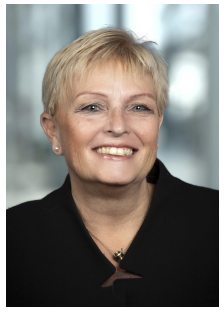
Webinar: Biodiversity

Why it is relevant to all Danish companies

Torsdag 26 august 2021

pwc

Hello from PwC



Susanne Stormer

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Experience

Susanne recently joined PwC after 20 years with Novo Nordisk, setting direction for the company's ambition and strategy to be a sustainable business. She is a recognised international leader in corporate sustainability and reporting.

During her career, Susanne has demonstrated an ability to identify early signals of changing expectations of business - including the emergence of bioethics as an agenda that companies, across sectors, must embrace and respond to.

Monica Mai Hansen

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Experience

Monica has several years of experience as project manager on sustainability and ESG projects within reporting on biodiversity. She has an in-depth knowledge on biodiversity impact measurements and impact evaluation of biodiversity on business'.

She has a background in environmental science, and holds a bachelor's degree in natural resources and a masters in environmental economics.

Agenda

What is biodiversity?	1
Why is biodiversity relevant to you and your value chain?	2
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1

What is biodiversity

What is biodiversity?

Biodiversity is the abbreviated word for **biological diversity**, meaning the variety of life on our planet. This includes the total number of species and varieties within species. All living things, both plants and animals, are included in the term - everything from micro-algae to elephants.
Biodiversity can be split into three different levels:

Ecosystem diversity

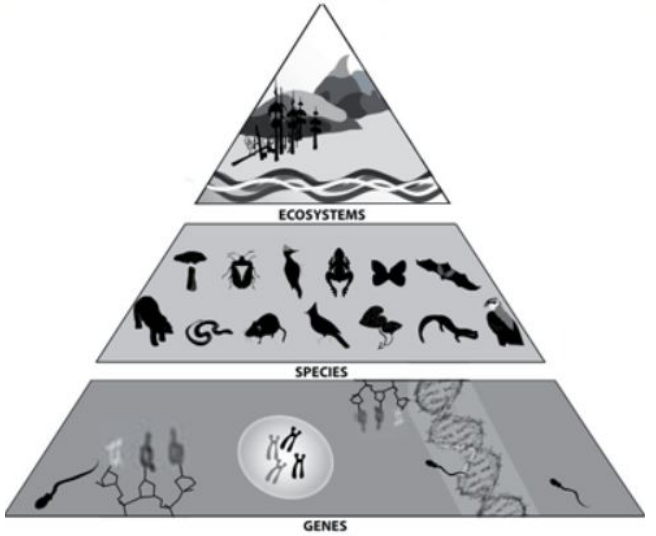
Ecosystem (or ecological) diversity means the richness and complexity of a biological community, including trophic levels (i.e. the food chain), ecological processes, food webs and material recycling (e.g. decomposition)

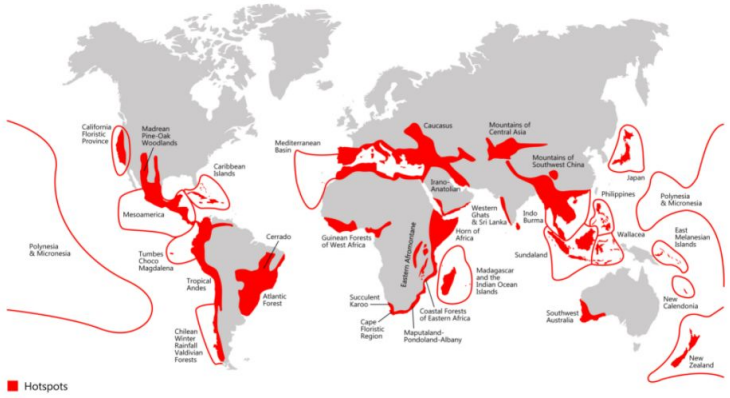
Species diversity

Species diversity describes the number of kinds of organisms within individual communities or ecosystems

Genetic diversity

Genetic diversity is a measure of the variety of versions of the same gene within individual species.





Based on these levels of biodiversity, so-called **biodiversity hotspots** have been defined. Biodiversity hotspots are areas that contain a high degree of biodiversity across especially the species and genetic levels. Most of the world's hotspots are located near the Equator, especially in tropical rain forests and in coral reefs.

Biodiversity loss is at a critical level - also compared to other issues

The state of biodiversity loss, and the relativity to other severe environmental issues has been known for many years.

The planetary boundaries framework, developed in 2009, looks at several environmental issues, in terms of how far they are from being within boundary of what can be considered sustainable. Biodiversity loss is the environmental issue that has transgressed the boundaries the most.

Yet, **biodiversity loss has flown under the public radar for a long time.**

How society and businesses should deal with biodiversity loss is still somewhat undefined.

The upcoming UN Biodiversity Conference, which aims to create a “Paris Agreement for nature” has now been postponed for the 3rd time, and is now planned for April 2022.

