

## Environmental and Social Data Sheet

### Overview

Project Name:	Toplofikacia CHP Project
Project Number:	2009-0545
Country:	Bulgaria
Project Description:	Construction and commissioning of a new combined heat and power (CHP) plant for Sofia's district heating network operated by Toplofikacia utilising refuse derived fuel (RDF) to be produced at the municipality's new waste management facility. This would be the final phase of the integrated Sofia Municipal Waste project. The project is likely to be co-financed under the OP Environment during 2014-2020 and it is on the JASPERS action plan to support the preparation of the grant application.
EIA required:	Yes, the facility is subject to EIA (Annex I)
Project included in Carbon Footprint Exercise <sup>1</sup> :	Yes

### Environmental and Social Assessment

#### Environmental Assessment

The municipality of Sofia currently implements a project called „Integrated System of Municipal Waste Treatment Facilities for Sofia Municipality“, financed by the European Regional Development Fund and co-financed by the Bank under operation 2009-0313 SOFIA MUNICIPAL WASTE MANAGEMENT. It consists of two phases: Phase I with the construction of a sanitary landfill, a composting unit and an Anaerobic Digestion plant; Phase II being the design and construction of a Mechanical and Biological Treatment (MBT) plant with production of refuse derived fuel RDF. The MBT is in operation since September 2015. The MBT converts mixed waste into RDF to be processed by the new CHP plant which replaces existing natural gas fired heat generators in Sofia (Phase III). This last phase is the object of the present operation.

The project (Phase III) is in line with the National Waste Management Plan 2014-2020 approved by the relevant public Authorities. It aims at increasing the energy recovery from waste and at reducing landfill of waste and contributes to achieving the objectives outlined in the Waste Framework Directive (2008/98/EC) and the Landfill Directive 1999/31/EC. By generating heat and electricity from a partly renewable energy source (biogenic fraction in RDF) the project will reduce and avoid greenhouse gases emissions. All electricity produced by the CHP plant will originate from “high-efficient” CHP in-line with Directive 2012/27/EU on Energy Efficiency.

<sup>1</sup> 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 CO<sub>2e/year</sub> absolute (gross) or 20,000 tons CO<sub>2e/year</sub> relative (net) – both increases and savings.

Luxembourg, 4 September 2017

The project falls under Annex I of the EIA Directive. This makes a full Environmental Impact assessment compulsory for authorisation. The promoter applied for consent in August 2014. A comprehensive environmental impact study (EIS) has been conducted and approved by the Authorities after modification. The EIS comprises the assessment of all relevant risks and impacts, compares various project sites, and comprises the modelling of dispersion of flue gas emissions. Following public consultation of project documentation, the competent authority (Director of the Regional inspectorate for environment and water) granted consent to the project in August 2015. The consent is accompanied by an authorisation of the competent authority for provisional execution of the project.

The project is located inside an industrial area next to an existing gas-fired CHP plant. The nearby green area of the central Sofia cemetery park is surrounded by a high reinforced concrete wall which will minimise noise impacts from the project. The closest residential buildings are ca. 400 m away from the chimney. According to the EIS, the closest nature conservation sites are ca. 9 km away from the project site. The EIA process concluded that the project has no significant negative impact on the integrity of nature conservation sites.

The project's main environmental impacts are noise, dust and increased traffic during the construction of the plant, and waste (fly ash etc.), road transport, noise and airborne pollutants during its operation. As required by the permit, these risks will be addressed through specific mitigation measures and more generally through the compulsory use of "Best Available Technique" (BAT) for Waste Incineration. Consequently, the project utilises equipment that is identical to the ones described in the applicable conclusions for BAT Reference Document and it complies with the atmospheric emission limits for NO<sub>x</sub>, SO<sub>x</sub>, particulates and other pollutants defined by the Directive 2010/75/EU on Industrial Emissions. Industry-standard monitoring and control of pollutant missions must take place.

### **EIB Carbon Footprint Exercise**

The Carbon Footprint of the project (Phase III) is included in the Carbon Footprint modelling under operation 2009-0313 (Phases I and II) because of the integrated character of the three phases. No additional Carbon Footprint is modelled here to avoid any double-counting.

Under operation 2009-0313, absolute emissions of Phases I to III are quantified at 110 kt Co<sub>2</sub> equivalent per year. When compared to a baseline, relative emissions savings of 29 kt CO<sub>2</sub> equivalents per year are determined for the three Phases combined.

### **Social Assessment, where applicable**

No separate social impact assessment has been carried out. However, it is generally deemed that the overall social impacts of the project are positive, with reduced costs of district heat supply and waste management for the inhabitants of the targeted project region. The project does not involve any resettlement.

Luxembourg, 4 September 2017

## Public Consultation and Stakeholder Engagement

Public consultation was part of the EIA process. Several associations and a private person have however launched detailed complaints before the Administrative Court of Sofia City against the EIA permit and against the provisional execution right. Concerns raised relate to the consultation process, to various technical aspects of the project, and to the rationale for provisional execution. A first decision of the Administrative Court of Sofia in October 2015 was contested. The matter for the provisional execution was confirmed by a Supreme Administrative Court's ruling issued in December 2016. The issued decision is final. Given that works are not expected to commence prior to the end of 2018, this matter is of less relevance. In contrast, a final court decision on all complaints against the EIA decision in favour of the project is essential for the Bank and reflected by a loan condition.

Several citizens living in the vicinity of the project and one person living elsewhere have legally challenged the site-specific detailed development plan. All of these complaints (17) are identical and generic in nature. They have been summarised to a single case by the Administrative Court of Sofia City. 16 complains were rejected by the court. Only one was admitted for further processing. A decision by the court is pre-condition for the Architecture and Urban Planning Department of Sofia to issue a construction permit to the project. Receipt of the construction permit is deemed essential and addressed by a loan condition.

During appraisal the Bank met with members of the environmental city council of Sofia, representing all key parties and a civil organisation. They confirmed their full support to the project, representing the final phase of the waste management programme of Sofia, and welcomed additional public consultation efforts.

## Conclusions and Recommendations

The project is expected to have minor residual environmental impacts and it is acceptable in environmental and social terms for Bank financing. An electronic copy of the Environmental Impact Study (EIS) has been submitted to the Bank to be published on its website.

Disbursements will be conditional to a supportive final court decision on all EIA-permit related complaints and to the granting of a construction permit, respectively.

It is further proposed that the promoter undertakes to pursue, on a voluntary basis, a meaningful engagement process prior to and during construction and during early operation phase of the project in order to address potentially affected peoples' concerns , also in case of supportive court decisions.