

Environmental and Social Data Sheet

Overview

Project Name:	<i>GALLOPER OFFSHORE WIND</i>
Project Number:	<i>2015-0382</i>
Country:	<i>United Kingdom</i>
Project Description:	<i>A 336MW offshore wind farm located in the North Sea off the coast of Suffolk.</i>
EIA required:	yes
Project included in Carbon Footprint Exercise ¹ :	yes
(details for projects included are provided in section: "EIB Carbon Footprint Exercise")	

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project's main objective is to generate electricity from renewable energy sources per year. It is located next to an existing offshore wind farm.

The UK government has conducted a Strategic Environmental Assessment (SEA) in 2002/03 for its plan to develop offshore wind in its territory. Three large areas - the Thames Estuary, the Greater Wash and the North West (Irish Sea) - identified by the government as being potentially suitable, were assessed. The project site falls within the Thames Estuary area and is compliant with the development recommendations of this study.

By virtue of its technical characteristics the project is classified as an Annex II-project according to the EIA-Directive 2011/92/EU. National legislation requires a full EIA including public consultation for offshore wind farms. The promoter's Environmental Impact Study (EIS) analyses the project's environmental and social impacts alone and cumulated with other activities in the same onshore and offshore area. The EIS concludes that the project's most relevant risks relate to its onshore facilities' visual impacts on an Area of Outstanding Natural Beauty (AONB), to its potential impacts on the regional lesser black-backed gull (LBBG) population which resides in the area, and to piling noise during construction on certain fish species.

There are a number of designated sites of nature conservation in the vicinity of the project. The wind farm itself is located outside any protected area but the export cable crosses the Outer Thames Estuary SPA. A comprehensive Appropriate Assessment (AA) has been pursued by the Secretary of State, concluding that the project has no adverse effects on the integrity of any protected site provided that proposed mitigation measures are put in place.

All key consents were granted during the period 2013-2014 by the relevant competent authorities after appropriate consultation of relevant stakeholders. The consents comprise a comprehensive set of mitigation measures and monitoring obligations, in-line with EIS and AA.

During the same period, the promoter has decided to down-scale the project from an initially analysed 504 MW to 336 MW. This measure also addresses mitigation measures included in the permit. At the time of appraisal there is an official confirmation pending from the

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

competent authority that this reduced project size in combination with the chosen turbine model ensure the level of bird (LBBG) protection requested. Such confirmation (Approval Notice) shall be provided to the Bank prior to contract signature.

Similar to other offshore operations of the Bank, it is proposed that the promoter undertakes to forward to the Bank an electronic copy of the environmental monitoring reports that the promoter submits to the competent authorities.

With the above conditions in place, the overall environmental impact of the project is considered to be acceptable to the Bank.

Environmental and Social Assessment

Environmental Assessment

The project's permitting process covers the offshore wind farm including offshore and onshore grid connection infrastructure. Onshore O&M facilities (office buildings in particular) are foreseen to be constructed on a brownfield site of an existing industrial harbour. This (minor) part of the project will undergo a separate environmental authorisation after appraisal.

The scope of the promoter's Environmental Impact Study (Environmental Statement, ES) was defined in 2010, based on a Scoping Opinion issued by the Infrastructure Planning Commission (IPC) after consultation with statutory consultees. Further consultation including community consultation was undertaken in the course of 2011, on the basis of a Preliminary Environmental Report (PER).