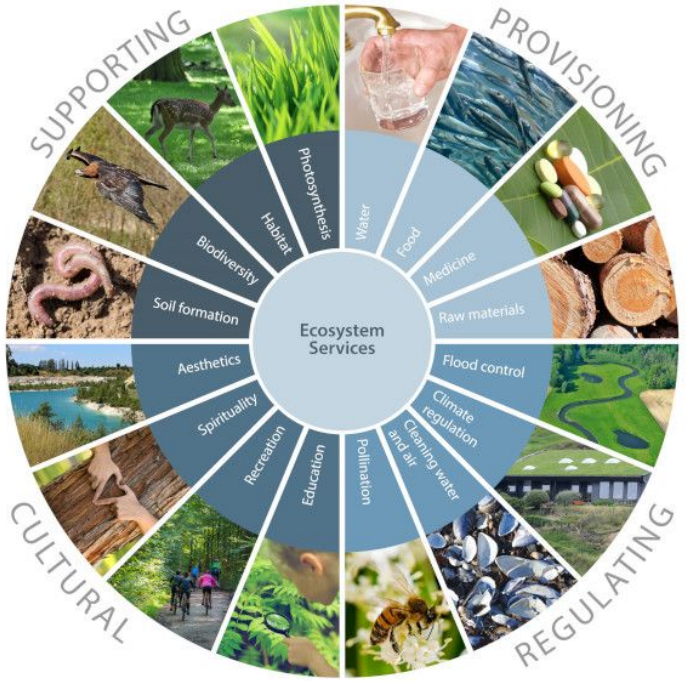
Rockström, J., W. Steffen, K. Noone, Å. Persson, et.al. 2009. Illustration by J. Lokrantz/Azote based on Steffen et al. 2015.

The significance of biodiversity

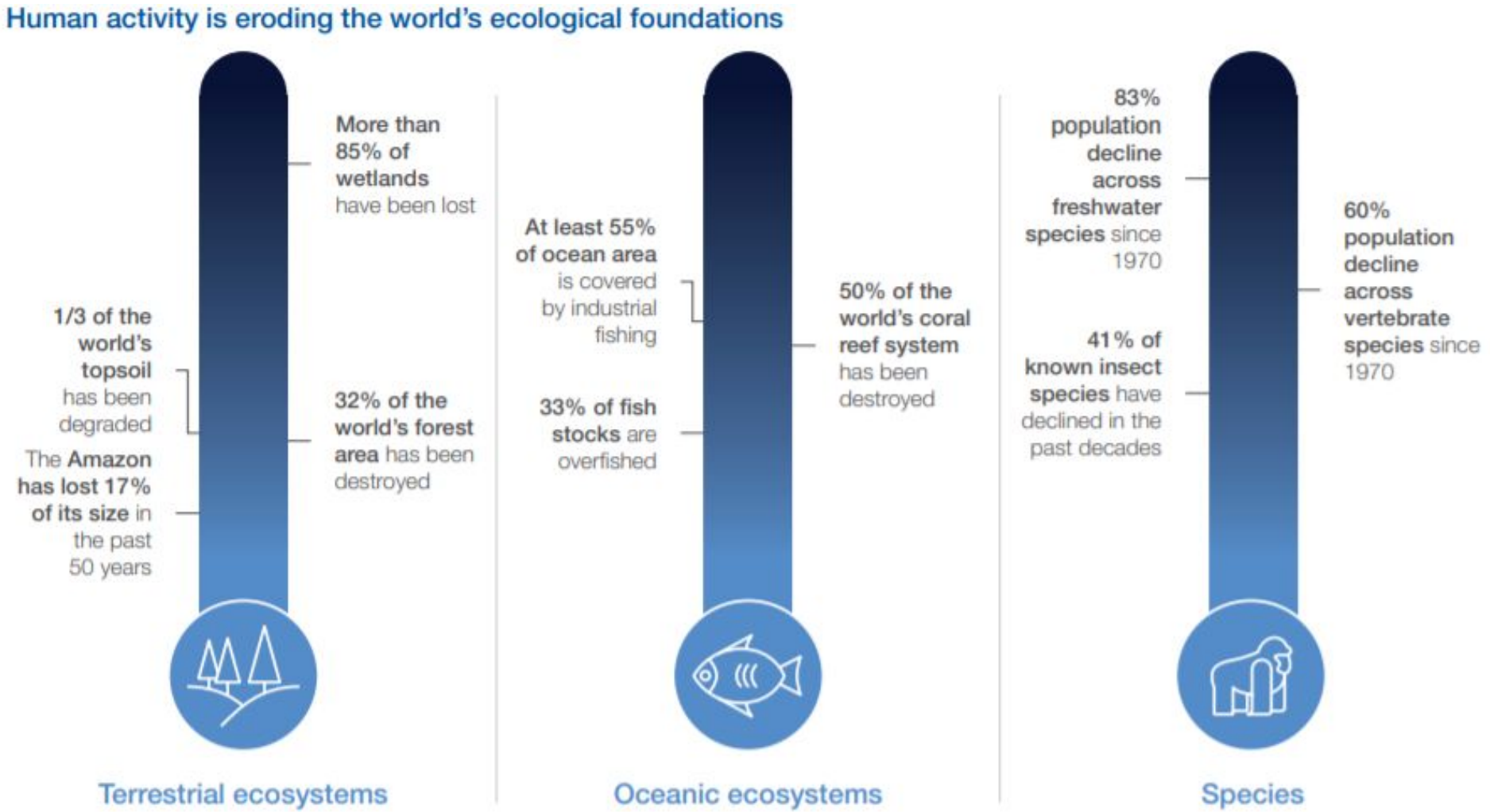
The **biosphere** is a life supporting system to the human race, and each species within the biosphere has its own significance. However, biodiversity is a key aspect in maintaining the viability of the biosphere and the **ecosystem services** it provides.

