

Environmental and Social Data Sheet

Overview

Project Name: *SMART METERS - PROJECT SPARK*
 Project Number: 2015-0086
 Country: *UK*
 Project Description: Installing smart gas and electricity meters for a major energy supplier in Great Britain.

EIA required: no

Project included in Carbon Footprint Exercise¹: no

(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 project relates to the roll-out of gas and electricity smart meters for a major energy supplier in Great Britain. The project is part of the national Smart Metering Implementation Programme established by the Department of Energy and Climate Change (DECC) involving the replacement of around 53 million gas and electricity meters.

The project comprises the installation of around 7 million gas and electricity smart meters that will allow remote readings, near real-time consumption information and better management of the electricity distribution network. The project will enable to improve operators' efficiency as well as customer information and awareness and will allow for energy savings.

The project is not subject to an Environmental Impact Study per Directive 2011/92/EU. The telecommunication system will use the GSM networks (global system for mobile communication) for remote access via the Wide Area Network and open protocols (mainly Zigbee wireless technology) using the 868 MHz and 2,400 MHz harmonised bandwidths for local access via the Home Area Network. The project is in line with the national and EU standards.

The promoter has the experience and the capacity to appropriately manage the project. The project is expected to result in a reduction of greenhouse gases through the achievement of energy savings. Based on the information available, the project is expected to have minor residual impacts and thus is acceptable in environmental terms for Bank financing.

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.

Environmental and Social Assessment

Environmental Assessment

The main impacts of the project relate to electromagnetic radiation and to the disposal of the old meters being substituted by this project.

Public Health England (PHE) considers that the evidence to date suggests exposures to radio waves produced by smart meters do not pose a risk to health. A review of health effects from radio waves has been prepared by the Advisory Group on Non-Ionising Radiation (AGNIR) in April 2012². Regarding smart meters, AGNIR considers that “given the low output power of typical devices, it is not expected that people’s exposure will exceed the ICNIRP³ restrictions”. Independent assessments will be conducted by PHE and published as smart meters are rolled out.

Appropriate procedures have been established to streamline the disposal process of the meters managed by the promoter and reduce the environmental impact of the waste disposal.

Public Consultation and Stakeholder Engagement

Various public consultations related to the roll-out of smart meters have been held by DECC⁴ and Ofgem⁵ since 2008 and consumer organisations have been consulted.

In particular, issues related to data privacy have been addressed and the Information Commissioner’s Office (ICO) has been consulted accordingly. In order to ensure data privacy, specific obligations set out in the Smart Energy Code and in the energy suppliers’ licences are incumbent upon the operators, in particular the Data Communication Company and the energy suppliers.

Other Environmental and Social Aspects

The promoter has a well-established internal quality and environmental management system.

Although the project results in the reduction of gas and electricity consumption and thus, CO₂ eq. emissions (around 380 kt/yr), it is not included in the carbon footprint exercise given that those reductions are from customer demand management rather than any technical aspect of the project itself.

² http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/web/HPAweb&HPAwebStanda rd/HPAweb_C/1317133826368

³ International Commission on Non-Ionising Radiation Protection

⁴ Department of Energy and Climate Change

⁵ Office of Gas and Electricity Markets