4 December 2015

Environmental and Social Data Sheet

Overview

Project Name:	*GRUPPO IREN TELERISCALDAMENTO E AMBIENTE*
Project Number:	*2015-0283*
Country:	*Italy*
Project Description:	*Investment programme in district heating networks and waste management facilities*
EIA required:	yes for some of sub-projects
Project included in Carbon Footprint Exercise[1]:	yes

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project – being part of the promoter's multi-annual, rolling investment programme - will comprise a number of investments geographically dispersed throughout the service areas of the promoter. It involves to a large extent upgrading and extending existing district heating networks. It further concerns the revamping of different existing waste recycling and treatment facilities.

Some of the programme components – particularly the waste treatment sub-projects – are subject to a mandatory EIA, which is currently pending. These sub-projects concern the construction of new waste sorting stations, biowaste and green waste treatment facilities (anaerobic digestion and composting technologies). Investments in waste management facilities are expected to contribute to improving the waste management system in the promoter's service areas by improving selective waste collection and increasing the share of municipal waste subject to energy recovery, treatment and recycling. This will enable higher compliance with EU objectives in the sector, in line with both the Waste Framework Directive 2008/98/EC and the Landfill Directive 1999/31/EC. Therefore, the project will significantly contribute to phasing out the current practice of direct landfilling of untreated MSW.

District heating sub-projects might fall under Annex II of the EIA Directive (2011/92/EU). However, given the characteristics, location and potential impacts of the DH systems, and considering the criteria established under the national EIA legislation, only one of the DH schemes is expected to require a mandatory EIA. The impacts that can be expected from district heating works are of temporary nature and will be mitigated according to established industrial practices.

For both investment types, the promoter nonetheless undertakes not to allocate the Bank's funds to project components requiring a mandatory EIA and/or nature assessment until it has been completed and approved by the competent authority. An electronic copy of the Non-Technical Summary (NTS) must be submitted to the Bank once the EIA is made available to the public. A copy of the consent from the competent authority should be provided to the Bank.

The promoter follows sound practices with regard to the management of environmental issues.

The project is expected to have minor residual environmental impacts and thus is acceptable in environmental terms for Bank financing.

Environmental and Social Assessment

Environmental Assessment

The district heating sub-projects involve typical upgrading works (e.g. ordinary trench excavation) which apply standard technologies, undertaken by an experienced promoter. The impacts that can be expected from district heating relate to visual impact, noise nuisance, and disturbance during construction that are of a temporary nature and are mitigated according to established industrial practices.

The investment into waste management facilities will help to achieve EU objectives of the Landfill Directive (1999/31/EC) and the Waste Framework Directive (2008/98/EC) by contributing to the

[1] Only projects meeting 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 CO_2e/year absolute (gross) or 20,000 tons CO_2e/year relative (net) – both increases and savings.

diversion of biodegradable waste put into landfills and to the recovery of energy. The facilities will be fully compliant with the revised Waste Framework Directive (2008/98/EC). Further, the waste management sub-projects will contribute to reducing greenhouse gas emissions by reducing the methane emissions from landfills.

EIB Carbon Footprint Exercise

For the district heating investments, which will increase the heat supply in the targeted cities and avoid individually based solutions and electricity generation in conventional plants, the estimated relative emissions are -26 kt/year of CO_2 equivalent.

The baseline for calculating the emission for the waste facilities is assumed to be a basic MBT facility for the entire waste volume of 620 kt/year with bio-stabilisation of biodegradable waste and disposal of all residues, with no assumed CO_2 emissions from residue disposal, but electricity consumption from the network to satisfy the internal load of the MBT. As a result, estimated annual emissions of the waste treatment facilities amount to 96.3 kt CO_{2eq}/year. Relative emissions are calculated at -27ktCO_{2eq}/year respectively. Therefore, the project will contribute to reducing greenhouse gas emissions by reducing the methane emissions from landfills and to meeting demand for electricity by using residual waste considered partially (production of biogas) as a renewable energy source.

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.