did they do? All their activities are based on their [Sustainability Flower](#), which helps EOSTA to Monitor, Manage, Market and Monetise the sustainability achievements of their organic growers. To increase transparency towards their customers, inform better and more sustainable decision-making, EOSTA developed a practical tool to account for the true cost of their products that includes environmental and social values. The pilot revealed the key environmental and societal costs: livelihoods and climate change. By monetizing their impacts, EOSTA integrated nature into its decision-making.

How did they do it as an SME? Through good relationships and cocreation with partner consultancy Soil & More, TEEB, FAO, WHO and EY, EOSTA was able to undertake the

assessment in a short time period and with a limited budget. A lot of data to measure and monetise their social and environmental impacts was already available. They were able to complete the assessment within the timeframe of one year, dedicating 1.5 hours per week to the project. Even though there is no standardised approach, they selected indicators more easily measured and monetized than others and used impact categories based on a materiality assessment they had already conducted.

What did they gain? Accounting for the negative social and environmental impacts, focusing on livelihoods, soil, water and climate change, EOSTA found that organic products outperformed non-organic ones. They also found that health is a material issue to consumers because of the use of pesticides that end up from the farm on the consumer's plate. Avoiding the use of pesticides reduced the negative impacts on biodiversity. Switching to organic products helped to reduce soil erosion, enhance soil fertility and thus improved the soil quality and avoided additional costs. Increased resistance against pests and diseases also led to cost-savings and improved resilience. Growers realised that a difference is made through biodiversity.





2. ALB-GOLD: German medium-sized pasta manufacturer

Who are they? ALB-GOLD is a traditional family-owned company from the Swabian Alb with future-oriented food production. They manufacture an organic pasta assortment, ranging from traditional Italian pasta made with durum wheat semolina to egg pasta specialties, produced with the best semolina, fresh eggs and locally grown spelt pasta. They follow the principles of sustainable pasta production with goals such as protecting the environment and the landscape, guarding the pureness of our seeds, and maintaining diversity for subsequent generations. The best natural ingredients from sustainable sources are used to produce their high-quality organic pasta.

What did they do? ALB-GOLD is one of Germany's organic pioneers when it comes to pasta. Over the past 20 years they have developed an extensive range of organic fresh and dried pastas. ALB-GOLD worked together with the institute for applied fire safety research (IFAB Institut) and the Lake Constance Foundation, a project-oriented organisation for nature conservation working towards sustainable economy, to make biodiversity an integral element of their policy. Together with its partners, ALB-GOLD managed to analyse its impacts on biodiversity and developed a Biodiversity Action Plan. The analysis revealed that most of the landscapes for durum wheat production were already richly structured: many hedges, trees, forest edges, ditches, small plots. Only a few of their production sites had a couple of large plots. This meant that there was no high need for new landscape elements and that measures needed to be detached from the durum area. This is also because of the sensitivity of the crop in terms of crop management, quality and harvesting. ALB-GOLD focused on two high quality measures. Shifting towards extensive crop land, which depends primarily on the natural

fertility of the soil, the terrain, the climate, and the availability of water, had a positive impact on regional biodiversity due to the reduction of the seed density, the use of diverse and cereal-based crop rotation, and the avoidance of pesticides.

Seeding high-quality perennial flower strips increased the number of pollinators making important contributions to agriculture. Farmers decide themselves about the distribution of the two biodiversity measures. For their effort, ALB-Gold pays farmers a quality bonus of 60 euros per hectare of durum wheat.

How did they do it as an SME? With the support of IFAB Institut and the Lake Constance Foundation, ALB-GOLD was able to take effective measures.

What did they gain? Optimizing the quality of their products helped them to meet customer demands. Transparency in food production and in the entire supply chain is an important component of their philosophy and for their customers. The production sites in Trochtelfingen and Riesa are both glassed-in facilities. All pastas are manufactured transparently so that anyone taking a tour through their production can see how it's made. Not only did they optimise their relation with consumers, but also with stakeholders and their suppliers and farmers.

"With this project, ALB-GOLD, together with the farmers and the agricultural trading companies, takes on a comprehensible and measurable responsibility for our biological diversity. The companies receive a fair offer, nature gets more space and the ALB-GOLD customers more enjoyment with added value for nature conservation", explains Patrick Trötschler from the Bodensee Foundation.



3. Cafeology: UK small coffee roaster

Who are they? Formed in 2003 by Bryan Unkles & Andy McClatchey to address the requirements of ethically sourced beverages specific to the out of home markets, they have grown into one of the largest independently owned coffee companies in the UK.

What did they do? After learning of the impact coffee production can have on the global deforestation of tropical forests and biodiversity, Cafeology took action to source a bird-friendly shade-grown coffee to supply to the UK hospitality and catering market. It is estimated that coffee, being the second most traded commodity in the world after oil, is drunk 30,000 times every second. What sets this coffee apart is its product purity; its coffee is the only one guaranteed to be 100% organic, grown in sufficient shade to maintain maximum biodiversity. Cultivated under the shade of tropical canopies, its Bird Friendly coffee is farmed in a way that protects the Guatemalan rainforest, encourages migratory birds to flourish and improves growers' livelihoods. Research by the SMBC in Peru shows that while a sunny plantation harbours just 61 species of birds, this number jumps to 243 when coffee is cultivated under a canopy of ten tree species or more.

How did they do it as an SME? Looking carefully at all aspects of their supply chain and continuing to develop responsibly has been vital in their continual development. They managed their responsibilities very carefully by fully understanding and managing the whole supply chain. Their Bird Friendly coffee is sourced directly from producers in Guatemala, Nicaragua and Honduras and is one of the most environmentally responsible coffees in the world. This organic coffee is Fairtrade certified and has Smithsonian Migratory Bird Centers (US) Bird Friendly Habitat accreditation. In areas of their supply chain where they were unable to directly control but able to influence, they chose to work with supply partners that align to their core principles in relation to ethical sourcing and sustainability.

What did they gain? Cafeology found a new niche in the premium coffee market and tapped into the commercial potential for biodiversity-responsible coffee. Cafeology's Bird Friendly coffee stands out. It has achieved a state described by the Smithsonian Institution as "product purity", meaning that it is not diluted or mixed with other non-certified coffees. Cafeology also increased their resilience: as demand increases, so will the awareness of the scale of the commercial opportunity here. In the past ten years, the SMBC has seen the area of land given over to cultivating certified bird-friendly coffee grow nearly fivefold.



MODULE 2: EASY BIODIVERSITY IMPACT ASSESSMENT

1. Biodiversity Basics

2. Easy Biodiversity Impact Assessment

You are familiar with the concept of biodiversity and understand it is a material issue for your company, but you are not sure how your specific company has an impact on biodiversity. Before you can take action it is crucial to understand your company's position in the value chain and the direct and indirect impacts your company has on biodiversity. This module introduces four different types of business explaining typical impacts such companies could have based on general approaches. As a company you will be able to relate with one of the personas, which will help you in your next steps taking meaningful action.

Note that this easy impact assessment uses a simplified framework. It is based on general approaches and assessment tools using proxies to gain insights in the biodiversity-related impacts of SMEs across the agri-food value chain. As a next step businesses can start assessing their specific impact on biodiversity. The EU B@B Platform has developed different [research papers on existing tools and approaches](#) to assess the impact of your activities on biodiversity.

3. Time for action

4. You don't have to make this journey by yourself

1

UNDERSTANDING WHERE YOU ARE IN THE AGRI-FOOD VALUE CHAIN AND WHAT IMPACT YOU CAN HAVE

The impacts of your company depend on where you are in the agri-food value chain. **To understand what you can do to decrease your footprint and increase your positive impact it is vital to understand where you are and where you want to be.** As a company you need to understand how red flags can be identified and where in the value chain the major pressures are exerted. Once you know where your actions will have the highest impacts, you can focus your efforts and make the biggest difference for the lowest cost.

What kind of SME are you?

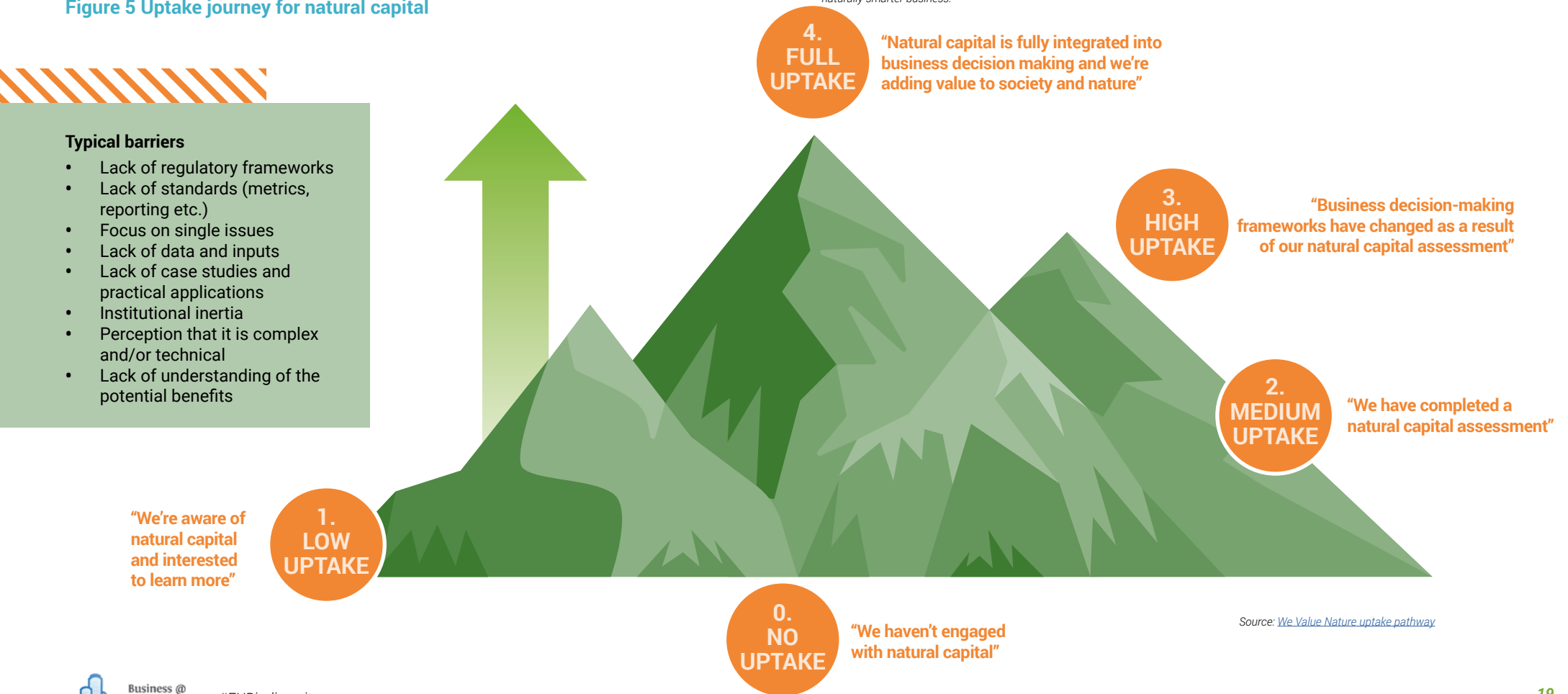
[We Value Nature](#)² developed an uptake journey for natural capital with different steps to successfully induce change, both at corporate and sector level. Thinking about your company,

it is important to understand where your company is in terms of engagement. Understanding where you are on your journey might sound simple, but it's an important step in identifying where you should go next. Depending on where you are on your journey you'll likely face different barriers. We Value Nature developed an interactive tool to help businesses identify some of the nearby barriers which are preventing them from making the next steps on their journey. The tool breaks down the [natural capital journey](#) to focus on smaller, more achievable steps. The framework can also be helpful for companies looking to integrate biodiversity into their business decision-making. It offers companies a structured approach on how to progress step by step.

¹ Crenna, E., Sinkko, T., & Sala, S. (2019). Biodiversity impacts due to food consumption in Europe. *Journal of cleaner production*, 227, 378-391. Retrieved from: <https://www.sciencedirect.com/science/article/pii/S095965261931131X>

² We Value Nature is a campaign supporting businesses and the natural capital community to make valuing nature the new normal for businesses across Europe. Supported by the European Commission, the campaign is reinforcing and boosting the work of the Natural Capital Coalition in promoting 'naturally smarter business'.

Figure 5 Uptake journey for natural capital



Source: [We Value Nature uptake pathway](#)

The challenges typically encountered by businesses, including SMEs, at a low uptake are often related to knowledge and communications. Overcoming the company-wide perception that it is too complex can be done through enhancing your understanding of the concept of biodiversity, learning how other businesses have addressed it and identifying how it links to your existing strategies and frameworks and can help you improve these.

Moving up, when companies have a better understanding of natural capital and biodiversity, they perceive challenges related to how to start or take practical action. Specific case studies, practical tools and training can help a company move to the next stage, the high uptake and to eventually the full uptake. As you move on the uptake journey the typical barriers encountered are linked to the lack of data and the lack of clear regulatory frameworks. Even though the EU has put in place frameworks to regulate agricultural production and nature protection, these are often not fully implemented due to a lack of awareness, administrative burdens and enforcement issues. At that stage, cooperation with peers and sectoral organisations will help you identify how to best continue your progression on your sustainability journey.

The four SME profiles presented below will help you better understand what these different stages practically mean for European SMEs operating at different stages of the agri-food value chain.



Did you know?

