European Investment Bank

Luxembourg, 22nd April 2026

Environmental and Social Data Sheet

Overview

Project Name:	GENNAKER OFFSHORE WIND
Project Number:	2021-0763
Country:	Germany
Project Description:	The project involves the design, implementation and operation of a fixed-bottom offshore wind farm with a capacity of up to 976.5 MW, located in the German Baltic Sea.
Invest EU sustainability proofing required	yes
E&S Risk categorisation	high
Project included in Carbon Footprint Exercise:	yes

Environmental and Social Assessment

As the project required the preparation of an EIA under national law, the project is categorised as 'High Risk' as per the EIB's Environmental and Social Policy (paragraph 4.18).

Environmental Assessment

The operation consists of a fixed-bottom offshore wind farm with an installed capacity of up to 976.5 MW, located in the German Baltic Sea. The project will use 63 large turbines with a capacity of 15.5 MW. Its grid connection solution is provided through the OST-6-1 project being implemented by the German transmission system operator (TSO) and consists of a 220 kV AC connection from the offshore site to the onshore grid in northern Germany. The generated electricity is collected via two offshore substations. The export system comprises three 220 kV submarine cable circuits, connecting the offshore substations to a new onshore substation near Gnewitz via approximately 54 km of subsea and 35 km of onshore underground cables.

The project will cover an area of approximately 44.3 km² and the turbines will be installed on monopile foundations in water depths of 12 m to 20 m.

The scope of the Bank's financing covers all components of the offshore wind farm up to the metering point at the offshore substations. The interconnection infrastructure (including the offshore substations) is developed, owned, and operated by the Transmission System Operator (TSO) 50Hertz. These components fall outside the scope of the Bank's financing and are considered associated facilities.

Wind farms fall under Annex II of the EIA-Directive 2011/92/EU as amended by the Directive 2014/52/EU, thereby leaving it to the competent authority to determine if an Environmental Impact Assessment (EIA) is required. In Germany, all offshore wind farms, regardless of their size, are subject to a mandatory EIA under the Environmental Impact Assessment Act (UVPG). Consequently, for this project an EIA was required and carried out under national legislation. The initial EIA process covered the offshore wind farm itself, inter-array cables andthe offshore substations. On 15 May 2019, the project was granted planning approval and licence under the Federal Immission Control Act (BImSchG) for the construction and operation of the wind farm. This approval included 103 wind turbines, two offshore substations and the inter-array cables. The approval process included an EIA Report and Appropriate Assessment in accordance with the Environmental Impact Assessment Directive 2011/92/EU as amended by Directive 2014/52/EU, Birds Directive 2009/147/EC and Habitats Directive 92/43/EEC. Subsequently, the promoter applied for a major modification of the project to install 63 larger turbines, which triggered a new EIA process. This process resulted in an updated EIA Report dated 12 March

2025, and the permitting authority issued a new BImSchG modification approval on 16 December 2025, which was formally announced on 19 December 2025 and constitutes the current environmental permit for the modified project configuration. It is noted that this environmental permit only covers the wind farm and inter-array cables, while the full interconnection infrastructure (two offshore substations, subsea export cables, underground cables and onshore substation) are being developed and will be owned and operated by the TSO.

Elements of the grid connection infrastructure located within the project area were included in the 2019 EIA report (as mentioned above) and included as part of the baseline ("Vorbelastung") in the updated 2025 EIA report, as they were not subject to re-permitting. The remaining sections of the grid-connection infrastructure, developed by the TSO, are authorised separately. The grid connection (known as OST-6-1) is subject to a full, multi-stage Environmental Impact Assessment under German and EU law, with completed EIA documentation for offshore and onshore sections already submitted to the competent authorities and final approvals still pending.

The offshore wind farm site lies within a designated priority area for offshore wind energy in the German Baltic Sea, as defined by German spatial planning instruments for marine renewable energy. The German Federal Maritime and Hydrographic Agency's (BSH) Site Development Plan (Flächenentwicklungsplan 2025) and the associated environmental reports set out priority areas for offshore wind energy in both the North Sea and the Baltic Sea; these planning instruments are subject to Strategic Environmental Assessments (SEA) that examine environmental suitability and compatibility with other marine uses, consistent with Germany's maritime spatial planning framework and the requirements of the EU Strategic Environmental Assessment Directive.