Ecosystem services is the term used to describe ecosystem functions that are important for human society and the well-being of people around the world. The services are grouped into four major categories:

1. **Provisioning services** that can be extracted from nature to benefit people, i.e. food, drinking water, timber, wood fuel, natural gas, oils, and plants.
2. **Regulating services** that make life possible for people. Plants cleaning air and filtering water, bacteria decomposing wastes, bees pollinating flowers, and trees holding soil in place to prevent soil erosion - all of these processes work together to make ecosystems clean, sustainable, functional, and resilient to change. Regulating services include pollination, decomposition, water purification, erosion and flood control, and carbon storage and climate regulation.
3. **Cultural services** that have guided our cultural, intellectual, and social development through our evolutionary history. Just think of ancient civilizations drawing pictures of animals and plants on cave walls. A cultural service is a non-material benefit that contributes to the development and cultural advancement of people.
4. **Supporting services** without which none of the above would exist. They sustain ecosystems, basic life forms and people. The consistency of underlying natural processes, such as photosynthesis, nutrient cycling, the creation of soils, and the water cycle is what keeps the Earth inhabitable.



Biodiversity loss across the globe



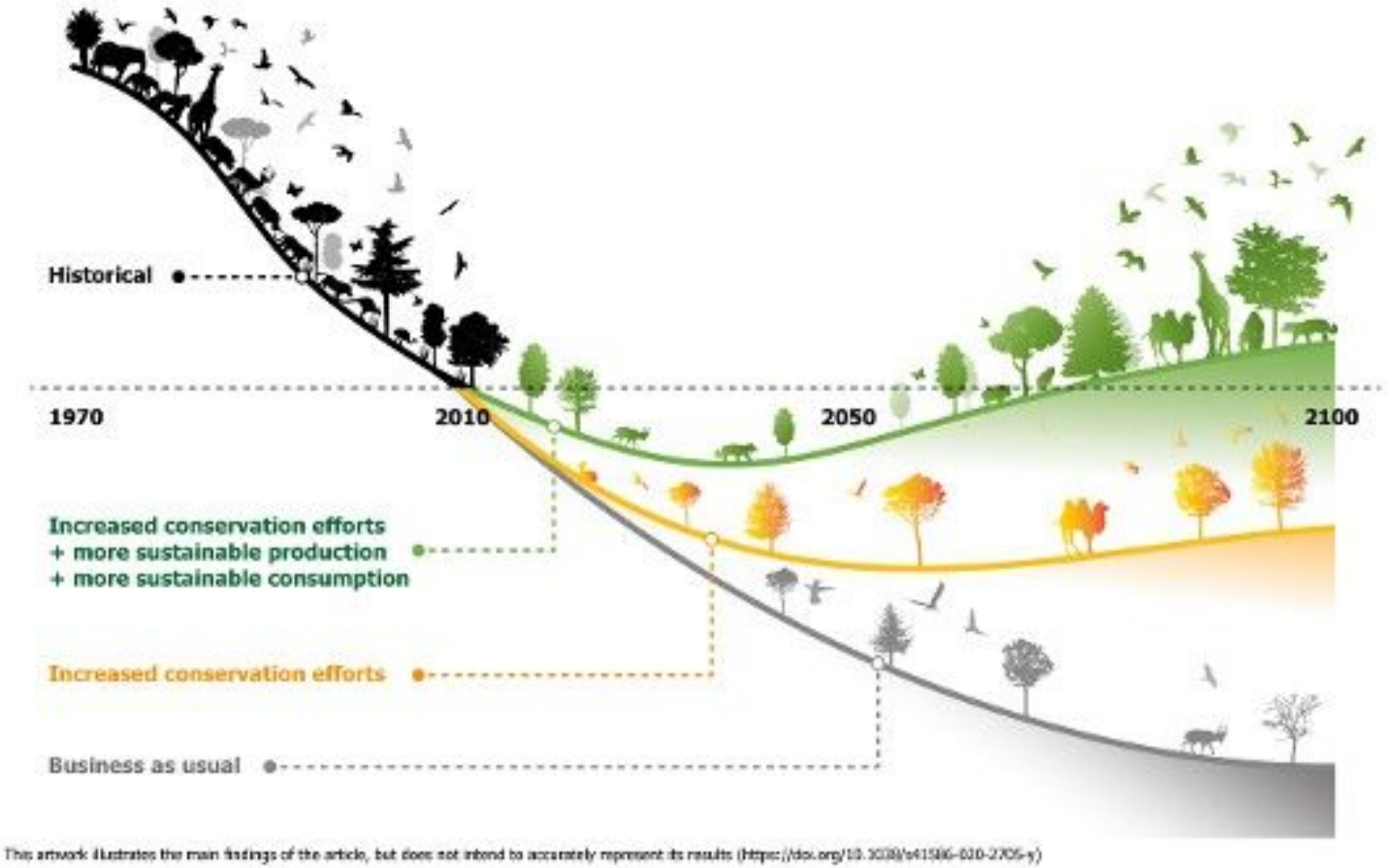
*World Economic Forum: New Nature Economy Report (2020)

Biodiversity loss and the way forward

Historically, we have lost a lot of biodiversity and we have already begun to see the negative effects.