Agricultural products contribute to different extents the loss of biodiversity through their production processes. In comparison to climate pollution, the impact on biodiversity is more locally linked. For example, the production of wheat, rice, and maize have a bigger negative impact on biodiversity, compared to lentils for example, due to high land occupation. Sugarcane, palm oil and coffee also have a big impact on biodiversity, not only because of the high land occupation, but also because of the presence of so many different species in the places where these products are cultivated. ¹



These profiles of the SMEs are fictional but inspired by existing case studies and are based on (updated) information from existing tools that help companies understand their impact on the environment in general, or on biodiversity in particular.

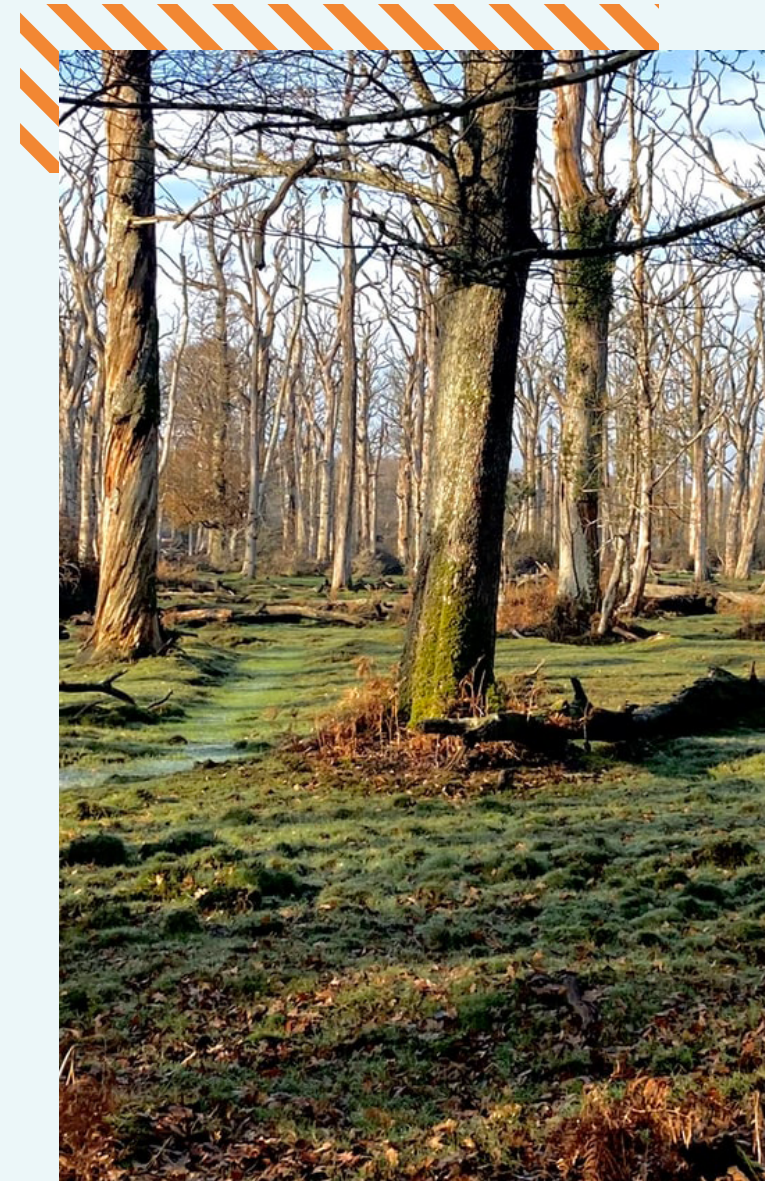
One of these tools is [ENCORE³](#) (Exploring Natural Capital Opportunities, Risks and Exposure), which visualises the interactions between nature and the economy. By focusing on the goods and services that nature provides to enable economic production, it guides users in understanding how businesses across all sectors of the economy potentially depend and impact on nature, and how these potential dependencies and impacts might represent a business risk. Business explore either their impacts or dependencies by selecting their sector, their sub-industry and their production process. They can explore the different impact drivers leading to changes in the state of nature (including biodiversity) and the natural capital assets that combine to provide ecosystem services upon which economic activities depend. For each sector and sub-industry, the impacts and dependencies on nature are given a materiality rating.

ENCORE also provides spatial natural capital impacts information using different types of data layers relating to either dependencies, impacts or hotspots of natural capital depletion. For dependencies, data layers focus on the natural capital assets that provide ecosystem services and the drivers of environmental change that can affect the provision of ecosystem services. For impacts, data layers focus on the impact drivers resulting from production processes. For the hotspots of

natural capital depletion, the layers focus on areas of the world that have experienced the most severe depletion across multiple natural capital assets. These help screen for areas where economic activities are at greater risk of disruption due to the loss of multiple ecosystem services.

An interactive map reveals red zones (higher level of depletion) and the way the impact drivers are affecting the natural capital assets. For example, it shows that the production process of large-scale livestock has a big negative impact on soils and sediments (asset) through terrestrial ecosystem use (impact driver). This translates into very high materiality rating. This is because large areas of land are cleared and converted to rear beef and dairy livestock. Rearing of cattle for beef production is also linked to intensive farming of crops used in feed, such as soy.

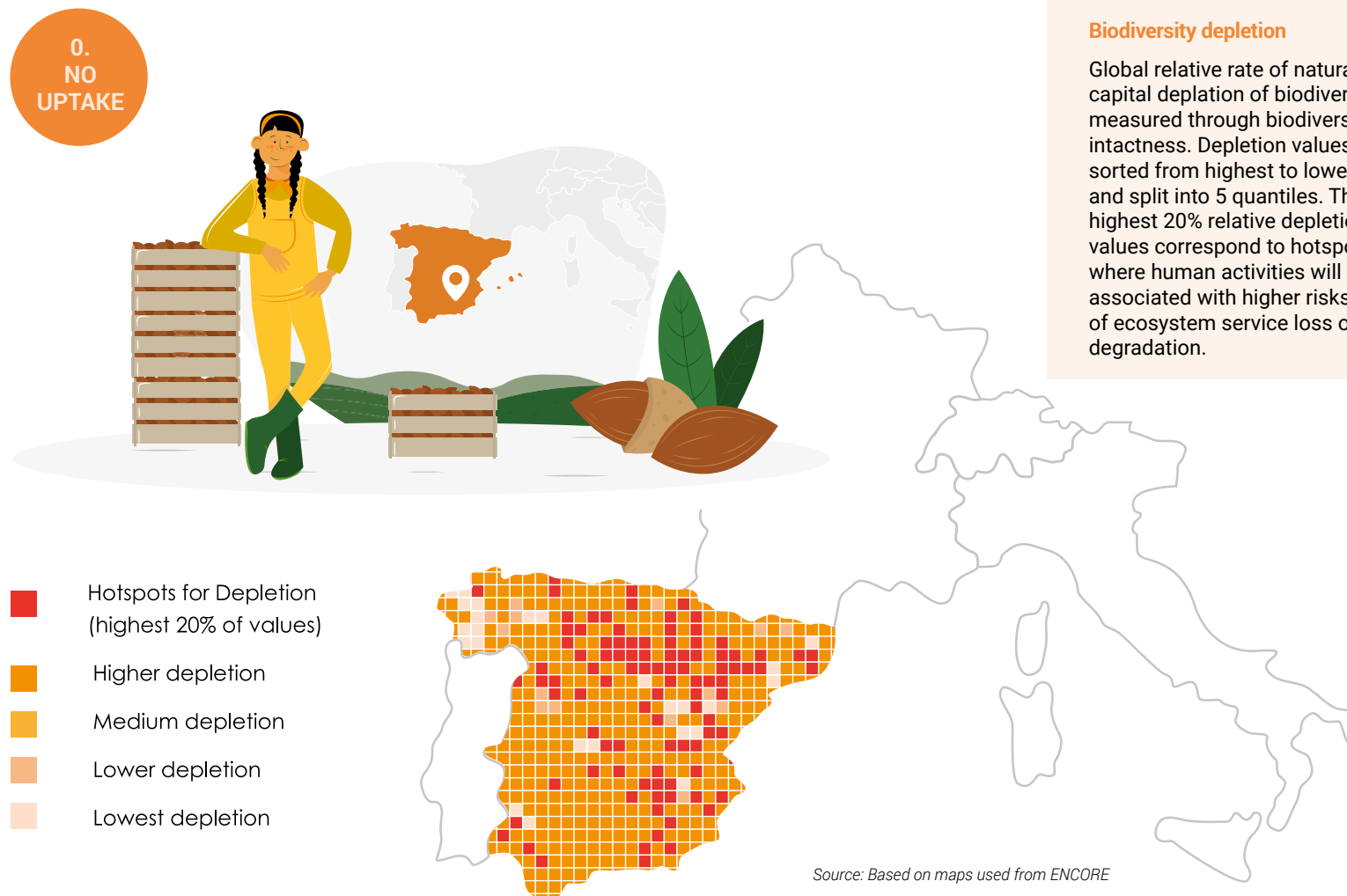
[IBAT \(Integrated Biodiversity Assessment Tool\)](#) is a tool that supports businesses with identifying potential impacts on protected areas, other areas of importance for biodiversity, and threatened species. IBAT partners are IUCN, UNEP-WCMC, BirdLife International and Conservation International. IBAT offers a 'one-stop shop' data search service for those seeking authoritative global biodiversity information and combines data from three authoritative databases, including [the World Database of Key Biodiversity Areas](#), [the IUCN Red List of threatened Species™](#) and [the World Database on Protected Areas \(WDPA\)](#). All these global datasets provide information on biodiversity that can support strategic decisions from different biodiversity perspectives.



Profile 1: Almond farmer in Spain using traditional extensive farming methods

The farm is located in Andalusia, Spain and is producing conventional almonds that are sold directly to consumers on local markets as well as to international plant-based milk processors. The production is highly variable depending on frost and drought. High irrigation is necessary to increase productivity and respond to increasing demand. Due to consumer pressure and demand from the food processor, the company wants to reduce its biodiversity footprint. The company depends directly on biodiversity and well-functioning ecosystems, such as soil fertility and pollination. The company also wants to explore opportunities to restore and rehabilitate the surrounding landscape of the farm.

The farm is located in a hotspot for biodiversity depletion. The expansion of irrigated crops has led to increased habitat modification and conversion of natural habitats to croplands, which has negatively affected biodiversity. The production process of the company is extremely vulnerable to disruption and highly depends on soil and water quality as well as pollination. The degree of protection offered by these healthy ecosystem services is critical and irreplaceable for the production process.⁴



Profile 2: Belgian chocolate producer and shop sourcing its cacao from Ghana

The chocolate factory is producing certified Fairtrade products in Belgium. The company is buying its cacao from sun-drenched farms in Ghana, West Africa. The cocoa production occurs in Ashanti, one of the country's forest areas, close to the protected Tanno-Offin Forest Reserve, a [Key Biodiversity Area](#), as well as a [protected area](#).⁵ The factory's cacao suppliers transformed parts of the region into sun-plantations, which are economically attractive because of the quick maturity of cacao tree and the higher yields.

Due to increased consumer demand, cocoa farming has caused deforestation and biodiversity loss. Due to consumer pressure and certification demand, the company wants to improve the traceability of its cacao supply chains to avoid deforestation and improve on-farm biodiversity.

Cocoa farmers are experiencing declining cocoa yields, which poses a risk to the chocolate manufacturer as higher prices might result from this. Lower productivity is induced by climate change, poor soil, overuse of fertilizers and pesticides, and a lack of natural inputs such as shade and pollinators.

The company wants help to preserve ecosystems and increase the long-term productivity of cocoa farms to ensure stable

revenues for local farmers while protecting its reputation and gaining a competitive advantage. It is important to take into account that certain measures to protect or enhance biodiversity will come with trade-offs. For example, restoring a piece of land by transforming agricultural land into natural or semi-natural habitats might take away someone's livelihood. Farmers need to be able to come up with their own solutions or contribute to the process in order to protect their rights, improve livelihoods and promote equity, justice and social well-being. Participatory decision-making processes are needed to ensure a just transition because the transition towards a climate-neutral and nature positive economy can only happen in a fair way, leaving no one behind.

Often tertiary companies in the value chain think they don't have influence. Moving up from low uptake to medium uptake stage, the chocolate manufacturer already realised that it is crucial to know where the materials are sourced. In the beginning they struggled convincing their colleagues who claimed 'it will be too difficult to find out'. But actually, it doesn't take too long! Through case studies and literature, they were able to learn a lot about their supply chain.



Profile 3: Estonian producer and whole seller of fresh and packaged seafood

The company is specialised in import, export and distribution of fresh and packed seafood products. The company's products range from farmed and wild fish fillets to canned seafood and prepared meals.

The fish originates from the Baltic Sea and Norway.

Wild marine resources are overexploited and threatened. Overlapping hotspots of potential depletion of natural capital assets surround Norway and the Baltic countries caused by high human pressure. Medium to high fish catch in national waters impact the marine ecosystems.⁶ Wild caught fishing is not sufficient to provide for consumption demand, resulting in a dramatic growth in aquaculture in the last three decades. Overfishing and marine habitat destruction have been putting increased pressure on biodiversity. As a company they highly depend on biodiversity and healthy ecosystems. The company wants to expand its customer base by responding to the growing trend of customers' preference for sustainably sourced fish. Moreover, the company realises that overfishing has become a huge problem as wild marine fisheries are depleting as a direct result of overfishing, pollution, and climate change. The company also wants to better understand the impact of farmed fish on biodiversity and of invasive species on biodiversity for escaped farmed salmon.

To increase its resilience and future-proof its business activities, the company wants to reduce both its negative impacts and dependencies on biodiversity. It wants to build a profitable business on 'shared value', ensuring both societal and business benefits.