In October 2011, the ES was finalised. It covers an assessment of all relevant impacts of the project including those in combination with other projects (cumulated impacts). The ES identifies the following most relevant environmental and social risks:

- Much of the coast in the project area sits within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB). Further, potential archaeological remains of some interest may be encountered in this area. The cable corridor and substation have consequently been located as close as possible to the corresponding facilities of the Greater Gabbart offshore wind farm to avoid landscape disturbance beyond areas already affected. Nevertheless, residual impacts within 500 m of the onshore development are anticipated to be significant for the AONB and Heritage Coast respectively.
- There are a number of designated sites of nature conservation in the vicinity of the project. The wind farm itself is located outside any protected area. The export cable crosses the Outer Thames Estuary SPA. The promoter scoped in all European sites within 2km of the onshore components of the scheme and all sites with marine and coastal features within 30km of the offshore works. Analyses yielded that the regional summer lesser black-backed gull (LBBG) population was impacted by a predicted mortality from blade hits. This species has an international conservation value, forming part of a protected breeding colony at the Alde-Ore Estuary SPA/Ramsar which is located ca. 28 km distant to the offshore wind farm.
- The ES also noted that pile driving noise during construction is of concern. The very high sound pressure levels could potentially prevent fish from reaching breeding or spawning sites, finding food, and acoustically locating mates as well as causing physical injury and mortality or disturbing normal behaviour. Subsequent consultation responses indicated the potential for a piling restriction from 1st November to 31st May for parts of the project location to cover the sensitive spawning periods for certain fish species. In contrast, marine mammal presence in the project's sea area and related impact risks were deemed relatively low.

In 2012, the promoter applied for development consent order (DCO) at the IPC, submitting final versions of ES and NTS. The IPC subsequently requested an Appropriate Assessment (AA) by the Secretary of State (Department of Energy & Climate Change, DECC). After thorough analysis, the AA focussed on the determination of the project's impact on the Alde-

Ore Special Protection Area and Ramsar Site. Considering an unfavourable declining status of the LBBG colony, DECC recommended that mitigation should be applied to the project to counter all predicted increases in mortality to enable a conclusion of no adverse effect on integrity to be reached. In particular, DECC recommended that an 85% contribution of this mitigation should come from SPA site-based measures to enhance reproduction rates (such as predator control and breeding habitat improvements) and a corresponding 15% should come from project mitigation, comprising restrictions to turbine specification and numbers.

In May 2013, the competent authority granted the project's DCO. It authorises the promoter to construct, operate and maintain the Galloper offshore wind farm with a capacity of up to 504 MW. The Order imposes requirements in connection with the project which reflect the mitigation measures identified and recommended in the course of the authorisation process and in the AA in particular. The Order entered into force in June 2013.

Subsequently, the promoter decided to down-scale the project from a consented "up to" 504 MW to 336 MW.

Planning permission for an alteration to the National Grid transformer infrastructure under the Town and Country Planning Act 1990 ("TCPA") was secured from the Suffolk Coastal District Council ("SCDC") on 11 March 2014. It relates to the necessary works for a grid connection capacity of 336 MW only.

EIB Carbon Footprint Exercise

The direct CO₂ emissions of offshore wind farms are deemed negligible.

In accordance with the current Bank's Carbon Footprint methodology it is calculated that the estimated emissions savings of the project are 821 kilo-tonnes of CO₂ equivalent per year. This calculation assumes that 75% of generated electricity substitute power generation in existing fossil fuel based power plants whilst 25% substitute power generation in new gas-fired combined cycle power plants.

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.

Other Environmental and Social Aspects

The promoter is a large European energy company. It has a good environmental and social management capacity.

During the substation enabling works, some archaeological findings were made and reported to the relevant authorities. The County Archaeologist was involved in monitoring the substation enabling works in 2014 and verified how archaeological findings were recorded and managed. Upcoming onshore works will follow the same process and available data shows that the relevant areas are of only moderate archaeological interest.

The DCO permit states that the promoter must submit a construction and monitoring programme to the competent authorities and collect their corresponding approval prior to commencing construction works. Such construction and monitoring programme must include, amongst others, details of proposed pre-construction surveys/monitoring, construction surveys/monitoring, and post-construction surveys/monitoring and related reporting.

The DCO permit further states that neither the connection works nor the transmission works shall commence until a written ecological management plan for the relevant onshore works reflecting the survey results and ecological mitigation and enhancement measures included in the ES has been submitted to and approved by the relevant competent authority, in consultation with Natural England.