The wind farm site does not overlap with any Natura 2000 sites. However, it is located nearby a number of Natura 2000 sites as follows:

- SAC 'Darßer Schwelle' (DE 1540-302), 900m west
- SAC 'Plantagenetgrund' (DE 1343-301), 3 km east
- SCI 'Kadetrinne' (DE 1339-301), 5.2 km west
- SAC 'Darß' (DE 1541-301), 9 km south
- SAC 'Westrügensche Boddenland-schaft mit Hiddensee' (DE 1544-302), 24 km east
- SAC 'Erweiterung Libben, Steilküste und Blockgründe Wittow und Arkona' (DE 1345-301), 23 km east
- SAC 'Recknitz-Ästuar und Halbinsel Zingst' (DE 1542-302), 14.5 km south
- SPA 'Plantagenetgrund' (DE 1343-401), 3 km east
- SPA 'Vorpommersche Boddenland-schaft und nördlicher Strelasund' (DE 1542-401), 3 km south
- SPA 'Binnenbodden von Rügen' (DE 1446-401), 28 km east

The environmental permit concludes that the wind farm will not cause significant adverse effects on the conservation objectives of this or any other Natura 2000 site, nor on the marine environment in general, provided that the prescribed measures and construction standards included in the permit are complied with.

The grid connection infrastructure, which is not part of the financing of this operation and is being separately developed by the TSO, crosses a number of Natura 2000 sites as follows:

- Vorpommersche Boddenlandschaft und nördlicher Strelasund (DE1542401) - Protected under the Birds Directive
- Darßer Schwelle (DE1540302) - Protected under the Habitats Directive
- Ribnitzer Großes Moor und Neuhaus-Dierhäger Dünen (DE1739303) - Protected under the Habitats Directive
- Recknitz-Ästuar und Halbinsel Zingst (DE1542302) - Protected under the Habitats Directive
- Wald bei Altheide mit Körkwitzer Bach (DE1740301) - Protected under the Habitats Directive

- Dänschenburger Moor und Teufelsmoor bei Gresenhorst (DE1840301) - Protected under the Habitats Directive

An Appropriate Assessment was carried out as part of the EIA process, and concluded that with the implementation of the mitigation measures described within the EIA report, the grid connection infrastructure is compatible with the conservation objectives of the affected Natura 2000 sites, with no significant adverse effects expected.

The EIA report has evaluated the potential effects of the construction and operation of the project on all relevant environmental receptors. These include humans and human health, animals, plants and biological diversity (with specific consideration of benthic communities, fish, marine mammals, birds and bats), sediments and seabed, water, air, climate, landscape, cultural heritage and material assets, as well as interactions between these receptors.

Based on the findings of the EIA report, it can be concluded that the project will not lead to significant adverse environmental effects, provided that the defined mitigation and monitoring measures are implemented.

Potential impacts during the construction phase can be summarized as follows:

- Marine mammals: Temporary exposure to elevated underwater noise levels, particularly during pile driving for monopile foundations, may lead to disturbance and short-term behavioural reactions. Noise mitigation measures and monitoring are applied to avoid significant adverse effects.
- Fish, benthic fauna and plankton: Localized and temporary disturbance of surface sediments and increased turbidity may occur during foundation installation and cable laying. These effects are spatially limited, reversible, and confined to the immediate construction areas.
- Birds and bats: Construction-related vessel traffic, noise, and lighting may cause temporary disturbance and small-scale displacement. Collision risk during construction is considered low and spatially limited.
- Sediments, seabed and water: Temporary seabed disturbance and sediment resuspension occur during foundation works and cable installation. Long-term effects are restricted to the immediate footprint of foundations and scour protection.
- Humans, air and noise: Short-term emissions from construction vessels and machinery occur but remain well below relevant threshold values. Impacts on human health are considered negligible due to the offshore location and distance from residential areas.

Potential impacts during the operational phase can be summarized as follows:

- Birds and bats: There is a potential risk of collision with rotating rotor blades as well as visual and barrier effects. According to the assessment, these impacts are generally low to moderate and do not lead to significant population-level effects.
- Marine mammals, fish and benthic communities: The presence of foundations and cables leads to minor, localized and long-term habitat changes. The creation of hard substrates may locally alter benthic communities. Operational noise and electromagnetic fields from cables are assessed as having no significant adverse effects.
- Sediments, water and habitats: Permanent seabed occupation is limited to a small proportion of the project area. No significant impacts on sediment dynamics or water quality are expected during operation.
- Air, climate and human health: Operational emissions are negligible. The project contributes positively to climate protection through the generation of renewable energy.
- Landscape and cultural heritage: Due to the offshore location and distance from the coast, visual impacts on the landscape are assessed as limited. No significant effects on cultural heritage or material assets are expected.

Cumulative impacts with other existing and planned offshore projects in the western Baltic Sea were also assessed. The spatial scope of the cumulative assessment was defined separately for each environmental receptor, taking into account their respective sensitivity and range of

effects. The EIA report concludes that, even when considered cumulatively, no significant adverse environmental effects are expected.

The EIA report and the environmental permit for the offshore wind farm include a set of measures to void or minimize adverse environmental effects.

General avoidance and mitigation measures include optimization of the wind turbine layout to minimize seabed footprint, bundling and careful routing of inter-array cables, and the use of environmentally compatible construction materials. Project-specific environmental management concepts address waste handling, hazardous substances, emergency response, and decommissioning, ensuring that impacts from construction, operation, and maintenance activities remain limited.