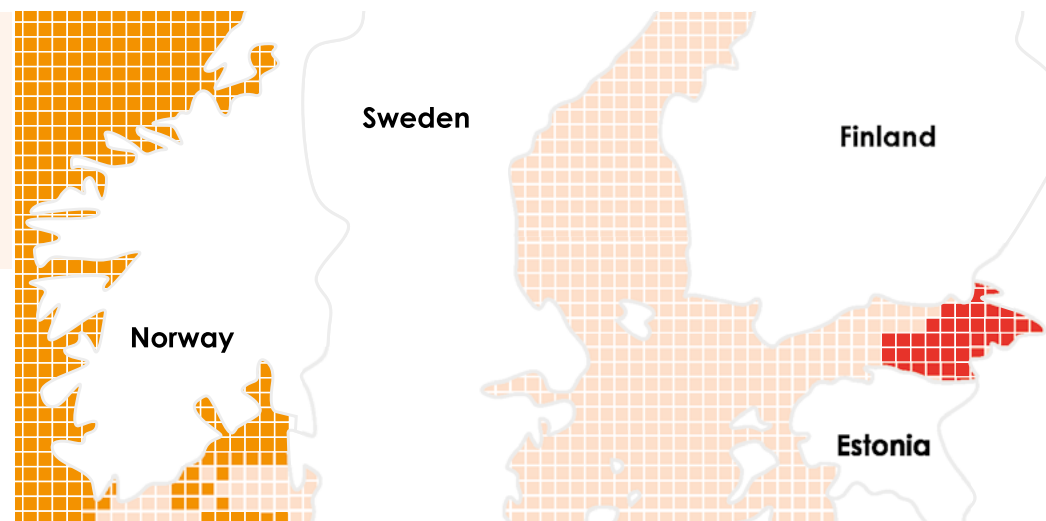
The red flags of the company's operations and supply chains are clearly linked to the products it sources. Its impacts on biodiversity are the biggest down the value chain.



3.
HIGH
UPTAKE

Fish catch in national waters per country

Catch in Millions of tonnes (Mt) per country. High refers to greater catch. Low refers to lower catch.



Source: Based on maps used from ENCORE

³ <https://encore.naturalcapital.finance/en/map?view=hotspots>

⁴ <https://encore.naturalcapital.finance/en/explore?tab=dependencies>

⁵ <https://www.ibat-alliance.org/visual-data-map>

⁶ <https://encore.naturalcapital.finance/en/map?view=impacts>

Profile 4: Irish dairy processor and distributor

The company is an Irish dairy brand processing and selling fresh and locally-produced yogurt and milk. They are sourcing their milk and other ingredients from farmers across Ireland. The company receives raw milk from the grass-fed dairy cows and the dairy output is manufactured to produce a wide range of consumer products such as cheese, butter, yoghurt and ice cream. They are operating to rigorous quality and food safety standards. The processor invests a significant amount of resources in the research and development for further improvements in technology.

Soya feed is used for intensively farmed milk cows. Increasing demand for soy is converting savannahs and forests into agricultural land, depleting natural ecosystems and threatening the survival of several animal species. The by-products of intensive farming are damaging the surrounding environment.⁷ The run-off from dairy farms, such as nutrients and manure, leads to the pollution of the environment as waste leeches into ecosystems and potentially pollutes rivers, lakes and groundwater, negatively impacting biodiversity. Large areas of land have been converted to rear dairy livestock.⁸

Dairy production also has a significant water footprint - around 1,000 litres of water is needed per litre of milk over the entire supply chain. Water abstraction to sustain dairy cows and maintain their pasture lands can contribute to local water stress.

The company wants to strengthen their domestic foothold and enhance their position in the Irish market. A strong national position is needed to access other markets and start exporting their food products to other EU countries. To do so, they want to create a competitive advantage. In addition, with the growing landscape of sustainability standards and disclosure requirements, the company wants to start its nature journey to ensure growth and mitigate potential business risks. Like the majority of their competitors, the dairy producer has already taken action to reduce

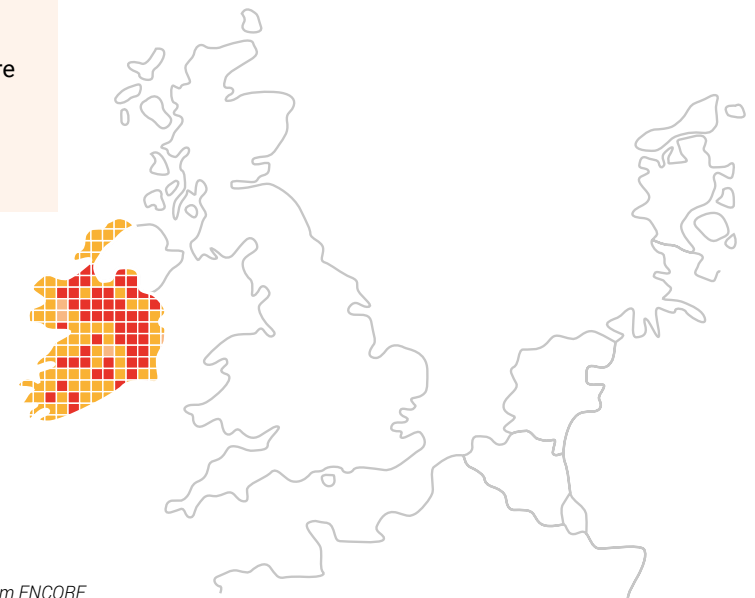
their CO2 footprint. Most food companies and retailers have adopted climate commitment, in line with the Paris Agreement, and are pressing for CO2-free or even “climate positive” products.

In Ireland, many hotspots of biodiversity depletion are located in the West, Shannon and Corky regions. Those areas are dominantly covered primarily by forest. Most of these areas are also used for agricultural purposes, including for dairy farming. This means that a landscape approach is required, and the impacts and dependencies on the surrounding environment need to be considered as well, to fully understand the impact on, and value of, biodiversity and nature for his business.

Biodiversity depletion

Global relative rate of natural capital depletion of biodiversity, measured through biodiversity intactness. Depletion values were sorted from highest to lowest and split into 5 quantiles. The highest 20% relative depletion values correspond to hotspots, where human activities will be associated with higher risks of ecosystem service loss or degradation.

- Hotspots for Depletion (highest 20% of values)
- Higher depletion
- Medium depletion
- Lower depletion
- Lowest depletion



Source: Based on maps used from ENCORE

⁷ <https://www.tabledebates.org/research-library/wwf-report-growth-soy-impacts-and-solutions#:~:text=The%20report%20finds%20that%20increasing%20of%20several%20animal%20species.>
⁸ <https://encore.naturalcapital.finance/en/map?view=impacts>

MODULE 3: TIME FOR ACTION

1. Biodiversity Basics

2. Easy Biodiversity Impact Assessment

3. Time for action

Based on your level of experience and knowledge, you can start at different levels along the biodiversity journey. Depending on where you are in your journey you can take different actions. The actions proposed are tailored to the different stages on the journey:

(i) Stage 1: Just starting, (ii) Stage 2: Taking first steps or (iii) Stage 3: Developing.

4. You don't have to make this journey by yourself

1 HOW TO THRIVE IN HARMONY WITH NATURE? START WITH PRACTICAL STEPS

The transformational change needed by businesses to address the climate and nature crisis can feel overwhelming. It helps when you focus on smaller, more achievable and practical steps.

1.1 WHAT LEVEL OF AMBITION IS REQUIRED?

You might ask yourself how much effort is needed to contribute to halting nature loss and move towards a nature positive world? And how can SMEs meaningfully contribute to this transition given the scale of the challenges ahead?

While we already have the clear goal of achieving carbon neutrality by 2050 to mitigate the worst impacts of the climate crisis, there is currently no equivalent for nature, until recently!

A new Global Goal for Nature

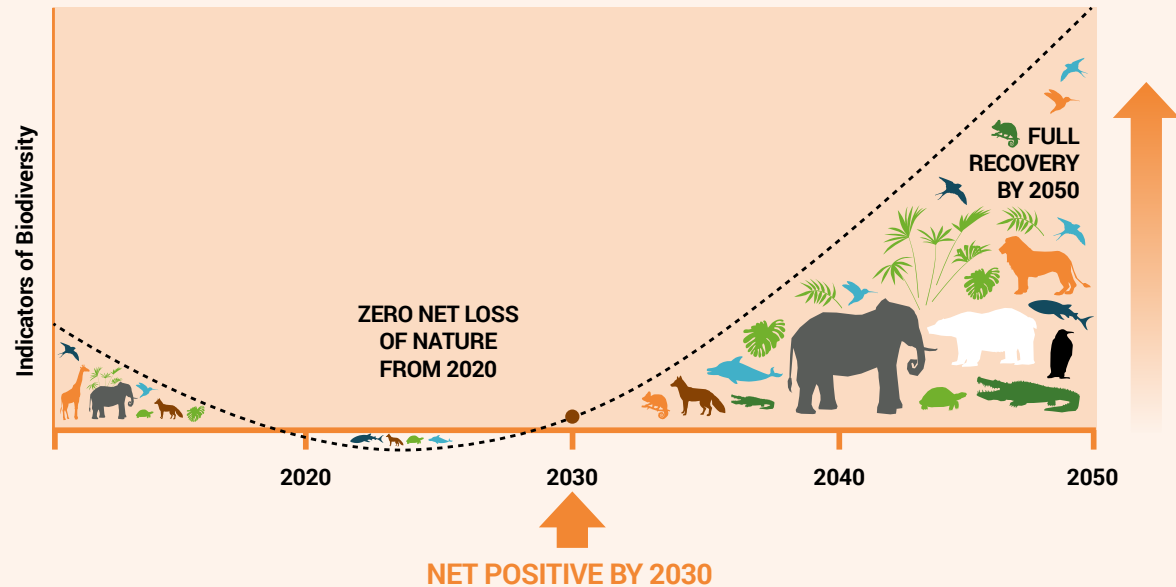
A coalition of businesses, scientists and civil society organisations recently proposed a Global Goal for Nature based on three measurable objectives:

- Zero net loss of nature from 2020,
- Achieving net positive impact on nature by 2030 compared to 2020, and
- Achieving full recovery of nature by 2050.

This global goal for nature defines what is needed to halt and reverse today's catastrophic loss of nature. The baseline of 2020 serves as a reference for zero net nature loss to ensure that we focus on retention of large intact areas as well as all remaining natural ecosystem

fragments. The year 2030 is a milestone for improvements in the abundance, diversity and resilience of species and of ecosystems. Meeting this 2030 objective will require immediate restoration beginning in 2020 as well as retention of existing natural ecosystems, whether they be highly intact or remnant fragments. The 2050 objective requires continued retention and restoration until there are sufficient functioning ecosystems to safeguard the stability and resilience of the Earth system, and support all life on Earth, including future generations of people so that the 2050 vision of Living in Harmony with Nature, the UNFCCC's 2050 carbon neutrality goal, and the SDGs are actually possible to achieve.

Pathway to achieve the Global Goal for Nature: Nature Positive by 2030



Source: [Nature Positive by 2030](#)

What does it mean?

This global goal must serve as a compass to guide your effort and level of ambitions. While there are no tools available yet to translate this global goal at sector or company level, it does provide a direction of travel for the world and for the agri-food sector (and all the other sectors) and your companies (and all the other companies).

The next sections present initial steps on how you can embark on your nature journey to contribute to these goals.

The framework is aligned with the first stages of the We Value Nature uptake journey and steps from stages one, two and four from the Natural Capital Protocol.

Both the climate and nature crisis should be tackled together to drive a swift transition to a nature-positive, carbon-neutral future by 2050. Only then we can thrive in harmony with nature.

Every company and every step count.

1.2 JUST STARTING – WHY?

If this is the first time that you are considering your business relationship with biodiversity and thinking about its value in a business context, then start here! It is vital to understand the complex ways in which biodiversity and economic agri-food systems interact, impact, and depend upon one another to make better informed decisions. It will help you find an entry point on how to start integrating biodiversity into your company.

When you are just starting your journey, We Value Nature identified a couple of typical challenges: you are probably struggling with the complexity of the topic and you or your colleagues might struggle to understand the potential benefits. Raising awareness and enhancing your knowledge are key at this stage. This is what the Natural Capital Protocol calls the Frame stage, which helps you to establish why you should start your journey. It builds a basic understanding of your business' relation with biodiversity and society by introducing some foundational concepts and outlining business applications.

What can be your impact as one small link in the chain?

The [Science Based Targets Network \(SBTN\)](#) defines four spheres of corporate influence in [the Initial Guidance for Business on Science Based Targets for Nature](#), adapted from the [GHG Protocol Scope 3 Standard](#) and [Natural Capital Protocol](#). Businesses have different levels of control, in ascending order, over:

1. **Direct operations**, i.e. all activities and sites (e.g., buildings, farms, mines, retail stores) over which the enterprise has operational or financial control.
2. **Value chain, including upstream and downstream**, i.e. series of activities, sites, and entities, starting with the raw materials and extending through end-of-life management, that (a) supply or add value to raw materials and intermediate products to produce final products for the marketplace and (b) are involved in the use and end-of-life management of these products.
3. **Value chain-adjacent areas**, i.e. landscapes, seascapes, and watersheds that are geographically adjacent to value chain sites.
4. **Systems**, i.e. the broadest extent of corporate influence—through direct and indirect channels— on socioeconomic and socio-ecological systems, including, for example, financial systems, influenced through corporate disclosure, but also the entire food system, which can be influenced by corporate agricultural practices.





Here is something to get your company going!

