

Environmental and Social Data Sheet

Overview

Project Name:	VERMIO WIND PROJECTS
Project Number:	2017-0501
Country:	Greece
Project Description:	Development, construction and operation of two separate onshore wind farms with a total operating capacity of 44.4MW, located in Imathia and Kozani Prefectures, Northern Greece.
EIA required:	yes
Project included in Carbon Footprint Exercise ¹ :	yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

Environmental Assessment

The project involves the development, construction and operation of two separate on-shore windfarms in mainland Greece, with a total operating capacity of 44.4MW, namely: Eressou Ipsoma-Fourka (36MW), Lefkes-Kerasia (8.4MW). The wind farms connect to a single new Medium Voltage (MV) to High Voltage (HV) substation, via an 8.5km and a 16.1 km MV underground line respectively. The two schemes are located in Imathia and Kozani Prefectures, in Northern Greece. The sites are both located on mountain Vermio, within c.a. 1.5km from each other.

Onshore wind farms fall under Annex II of the EU EIA Directive 2011/92/EU (as amended by 2014/52/EU), leaving it to the competent authority to determine whether or not a full Environmental Impact Assessment (EIA) is required. The two schemes were screened in and they have both undergone independent EIAs, in which the corresponding ancillary works were included.

According to Greek Law 4014/2011 (GG 209/A/21.09/2011), as amended by Law 2471/2016 (GG 2471/B/10.08.2016), public and private projects and activities are classified into two main categories (A and B) depending on project's estimated environmental impact. Category A includes projects and activities, which might have a significant environmental impact for which an EIA Study submission is necessary. An EIA Study aims to include all appropriate conditions and restrictions, when necessary, shaped according to each project's nature. Category A is divided into subcategory A1, which includes projects and activities that might have a very significant environmental impact and subcategory A2, which includes projects and activities that might have significant environmental impact. According to the aforementioned legislation, the schemes are classified as A2.

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.

Luxembourg, 15.03.2018

The relevant environmental permits have been issued for both schemes- for Eressou Ipsoma-Fourka in 2011 and for Lefkes-Kerasia in 2010. Main impacts expected are temporary during construction (noise and dust) and landscape and visual during operation. These potential impacts have been analysed comprehensively through the authorization process and deemed acceptable. The cumulative impact of the two sites and with two other existing wind farms has also been analysed in the EIAs. A section of the project is located in forest land (primarily public). To this end, there are special terms imposed in the Environmental Terms Approval (ETA) and in the Forestry Approval by the competent Forestry Authority, which need to be fulfilled during the construction and operating periods. These include a reforestation plan to compensate for trees removed. As the original design of the projects has been modified over the past years, subsequent modifications of the environmental permits have been issued.

The occupation area of the wind farms is physically located outside of Natura 2000 sites. One of the two wind farms (Eressou Ipsoma-Fourka) adjoins a Natura 2000 designated site (referring to the turbine closest to the designated site), while the second is located approximately 1.5km from it. The designated site is 'OROS VERMIO' with site code 'GR1210001'. This is an SCI site for flora (Sites of Community Importance), in which 11 species of plants referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 2209/147/EC and listed in Annex II of Directive 92/43/EEC have been identified. There is no Special Protected Area for birds and avifauna and there are no major bird migration routes that cross the site. The wind farm sites are located on mountain ridges with low vegetation, and the wind turbines' occupation zone is on soil degraded by grazing. During the preliminary environmental approval process, the original design for Eressou Ipsoma-Fourka included a wind turbine within the Natura 2000 site. The preliminary environmental approval issued for Eressou Ipsoma-Fourka by the competent authority, stated that the impact of the wind farm on the designated site was deemed insignificant. In the final layout, the specific wind turbine was moved outside of the Natura 2000 site –the final environmental permit was issued on this layout. The conclusions of the permitting process are considered reasonable. However, as an Appropriate Assessment study has not been provided to the Bank for review, a corresponding loan condition has been introduced.

The promoter is a company specialized in renewable energy projects, with significant experience in similar projects in Greece. The promoter has obtained a BS OHSAS 18001 certification for occupational health and safety management best practice and a DIN EN ISO 14001 certification for environmental management systems. Overall, the promoter's capacity to assess environmental and social impacts is deemed satisfactory.

The approval process followed by the Bank for this project is executed in two stages (Stage I and Stage II). The review of the compliance of the project with the relevant directives will be concluded (together with the support of the lender's engineer) in stage II.

EIB Carbon Footprint Exercise

The direct CO₂ equivalent emissions of the two wind farms under this investment programme are 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 Greece (75% operating margin and 25% build margin), the total relative effect of the project is a net reduction in CO₂ equivalent emissions by 79 kt CO₂e/yr.

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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'.

Conclusions and Recommendations

Based on a preliminary review it is concluded that this operation is likely to be acceptable to the Bank from an environmental and social point of view under conditions.

An Appropriate Assessment study of the project's impacts on the neighbouring Natura 2000 site ("OROS VERMIO") must be provided prior to loan signature, satisfactory to the Bank.

Further environmental loan conditions (if any) will be defined after completion of the Bank's environmental due diligence and prior to financial close.