

Ørsted

Offshore wind biodiversity policy

The world is in the middle of a global climate crisis. It is not a distant threat. The planet is already feeling the grave impact of climate change, which is a significant threat to biodiversity. Green energy makes a major contribution to mitigating climate change. That is why we want to create a world that runs entirely on green energy.

Today, Ørsted is one of the largest green energy developers in the world, and we have deployed more offshore wind capacity than any other company. We commit to grow our wind power business sustainably and in our [Sustainability Commitment](#), we commit to operating in a way that creates progress towards the UN Sustainable Development Goals (SDGs). That is why we take responsibility to ensure that wind energy and wildlife thrive together.

Deploying wind power offshore brings along special flora and fauna considerations — and every offshore wind farm site has its own unique natural environment. Some of the focus areas include the installation of wind turbine foundations which can have an impact on marine mammals due to noise disturbance. The installation of transmission cables can have an impact on seabed ecosystems and coastal environments. Wind turbine blades may pose a risk to seabirds in flight.

This offshore wind biodiversity policy sets out the principles that underpin Ørsted's efforts to protect the natural environment in the areas where we construct and operate offshore wind farms.

Principles for protecting biodiversity

The development of an offshore wind farm typically takes three to ten years and includes the assessment of environmental impacts. Following the development phase, which includes having gone through the relevant decision-making processes, and after obtaining relevant

approvals from the regulatory authorities, construction can commence. The construction of an offshore wind farm typically takes two to three years. Once the construction phase is completed, the offshore wind farm comes into operation and will start generating electricity. The typical lifetime of an offshore wind farm is around 25 years, though this can vary.

Protecting biodiversity is an integral part of the way we work from early project development, through the construction phase and during the operational phase. We adhere to the mitigation hierarchy principles of avoiding, reducing and restoring potential biodiversity impacts. Through this, we contribute to the SDGs 14.2 and 15.5 on 'Life below water' and 'Life on land'.

Choosing the wind farm location

During the development phase of an offshore wind farm, the choice of location is crucial for protecting marine and coastal ecosystems. In some cases, the decision of where to locate an offshore wind farm is taken by public authorities. However, in most cases, Ørsted, as the offshore wind farm developer, is very much involved in selecting the location for our offshore wind farms. In the cases where we can influence the location of an offshore wind farm, we undertake detailed environmental assessments to understand the environmental impacts of an offshore wind farm site.

During this phase, we undertake extensive stakeholder dialogue to understand local considerations and sensitivities of potential offshore wind farm locations.

Ørsted strives to start this dialogue very early in the development process to take into account stakeholder views, new sensitivities and local information. Based on this input, we explore how we can mitigate potential environmental impacts in the best possible way. In particular, we:

- **ensure that our offshore wind farms are appropriately and responsibly sited** in cases where we are responsible for choosing the site and precise location of the offshore wind farm. Our global team of environmental specialists perform analyses, such as environmental impact assessments (EIAs), in the development phases of all projects. We take the required steps to ensure that all concerns identified are considered before initiating construction. Through detailed planning and in collaboration with authorities, we determine the specific location of wind turbines and cables to avoid unacceptable or significant impacts on the marine and coastal environment, including considering rare species or habitats.
- **ensure within predetermined sites that we reduce any significant impact on sensitive species and ecosystems.** In some countries, public authorities select the offshore wind farm sites and assess environmental impacts. It therefore varies how much we, as the developer can influence the site selection. If a site overlaps with a sensitive area of high biodiversity value, we commit to avoid or reduce potentially unacceptable or significant negative impacts on biodiversity. In these situations, assessment criteria are similar to above-mentioned and decisions to reduce impacts are taken in collaboration with public authorities.

Minimising impacts during construction

Despite careful planning during the development phase, the construction of an offshore wind farm may potentially impact local ecosystems. However, the duration of the construction phase is relatively short, two to three years from beginning to end of construction. In planning and carrying out construction, we continue to engage with our stakeholders. Our dialogue enables us to be responsive to stakeholder concerns and ensures we meet our mitigation

requirements that were agreed with authorities during the development phase to reduce impacts on habitats and species. For example, we:

- **mitigate potential impacts due to underwater noise from piling foundations.** Marine mammals may potentially be disturbed by underwater noise created during the installation of offshore wind turbine foundation piles. Our environmental team includes qualified marine biologists and acoustic experts with a deep understanding of the marine environment and its complex interactions with offshore wind farms. We implement a range of measures, including limiting the duration, intensity or extent of potential disturbing activities that cannot be completely avoided. New technologies are developed continuously and we engage with leading scientists and engineers to be at the forefront and support development of the best available science and technology.
- **reduce impacts on seabed and coastal ecosystems to a minimum.** Installing an offshore wind farm can result in impacts on the seabed flora and fauna, for example through installing cable trenches. We survey to ensure strong consideration of natural habitats before and after installing cables in seabed and coastal environment. We appropriately manage, monitor and mitigate unavoidable impacts to levels acceptable according to local conditions and ongoing liaison with authorities.

Monitoring of impacts during operation

The operational life time of an offshore wind farm is on average 25 years. The offshore wind farm will be serviced with inspections and occasional replacement of components. In this phase, we also monitor habitats, flora and fauna in accordance with the authorities' requirements, for example for sensitive species identified in the environmental assessments. The monitoring during operation is often multi-purpose. It serves to validate the expectations in terms of potential impacts identified in the development phase in environmental assessments, it reveals potential long-term effects on biodiversity, it helps to guide monitoring scope for future projects, and it helps de-risk future projects. In particular, we:

- **monitor during operation until projected impacts prove as anticipated.** We manage a range of mandatory and voluntary environmental monitoring programmes. Through the monitoring, we gain knowledge from our entire offshore wind farm portfolio that can be applied in future projects. As an example, we contribute with evidence about the risk to seabirds from offshore wind turbines in operation as this is a focus area for many stakeholders.
- **initiate appropriate responses in the case of unforeseen impacts.** If environmental monitoring reveals unforeseen negative impacts on biodiversity, we will seek to substantiate this further and explore implications with authorities, however, we strive to avoid this occurring through careful planning and stakeholder engagement at earlier stages of wind farm development and construction.

Building knowledge

Despite the ongoing and increasing body of knowledge on offshore wind farms' impacts on biodiversity and wildlife, the area is still facing knowledge gaps and scientific uncertainties. Therefore, we need to continue to build knowledge to support decision-making with evidence that offshore wind power, biodiversity and wildlife can coexist, and particularly as offshore wind moves into new marine environments.

With more than 25 years of experience in offshore wind, our in-house knowledge base is substantial. We commit to continuing to collaborate with authorities, industry peers and societal stakeholders, such as environmental NGOs, nature conservation groups, charities, and universities to expand the available body of knowledge. Beyond knowledge obtained through environmental assessments and monitoring, we voluntarily finance several R&D activities within the areas of highest concern among our stakeholders. These include studies of marine mammal and bird behavior around offshore wind farms.

Governance

This policy applies to Ørsted Wind Power A/S and its subsidiaries. As every offshore wind farm site has its own unique natural environment, the principles are implemented in accordance with local environmental conditions and in compliance with local regulations. We have a close dialogue with stakeholders both at governmental level and local community level, and in relevant fora and organisations to discuss and find solutions to the biodiversity topics we face.

We have a separate policy for local stakeholder engagement, which ensures that we act as a trustworthy collaboration partner in the green transformation. We communicate about our biodiversity activities on our website and in our annual sustainability report.