Colourful meadows, wildflowers, hedgerows, ... Nature instead of grey areas. There is an urgent need to provide space for wild animals, plants, pollinators and natural pest regulators. Biodiversity-oriented business premises not only contribute to the protection of biodiversity at local level, it also is a good way to involve staff and raise awareness about its importance. Sow perennial flower strips to attract wild pollinators, build and install insect hotels to protect biodiversity at your company's site, green roofs and water bodies, ... The options are endless and some measures such as green roofs contribute also to climate protection.

The potential of biodiversity at company's site has led to the emergence of initiatives and projects promoting biodiversity-oriented design of premises as a part of green infrastructures and potential stepping-stones for biotope corridors. EU LIFE [BooGI-BOP](#) is a project funded by the [EU LIFE programme](#), the European Union's funding instrument for the environment and climate action. The acronym stands for "Boosting Green Infrastructure through Biodiversity-Oriented Design of Business Premises". Their main objectives are to promote biodiversity on site, raise awareness and motivate architects, landscape planners and gardeners to promote this approach. Also, national and local authorities are working together with organisations and companies to increase biodiversity on-site. For example, in Belgium and the Netherlands 26 organizations worked together under the project [2B Connect](#).

Learn more about this project and get started on your nature journey!



1.2.1 CONCRETE IMMEDIATE ACTIONS

LEARN & GET INSPIRED

- The obvious first step is to **familiarise yourself with the concept of biodiversity and learn more about how agriculture and food systems depend on nature**. To fully grasp the impacts and dependencies of the agri-food sector on biodiversity and to better understand how the transformation of the sector has the potential deliver systemic benefits for nature, people and your company, the [TEEBAgriFood Operational Guidelines for Business](#) is a good starting point. The report is quite dense but it a rich source of information. The website offers a good overview of the initiative. It will help you, and at a later stage your colleagues and (future) customers, to understand the true economics and value of ecosystems and biodiversity for agriculture and food. Shifting your thinking from a traditional perception of the economy with companies, sectors and consumers to a more holistic thinking in landscape areas and systems, is crucial.
- A quick search will also show that there is a lot of secondary literature available on the impact and dependencies of agri-food companies on biodiversity, and SMEs are already taking action. **Inspirational case studies** will help you get started. Have a look at Module 1 for some practical case studies of SMEs that are integrating nature into their decision-making.
- **Have a look at what your company is already doing.** Is it already taking action to reduce its CO2 emissions? Maybe you have already set science-based targets for climate, increasing your energy efficiency. If you have already conducted a Life Cycle Analysis for one of your products or obtained a certificate, you probably already have a lot of information at hand that might come in useful at a later stage to identify red flags in the operations along your value chain and influence positive change!
- To find your company's entry point, it is important to define your "why". **Why does your company need to consider its relation with biodiversity?** Are you starting your journey because of reputational risks? Or do you want to gain access to new markets? Defining your purpose will help determine the direction and each step to take.

- **An initial materiality assessment can help you identify where your sub-sector and region experiences its biggest impacts.** The ENCORE tool introduced in Module 3 can assist with this analysis. Starting with a focus on one or two material issues may be beneficial to build capacity and learning, and to get you started! Many companies are familiar with the concept of materiality and might be primarily concerned with financial materiality, but now is the time to also consider material issues associated with nature to future-proof your business.
- **Inform yourself about the food standards and which of them include sound criteria regarding biodiversity.** Many quality certifications and labels for agricultural and other food products exist in Europe. Selling or buying products certified with an ambitious standard would be an important contribution to protecting biodiversity. Ask yourself what you can do to work towards complying with the requirements. The EU LIFE project "Food and Biodiversity" published recommendations on effective biodiversity criteria for food standards and sourcing rules of food companies to improve biodiversity protection. You can compare the recommendations with the criteria of the certification(s) your company requests – or with your own sourcing requirements.
- **Take a training on biodiversity.** We Value Nature has developed various training modules for business on natural capital specially adapted to the food and beverage sector. The training modules breaks down the [natural capital journey](#) into concrete and manageable steps. The training materials provide logical and practical guidance on key steps, approaches and tools to integrating natural capital in decision-making. Another option might be to check out local initiatives. Maybe local NGOs are providing information sessions on biodiversity or running webinars dedicated to business and environmental action. The Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH, GIZ, is a German international development and cooperation agency that organises webinars for business on nature and sustainable.



[Oryza Food Italy](#) obtained industry control from farm to final product and obtained organic certification for a broad range of their products.¹ Organic farming operates without pesticides, herbicides and inorganic fertilizers, and usually with a more diverse crop rotation. Organic farms have higher levels of biodiversity (insects, plants, etc) compared to conventional farming.



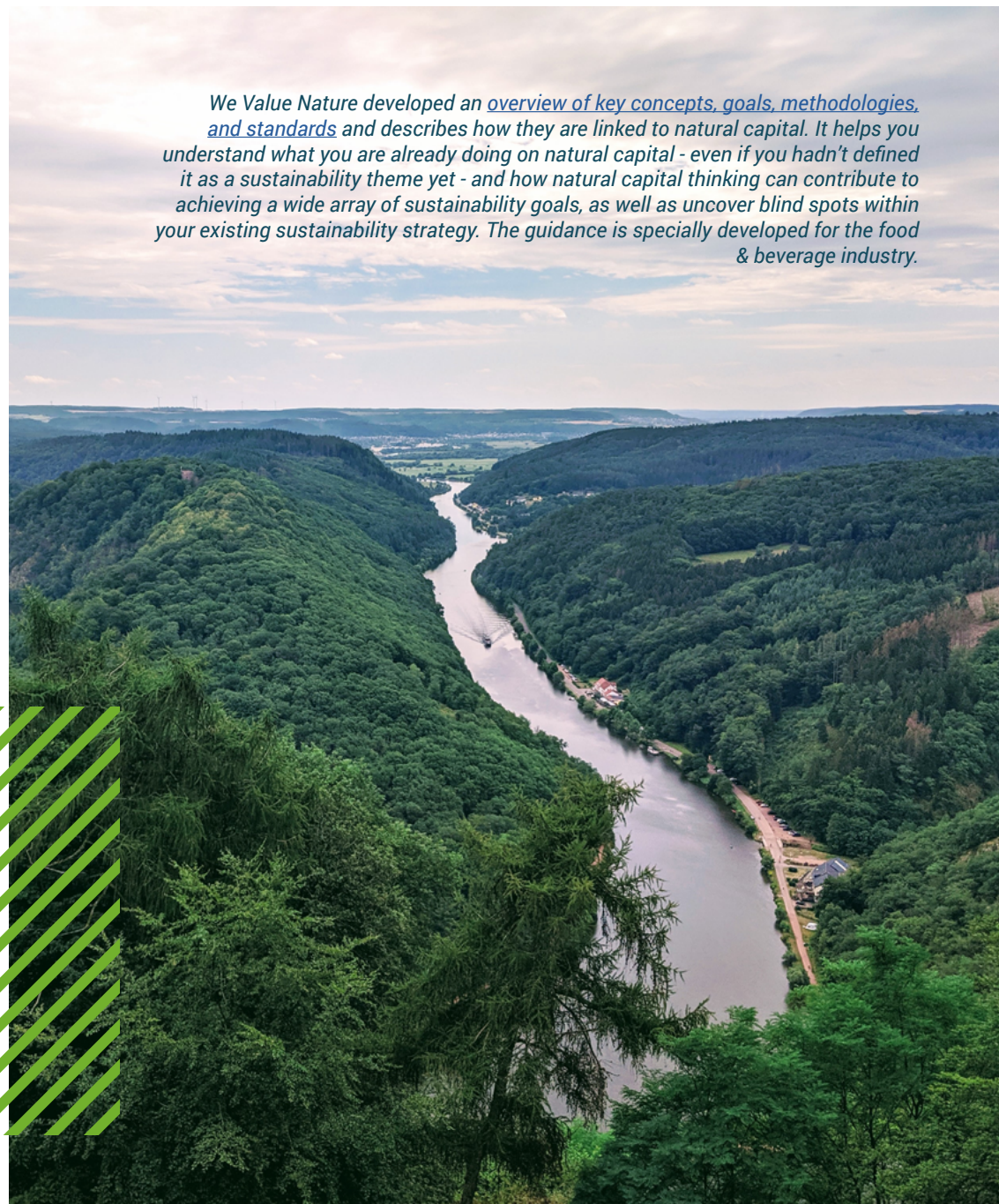
BUILD THE BUSINESS CASE

- **Define your material issues.** To understand the risks your company is facing and the opportunities you can seize, you should ask yourself “what knowledge is available about the state of biodiversity on your company’s production site? How does your company benefit from biodiversity and the services nature provides? How does your company impact on biodiversity and the services you or others depend on? What is the impact along your supply chain and who is involved?” Once you know the answer to these questions you can assess your company’s biodiversity footprint and identify ways to reduce your negative impact and focus on opportunities to increase your positive impact.
- Find a way to **frame the story** on why it makes business sense to invest in biodiversity and list the expected returns in the short and long-run. Map your operations’ supply chain and all actors involved to get a better overview of who needs to be informed to enhance your company’s biodiversity performance. Who and how can you convince them? The business applications described in Module can help frame your business case and define why, and in what way, considering biodiversity and natural capital can be useful for your business. On the one hand, you can focus on the risk and building resilience. For example, considering that consumers are becoming more eco-minded, it makes sense to integrate nature into your decision making to mitigate reputational risks. On the other hand, you could focus on the opportunities and intended use of your gained knowledge understanding your company’s footprint.
- **Think about future business opportunities** biodiversity offers your company and about how measures might also save your company money.

1.2.2 TAKING IT TO THE NEXT STAGE

- **Identify key issues on-site and in your supply chain to assess the materiality of these issues.** Creating a pressure heatmap of key biodiversity areas from farm to fork could help to identify red flags and priority areas for action. This can be done based on literature studies and data analysis. Assess and map the risk areas related to various ecosystems and ecosystem services. Indicators that you can use are habitat connectivity or species richness. For example, if you are a peanut butter manufacturer using palm oil cultivated in biodiversity rich areas, such as the Amazon, then the key pressure on biodiversity is caused by the conversion and degradation of these areas. This could be an area of focus for your company. This makes more sense than investing resources increasing on-premise biodiversity levels.

We Value Nature developed an [overview of key concepts, goals, methodologies, and standards](#) and describes how they are linked to natural capital. It helps you understand what you are already doing on natural capital - even if you hadn't defined it as a sustainability theme yet - and how natural capital thinking can contribute to achieving a wide array of sustainability goals, as well as uncover blind spots within your existing sustainability strategy. The guidance is specially developed for the food & beverage industry.



Profile 1: Almond farmer in Spain using traditional extensive farming methods

The Spanish almond farmer realises that the benefits of farming to biodiversity are especially relevant in the Mediterranean, where landscapes have been shaped by agricultural practices for centuries. Through some preliminary research and gathering information from existing studies they learned that the presence of wild pollinators increases yield due to increased direct almond pollination and the indirect effect of increasing pollination by honeybees. In addition, as compared to honeybees, wild pollinators are able to pollinate even with the strong winds typical for the Mediterranean. Conducting initial research helped the farmer understand that there are many business benefits related to increased biodiversity on-site. The farmer also learned that there are many opportunities to protect biodiversity in agricultural landscapes. To raise awareness on the interdependencies between biodiversity and bolstering the long-term business of their farm, they plant perineal flower strips of native seeds of a minimum width to support pollinators. Furthermore, they implement the principles of Integrated Pest Management while ensuring that pesticides and fertilizers are not applied to the flower strips.

The farmer is aware that the business also has a negative impact on biodiversity and the environment. Not only do almonds require a lot of water, and hence irrigation, traditional mono-crop farming practices are not good for biodiversity and negatively affect soil health. As a farmer, there is an obligation under Spanish legislation to protect water bodies by establishing buffer zones. In addition, in line with the [Common Agricultural Policy](#), the farmer needs to establish a minimum of 5 % of ecological areas. The farmer is aware that in this will be increased up to 10 % of the total of the farm.

In this context, the farmer decides to protect and to restore habitats beyond the legally required share and focus especially on water bodies on the farm or limiting to the farm. By establishing buffer zones with native vegetation and a minimum of 10 meters width, they avoid, or at least reduce, contamination of aquatic ecosystems by run offs of pesticides and fertilizers. The farmer also has water samples tested periodically to ensure that no contamination is occurring. To make sure that the quantity of water used

for irrigation is not damaging the water source, the farmer documents the use of water for irrigation and does not exceed authorized withdrawal limits. The farmer knows the water sources they are using and seeks for a regular information exchange with regional experts /administration regarding sustainable management of these water sources.



Profile 2: Belgian chocolate producer and shop sourcing its cacao from Ghana

One of the main pillars of the **Belgian cacao manufacturer** is paying fair prices to the farmers they are cooperating with. The chocolate industry in Belgium is on the move and many competitors are improving their biodiversity performance to obtain environmental food certificates.

A highly biodiverse cocoa farm has been shown to be drought, disease, and pest resilient, and produces higher yields. Shaded cacao trees allow for more biodiversity and contribute towards greater species richness. This is a win-win for both the cacao farmers and nature, as agroforests not only live longer but are also less susceptible to pests and diseases due to the increased presence of species. The manufacturer quickly discovers the business case for the cacao farmers and creates a list of arguments before they reach out to their suppliers to agree to create more shade on the plantations. Due to intensified public debate around soy cultivation, the Irish dairy processor is aware about the negative impacts of soy, especially imported from overseas. In the EU and in UK, primary forest is strictly protected and for all Natura 2000 sites where agricultural use is allowed, the intensity of use is regulated in the Natura 2000 management plans. Contracting a European soy supplier helps mitigate reputational risks and reduce the impact on biodiversity. Of course, the company could go beyond legal requirements.