With regard to marine mammals, particularly harbour porpoises, the EIA report identifies underwater noise during pile driving as the most relevant impact. Noise mitigation measures, including technical noise attenuation systems and defined exclusion zones, are applied to ensure compliance with applicable underwater noise thresholds. Acoustic monitoring and visual observation are implemented during construction to verify the effectiveness of these measures and to prevent significant disturbance or injury.

For benthic habitats and sediments, measures focus on limiting the spatial extent and duration of seabed disturbance. Turbine foundations and scour protection are designed to minimize permanent habitat loss, while cable installation methods are selected to reduce sediment resuspension and turbidity. Sensitive biotopes are avoided through micro-siting, and the affected areas are restricted to the immediate vicinity of foundations, scour protection, and cable corridors.

Measures concerning birds and bats aim to reduce collision risk, barrier effects, and disturbance. These include clustered turbine arrangements to limit the overall barrier effect, demand-based aviation and navigation lighting to reduce light emissions, and turbine marking in accordance with regulatory requirements. The EIA report also foresees operational measures such as temporary shutdowns during periods of intensive bird migration, where necessary, to further reduce collision risk.

The EIA foresees the implementation of a comprehensive environmental monitoring programme during both the construction and operational phases. Monitoring includes underwater noise measurements and marine mammal observations during pile driving, surveys of benthic communities to assess recovery and long-term habitat changes, and systematic monitoring of birds to evaluate collision rates and migration behaviour. The monitoring results serve to verify the effectiveness of mitigation measures and to identify any unforeseen environmental effects at an early stage.

Potential environmental impacts associated with the inter-array cablesare assessed in the EIA report in conjunction with those of the wind farm itself. Mitigation measures address temporary sediment disturbance, underwater noise during installation, and the protection of marine fauna and sensitive habitats. Overall, the EIA report concludes that, with the implementation of the defined avoidance, mitigation, and monitoring measures, significant adverse environmental effects from both the offshore wind farm and its associated infrastructure can be excluded.

Climate Assessment

The project contributes to climate change mitigation objectives. The project has been assessed for Paris alignment and is considered to be aligned for both low carbon and resilience goals of the Bank’s relevant policies. With appropriate mitigation measures to be introduced by the promoter, residual risks from physical climate hazards are deemed low.

EIB Paris Alignment for Counterparties (PATH) Framework

This is a project finance operation where the borrower will be an SPV (Holdco). The promoter is currently planning to sell down part of its shares into the SPV, with the expectation for this to happen before signature. The borrower is therefore expected to be an SPV owned by at least two shareholders, hence out of scope of the PATH framework.

EIB Carbon Footprint Exercise

The direct CO2 emissions from an offshore wind farm are deemed negligible. In accordance with the Bank's current Carbon Footprint methodology, it is calculated that based on the avoidance of electricity generation from a combination of existing and new power plants in Germany, the total relative effect of the project is a net reduction in CO2 equivalent emissions by approximately 1,947k tonnes of CO2 equivalent per year.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

Social Assessment

The project is located offshore and does not affect vulnerable groups. Labour standards are expected to be upheld by the promoter, which has a good track record in offshore wind development. Occupational health and safety measures are in place for offshore construction activities. No gender-related risks have been identified.

A positive social impact is the creation of long-term employment during the construction and operation of the wind farm.

Public Consultation and Stakeholder Engagement

The EIA process for the wind farm was subject to public consultation, with documents made publicly available via the German Federal Environmental Impact Assessment Portal. Similarly, the interconnection infrastructure underwent a mandatory public consultation. Stakeholders had the opportunity to review the documents and submit comments before the issuing of the Planning Approval Decision.

Other Environmental and Social Aspects

The promoter has demonstrated strong environmental management capacity. Environmental monitoring and mitigation plans are in place and aligned with good industry standards.

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Conclusions and Recommendations

The Bank reviewed the environmental and social aspects of the project, as well as the capacity of the promoter to implement the project in line with EIB's requirements and considers them acceptable.

The environmental permitting process for the wind farm has been completed, and the relevant documentation only identifies limited residual environmental risk, subject to the implementation of the measures envisaged in the permits. While the environmental permitting process for the grid connection is still to be completed, the EIA studies only identify limited residual environmental risk.

Considering that the EIA processes are concluded and that the project is expected to have minor environmental residual impacts, no further sustainability proofing is needed for the environmental dimension. For the climate dimension, considering the aforementioned climate assessment and the outcome of the carbon footprint exercise, the sustainability proofing is completed with no further actions required. The social impacts of the project are expected to be low, requiring no further proofing for the social dimension.

The promoter shall store and keep up to date all documents relevant for the project supporting the compliance with the provisions of EU environmental legislation, permits and environmental approvals, and shall promptly upon request deliver such documents to the EIB.