There are 3 options for biodiversity, shown in the graphic:

1. Increasing conversation efforts, which includes more sustainable production and consumption
2. Increasing conversation efforts
3. Business as usual



*Based on the OECD's G7 report: Biodiversity: Finance and the Economic and Business Case for Action (2019)

Sustainable Development Goals (SDGs)

Several of the SDGs feed into the biodiversity agenda.

SDG 12 to advance *responsible consumption and production* urges to cull food waste which will undoubtedly contribute to improving biodiversity in the long run.

SDG 14

Including 6 sub-targets, such as:

1. 'Target 14.1: Prevent and significantly reduce marine pollution of all kinds
2. Target 14.2: Sustainably manage and protect marine and coastal ecosystems

SDG 15

Including 11 sub-targets, such as:

1. Target 15.1: Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services
2. Target 15.2: Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

2

Why is biodiversity relevant to you and your value chain?

Biodiversity - The business case

1

Science has proven that **biodiversity loss is among the top global risks to society** as the planet enters into a phase that has been titled **“the sixth mass extinction”.** The mass extinction of species across the globe has been brought on by anthropogenic activities, including degradation of many of the world’s ecosystems and the services they provide. Today, only 5% of the world’s land mass is left untouched by human activities. The main changes to our ecosystems are driven by land-use change, over-exploitation of natural resources, pollution, spread of invasive species, and climate change.

2

Biodiversity management and sustainable use and management of our natural resources is essential to almost all companies.
Any company that relies on the provision of services from the nature have an obligation and responsibility to respect of and protect biodiversity.

3

Current human activity is undermining the ecosystems and biodiversity that supports all life on Earth, which include crop pollination, water purification, food protection, and carbon sequestration, all of which are vital to human survival and well-being. **These ecosystem services have been estimated to be worth USD 125-140 trillion per year** - i.e. more than one and a half times the size of global GDP. The loss of biodiversity is a costly affair, and between 1997-2011, it was estimated that the world lost USD 4-20 trillion annually in ecosystem services and land-cover change, and USD 6-11 trillion annually from land degradation.

4

Business impacts and dependencies on biodiversity translate into **business risks** - including ecological risks to operations, liability risks, and regulatory, reputational, market and financial risks. Acknowledging and measuring these dependencies and impacts on biodiversity can help businesses and financial organizations manage and prevents biodiversity-related risks, while harnessing new business opportunities.

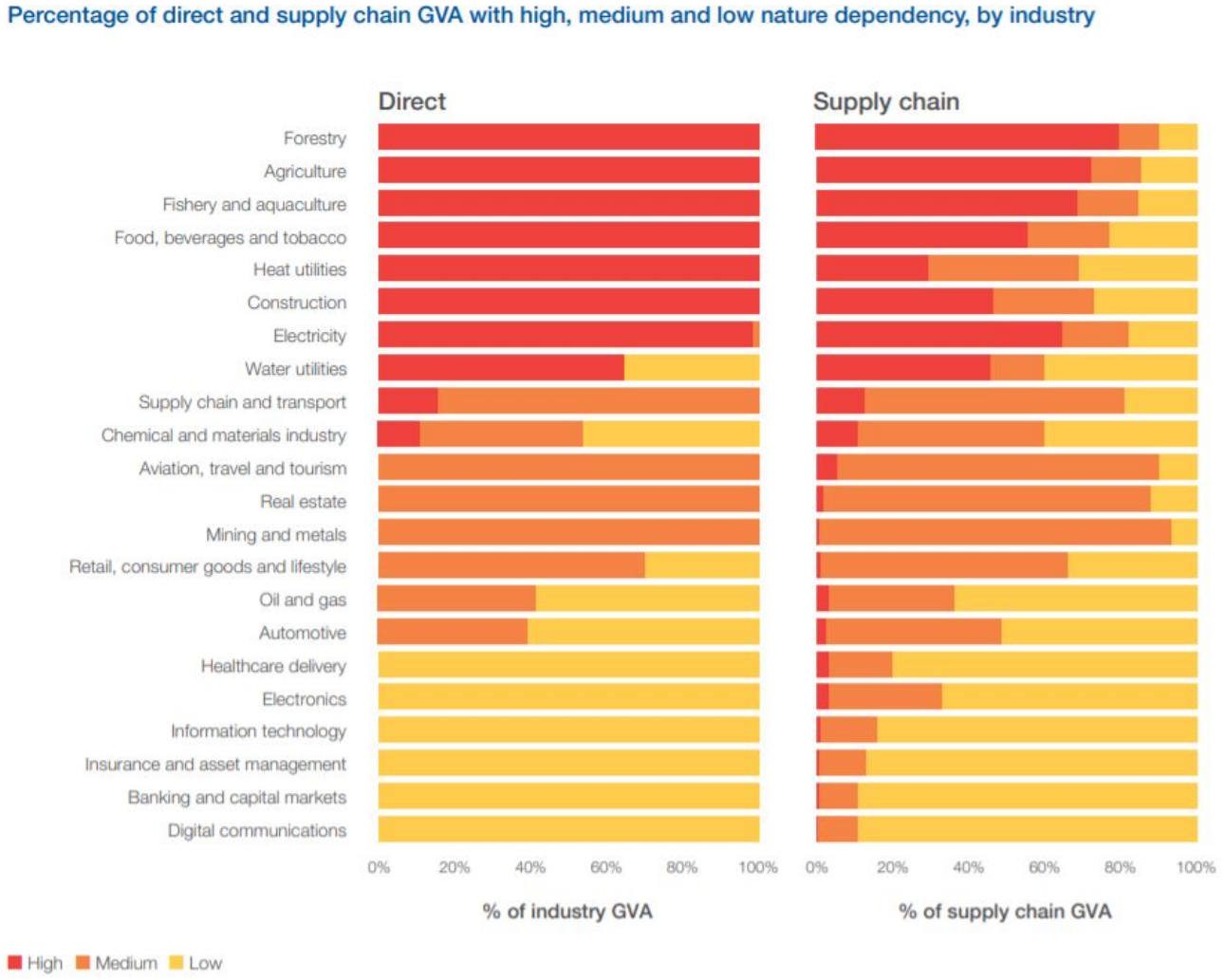
Who picks up the bill for nature loss?