The food retailer is the last link in the agri-food supply chain but also directly depends on healthy ecosystem services

and biodiversity. They can play an important role in protecting biodiversity. Often, small food retailers have relatively small direct negative impacts as they often do not source or manufacture products themselves but rely on suppliers. However, they can have a big influence on the decisions of consumers and provide incentives to their customers to foster sustainable consumption supporting the protection of biodiversity. Bigger food retailers that have their own brands do have operational control over upstream and downstream activities. They are responsible for the sourcing of raw material and the manufacturing of the products they offer and can adapt their sourcing requirements to reduce their negative impacts on nature.

As a first step the retailer assesses the status of the fish species in their product portfolio using the [IUCN Red List](#). As they mainly sell private brands, they can have direct influence on the aquafarmers and their method of production. The first step is to investigate where the fish is coming from and how it is being produced. Mapping the supply chain is key to the retailer. Next, it can be assessed whether the direct suppliers operate in the vicinity of key biodiversity areas and check whether the suppliers comply with all legal requirements in the field of nature conservation. The retailer decides to investigate which fish certifications have ambitious criteria relevant biodiversity and how can go beyond legal EU requirements.



1.3 FIRST STEPS – WHAT?

Once you are moving up the uptake pathway and you were able to overcome the challenges related to knowledge and awareness, you will find that having best practices and case studies of other SMEs acting on biodiversity can help you at this stage. Taking the next steps outlined below means that you understand the basic concepts and framed the business case for your company. This part aligns with stage two of the Natural Capital Protocol which focusses on defining the scope of your actions at a company level. The next steps focus on setting your objective, identifying stakeholders and the appropriate level of engagement, articulating the objective and defining material biodiversity impacts and dependencies.



What are the IUCN Red List and STAR?

Established in 1964, The International Union for Conservation of Nature's Red List of Threatened Species has evolved to become the world's most comprehensive information source on the global conservation status of animal, fungi and plant species.

The [IUCN Red List](#) is a critical indicator of the health of the world's biodiversity.

Far more than a list of species and their status, it is a powerful tool to inform and catalyse action for biodiversity conservation and policy change, critical to protecting the natural resources we need to survive. It provides information about range, population size, habitat and ecology, use and/or trade, threats, and conservation actions that will help inform necessary conservation decisions.

[The Species Threat Abatement and Restoration \(STAR\)](#) metric uses data on the distribution, threats, and extinction risk of threatened species derived from the IUCN Red List of Threatened Species™. It allows quantification of the potential contributions to addressing the threats that are driving species extinction risk, a key concern for nature conservation and a central element of the post-2020 Global Biodiversity Framework and the Sustainable Development Goals. [STAR](#) can be used to easily identify areas where agriculture is already a leading threat to species as well as identify opportunities for positive biodiversity action through project management.

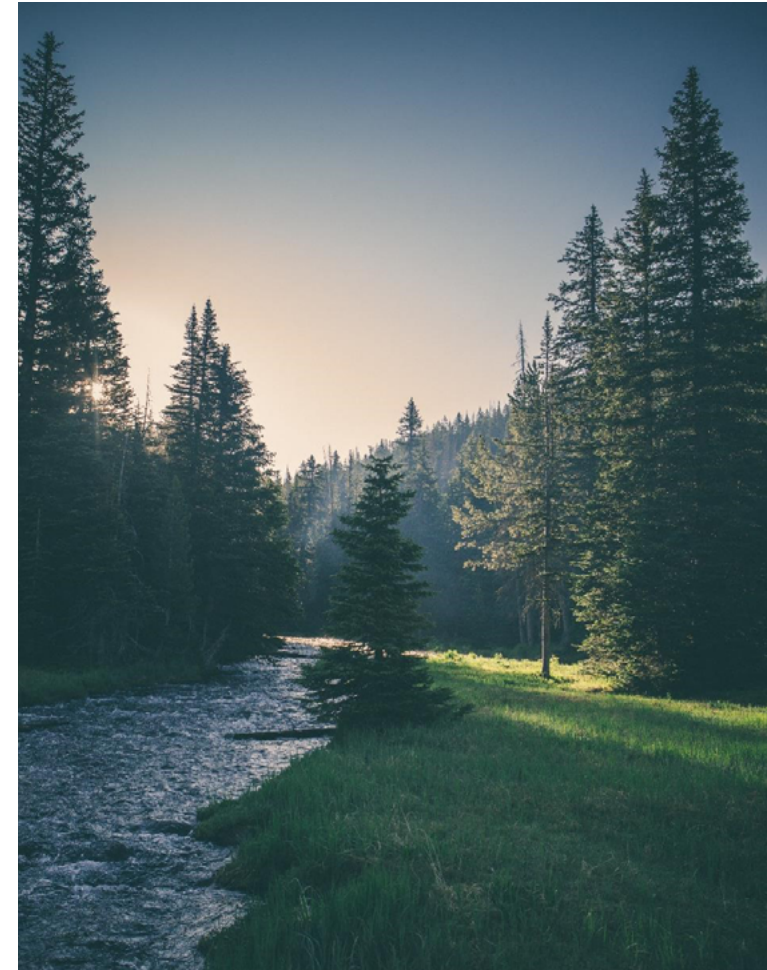
1.3.1 CONCRETE IMMEDIATE ACTIONS

DO

- Now that you understand your company's relationship with nature and its impacts and dependencies on biodiversity, you can start taking action. **Carefully consider what the quick wins you are willing to start with.** Ask yourself the question "what can we do to preserve and strengthen biodiversity?". Think about what you can do that will have a positive of outcome on nature. It is important to keep it simple and to keep it practical. Start with something that will not only motivate you but also inspire others. It is important to start with positive and visible action. Show and be proud of what you can achieve. Once you realise your company can have a positive impact on biodiversity the next steps will be much easier. Once you are inspired it is time to talk business!
- **Identify a member of your team to do some further research and identify case studies and best practices in the agri-food sector.** Make sure that you don't add biodiversity on top of someone's daily workload and you or one of your colleagues don't start to see it as a burden rather than an opportunity. You can put some time aside for strategic thinking and planning next steps. Remember what your company will gain from it. In the beginning you might want to give the responsibility to only one person of your company. It can be either the sustainability manager, the CEO, the Procurement Officer, the Value Chain Manager, the Farmer or anyone else from your team who might be motivated to take on the role.

ENGAGE & COLLABORATE

- Find out which environmental NGO you can engage with in your country or the country of your company's operations. **Environmental NGOs are a source of knowledge and expertise and are probably willing to support you.** You can also look for business networks that cover specific nature issues to learn practical ways of applying system thinking. **Most EU MS have national business and biodiversity platforms that support their members on their nature journey.** They will be able to put you in touch with likeminded peers. Have a look at the key initiatives active in [the area of biodiversity and natural capital](#).
- **Reach out to other agri-food SMEs** that have taken action. They will probably be happy to share best practices and lessons learned from their journey. Before reaching out try to define what vision or values your companies share. Maybe you can join a cooperative.
- The same goes for the farmer. The farmer should have a look at the requirements of ambitious standards and work towards complying with these requirements. **Farmers could use the [Biodiversity Performance Tool and elaborate a Biodiversity Action Plan \(BAP\)](#).** According to the strengths and weaknesses of the current situation, farmers can choose measures to reduce their negative impacts and create potential for more biodiversity. The overall aim of the BAP is to achieve continuous improvement.



Since 2014, [Natural Balance Foods](#) has been working with international non-profit association [WeForest](#) to raise awareness around biodiverse tree planting and they have planted +4000 trees to offset their carbon emissions and to create new habitats.²

The European Business and Biodiversity Campaign (EBBC) is a partner consortium which supports companies from all industries in integrating biodiversity into their corporate management. [Our key project LIFE Food & Biodiversity](#), funded by the [EU LIFE programme](#), aims to improve the biodiversity performance of standards and labels within the food industry. The EBBC developed a [Biodiversity Performance Tool \(BPT\)](#) to address the gap with regard to the availability of tools to assess and manage biodiversity at farm level.

Furthermore, a [Biodiversity Monitoring System](#) is available for standards, companies or cooperatives to monitor the biodiversity performance of certified farms, suppliers or members.



[Lou Pan d'Ici](#) is a French regional project aiming to develop short supply chains between wheat producers, millers and bakers in the South of France, with a positive impact on biodiversity.

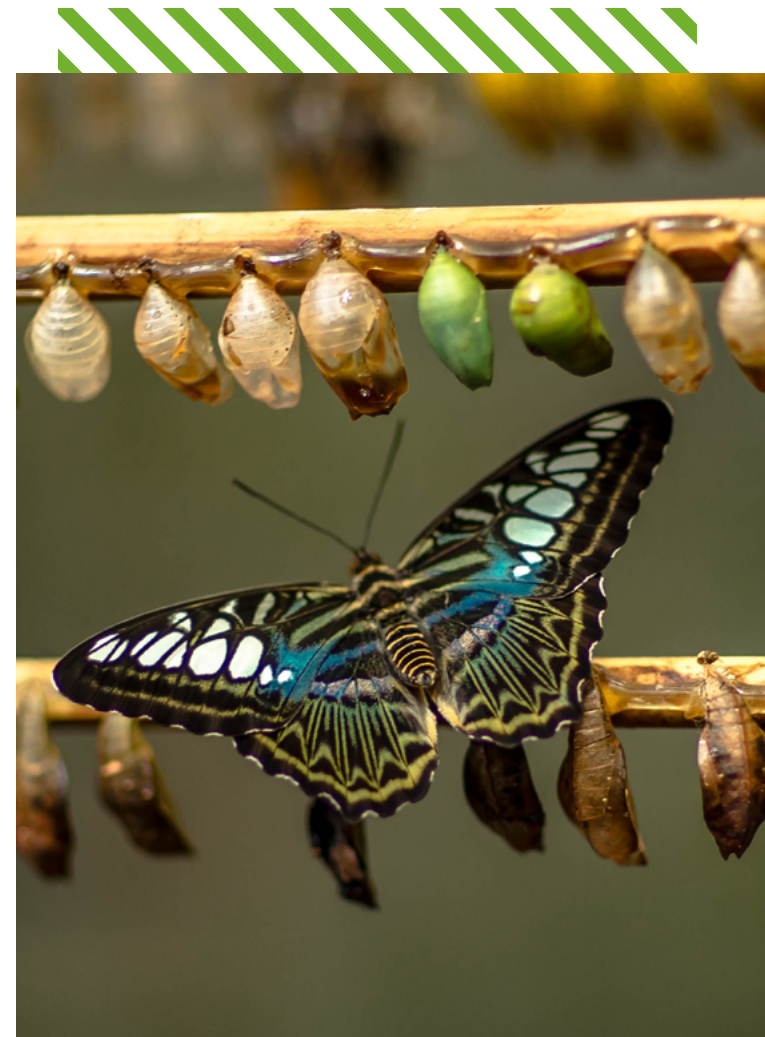


SHARE

- Once you have taken your first steps as a company to increase your positive impact on biodiversity, it is time to communicate your efforts and future plans within your company and to involve your colleagues. **Integrating biodiversity into business-decision making is a collaborative process.** Everyone has a different role to play. [We Value Nature](#), a campaign supporting businesses to value nature, developed [persona action cards](#) for the food & beverage sector to assist professionals with different positions within the company to become more effective and deliver more impact. The action cards list different actions, needs and challenges each individual is facing. The cards address natural capital as a whole, which sees the environment as a stock of resources generating a flow of products and services, of which biodiversity is the living part.
- Showcase what your company has done and, more importantly, what it is aiming to achieve in the future.** Sharing your journey and vision might attract others that work on biodiversity who can support you.

COMMIT

- Set a few strategic overarching objectives based on the key issues identified which are material to your company and commit to taking action. **Focus on what is achievable.**



1.3.2 TAKING IT TO THE NEXT STAGE

- **Look into which innovative products, services, and technologies exist to integrate biodiversity in your activities based on your company's priorities.** You could switch to agricultural practices that preserve the soil and reduce erosion, invest in a precision irrigation system, recycle or reinvent packaging, diversify your food portfolio or work on the design of products towards plant based ingredients' in order to reduce meat and other animal based raw material.
- **Try to translate your strategic biodiversity commitments into SMART targets.** This will help you track and monitor progress. It also gives more weight to your achievements when you can quantify them. Setting targets without measuring your impacts and dependencies can be challenging. However, there are general approaches available to ensure your actions are relevant and ambitious. In the food sector, the main impacts and risks related to biodiversity are linked to the food production process and the sourcing of raw materials. As an important next step, companies need to prioritise their impact and risk areas and set targets aligned with their priorities.
- Now that you have mapped your supply chain and developed a heatmap, you can list the raw materials with the highest impact on biodiversity. The next step would be to consider the options to shift to certified raw material with high biodiversity requirements. **Changing your supply chain towards certified products and improving traceability are key steps to improve your biodiversity performance.** Ideally, your vision should be to establish direct supply chains and support farmers to implement biodiversity measures.



[Followfood](#) in Germany pays higher prices for products from regenerative agriculture. They support regenerative agriculture practices to keep carbon in the soil, increase the soil's capacity to hold water, enhance the resilience of crops while reducing excessive synthetic agricultural-chemicals input and supporting the livelihood of farmers.³



Belgian coffee roastery [Ray and Jules](#) committed to 100% sun-roasted coffee beans to completely phase out petroleum.⁴ Drilling facilities fragment public lands, displaces wildlife and destroys habitat. Petroleum spills can lead to fires and contaminate soil and water. Phasing out petroleum therefore decreases their negative impact on biodiversity.





