Luxembourg, 18.07.2017

Environmental and Social Data Sheet

Overview

Project Name:	ENEL OPEN METER
Project Number:	2015--0201
Country:	Italy
Project Description:	Implementation of an advanced electricity metering system throughout ENEL's concession areas in Italy.
EIA required:	no
Project included in Carbon Footprint Exercise[1]:	yes

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

Environmental and Social Assessment

The project comprises the installation of 24.7 million second generation electricity smart meters to replace the existing first generation smart meters and will allow remote readings, near real-time consumption information and better management of the electricity distribution network. The project will enable the improvement of the distribution operator's efficiency as well as customer information and awareness and will allow for potential energy savings.

A data concentrator will be installed in substations to collect data coming from meters connected to the feeders. The communication technology used for the transfer of data from the meters to the concentrators is PLC (power line carrier). The telecommunication system will use the GSM networks (global system for mobile communication) for the communication between the concentrators and the central metering system. The project is in line with the national and EU standards.

Environmental Assessment

The project is not subject to an Environmental Impact Assessment per Directive 2011/92/EU. The main impacts of the project relate to electromagnetic radiation and to the disposal of the old meters being substituted by this project.

Regarding the radio waves produced by the smart meters, the promoter has signed a declaration of conformity according to the requirements of the Directive 1999/5/EC.

Appropriate procedures are established to streamline the disposal process of the meters and reduce the environmental impact of the waste disposal. The procedures include: (a) the removal of the resin/glue from the base and casing protection, the separation of the battery

[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.

and the display and the removal of the antenna, the metal parts, the switch and the connectors; (b) shredding and recycling of the plastic parts; (c) shredding of the electronic parts and processing to extract metals. Subcontractors responsible for the disposal should have the appropriate certifications.

The expected energy savings brought about by the full implementation of the Project will lead to reductions in CO_2 emissions of approximately 284 $ktCO_2$ per year from 2021. Calculations of the emission reductions follow the EIB Carbon Footprint Methodology, and result from reductions in energy consumption and the application of the appropriate grid factor .

Public Consultation and Stakeholder Engagement

Various public consultations related to the roll-out of smart meters have been held by the Italian regulatory authority for energy. The promoter ran public consultations and engaged in dialogues with consumers associations and local authorities. The results of the consultations raised no major issue and they have been provided to the regulator, which eventually approved the roll-out plan.

As required by European legislation (Directive 2012/27/EU), technological, performance and privacy requirements for the new architecture have been defined in Italy by the Italian regulatory authority for energy[2] and addressed appropriately in the metering system to be installed.

Other Environmental and Social Aspects

Regarding environmental aspects, the promoter is ISO 14001 and ISO 50001 certified. The promoter is experienced and has the capacity to mitigate the impacts to an acceptable level through its Environmental Protection Management programme. Safety aspects are integrated into the promoter's guidelines, as evidenced by the OHSAS 18001 certification

Conclusions and Recommendations

The CO_2 reductions brought about by energy savings amount to approx. 284 $ktCO_2$/yr at project completion.

Based on the information available, the project is expected to have minor residual impacts and thus is acceptable in environmental terms for Bank financing.

PJ/SQM/ECSO 15.10.15

[2] Decision 87/2016/R/eel (http://www.autorita.energia.it/it/docs/16/087-16.htm)