



# Environmental Assessment of Offshore Windfarm Tenders

**The environmental assessments for Offshore Wind Farms in Denmark follow a well-known international assessment approach.**

The environmental assessments for Offshore Wind Farms (OWF) in Denmark follow a well-known international assessment approach as laid down in the EU-directives on Strategic Environmental Assessment (SEA)<sup>1</sup> and Environmental Impact Assessment (EIA)<sup>2</sup>.

Firstly, prior to the tender deadline of the OWF, the Danish Energy Agency (DEA) in collaboration with Energinet (Danish TSO) completes a SEA of the plan and conducts preliminary site investigations for each specific site. Secondly, the bid winner of the tender further undertakes an EIA of the specific project in order to obtain the final construction license.

## Strategic environmental assessments

The SEAs are based on the areas included in the tenders published in April 2024 by the DEA. The plan outlines the selected sites, potential MW-capacity, the expected elements constituting the entire OWF (facilities on sea and land until Point of Connection (POC)) as well as relevant political and administrative decisions<sup>3</sup>. One SEA is done for the three sites in the North Sea, one SEA for the two sites Kattegat and Kriegers Flak II and one SEA for Hesselø.

The SEAs rely on existing, available knowledge and data at the time of the assessments; the environmental survey

---

<sup>1</sup> Directive 2001/42/EC

<sup>2</sup> Directive 2011/92/EU as amended by Directive 2014/52/EU

<sup>3</sup> Planning documents for the individual sites are available at [www.ens.dk](http://www.ens.dk)



data from the preliminary site-investigations are not available in time to be included in the SEAs. The environmental assessments in SEAs encompass various scenarios, including but not limited to turbine size, number of turbines, capacity, construction method etc.

Aside from ensuring compliance with Danish law on environmental assessment for offshore wind tenders<sup>4</sup>, SEAs also aim to identify potential environmental issues at an early stage. These issues must be considered by later project developers when designing the future project and further assessed in the EIAs of the individual projects.

### Preliminary site-investigations prior the tender deadline

In addition, Energinet, mandated by the DEA, conducts site-investigations, including a wide range of geophysical, geotechnical and environmental surveys. All data and reports from these surveys are made available to bidders in the tender processes. The schedule for finalizing and releasing the survey data can be found on the DEA website for preliminary investigations ([link](#)).

The purpose of the site-investigations is to provide essential input data for project developers before bidding, helping to reduce bid risk and minimize the need for additional site-investigations and environmental surveys later in the project development process and during EIA of the individual projects<sup>5</sup>.



---

<sup>4</sup> LBK nr. 4 af 03/01/2023

<sup>5</sup> Note that not all site-investigations will be available by bid deadline, see schedule for release of preliminary site-investigations on DEA website.



The surveys and reports contain data regarding seabirds, bats, marine mammals, benthic habitats, safety of navigation, radio links and radar, fisheries, marine archaeology, underwater noise, meteorology, oceanography and geophysical and geotechnical aspects of the seabed.

### Environmental Impact Assessment and municipal planning documents - onshore

In parallel with the SEAs and the offshore preliminary site-investigations, Energinet undertakes EIAs of the onshore projects. The EIAs separately process both the part of the project that Energinet will develop and maintain at the 400 kV grid connection point (POC) and the part of the onshore project, which is the responsibility of the bid winner. This part covers the cable routes from the landfall point, to the onshore reactive compensation station and the onshore high-voltage substation. The purpose of this is to fast-track the process, as a permit for the entire onshore part of the project will be available sooner, than if the project developer were to initiate the EIA-process for their part of the onshore part after winning the tender.

The EIAs assume a 1,000 MW<sup>6</sup> connection to the grid and a cable route consisting of two parallel cable systems to the substation. For further details, see the

specific project description on the EPA's webpage<sup>7</sup>.

After receiving an EIA-permit, Energinet transfers the permit, including its terms and conditions set by the Danish Environmental Protection Agency (EPA), to the individual project developers.

Parallel to the EIA-process for the onshore part of the projects, Energinet applies for local municipality planning documents relevant to the EIA-permit. The planning authorities must approve these planning documents before EIA-permits are issued.

If the project developer intends not to make use of the EIA and EIA-permit for their part of the onshore project provided by Energinet, or wish to take over the ongoing EIA-process for their part of the onshore project, the developer must provide the EIA-permit and local municipality planning documents on their own. This presumably involves a new process for scoping of the EIA, conducting relevant environmental surveys, preparing the EIA-report and planning documents and conducting public consultations with the relevant EIA- and planning authorities<sup>8</sup>.

#### *Other permits etc. onshore*

In addition to the EIA-permit and planning documents, the project developer will also need to apply for and obtain relevant local permits and dispensations before the construction. For the offshore part of the project the construction license issued by the DEA after § 25 in the Renewable Energy

<sup>6</sup> 1,200 MW for Hesselø OWF.

