

Environmental and Social Data Sheet

Overview

Project Name:	<i>E2I RENEWABLE ENERGY</i>
Project Number:	<i>2017-0046</i>
Country:	<i>Italy</i>
Project Description:	<i>The project comprises the construction and operation of 5 wind farms (for a capacity of 92 MW) as well as the total reconstruction and operation (i.e. repowering) of 3 wind farms (for a capacity of 73 MW), for an estimated total capacity of around 165 MW, together with their grid connections and related infrastructure.</i>

EIA required:	yes, one for each wind farm.
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

These plants are to be constructed on areas already owned or acquired by the promoter or otherwise available to the promoter in central and southern Italy, as follows:

NAME	LOCATION (town, region)	MW	TYPE OF INTERVENTION
<i>San Giorgio la Molara</i>	<i>San Giorgio la Molara, Campania</i>	<i>35.0</i>	<i>construction and operation</i>
<i>Montefalcone</i>	<i>Montefalcone di Val Fortore, Campania</i>	<i>15.0</i>	<i>construction and operation</i>
<i>Vaglio2</i>	<i>Vaglio Basilicata, Basilicata</i>	<i>15.0</i>	<i>construction and operation</i>
<i>Mazara del Vallo</i>	<i>Mazara del Vallo, Sicily</i>	<i>15.0</i>	<i>construction and operation</i>
<i>Troia</i>	<i>Troia, Apulia</i>	<i>12.5</i>	<i>construction and operation</i>
<i>IR Abruzzo 1</i>	<i>Castiglione Messer Marino, Abruzzo</i>	<i>39.6</i>	<i>total reconstruction and operation</i>
<i>IR Abruzzo 2</i>	<i>Schiavi di Abruzzo, Abruzzo</i>	<i>13.2</i>	<i>total reconstruction and operation</i>
<i>IR Vaglio</i>	<i>Vaglio Basilicata, Basilicata</i>	<i>20.0</i>	<i>total reconstruction and operation</i>
TOTAL		165.3	

The project is located within the EU and falls under Annex II of the Environmental Impact Assessment ("EIA") Directive 2011/92/EU, requiring the competent authorities to determine whether an EIA is required. Nevertheless, the promoter proposed to follow a full EIA process for all 8 wind farms and the competent authorities accepted this approach.

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, 18 July 2017

Permitting has been obtained for all sites, with the granting by the competent authorities (Regional Administrations) of the environmental permits (EIA process) and the administrative Framework Authorisations (the Autorizzazione Unica, "AU"), which certifies compliance with national legislation on emissions and environmental matters and utilization of Best Available Technologies toward environmental risk mitigation (law Dpr 59/13-03-2013).

According to the Habitat Directive (art.6 c.3 92/43/CEE, as transposed by art.6 DPR 120 of 12/03/2003), proximity of a wind farm to sites of EU nature conservation requires a specific Appropriate Assessment (*Valutazione di Incidenza Ambientale – "VINCA"*, and *Relazione Paesaggistica*) to be carried out by competent authorities for each site. Consequently, 5 out of 8 of the promoter Environmental Impact Studies ("EIS") have been supplemented by expert assessments of the projects' impacts on the integrity of these sites. For the remaining three sites (IR Vaglio, Vaglio 2 and Troia), a separate Appropriate Assessment was not carried out, however the EISs of these wind farms identify the Natura 2000 sites and contain a biodiversity assessment evaluating the relevant impacts.

According to the final EIS and to the Appropriate Assessments carried out, environmental impacts on all wind farms are assessed as low, negligible or totally reversible in the short-medium term, provided the envisaged monitoring and mitigation measures are implemented. No significant impacts on the integrity of any protected site are expected at this stage.

The main potential negative impacts of these projects on the environment could be: disturbance to some protected bird species living near the wind farms (modification of their natural habitats, and risks of collision); visual impact on the landscape; disturbance for local villages caused by noise and/or flickering. In particular, the promoter's technical choices of limiting the total number of turbines, reducing their number in the repowering sites, positioning them outside of the main known migration corridors and opting for models with slower rotation speeds and higher interdistance, minimise the risk of bird impacts. Moreover, in order to further lower perturbations to the habitats, turbine erections and most heavy works are planned outside of the autochthonous species' nesting and reproductive seasons.

The Bank has assessed the forecasted mitigation and monitoring measures as adequate. Residual environmental risks have been covered by the Bank through the project undertakings.

All projects are generally aligned with the underlying regional and local planning.

San Giorgio la Molara

The site is not located in a Natura 2000 area, but is in close proximity to the following sites of natural conservation:

- Bosco di Castelfranco in Miscano (SIC IT8020004), at a distance of around 6.3 km;
- Sorgenti e Alta Valle del Fiume Fortore (SIC IT8020010), at a distance of around 3.3 km.

The Appropriate Assessment, undertaken in 2014, concludes that the project impacts on the integrity of the above-mentioned protected areas are negligible.

Montefalcone

The site is not located in a Natura 2000 area, but is in close proximity to the following sites of natural conservation:

- Bosco di Castelfranco in Miscano (SIC IT8020004), at a distance of around 8 km;
- Sorgenti e Alta Valle del Fiume Fortore (SIC IT8020010), at a distance of around 2 km.

The Appropriate Assessment, undertaken in 2014, concludes that the project impacts on the integrity of the above-mentioned protected areas are negligible.

Luxembourg, 18 July 2017

Mazara del Vallo

The site is not located in a Natura 2000 area, but is in close proximity to an Important Bird Area (“IBA”) (IBA 162 - Zone umide del Mazarese) and around 2 km far from the following sites of natural conservation:

- Laghetti di Preola, Gorgi Tondi e Sciare di Mazara e Pantano Leone (ZPS ITA 010031);
- Laghetti di Preola, Gorgi Tondi e Sciare di Mazara (SIC ITA 010005).