Any business has an impact on biodiversity, either directly or indirectly through the supply chain or its investments.

The WEF New Nature Economy Report in 2020, focuses on the **correlation between biodiversity and ecosystems services and the global economy**.

Industries that are highly dependent on nature generate 15% of global GDP (USD 13 trillion), while moderately independent industries generate 37% (USD 31 trillion).

Together, the three largest sectors that are highly dependent on nature - - construction, agriculture, and food and beverages- generate close to USD 8 trillion of gross value added (GVA). This is roughly twice the size of the German economy. These sectors rely on extraction of natural resources or the provision of ecosystem services such as healthy soils, clean water, pollination and a stable climate. As nature loses its capacity to provide such services, these sectors could suffer significant losses.



*World Economic Forum - Nature Risk Rising: Why the Crisis Engulfing Nature MAtters for Business and the Economy (In collaboration with PwC) - January 2020

Stakeholder expectations are becoming more vocal

Public perception	Financial stakeholders	Regulatory requirements
Public perception is shifting, especially among millennials and generation Z. Globally there have been major consumer shifts on e.g. single-use plastics, meat consumption, and other ethical consumer considerations. A typical company in e.g. the fashion and textile industry, can often be resource- and water-intensive, chemical-heavy and a significant generator of waste. This also affects recruitment of new talent, as the majority of millennials won't take a job if their employee does not have a progressive strategy to address global sustainability challenges. **Consumers are becoming more aware of the environmental damage** caused by the industry and are demanding action. As an example, shifting consumer preference is seen in the meat industry. Beef consumption in the United States fell by 19% between 2005-2014, and Europe predicts that both beef and pork meat consumption will decline by 2030.	Consumers are not the only stakeholders that are demanding more from businesses. **Nature-related disclosures are now included in assessment by ratings agencies (e.g. CDP), while institutional investors are demanding more accountability for the environmental risks of business operations**. Companies will incur higher costs of capital when engaging in nature-degrading practices. NGOs are demanding that changes be made to how we utilise our natural resources, and investors are increasingly taking ESG issues into account in their investment decisions	**Regulatory requirements are on the rise**, putting pressure on businesses to measure and assess their impact on biodiversity and ecosystems. It is highly relevant for businesses to begin reporting on biodiversity; not doing so may have reputational and financial repercussions.

What does this mean for Danish companies?

All Danish companies will experience the same growing scrutiny as multinational companies will when it comes to operational impacts on nature, ecosystems and biodiversity. Many effects are still unknown, but it is known that a loss of biodiversity will limit innovative discoveries of new products, disrupt supply chains by decreased availability of natural resources, lowering sourcing options and maneuverability that leads to higher costs and risks.

Emerging regulatory requirements will soon make it mandatory for financial institutions and non-financial companies to report on their impact on ecosystems and biodiversity.

Stakeholders expect and demand action from businesses to protect and improve the natural environment beyond climate change. This will induce an increasing demand from customers to companies to go from **risk minimization to value creation** in relation to biodiversity, and companies will need to adjust and tailor their offerings and supply chains much quicker.

All of this underscores how biodiversity is also a **business opportunity** for Danish companies if they manage to **measure and assess their environmental impacts in a broader scope, including biodiversity.**

3

Measuring and reporting on biodiversity

What to report and where?

To date, there are a few formalized reporting processes for corporate reporting on biodiversity, and these mainly consist of questions incorporated into more comprehensive questionnaires.

Reporting requirements

The reporting organization shall report the following information:

a. For each operational site owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas, the following information:

i. Geographic location;

ii. Subsurface and underground land that may be owned, leased, or managed by the organization;

iii. Position in relation to the protected area (in the area, adjacent to, or containing portions of the protected area) or the high biodiversity value area outside protected areas;

iv. Type of operation (office, manufacturing or production, or extractive);

