

Environmental and Social Data Sheet

Overview

Project Name:	<i>West of Duddon Sands Offshore Wind Farm</i>
Project Number:	<i>2012-0430</i>
Country:	<i>United Kingdom</i>
Project Description:	The Project is a 389 MW offshore wind farm in the Irish Sea (Northwest England), comprising 108 turbines on monopile foundations.
EIA required:	yes
Project included in Carbon Footprint Exercise ¹ :	yes

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

The project has significant environmental benefits. Offshore wind farms generate electricity at significantly lower pollutant gas and greenhouse gas emissions than fossil fuelled power plants.

In 2002/03 the UK government has conducted a Strategic Environmental Assessment (SEA) in-line with Directive 2001/42/EC for its plan to develop offshore wind in its territory. This study assessed, amongst others, the greater sea area of this project (Liverpool bay) under environmental and social aspects in view of its offshore wind farm development potential. The project is compliant with the final 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 Statement (EIS) concludes that under the assumption of all mitigation measures being implemented, there are no significant negative impacts resulting from the project. Residual minor impacts relate to noise emissions during piling of foundations, temporary disturbances of human beings and nature during construction, limited permanent loss of fishing grounds, and visual impacts.

The wind farm itself is located outside designated areas of nature conservation interest. The export cable route, however, crosses the adjacent Morecambe Bay which is a Ramsar Site, Special Protection Area (SPA) and Special Area of Conservation (SAC). An Appropriate Assessment (AA) in-line with EU Directives has been conducted by the competent authorities. It concluded that the overall effects of the project on sites of nature conservation are likely to be non-significant even when cumulated impacts with other projects in the same sea area are taken into consideration. Residual uncertainties regarding potential impacts on birds were addressed by extended bird monitoring obligations.

All key consents were granted during the period 2008-2011 by the relevant competent authorities after appropriate consultation of relevant stakeholders. The consents comprise a comprehensive set of mitigation measures and monitoring obligations. It is proposed that the promoter undertakes to send to the Bank an electronic copy of all environmental monitoring reports that it submits to the competent authorities.

The overall environmental impact of the project is considered to be acceptable to the Bank.

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.

Environmental and Social Assessment

Environmental Assessment

The permitting process covers the entire project scope, including offshore wind farm, offshore and onshore grid connection infrastructure, and onshore O&M facilities.

There are a number of designated sites of nature conservation in the vicinity of the project. The only site being directly affected by the project is Morecambe Bay which is an SAC (UK0013027), SPA (UK9005081) and Ramsar site at the same time. It is crossed by the export cable, impacting it on less than 0.1% of its surface area. Furthermore, the export cable route is located near the Middleton Former Refinery County Biological Heritage Site, which is a non-statutory wildlife site. The offshore wind farm itself is located inside a dedicated offshore development area and outside any area of nature conservation interest. The O&M facilities are installed in an existing industrial area.

In 2006, the promoter in cooperation with its external experts finalised an Environmental Impact Study (EIS) which covers the entire project scope, both offshore and onshore. The EIS consists of several expert reports that analyse in detail impacts of the project on water quality, birds, fish and marine mammals, archaeology, commercial fisheries and navigation, marine recreation, noise and electromagnetic interference, physical and human environment, and landscape and seascape.

Subsequently, the cable route was developed further in order to minimise potential negative impacts on sensitive habitats and species. Eventually, the developers of three wind farms in this sea region, including the project appraised here, had proposed a joint cable corridor. This proposed cable route was a change from the initial route presented in the EIS but lies within the limit of deviation corridor assessed in the EIA.

The project underwent several parallel environmental authorisation processes. The relevant competent authorities analysed the EIS in consultation with Natural England (statutory advisor to the secretary of state on nature conservation matters), stakeholders, and NGOs. During consultation, some objections were raised, notably on navigation safety, commercial interests of shipping companies, the economy of the Isle of Man, fishing, birds, visual impacts, and the economy of Barrow-in-Furness. They have all been evaluated by the competent authorities and, where possible and relevant, solved through adequate mitigation measures. Residual uncertainties regarding environmental impacts, particularly on birds, were addressed by enhanced monitoring requirements.

The promoter committed towards the competent authority to compensate fishermen that are affected from the project during the construction phase and during the first years of operation. To this end, the promoter is participating in a joint scheme with operators of neighbouring wind farms which is already successfully in operation.

In September 2007 an Appropriate Assessment (AA) was conducted by the Competent Authority under the Electricity Act (BERR, (Department for Business, Enterprise and Regulatory Reform) upon request by Natural England. The AA's objective was to determine whether or not the project will adversely affect the integrity of the Special Protection Areas (SPAs) and Special Areas of Conservation (SACs); in view of the conservation objectives of the SPAs and SACs as classified. The AA concludes that the project will not cause an adverse effect on the integrity of the relevant European sites (Duddon Estuary, Morecambe Bay, Ribble and Alt Estuaries and Martin Mere, Rum and Skokholm and Skomer SPAs) either alone or in-combination with other plans or projects.

By the time of appraisal, all key environmental authorisation processes were completed and, amongst others, the following key consents had been granted:

- Consent under Section 36 of the Electricity Act, issued in September 2008 by the Secretary of State for Business, Enterprise and Regulatory Reform through BERR;

- Consent under Food and Environmental Act FEPA, issued in August 2010 by the Marine Management Organisation – MMO;
- Several permissions under the Town and Country Planning Act TCPA, issued during 2011 and 2012 by the Lancaster City Council.

UK authority Defra (Department for Environment, Food and Rural Affairs) is currently holding a consultation on proposals for the designation of the first tranche of Marine Conservation Zones (MCZs) to meet the Government's objective to create a network of Marine Protected Areas by the end of 2016. None of the 127 recommended MCZ (rMCZ) that have been put forward in a first tranche for designation is covering the project site.

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 total relative effect of the project is a net reduction in CO₂ equivalent emissions by 824 kt CO₂e/yr. 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 joint venture of two large European energy companies. Both entities have a good environmental and social management capacity.

The promoter has developed a communications plan to ensure that public opinion concerns are addressed appropriately. It has further put in place Environmental Management Plans which set the framework for the construction activities to be pursued in accordance with environmental commitments and requirements of consent conditions. The promoter's Environmental Management Plans have been formally accepted by the competent authority (Marine Management Organisation – MMO) and its advisory authorities. The promoter's contractors are required to operate under their own Environmental Management Plans in accordance to the minimum requirements set out in the framework plans.

The promoter is obliged to pursue a comprehensive monitoring programme in consultation with the competent authorities and Natural England. This programme covers monitoring activities in relation to seabed morphology and scour; benthic organisms; marine fish; noise and vibration; electromagnetic fields; ornithology; and archaeology. The ornithological monitoring commences 1 year prior to construction and lasts until at least three years after commissioning with the option to be extended further. The marine mammal monitoring focusses on the construction period but may also extend to 3 operational years.