Setting SMART targets

SMART targets are goals that are Specific, Measurable, Achievable, Relevant, and Time-Bound. These goals include a specific set of criteria ensuring targets are attainable within a certain time frame. Setting qualitative or quantitative KPIs related to biodiversity do not necessarily require SMEs to carry out a natural capital assessment.

SMEs could, for example, increase the traceability of the products with raw material of high risks for biodiversity or purchase products certified by standards with effective biodiversity criteria, such as the Rainforest Alliance, Fairtrade, or Biodiversity Add-On of Global GAP. These prioritised areas for action could translate into the following SMART targets:

- Achieve 100 % traceability of 14 products or raw material by 2025.
- Increase of certified products by 10 % of the total volume of vegetables by 2030.

Management and continuous improvement are key in the context of biodiversity. Adopting new and more ambitious targets once old ones are achieved is crucial to future-proof your business.

The [Science-Based Targets Network](#), a collaboration of leading global non-profits and mission driven organisations, is developing guidance to set science-based targets for nature for companies as well as cities. The [initial guidance for business](#) is already available.

Profile 1: Almond farmer in Spain

The **farmer** realizes that their efforts to attract more wild pollinators will be in vain if they continue to use a high amount of chemical pesticides.

They decide to implement “Integrated Pest Management” practises in order to achieve a continuous improvement in terms of pesticide use. They aim to reduce pesticides in quantity and toxicity. To achieve this objective they should adopt crop-based preventive measures, apply biological pest management whenever possible and avoid or restrict the use of pesticides that are particularly harmful to biodiversity.

The Farmer asks for advice to the biodiversity assessor of the regional agricultural administration, the local /regional NGO or the Pesticide Action Network (PAN). Due to increased pressure from the businesses they supply and the changing consumers preference for organic products, the farmer feels that is a priority area.

They start talking to other almond farmers in the district about the interdependencies between almond farming and biodiversity and the risks and opportunities it entails in terms of landscape transformation.

Reducing tilling and leaving grassy plants to wither in the fields can protect the soil as they form natural fertilisers. Together they identify areas for restoration of biological corridors in order to foster the conservation of biodiversity.



Profile 2: Belgian chocolate producer

The **manufacturer** has mapped the actors and operations along the supply chain: the cocoa production takes place in Ghana. Cocoa is transported to Belgium where it is processed to chocolate. Beet sugar is extracted from Western Europe and milk imported from France. Land-use is one of the main drivers of biodiversity loss, so the manufacturer decides to use this metric to determine their biodiversity footprint. It is obvious that low productive cacao production has the biggest impact when looking at land-use. Little fertiliser is used by the farmers. Due to previous interactions with the farmers, collaborating to obtain the Fairtrade certificate, the manufacturer is able to capitalise on the established partnership to engage the farmers on biodiversity. More efficient cocoa production on the low productive farms would reduce the relative impact of land use. However, they are also aware that the impact on biodiversity is not necessarily related to the use of land but the way we use it. Therefore, optimising production processes on the high productive farms will mitigate the negative impacts of biodiversity on the farm and the surrounding landscape. It is important to protect nature and adopt farming practices working with rather than against nature. This includes, among others, good management of the cocoa trees and increasing shade trees to improve humidity of soil. The manufacturer investigates the principles of organic cacao production. They work with the farmers to achieve these requirements. Because the manufacturer is aware that they are asking farmers to make an additional effort, they suggests to set up a compensation scheme to communities for adopting measures for biodiversity.



Reward those who make an effort for nature!

[Payments for Ecosystem Services](#) (PES) is an innovative approach to nature conservation.

PES is a market-based instrument to finance nature conservation. It puts in place arrangements through which the beneficiaries of environmental services value these services and reward those whose lands provide these services. This can be done through subsidies or market-based rewards.

It is a way to recognize the true value of nature and its services and ensures that future generations can enjoy these benefits as well.

In addition to PES, simpler financing mechanisms have also been created. So called “Biodiversity Funds” which invite companies to “invest” in the restoration of ecosystems or the creation of biotope corridors, for example, have emerged more recently. [The REWE Group, a German diversified retail and tourism co-operative group committed to better ecological and social conditions in banana cultivation in Central America, launched the REWE Group Central America Fund \(“Banana Fund”\).](#) The Banana Fund provided a project volume of over 3.5 million euros from 2013 to 2018 to which local organisations in Panama and Costa Rica could apply for funding with project ideas promoting more sustainable banana production.

Currently, [the German Development Agency \(GIZ\)](#) and the [Global Nature Fund](#) are developing a similar “Biodiversity Investment Mechanism” within the project “From Farm to Fork” approaching all actors of the banana and pineapple supply chains to “invest” into biotope corridors in agricultural areas in Costa Rica and Dominican Republic. This Fund will also provide SMEs with the opportunity to invest smaller amounts.



Profile 3: Estonian producer and whole seller of fresh

The **retailer** knows that overexploitation of fish is a direct driver of biodiversity loss. Through the product portfolio they can contribute to biodiversity protection. They also want to improve their risk management and mitigate supply failures due to decreasing fish stocks and reputational risk due to increased consumer awareness about extinction risks. They decide to diversify their portfolio eliminating threatened species, such as tuna, that appear on the IUCN Red List. To avoid increasing the pressure on other species, they decide to introduce plant-based alternatives in their offer. Not only does the retailer reduce their negative impact on biodiversity, they also contribute to enhanced dietary habits of their customers. After a while, they notice economic benefits as they have attracted a new crowd of customers.



Profile 2: Irish dairy processor and distributor

The **dairy processor** has already developed a climate action plan, in which their company adopted science-based targets to reduce its emissions. Many of the company's main suppliers also started to take climate action. The processor's climate strategy is the right entry point to start integrating biodiversity into their decision-making. Restoring nature not only avoids expected extinctions but it also sequesters CO2 emissions.

The dairy processor engages with the dairy farmers and jointly creates a Biodiversity Action Plan using the Biodiversity Performance Tool (BPT) to monitor on-farm progress. Dairy farmers depend on natural resources such as fertile soil, clean groundwater, and the availability of minerals. The promotion of functional biodiversity such as soil organisms contributes to living, healthy soil and facilitates productivity. The Biodiversity Action Plan focuses on the increasing on-farm biodiversity, the protection and creation of habitats in the surrounding landscape and measures to protect species. It also includes agricultural practices to reduce the negative impacts on biodiversity on-farm and in immediate surroundings. The tool also collects and evaluates information and data for long-term monitoring to measure progress. The availability of data to set the baseline for the products did not pose a major barrier to the SME. Once suppliers provide information on land use (type, location and area) and its intensity, like is done for CO2 equivalent reporting, hardly any time is needed to collect these data.



1.4 DEVELOPING – WHAT'S NEXT?

If you feel you have familiarised yourself with the concept of biodiversity as a part of natural capital and that you have improved your understanding of its linkages with business decision-making and risks management, it is time to move from commitments to actions and start implementing the plans you have developed. It is crucial to build on the outcomes of your previous actions to optimise your efforts. In line with the We Value Nature uptake pathway you might face new challenges including the lack of regulatory framework of standardised data and metrics. You can start to familiarize yourself with a few key approaches and tools to start assessing and integrating biodiversity and natural capital into business decision-making.



1.4.1 CONCRETE IMMEDIATE ACTIONS

DO

- **Identify suppliers that have adopted good practices**, such as limiting industrial fishing, prohibiting the use of antibiotics, adopting agro-ecological practices. Try to engage with your current supplier to adopt similar practices and enhance their biodiversity performance. If needed and possible, you can switch suppliers.
- Setting up a management scheme could be useful. **There are various environmental management instruments and tools available.** There are the [ISO's environmental standards](#) providing a model to follow when setting up and operating an environmental management system. [Eco-Management and Audit Scheme \(EMAS\)](#) is a premium management instrument developed by the European Commission for companies to evaluate, report, and improve their environmental performance. EMAS III is an excellent environmental management system that includes biodiversity as one of the key areas. An EMAS certification is of increasing value to be accepted as a supplier. With an EMAS certificate it is easy to obtain the international ISO 14001.
- **Integrate biodiversity into your environmental management system and strategy to structure your company's activities** and to include them into the company's management process. Monitor and evaluate your actions and achievements. Are these in line with the intended outcomes? Are you seeing improvements? It is important to adapt your activities if not successful. You should consider how optimising the value from your gained knowledge and experience up until this stage has been.
- As a producer, **improve your performance to meet food certification requirements**, to respond to the rising demand of certified suppliers. As a processor or retailer,

work with your procurement team to identify standards with sound biodiversity criteria and certified products. Recommend and support your producers to obtain these certifications.

- **Diversify your product portfolio** as a retailer. Consider plant-based products to (partly) replace meat and dairy are a big contribution to reduce impacts on biodiversity. As a farmer you can increase the variety of crops, improve crop rotation, or even cultivate a traditional variety which is better adapted to climate change.
- **Support a project to restore ecosystems and/or to protect species** which is related to your supply chain as a food producer or retailer or carried out in the surroundings of the farm when you are a farmer or supplier.



[Obst vom Bodensee Vertriebsgesellschaft mbH](#) (Fruits from Lake Constance) supplies the German food retail trade with apples, berries and other fruits (conventional and organic) from the Lake Constance Region and exports within and outside the EU. Obst vom Bodensee is a partner of the [Rewe Pro Planet Apple initiative](#) for the protection of insects. In 2020, a total 157 farms with a 1,256 hectare were involved. More than 400 hectares of flowering areas are established, more than 800 nesting aids for wild bees have been installed and many more small and bigger measures to enhance the ecological infrastructure in and around the orchards at Lake Constance have been introduced. The project approach was transferred to other apple production regions in Germany and Austria providing apples to REWE Group. The initiative received the European Bee-Award in 2020.

SHARE & COLLABORATE

- **Share your story with peers**, other companies in the region, with your customers and maybe even the media. There are many NGOs that are looking to showcase best practices examples to inspire others. This will give your company more visibility and improve its reputation. Showcasing your achievements might facilitate accessing new markets.
- **Involve stakeholders and create partnerships with other organizations to roll-out your biodiversity strategy and scale-up action.** Become part of business networks or coalitions to share best practices, address the challenges you're encountering and get access to the right expertise. Supporting specific business advocacy initiatives that contribute to reversing the loss of nature will support your business, and that of others, to scale and speed up further action, like [Business for Nature](#), a global coalition that brings together business and conservation organizations and forward-thinking companies, invites companies to join the business movement to reverse nature loss. They advocate for ambitious government policies on behalf of the business community. More and more companies are mobilizing support for some ambitious policies by calling on national governments to set a clear direction for a sustainable and prosperous future.
- **Participate in contests**, share your case as a best practice and be rewarded for your hard work. The European Commission organises the [European EMAS Awards](#) on a yearly basis with a specific category for private micro and small organisations and private medium-sized organisations. Interested organisations are invited to participate in national competitions and subsequently in the [European Business Award for the Environment \(EBAE\)](#), which is under consideration for 2022 and offers a category specifically on environmental management.





Through further research, the **Spanish almond farmer** realises that the heavy irrigation has negative consequences linked to salinization and soil solidification. Soil erosion can produce severe damage to the almonds and impact yield and productivity. The use of pesticides also entails risks for his business.

The farmer decides to invest in drop irrigation. Not only does this type of irrigation reduce the negative impacts on biodiversity by reducing soil erosion, it is also a smart financial investment due to efficiency gains made. The almond orchard is watered more efficiently which decreases the total amount of water needed. In addition, it eliminates water loss caused by evaporation or wind, which is perfect for the Mediterranean climate. Changing farming practices has increased the farmer's crop production, income and resilience. In their area, the farmer adopts the role of biodiversity champion spreading the word about the opportunities biodiversity has to offer. Collective action is needed in their area to efficiently mitigate the loss of pollinators, water stress and other nature-related risks.



The **chocolate manufacturer** has been collaborating together with the cacao farmers and a local NGO to develop an "organic plan". The plan will detail all aspects of the agricultural production of the cacao plant to working towards obtaining certification. This includes things such as soil management, crop rotation, biological inputs and pest control.

They are also investigating alternatives to chemical fertilizers to improve soil quality. Agricultural waste, such as weeds, leaves and cocoa pods, can be used as fertilisers. So called biochar enhances living soils and creates carbon sinks capturing carbon storing it for hundreds of years. This nature-based solution brings both financial and environmental benefits addressing both biodiversity loss and climate change.



Using some key performance indicators, such as the presence of species on-farm (identified in agreement with the farmers) allows the measurement of the influence of dairy farms on biodiversity. It also allows the **dairy processor** and farmers to track progress. Increasing the level of biodiversity, through nature conservation of restoration, had a direct positive impact on the farms and their productivity. Through increased biodiversity performance, the processor has increased its resilience and uses it as a marketing strategy to respond to changing consumer preferences and to create a competitive advantage compared to conventional dairy processors. Reporting on biodiversity performance has also enhanced its creditworthiness.

The dairy processor starts to explore ways to further decrease their impact on biodiversity and the possibilities to adapt their industrial agricultural approach, moving towards a more sustainable approach with the aim to reduce the density of their livestock. They familiarize themselves with non-conventional agricultural approaches and explores how to move to the NGO recommended standard of maximum 1.4 LU/ha fodder area. The dairy processor also decides to commit to 100% cradle to cradle packaging to combat deforestation. This is an easy win for the company as they already conducted an LCA for some of their products.