The Appropriate Assessment, undertaken in October 2014, concludes that the project impacts on the integrity of the above-mentioned protected areas are negligible, negative or totally reversible in the short-medium term, provided the envisaged mitigation and monitoring measures are implemented.

Troia

The site is not located in a Natura 2000 area. However, it is located near the following sites of natural conservation:

- Valle del Cervaro, Bosco dell’Incoronata (SIC IT9110032), at a distance of around 15 km;
- Monte Cornacchia, Bosco Faeto (SIC IT9110003), at a distance of around 9 km;

A separate Appropriate Assessment was not carried out, but a biodiversity study was undertaken assessing impacts on flora, fauna and ecosystems in the macro-area including the protected sites.

Vaglio 2 and IR Vaglio

Neither site is located in a Natura 2000 area. However, both sites are located near the following protected areas:

- Bosco Cupolicchio (SIC IT9210020), at a distance of around 9 km;
- Lago Pantano di Pignola (SIC IT9210142), at a distance of around 11 km;
- Abetina di Ruoti (SIC IT9210010), at a distance of around 11 km;
- Monte li Foi (SIC IT9210215), at a distance of around 13 km.

A separate Appropriate Assessment was not carried out, but a biodiversity study was undertaken assessing impacts on flora, fauna and ecosystems in the macro-area including the protected sites.

IR Abruzzo 1 and IR Abruzzo 2

Neither site is located in a Natura 2000 area, but both sites are located close to the following sites of natural conservation:

- Abetina di Castiglione Messer Marino (SIC IT7140121) – at a distance of less than 1 km;
- Monti Frentani e Fiume Treste (SIC IT7140210) – at a distance of less than 1 km;
- Abetina di Rosello e Cascade del Rio Verde (SIC IT7140212) – at a distance of less than 1 km.

The Appropriate Assessment, undertaken in March 2016, concludes that the project impacts on the integrity of the above-mentioned protected areas are negligible, negative or totally reversible in the short-medium term, and that mitigation measures devised to minimise residual impacts are adequate.

Moreover, both wind farms are internal to an IBA (IBA 115 - Maiella, Monti Pizzi e Monti Frentani). For this reason, particular attention has been devoted to the assessment of impacts on birds and bats within the EIS. Between 2012 and 2013, a detailed survey of birds and bats species within the sites has also been undertaken. The survey lasted 1 full year and entailed a monitoring of species and species density in summer and in winter, a determination of the consistency of migration phenomena in the areas and a survey of bats through ultrasonic

Luxembourg, 18 July 2017

converters. Results show that the areas are interested by a much more modest and sporadic migration passage than that on the main Adriatic and Tirrenic routes. The main nesting bird of prey detected are *Athene noctua*, *Buteo buteo*, *Falco tinniculus* and *Milvus milvus*. These, as well as the other nesting species detected in the area, are not considered critically endangered. Bat surveys show the absence of bats in the areas, likely due to the winds as well as to the absence of natural caves and feeding spots. Results of additional monitoring, during the construction phase of the previous plants, have shown a temporary withdrawal (of around 150-400m) of the sole *Buteo buteo* species, which has however returned after construction. Further studies, aimed at recording casualties from impacts, detected no casualties from impacts on the sites between 2010 and 2013. The EIS has therefore concluded that impacts on birds and bats are non-significant, transitory and limited to the sole construction phase, and that adopted mitigation measures would reduce any residual risk.

IR Abruzzo 1 and IR Abruzzo 2 are re-powering projects, characterised by a reduction in the number of wind turbines and lower rotation speed in respect to previous situation. These mitigating measures and project characteristics apply also to the third repowering project, IR Vaglio.

EIB Carbon Footprint Exercise

The direct CO₂ equivalent emissions of the eight 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 Italy (75% operating margin and 25% build margin), the total relative effect of the project is a net reduction in CO₂ equivalent emissions by 198 kt CO₂e/yr.

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.

Public Consultation and Stakeholder Engagement

Public consultation is part of the EIA and Framework Authorisation process, whereby all permitting authorities and relevant stakeholders' gather and express their opinion on the project in what is called a Services Conference (Conferenza dei Servizi). The promoter has sent to the Bank the full Environmental Impact Studies and Non-Technical Summaries (NTS).

Other Environmental and Social Aspects

The Promoter obtained the quality certificates of OHSAS 180001, ISO 9001 and ISO 14001. It has good E&S capacity to implement the project.

Occupational health and safety ("OHS") standards are deemed satisfactory. The Bank's impression of OHS standards when visiting the sites of IR Abruzzo 1 and IR Abruzzo 2 was good.

By substituting for alternative fossil fuel-fired generation, the project will also contribute to reducing the emissions of air pollutants and greenhouse gases, ultimately supporting climate change actions in the European energy sector.

Luxembourg, 18 July 2017

Conclusions and Recommendations

All eight wind farms have obtained EIA positive opinion and full permits through the administrative Framework Authorisation.

The available Environmental Impact Studies are satisfactory to the Bank and confirm that the wind farms do not have significant negative environmental impacts if all mitigation measures are fully implemented. Impacts on the integrity of Natura 2000 sites and other protected sites in the project areas have also been assessed through Appropriate Assessment to the satisfaction of the Bank and conclude that such impacts are not significant.

Regarding the sites of Troia, Vaglio 2 and IR Vaglio, the Promoter undertakes to confirm that the plants are not likely to have any significant impact on the identified Natura 2000 sites (the so called "Form A" or equivalent).

Subject to the above-mentioned conditions being met the project is considered acceptable for EIB financing from an Environmental and Social point of view.

PJ/SQM/ECSO 14.06.17