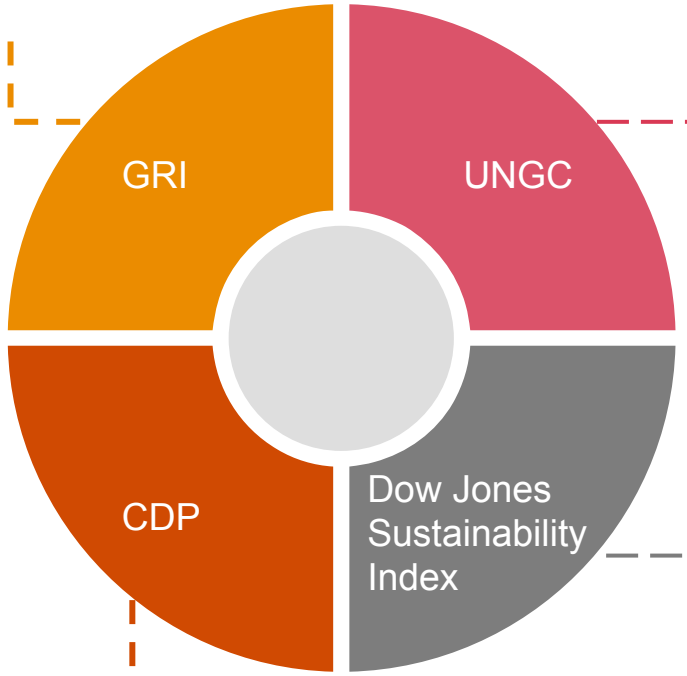
v. Size of operational site in km² (or another unit, if appropriate);

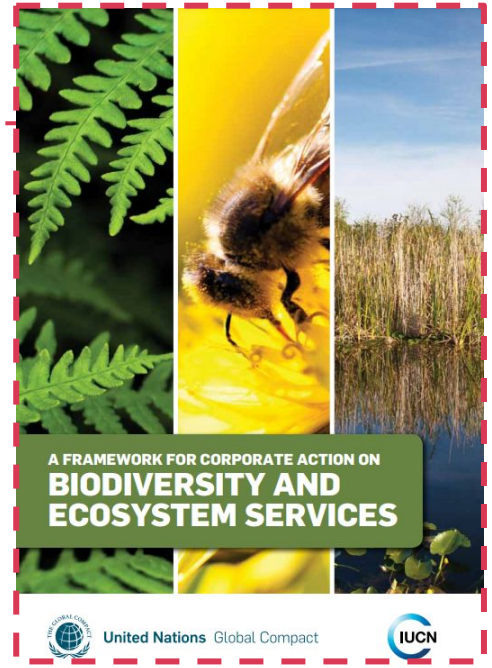
vi. Biodiversity value characterized by the attribute of the protected area or area of high biodiversity value outside the protected area (terrestrial, freshwater, or maritime ecosystem);

vii. Biodiversity value characterized by listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation).

Reporting recommendations

2.1 When compiling the information specified in Disclosure 304-1, the reporting organization should include information about sites for which future operations have been formally announced.





- **Biodiversity Commitment (NEW):** A company is required to publicly disclose its commitment on biodiversity which includes the following elements:
  - No operations in World Heritage Areas and IUCN Category I-IV protected areas
  - Application of the Mitigation Hierarchy steps (avoidance, minimization, restoration, and offset) when operating in areas with globally or nationally important biodiversity
  - Partnership with an external expert. This may be a local expert if this expertise is science based. It is not required to have a partnership on a global level
  - Target for No Net Loss or Net Improvement
- **Biodiversity Exposure & Assessment (NEW):** Similar to the Supply Chain Management and Human Rights question, a company is requested to provide information on periodic assessments on biodiversity on their production sites. Furthermore, information on management plans and mitigation actions have to be in place. Scoring is based on having a low potential of exposure in areas with important biodiversity.

Module no.	Module	Section	2021 Question no.	2020 Question(s) no.	2021 question	Linked questions	Minimum version
F0	Introduction	Introduction	F-MM0.7a/F-CO0.7a	F-MM0.7a/F-CO0.7a	Please report your exclusions and describe their potential for biodiversity-related risk.	F-MM0.7/F-CO0.7	No
F0	Introduction	Introduction	F-MM0.6/F-CO0.6	F-MM0.6/F-CO0.6	Select the option that best describes the reporting boundary for which biodiversity-related issues are being reported?		No
F0	Introduction	Introduction	F-MM0.7/F-CO0.7	F-MM0.7/F-CO0.7	Please report your exclusions and describe their potential for biodiversity-related risk.	F-MM0.7a/F-CO0.7a	No

Measuring biodiversity for reporting purposes

Corporate Ecosystem Valuation (CEV)	How to apply CEV
The IUCN (International Union for Conservation of Nature) has created a set of recommendations and tools for measuring biodiversity for corporate reporting purposes - Corporate Ecosystem Valuation (CEV). The report recognizes the value of biodiversity. The methodology was developed by the World Business Council for Sustainable Development (WBCSD). CEV is essentially a process to make well-informed business decisions by valuing ecosystem degradation and benefits provided from ecosystem services, which impact the financial bottom-line as well as corporate performance in relation to social and environmental goals.	CEV can be applied to any type of business in any sector, and typically falls within one of the following four generic applications: 1) Calculate the change in value of ecosystem services associated with trade-offs between alternative scenarios and their related impacts; 2) Value the total benefit of ecosystem services; 3) Assess the distribution of ecosystem service costs and benefits across different stakeholder groups; 4) Determine sources of revenues and compensation packages relating to ecosystem service