The **retailer** assumes that farmed fish will reduce the pressure on biodiversity as they do not contribute to the overexploitation of wild fish anymore. However, further research shows that farmed salmon have a greater impact on ecosystems than wild caught salmon, with feed production being the major issue on habitat change, pollution, climate change and overexploitation. Escaped farmed salmon also disrupts local ecosystems as an invasive species driver. The relatively lower impact of wild-caught salmon compared to the negative biodiversity impacts of farmed salmon has influenced the company's decision making more adequately.

The company wants to make sure that all species from their product portfolio have been certified as MSC (Marine Stewardship Council) sustainable fishing products. In collaboration with an NGO, the company has drawn up a list of supply sources, classified by colour according to their sustainability. The procurement team uses this list to select the most responsible source.

The company is exploring options to select fish farms that have adopted good practices, such as limiting industrial fishing and prohibiting the use of antibiotics. They are investigating options to switch to Organic Farming products bearing the ASC (Aquaculture Stewardship Council) or Naturland.

1.4.2 TAKING IT TO THE NEXT STAGE

- If your company is reaching a maturing or comprehensive stage on its journey of integrating biodiversity into its decision making, it could be helpful to start measuring your biodiversity footprint. Once you are able to put a number on something, it immediately gains significance offering you leverage to continue your journey. Measuring your footprint will allow you to track and monitor progress and report on it to your customers, potential investors, and other stakeholders. You will be able to show positive progress made. **Measuring your biodiversity footprint will also help you to make better informed decisions and assess whether your actions are actually having the outcomes you were expecting them to have.** The landscape of biodiversity assessment and measurement approaches is constantly evolving. Selecting the suitable measurement approach depends on the business context.

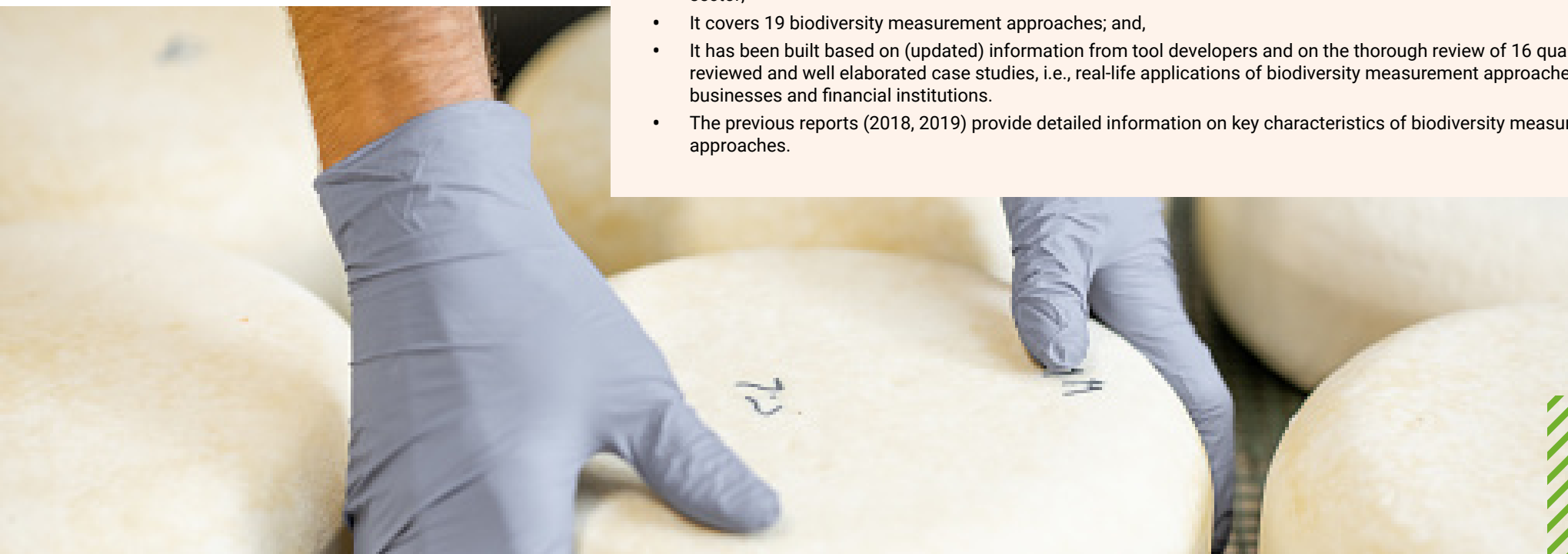
Navigating the landscape of biodiversity measurement approaches and methodologies

Selecting the appropriate methodology – and related metrics – for identifying, measuring, valuing and disclosing your impacts and dependencies on biodiversity can be challenging.

The European Business and Biodiversity Platform publishes regular [Update Reports](#) which reflect evolutions in the development of biodiversity assessment approaches for businesses and financial institutions. The latest report, Update Report 3 (Lammerant et al. 2020), marks the launch of a pragmatic decision framework to select the most suitable measurement approaches for a specific business context: the Biodiversity Measurement Navigation Wheel.

Key features of the Biodiversity Measurement Navigation Wheel 1.0 are the following:

- It offers a 'Fast Track' approach as it allows for considering multiple criteria at once;
- It relies on easy-to-use overview tables full of information on how tools can be differentiated on specific criteria;
- It brings in new selection criteria such as information on accessibility, costs and efforts and the maturity level of tools based on the application frequency for specific business contexts;
- It explicitly highlights the possibility to combine different approaches and metrics,
- It acknowledges the different perspective of the financial sector and made a start with an adapted version for that sector;
- It covers 19 biodiversity measurement approaches; and,
- It has been built based on (updated) information from tool developers and on the thorough review of 16 quality reviewed and well elaborated case studies, i.e., real-life applications of biodiversity measurement approaches by businesses and financial institutions.
- The previous reports (2018, 2019) provide detailed information on key characteristics of biodiversity measurement approaches.



- Once you have measured your biodiversity footprint, assessed how much you depend on nature and defined your material issues, you will be able to **assign values to the ecosystem services on which your company depend**. What benefits does biodiversity offer your company and how much is it worth? Valuation means more than just monetization. It can be interpreted in terms of relative importance, worth, or usefulness of biodiversity to people. It can be qualitative, quantitative, monetary or a combination of these. To determine the relative importance of the benefits valued in monetary terms you can estimate the costs of replacing the diversity of services offered by living organisms, such as pollinators, by technical or human activities. In other words, where the state of biodiversity is not expected to achieve its goal, the actions needed to achieve the same goal should be costed. It is important to think about how to integrate and present the costs of maintaining the biodiversity alongside benefits it directly or indirectly supports. You should be mindful that putting monetary values to ecosystem services is a costly exercise and entails critical discussions. Qualifying and quantifying biodiversity and ecosystem services using proxies and general approaches remains a very good start.
- The revealed true costs of production, which were not accounted for before, can be included in your bookkeeping. Internalising external costs is called **True Cost Accounting**.
- The [Natural Capital Protocol](#) sets out guidelines for businesses to conduct a natural capital assessment, assessing all the impacts of your company's operations on the natural environment. **Consult the primer for business, developed to prepare companies for a natural capital assessment, if you are thinking about conducting a broader natural capital assessment.** The assessment can feed into approaches to natural capital accounting. In "[Biodiversity at the heart of accounting for natural capital](#)" the [Cambridge Conservation Initiative](#) describes the importance of capturing biodiversity in natural capital accounting to make credible choices about investment, resource allocation and the setting of strategic priorities.

[Eosta](#) calculated the costs for climate, water, soil, social coherence health and biodiversity. Their true cost calculations consider all impacts on people and planet in these categories. For each category the potential positive and negative impacts of farming are weighed against each other. As part of their campaigns Eosta shows the real price of minced meat after including the negative externalities.⁵ This encourages customers to reconsider their product choices and become aware of the negative impact of the meat industry on biodiversity. Correct pricing might shift consumer behaviour moving towards more biodiversity-responsible food choices.





Did you know?

In a business-as-usual scenario, the continuing loss of biological diversity will cost the global economy up to 14 trillion Euros by 2050. This is equivalent to 7% of the projected global GDP in 2050. Too often economic projections fail to take account of the decline in ecosystem services. A major cost is the loss of pollinators who play an indispensable role in the lifecycle of our crops. Loss of biodiversity also leads to increased sensitivity to pests and loss of landscape value. The true cost and monetary value of biodiversity needs to be taken into account.

Source: [OECD report prepared for the G7 Environment Ministers' Meeting, 5-6 May 2019](#)



MODULE 4: YOU DON'T HAVE TO MAKE THIS JOURNEY BY YOURSELF

1. Biodiversity Basics

2. Easy Biodiversity Impact Assessment

3. Time for action

4. You don't have to make this journey by yourself

Starting your biodiversity journey can be overwhelming. Luckily there are many initiatives and organisations that are supporting SMEs that are willing to take action. Creating the right partnerships is key to succeed and it will make it all a lot easier. This module identifies key partners and initiatives at European level, where SMEs can turn to for support. It also provides advice on how to find support at the national level. Finally, a list of tools and resources is pulled together to support agri-food SMEs at the start of their journey, but also for the ones that want to take it a step further and start measuring.

1 PARTNERSHIPS AND FUNDING

1.1 PARTNERSHIPS

One way to help SMEs overcome this challenge is by facilitating knowledge exchange between more established businesses. The opportunities and role of collaboration in addressing the challenges agro-food SMEs, as well as large corporates, are facing is vital. Neither SMEs nor large corporations can drive transformation on their own. Business alongside policy makers, industry leaders and society all have a critical role to play.

Collaborating with **peers across the agri-food chain** will not only help your company to create future proof solutions to the market demands, but it will also accelerate the uptake of practical solutions that are out there.

Sector associations, such as [SMEUnited](#) or the International [Agri-Food Network](#), and programmes such as [Horizon Europe](#) or [EIT Food programmes](#), play an important role in supporting SMEs and stimulating joint action. An increasing number of industry associations start to adopt work streams focusing on biodiversity, supporting their members to take action, helping the industry to transform itself. Here are some examples:

[FoodDrink Europe](#) is an EU food industry confederation consisting of 26 national food-related federations representing the interest of their members committed to achieving more sustainable food systems. They have a special work stream focusing on the protection of ecosystems, particularly through better sourcing of raw materials within and beyond Europe's borders. In their [2021 Annual Report](#), they emphasize the important role of the industry to help deliver the EU's objectives set out in the EU Biodiversity Strategy.

[The European Alliance for Plant-based Foods](#) brings together like-minded organisations in the plant-based value chain. They actively promote innovation towards sustainable plant-

based food solutions and advocate for a level playing field between plant- and animal-based products.

[IFOAM Organics Europe](#) is the European umbrella organisation for organic food and farming which advocates for a transformation of food and farming, representing the interest of almost 200 members in the EU, spanning the entire food chain. One of their priorities is advocating for producing food while preserving our natural resources. There are different ways companies can engage with IFOAM Organics Europe.

Many of the EU associations have national offices. Reach out to these offices to explore partnership opportunities and ways to receive support. Partnerships with large corporates could also help you move forward.

You could also connect with **NGOs or environmental initiatives** which will also help you address the challenges your company is facing along its journey. In Germany, for example, the Initiative ["Food for Biodiversity: Biodiversity in the Food Industry"](#) was created in Spring 2021. The initiative includes SMEs and large companies of the food sector, standards, producers, NGOs and scientific organisations who work together on the challenges regarding biodiversity. The overarching goal of the initiative is to anchor the protection of biodiversity as a key concern of the food industry and agriculture as a supplier of raw materials.

Join **knowledge hubs, networks or platforms** to stay up to date on the latest developments in the agri-food sector.



[The International Chamber of Commerce](#) helps generate business and policy breakthroughs in social, economic and technological areas. Th ICC promotes international trade and investment as vehicles for inclusive growth and prosperity and aims to make business work for everyone. **The ICC has national committees across Europe.** Joining a national ICC committee will give you access to the network and experience and will offer you the opportunity to build partnerships around the world.

[The Certified B Corporations](#) are businesses that meet the highest standards of verified social and environmental performance. It provides a checklist for companies to achieve a minimum verified score on its impact on nature, its employees and customers. It supports companies to transform their business through a combination of third-party validation, public transparency, and legal accountability. **Members of the B Corp community** gain access to a network of pioneering companies and a broad range of resources. [The B Corp Welcome Guide](#) offers a glimpse of the benefits of joining the B Corp Movement.

Partnerships are key to achieving your goals!

[Nature Network](#), for example, supports companies implementing and amplifying nature based-solutions. [Commonland](#) is an international team of specialists which brings a holistic approach to landscape restoration. They offer partners a wide range of support tools, advice and a practical guide. Together with their landscape partners they develop business cases built on regenerative agriculture, agroforestry and rotational grazing – from pilot to scale. They developed expertise in mobilising blended funds to landscape projects.

Banks are the traditional way to access finance to receive the support you need. Many banks are reconsidering the investments in their portfolio and reassessing biodiversity-related risks linked to certain investments. Some frontrunners have been engaging companies in their portfolio on the topic of biodiversity and how to improve their performance. This is an option worth exploring.



