

Environmental and Social Data Sheet

Overview

Project Name:	<i>TERNA RETI ELETTRICHE V</i>
Project Number:	<i>20130015</i>
Country:	<i>Italy</i>
Project Description:	The Programme comprises fourteen electricity transmission sub-projects geographically dispersed throughout Italy. These include the second phase of the 380 kV interconnection mainland-Sicily, known as Rizziconi-Sorgente, four new 380 kV OHL ¹ (Villanova-Gissi, Paternò-Pantano-Priolo, Udine Ovest-Redipuglia, Feroletto-Maida), reconstruction and voltage upgrade of the 220 kV OHL Cassano Chiari, capacity increase through reconductoring of the 380 kV OHL Vignole-La Spezia, reinforcement of the 150 kV network supplying Palermo, second phase of reinforcement of the 220 kV network supplying Torino and 150 kV substation Ascoli Satriano and associated underground cable connections.
EIA required:	Yes, for the following five sub-projects: <ul style="list-style-type: none"> • 380 kV interconnection mainland-Sicily; • 380 kV OHL Villanova-Gissi; • 380 kV OHL Paternò-Pantano-Priolo; • 380 kV OHL Udine Ovest-Redipuglia; • 380 kV OHL Feroletto-Maida.
Project included in Carbon Footprint Exercise ² :	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 Programme is part of the promoter's Grid Development plan that underwent Strategic Environmental Assessment in line with the requirements of the SEA Directive. According to the decisions made by the Italian competent authorities, five sub-projects out of the planned fourteen do require Environmental Impact Assessment (EIA). All sub-projects have been granted environmental permits (VIA Decree) with the exception of the OHL Paternò-Pantano-Priolo, for which the environmental impact study has been carried out and the VIA Decree is in the process of being granted.

The remainder sub-project components involving mainly installations within the boundaries of existing substations, reconductoring of existing OHL and installation of underground cables were not subject to EIA. Environmental analyses carried out for some of these components are limited to landscape and archaeological assessments.

The environmental impact analyses and the appropriate assessments carried out indicate that, with the planned mitigations in place, no significant impacts are expected to result from construction and operation of the sub-projects. Additionally, as the new installations will be offset by demolition/burial of existing transmission infrastructures, the Programme will enable substantial release of land and landscape improvements in various sites. Furthermore, by

¹ Overhead line

² 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.

facilitating the dispatching of renewable generation across the grid and reducing network losses, the Programme will substantially contribute to reducing CO₂ emissions. The Programme is therefore acceptable to the Bank in environmental terms.

The Finance Contract will require undertaking by the promoter not to allocate Bank's funds to the sub-project "Paternò-Pantano-Priolo" until the corresponding EIA and the integrated biodiversity assessment have been approved by the competent authorities.

Environmental and Social Assessment

Environmental considerations have been incorporated in the design of the sub-projects from the earliest stages. Lines and cables routes and substations locations have been selected so to minimise proximity and crossing of human settlements, sensitive areas, and hydrogeological risk areas. All sub-projects have been designed to strictly comply with current regulations concerning electromagnetic fields.

Further to that, appropriate mitigating measures have been planned and will be implemented to minimise the impacts of the sub-projects during construction and operation. In densely populated areas particular attention will be paid to contain the effect of noise, vibrations and traffic disruption during the construction works.

A number of support measures will be implemented to improve the social acceptance of the sub-project. These include measures for landscape integration of new substations, the use of special tubular pylons to reduce the magnetic field zone, land occupation and visual impact of overhead lines and burial of existing lines to compensate for the visual impact of new lines.

As regards the natural environment, flight diverters and goshawk silhouettes will be installed on ground wires and on top of pylons to avoid birds' collision and mortality in sensitive areas. 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.

EIB Carbon Footprint Exercise

The source of CO₂ equivalent (CO₂e) emissions for the Programme is the ohmic losses of the network equipment being installed through the Programme. At Programme completion the corresponding absolute emissions are estimated at 51 kt CO₂e per year.

These absolute emissions are however largely offset by the reduction of the overall system losses enabled by the network reinforcements under the scope of the Programme. Therefore, at completion, the Programme is expected to enable a CO₂ saving of 157 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.