

Environmental and Social Data Sheet

Overview

Project Name:	ESB NETWORK – RENEWABLE CONNECTION
Project Number:	2013-0099
Country:	Ireland
Project Description:	The Project is a Multi-component investment programme consisting of seven electricity transmission sub-projects geographically dispersed across South West of Ireland. These include the construction of 5 power substations, either in the form of new construction or rehabilitation/extension, and the associated network connections, the reconductoring of the 220 kV OHL Kilpaddoge-Clashavoon, to which the above substations will be connected, and a new 220 kV, underground/sub-sea cable connection across the Shannon Estuary between the substations Moneypoint and Kilpaddoge. The main purpose of the Project is to collect and accommodate into the grid 1.1 GW of wind generation.
EIA required:	no
Project included in Carbon Footprint Exercise:	yes

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

The Project is part of Ireland's Grid Implementation Programme 2011-2016 that underwent Strategic Environmental Assessment in accordance with the requirement of the SEA Directive. By their technical characteristics some of the proposed sub-projects fall under Annex II of the EIA directive but, according to the decision made by the Irish competent authorities, none of them requires Environmental Impact Assessment (EIA). Environmental analyses and, as relevant, appropriate assessments have been, however, carried out for the majority of the sub-projects, in order to accompany planning or foreshore applications.

All the developments under the Project have been granted planning permits and, when requested, foreshore license, with the exception of the reconductoring Kilpaddoge-Clashavoon, for which planning permit is not required. All relevant authorities, stakeholders, and the public were consulted during the authorisation process.

The various analyses carried out along with the conclusions of the permits indicate that, subject to the implementation of the specified mitigating measures, the Project would neither have significant adverse effects on the environment nor adversely affect the integrity of any European site on view of the site's conservation objectives. Furthermore, by enabling collecting and accommodating into the grid 1.1 GW of wind generation, the Project will substantially contribute to reduce CO₂ emissions.

The Project is therefore acceptable to the Bank in environmental terms.

Environmental and Social Assessment

Environmental considerations have been incorporated in the design of the Project from the earliest stages. The location of the new substations has been decided so to minimise the distance from the existing grid. OHL and cables routes have been selected so to limit proximity/crossing of human settlement and sensitive areas. Underground cable connections and compact substation technologies will be extensively used so reduce land occupation, visual impact and ultimately improve the social acceptance of the Project.

Further to that, appropriate mitigating measures have been planned and will be implemented to minimise the impacts of the Project during construction and operation. Particular attention

will be paid to contain the effect of noise, vibrations and traffic/navigation disruption during the construction works.

As regards the natural environment, felling and trimming of trees will be done in a selective way and, as necessary, compensatory plantations will be realised. In proximity or in case of crossing of sites of nature conservation importance, construction works and restoration of sites will be executed with great care and avoiding breeding periods of wildlife species.

A specific mitigating measure during the installation of the sub-sea cable across the Shannon estuary is the soft start of all operations so marine species in the immediate vicinity would be alerted to this activity and have the opportunity to move away. Additionally, specific monitoring by marine mammal observers (MMOs) will take place during the subtidal construction phase and no cable laying or cable mattresses activities will be started when dolphins are noted by MMO as within 500 m of the vessel.

EIB Carbon Footprint Exercise

The source of CO₂ equivalent (CO₂e) emissions for the Project is the ohmic losses of the network equipment being installed through the Project. At Project completion the corresponding absolute emissions are estimated at 5 kt CO₂e per year.

These absolute emissions are however offset by the reduction of system losses enabled by the Project in comparison to the alternative, which consists of reinforcing the 110 kV network. Therefore, at completion, the Project is expected to enable a saving of 16 kt CO₂e per year.

The CO₂ savings achieved by releasing network-constrained renewable generators are not taken into account in the Carbon Footprint Exercise for electricity networks.