1.2 FUNDING AND HELPFUL RESOURCES

By now you should have noted that you can improve your biodiversity performance without needing additional funding or making resource sacrifices. You might have even already experience some financial benefits due to the changes you implemented or attracted capital coming from (impact) investors. In case you are still looking for funding to scale up your action or fully integrate biodiversity into your business model, there are a few options:

- The European Commission provides funding, for example, through the [EU budget](#) and [NextGenerationEU](#), categorised per policy area. **A part of the EU budget is allocated to Natural Resources and Environment and aims to be a driver of sustainability.** It invests in sustainable agriculture and maritime sectors, alongside climate action, environmental protection, food security and rural development. Organisations can apply to the [different funds](#) depending on the objective of their initiative.
- **The [LIFE programme](#) is the EU's funding instrument for the environment and climate action.** Created in 1992, it has co-financed thousands of projects focusing on circular economy, clean energy, climate change adaptation and mitigation, as well as nature and biodiversity. The LIFE Nature and Biodiversity sub-programme funds nature conservation projects, in particular in the areas of biodiversity, habitats and species. Thanks to LIFE, 1.5 million people now benefit from improved air quality, while 42% of targeted species are progressing towards conservation status.
- The European Commission also supports **access to funding for SMEs through local financial institutions in EU countries.** Many types of funding are available, including loans, microfinance and guarantees or equity funding through venture capital funds, business angels or social investors. You can have a look at the [financing programmes for SMEs](#).
- There might also be opportunities at national Member

State level. This is an option worth exploring.

- Investors and banks are also shifting towards greening their portfolios, prioritising investments contributing to nature conservation.
- Overcoming the need for funding could also be achieved through knowledge-sharing with peers and pooling resources. Explore opportunities to start a cooperative or join a community of practice.
- **Some NGOs or consultancies are offering their knowledge and expertise for free.** They might even be happy to offer you their services developing a case study together or piloting a new tool they have developed.
- Some organisations also organise competitions and grant **awards to SMEs that are contributing to better and healthier planet.** [The Foodies](#) are a celebration of sustainability achievement among 290,000 small and medium-sized enterprises that make up 99% of Europe's food and drink industry. They offer exposure and media attention.





2

TOOLS, RESOURCES AND LINKS WITH OTHER INITIATIVES

Do you want to take it a step further and make biodiversity your company's trademark? Below some useful resources to set science-based targets for nature. Setting targets means your company can be confident of doing enough to help restore balance to the global commons and harness the opportunities this presents. It will also help you to track progress and evaluate your actions!

2.1 GENERAL TOOLS AND RESOURCES ON BUSINESS AND BIODIVERSITY

- [The Science Based Targets Network \(SBTN\)](#), in collaboration with international experts, produced the first practical guide for companies to set a clear course of action to protect nature in line with science. [This initial practical guidance document](#) is the first product of the Global Commons Alliance issued by SBTN.
- The report of the [UN Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services \(IPBES\)](#) provides evidence of the biodiversity crisis induced by human industrial activity. The report, '[Integrating Natural Capital in Risk Assessments](#)' published by the UNEP Finance Initiative is a step-by-step guide to help financial institutions conduct a rapid natural capital risk assessment.
- [The Capitals Coalitions](#) has developed a broad range of tools and resources linked to the [Natural Capital Protocol](#), a decision-making framework that enables organizations to identify, measure, and value their impacts and dependences on natural capital. The Protocol is a successful method to incorporate natural capital into corporate decision-making through natural capital accounting. However, the framework is mainly used by large companies, due to its technical complexity, time-consuming activities and a focus on 'measuring' instead of action:
 - A series of Biodiversity Practical guides was developed as a companion to the [Natural Capital Protocol](#); enabling businesses to better incorporate biodiversity into natural capital assessments and decision-making.
 - [The Natural Capital Toolkit](#) is an interactive database that helps business find the right tool to measure and value natural capital as they use the Protocol.
 - [The Biodiversity Guidance Navigation Tool](#) is designed to guide users through a biodiversity-inclusive natural capital assessment, following the steps outlined in the Natural Capital Protocol; Frame, Scope, Measure and Value and Apply. Throughout the steps, the tool suggests a number of biodiversity-specific tools, resources, and methodologies that you can further explore to assist your assessment.
- [Principles of Integrated Capitals Assessments](#) – standardized natural capital accounting principles for businesses from the Natural Capital Protocol and Social & Human Capital Protocol (2020).
- The [IBAT Alliance](#) brings together authoritative biodiversity data from three global biodiversity datasets, including the [IUCN Red List of Threatened Species](#), [World Database on Protected Areas](#) and [World Database of Key Biodiversity Areas](#). A range tutorials and webinar on how to use the database can be consulted on the [IBAT website](#).
- [The Species Threat Abatement and Restoration \(STAR\)](#) metric allows quantification of the potential contributions to addressing the threats that are driving species extinction risk, a key concern for nature conservation and a central element of the post-2020 Global Biodiversity Framework and the Sustainable Development Goals. [STAR](#) can be used to easily identifying areas where agriculture is already a leading threat to species as well as identifying opportunities for positive biodiversity action through project management. It is calculated from data derived from the IUCN Red List of Threatened Species™.
- [We Value Nature](#), European Union's Horizon 2020 project, developed [a natural capital uptake pathway](#) breaking down the natural capital journey and focusing on smaller, more achievable steps. We Value Nature aims to support businesses and the natural capital community to make valuing nature the new normal for businesses across Europe.
- [BSI 8632 Natural capital accounting](#) for organizations is a standard that is currently in development to support organizations with good practice for undertaking natural capital accounts.
- [IUCN Global Standard for Nature-based Solutions](#) provides clear parameters for defining nature-based solutions and a common framework to help benchmark progress. The Global Standard includes a self-assessment tool.
- [CBD post-2020 Global Biodiversity Framework](#) – the Convention on Biological Diversity will adopt a post-2020 global biodiversity framework as a steppingstone towards the 2050 Vision of "Living in harmony with nature". The information note sets out ways and means to contribute to its development.
- UN Environment Programme published the first edition of the GEO for Business briefs, a series of stimulating briefs about the environmental challenges and business opportunities that demand transformational change at a global scale. The first brief "[Adapt to Survive: Business transformation in a time of uncertainty](#)" touches upon the scale of environmental challenges, the necessity of business transformation and the Nature Positive Economic business models. The brief means to inform a broad business audience, including companies in the supply chains of major multinationals, multinationals themselves as well as small to medium-sized enterprises. It shows how smart businesses will learn how to take advantage of the needed transformation. New instalments of GEO for Business will appear every few months to provide guidance on a range of issues relevant to the future of business in a changing world.



2.2 TOOLS AND RESOURCES FOR AGRI-FOOD COMPANIES

- The partners of the EU LIFE Food & Biodiversity initiative analysed more than 50 standards, labels and company requirements with regard to their criteria on biodiversity. The results were summarised in a [Baseline Report](#) and evaluated with representatives of standard organisations and companies from the food industry. The analysis indicated the need and the potential to improve the biodiversity performance of standards and company requirements.
- [FrieslandCampina](#), [Rabobank](#) and [WNF](#) (the Dutch chapter of the World Wide Fund for Nature/WWF) have developed a tool to quantify biodiversity achievements, seeking to help restore biodiversity in agriculture. The tool has been specifically designed for the dairy sector. The newly designed tool, the Biodiversity Monitor for Dairy Farming, uses Key Performance Indicators to measure the influence of dairy farms on biodiversity. This allows monitoring the role of dairy farmers in the preservation of the landscape and the environment through a standardised system. If you would like to read the full report and check the tool out, click [here](#).
- EU LIFE Food & Biodiversity published a [set of recommendations](#) to improve and enhance biodiversity criteria in standards and sourcing guidelines. These recommendations were elaborated in collaboration with experts from standard organisations, certification companies, food companies, environmental organisations and scientific institutions. Available in five languages.
- [Greener.LAND](#) is an online tool that farmers and professionals from around the world can use to help select effective interventions for landscape restoration. It shows how maps and geographical data can aid in selecting fitting interventions for an area. This tool helps you decide which landscape interventions are best suited towards landscape restoration for the landscape you operate in. Greener.LAND is a cooperation between [Nature^Squared](#), [SamSamWater Foundation](#) and [Justdigg.it](#).
- [Food & Beverage Sector Guide](#) is a supplement to the Natural Capital Protocol specifically developed for the Food & Beverage Industry.
- [TEEBAgriFood](#) Operational Guidelines for Business helps the Food & Beverage industry to better understand their specific impacts & dependencies on natural capital as well as on social & human capital.
- The Business & Biodiversity Campaign developed a factsheet about biodiversity and the food retail.
- IUCN published the report "[Approaches to sustainable agriculture: Exploring the pathways towards the future of farming](#)" to shed some light on the different terms relating to sustainable agriculture. The fourteen different approaches examined all share the common goal of striving for sustainability which includes environmental aspects alongside socio-economic considerations. They aim to offer an alternative for conventional agricultural approaches and many share similar environmentally-responsible practices.
- [BiodivERSa](#), in collaboration with the Belmont Forum, produced a [Handbook on the use of biodiversity scenarios in support of decision-making](#). This handbook is intended for any individual interested to learn about biodiversity scenarios and, in particular, participatory scenario design and the use of biodiversity scenarios in decision-making. It builds on a variety of sources providing a general understanding of scenarios of biodiversity, concrete examples of their use, and a directory of relevant resources to go further on the topic.
- [The agricultural European Innovation Partnership \(EIP-AGRI\)](#) works to foster competitive and sustainable farming and forestry that achieves more and better from less. It contributes to ensuring a steady supply of food, feed and biomaterials, developing its work in harmony with the essential natural resources on which farming depends. [A bunch of related content for biodiversity, new tools for farmers and scientists is freely accessible.](#)
- The [European Network for Rural Development \(ENRD\)](#) developed a working document on [Practices to Identify, Monitor and Assess High Nature Value \(HNV\) Farming in RDPs 2014-2020](#), providing an introduction to the concept of HNV and examples of practical approaches.
- [The Slow Food Foundation for Biodiversity](#), created by Slow Food International and Slow Food Italy, coordinates projects that defend local food traditions, protect food communities, preserve food biodiversity and promote quality artisanal products, with an increasing focus on the global south. The Foundation's projects are tools to promote a model of agriculture that is based on local biodiversity and respect for the land and the local culture. They are in harmony with the environment and aim to provide food sovereignty and access to good, clean and fair food for all communities. The Presidia are Slow Food Communities that work every day to save native livestock breeds, local fruit and vegetable varieties, bread, cheeses, cured meats, sweets, and more. They are committed to passing on traditional production techniques and crafts, they care for the environment and they add value to landscapes, places, and cultures.

The Presidia, which is one of the projects, involves thousands of farmers, food artisans, herders, fishers, and winegrowers, and aims to pass on traditional production techniques and crafts. They care for the environment and add value to landscapes, places, and cultures.



2.3 BEST PRACTICE EXAMPLES OF SMES FROM THE AGRI-FOOD SECTOR

- [Oryza Food Italy](#) obtained industry control from farm to final product and obtained organic certification for a broad range of their products.¹ Organic farming operates without pesticides, herbicides and inorganic fertilizers, and usually with a more diverse crop rotation. Organic farms have higher levels of biodiversity (insects, plants, etc) compared to conventional farming.
- As part of their campaigns [Eosta](#) show the real price of minced meat after including the negative externalities.² This encourages customers to reconsider their product choices and to become aware of the negative impact of the meat industry on biodiversity. Correct pricing might shift consumer behaviour towards more biodiversity-responsible food choices.
- [Followfood](#) in Germany pays higher prices for products from regenerative agriculture. They support regenerative agriculture practices to keep carbon in the soil, increase the soil's capacity to hold water, enhance the resilience of crops while reducing excessive synthetic agricultural-chemicals input and supporting the livelihood of farmers.³
- Belgian coffee roastery [Ray and Jules](#) committed to 100% sun-roasted coffee beans to phase out petroleum for 100%.⁴ Drilling facilities fragment public lands, displace wildlife and destroy habitats. Petroleum spills can lead to fires and contaminate soil and water. Phasing out petroleum therefore decreases their negative impact on biodiversity.
- Since 2014, [Natural Balance Foods](#) has been working with international non-profit association WeForest to raise awareness around biodiverse tree planting and they planted +4000 trees to offset their carbon emissions and to create new habitats.⁵
- [ALB-GOLD](#) provides a quality premium to farmers meeting both durum quality requirements and biodiversity targets. This quality premium is calculated per hectare of durum wheat cultivate.⁶
- [Obst vom Bodensee Vertriebsgesellschaft mbH](#) (Fruits from Lake Constance) supplies the German food retail trade with apples, berries and other fruits (conventional and organic) from the Lake Constance Region and exports within and outside the EU. Obst vom Bodensee is partner of the [Rewe Pro Planet Apple initiative](#) for the protection of insects. In 2020, a total 157 farms with a 1,256 hectare were involved. More than 400 hectares of flowering areas are established, more than 800 nesting aids for wild bees have been installed and many more small and bigger measures to enhance the ecological infrastructure in and around the orchards at Lake Constance. The project approach was transferred to other apple production regions in Germany and Austria providing apples to REWE Group. The initiative received the European Bee-Award in 2020.
- [Lou Pan d'Ici](#) is a French regional project aiming to develop short supply chains between wheat producers, millers and bakers in the South of France, with a positive impact on biodiversity.



¹ More info here <https://oryzafood.it/en/chi-siamo/>, and the list of products here <https://oryzafood.it/app/uploads/2015/07/Certificato-Conformita-C3%A0-Scad-03-04-2020.pdf>

² <https://www.eosta.com/en/about-eosta/mission-values>

³ <https://op2b.org/wp-content/uploads/2019/09/OP2B-Ambition-Statement.pdf>

⁴ <https://www.ray-jules.com/nl/ons-verhaal/>

⁵ <https://www.naturalbalancefoods.co.uk/community/causes-we-believe-in/the-nakd-forest/>

⁶ <https://www.bodensee-stiftung.org/en/mehr-biodiversitaet-im-hartweizen-anbau/>