The EU Taxonomy includes reporting on biodiversity

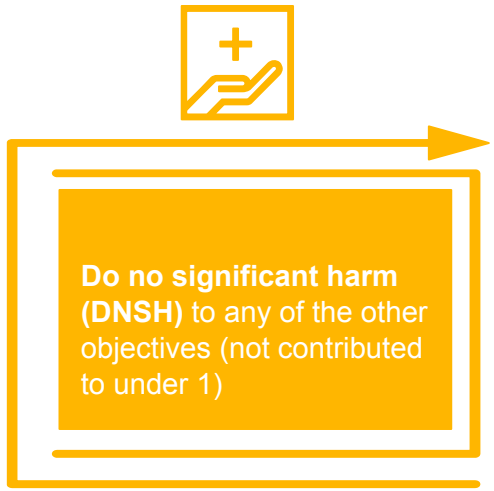
The Taxonomy Regulation specifies that large companies (covered by the NFRD) are obliged to report the following:

- The proportion of their turnover derived from products or services associated with *environmentally sustainable economic* activities.
- The proportion of their total investments (CapEx) and expenditures (OpEx) related to assets or processes associated with *environmentally sustainable economic* activities.

This applies for activities within the area of biodiversity from January 1st 2023

The EU Taxonomy on sustainable activities is a union classification of environmentally sustainable economic activities depending on **6 environmental objectives** and defined **technical criteria**.

Meaning that the economic activity should *substantially contribute* to at least one of 6 objectives. This should be done either through own performance or by enabling other activities (other activities that make a substantial contribution) - as defined by the technical screening criteria.



Meaning that if the economic activity for example *substantially contributes* to Climate change mitigation, then it cannot lead to any significant harm concerning the other environmental objectives.

The economic activity must comply with minimum safeguards such as OECDs Guidelines for Multinational Enterprises, UNs Guiding Principles on Business and Human Rights, ILO Declaration on Fundamental Principles and Rights at Work and The International Bill of Human Rights

The EU Taxonomy: What does this mean for biodiversity?

Substantial contribution to the protection and restoration of biodiversity and ecosystems

An economic activity shall qualify as contributing substantially to the protection and restoration of biodiversity and ecosystems where that activity contributes substantially to protecting, conserving or restoring biodiversity or to achieving the good condition of ecosystems, or to protecting ecosystems that are already in good condition, through:

- (a) nature and biodiversity conservation, including achieving favourable conservation status of natural and semi-natural habitats and species, or preventing their deterioration where they already have favourable conservation status, and protecting and restoring terrestrial, marine and other aquatic ecosystems in order to improve their condition and enhance their capacity to provide ecosystem services;
- (b) sustainable land use and management, including adequate protection of soil biodiversity, land degradation neutrality and the remediation of contaminated sites;
- (c) sustainable agricultural practices, including those that contribute to enhancing biodiversity or to halting or preventing the degradation of soils and other ecosystems, deforestation and habitat loss;
- (d) sustainable forest management, including practices and uses of forests and forest land that contribute

Technical criteria will be available on January 1st 2022

Do no significant harm to biodiversity (applied under the technical annex for climate change mitigation and adaptation)

APPENDIX D: GENERIC CRITERIA FOR DNSH TO PROTECTION AND RESTORATION OF BIODIVERSITY AND ECOSYSTEMS

An Environmental Impact Assessment (EIA) or screening[333] has been completed in accordance with Directive 2011/92/EU[334].

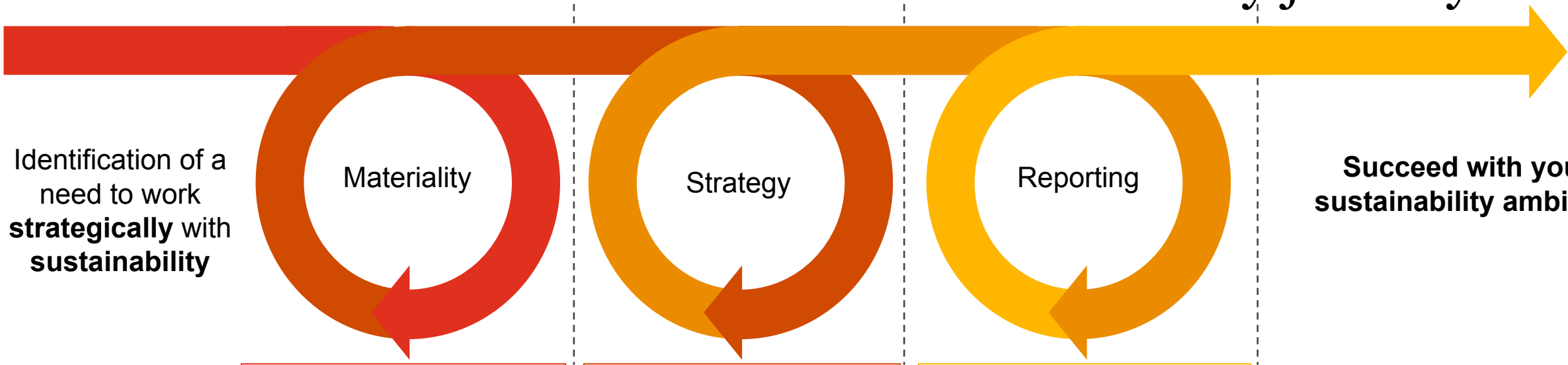
Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.