<sup>7</sup> E.g. for the North Sea I A3 <https://mst.dk/erhverv/rig-natur/miljoevurdering/igangvaerende-miljoevurderinger/landanlaeg-til-nordsoeen-i-a3-vedersoe-klit-til-idomlund>

<sup>8</sup> The relevant EIA-authority depends upon the extension of the project and whether the developer is a state-owned entity, like Energinet. If the project extends across one or two municipalities, the relevant authority will be the municipalities – potentially

through a coordinated procedure if not other has been stated from the Minister of Environment. If the project extends across three or more municipalities, the Danish EPA will be the relevant authority for the EIA-process according to the Environmental Assessment Act. Likewise, if Energinet is the project developer applying for the EIA-permit, the EPA will be the relevant authority for the EIA-process. If a private developer applies for an EIA-permit the relevant authority for the EIA-process will be the municipality.



Act lists the major approvals needed as well as requirements for coordination with other authorities, e.g. on maritime safety. This is not the case for the EIA-permit for the onshore part of the projects. Currently, the DEA is working on a guidance document that provides an overview of the various permits etc. needed by different authorities for the onshore project. The final document will be available at the DEAs webpage.

#### *Power-to-X*

The EIA for the onshore part of the project prepared by Energinet and the EIA-permit obtained by Energinet and transferred to the project developer does **not** include a Power-to-X scenario. This is due to a lack of knowledge of the capacity needed, possible facilities in relation to product, technology, size and location at the time of the EIA-process. Power-to-X facilities will therefore need a separate EIA-and permitting procedure, which is to be coordinated between the project developer and the relevant authority, either the local municipality or the Danish EPA depending on the characteristics of the Power-to-X facilities.

### **Environmental Impact Assessment – offshore and further preliminary site-investigations by project developer**

#### *Preliminary site-investigations*

Following the finalized and signed concession agreement between the project developer and the DEA, the DEA issues a preliminary investigation license to the project developer upon an application. The DEA expects to be able to issue the license for preliminary site-investigations shortly after the signing of the concession

agreement, if the developer applies for the license as fast as possible. Additionally, the scope of the site-investigations must be clearly defined in the application, in particular regarding expected equipment to be used as well as timing and duration of site-investigations.

The license will contain requirements concerning underwater noise, impacts on marine mammals, an environmental monitoring program and other requirements to prevent possible damage of the environment for the given area.

The preliminary investigation license will grant the project developer rights to explore the project area further e.g., for exploration of the seabed for potential unexploded ordnance, sampling of the seabed structure for the final turbine locations etc. The preliminary investigation license can contain requirements that collected environmental data and data on the seabed must be made publicly available. This can be achieved by reporting data to relevant public data portals and/or handing data over to the DEA. The details on making the site-investigation data available will be agreed between the project developer and the DEA.

#### *EIA on offshore project and permits for construction and energy production*

The issuing of the license for preliminary site-investigations will also initiate the EIA-process for the offshore project. During the first phase of the EIA-process, known as the scoping phase, there will be a consultation involving the public and relevant authorities. After the consultation, the DEA will issue a scoping document to





the developer for the EIA-report. The document will outline potential environmental impacts from the project that will need to be addressed e.g.: underwater noise, airborne noise, impacts on seabed, hydrology/hydrography, fisheries, maritime safety, marine mammals and migrating birds etc. The project developer is solely responsible for gathering relevant data for the EIA-report. The results from the environmental preliminary site-investigations done by Energinet prior to the project are expected to form part of the basis for the EIA-report.

There will be a second consultation of the public and public authorities after completion of the final draft report and approval of the report by the DEA. ESPOO-hearings of neighboring countries on cross-border environmental impacts will be part of both the first and second public consultation. After the second public consultation, and if no further investigations or assessments are needed, the DEA expects to be able to issue the final construction permit (also containing the EIA-permit) for

the project allowing the developer to proceed to the construction phase. The construction permit will contain a number of terms and conditions that the developer will need to meet e.g. on physical aspects of the project, maritime and navigational safety, limiting underwater noise impacts, environmental monitoring program etc.

Before establishment of the first turbines and delivering initial power, the developer will also need a final production license from the DEA.

#### *Process regarding impacts on radar*

In parallel to the EIA, the project developer will have to start dialogue with the Danish Defense Command on potential impacts on Danish military radar systems and compensation as well as other public radar services. The DEA strongly urge that this dialogue is initiated as early as possible by the developer in order to lower the risk of delays in the project process.



*Process regarding impacts on fisheries*

The developer will also need to start negotiations with the relevant commercial fishery, whose earnings will be impacted

by the project as according to the Fishery Act. The DEA also urge that these negotiations are commenced as early as possible.

**Energistyrelsen**

Carsten Niebuhrs Gade 43  
1577 København V

T: +45 3392 6700  
E: [ens@ens.dk](mailto:ens@ens.dk)

[www.ens.dk](http://www.ens.dk)