For sites/operations located in or near biodiversity-sensitive areas (including the Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas, as well as other protected areas), an appropriate assessment[335], where applicable, has been conducted and based on its conclusions the necessary mitigation measures[336] are implemented.

4

How to work with biodiversity in practice

Our recommendation is to make the sustainability journey



Identification of a need to work **strategically** with **sustainability**

Succeed with your sustainability ambition

Materiality assessment
Understanding your **material sustainability topics** can help you unlock a range of **opportunities** and mitigate any **material risks**. It will help you identify the key focus areas to inform strategy and reporting, and drive performance.

Strategy development
Integrating your material sustainability topics into a **purpose and vision driven sustainability strategy** will enable you to integrate sustainability into **your business** and **mitigate risk** and **benefit from opportunities** that the sustainability agenda gives.

Reporting framework
Having a **robust, transparent and coherent** reporting framework that enables you to report **effectively** on your sustainability strategy will help you meet stakeholder expectations and regulatory requirements, as well as enhance access to capital.

Examples of how to work **biodiversity** into your sustainability framework

Assess your **business model** and **value chain** and address which part of your value chain has the biggest impact on biodiversity.

Examples: Raw material purchase, office locations, operations in biodiversity vulnerable areas

Based on the materiality assessment, select a few **strategic focus areas/KPIs** and create a biodiversity action plan that is relevant to your business' specific environment.

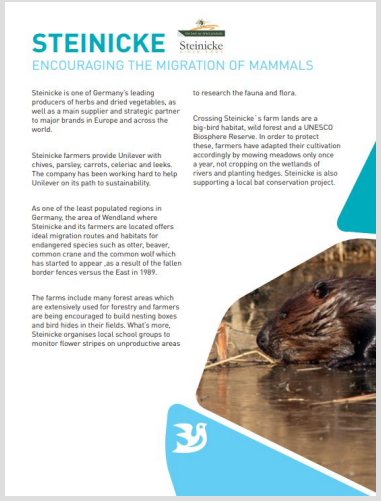
Examples: Impact on vulnerable species, operations in high value biodiversity areas (raw material purchase)

Implement specific **metrics** and **targets** related to the chosen KPIs, and report on **performance** annually. Eventually, get limited assurance on the reported data.

Examples: Area laid out as "wild" in own operations, impacted red list species

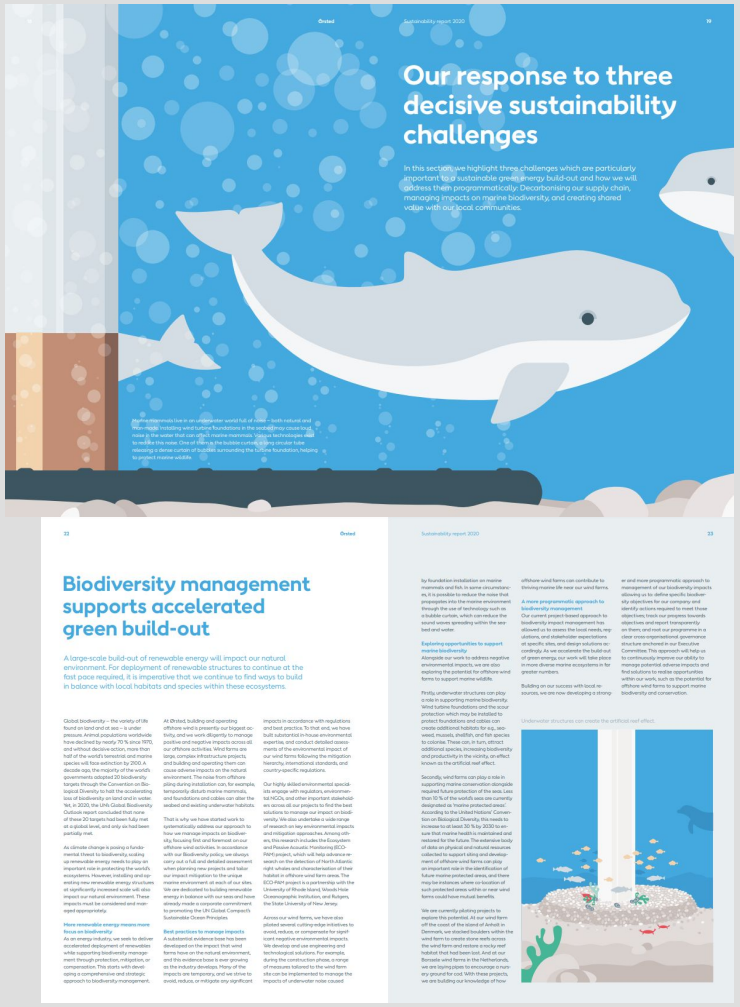
Example - Unilever

PwC UK has worked with Unilever for nine years, providing, amongst other, limited assurance on Unilever's commitment to Nutrition and Sustainable Sourcing



Example 2 - Ørsted

PwC has worked with Ørsted, providing limited assurance on GRI indicators related to biodiversity for the past two years.



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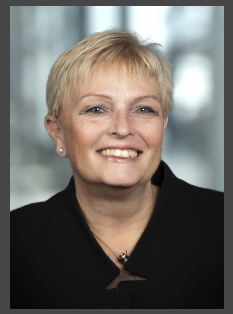
Q&A

Thank you for your time.



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