

## Environmental and Social Data Sheet

### Overview

Project Name:	Budapest District heating Strategic Investments
Project Number:	2018-0061
Country:	Hungary
Project Description:	Investments in the district heating system of Budapest for the period 2018-2019 to improve network performance, to optimize the heat generation mix and to reduce emissions of greenhouse gases and other air pollutants.
EIA required:	no
Project included in Carbon Footprint Exercise <sup>1</sup> :	yes

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

### Environmental and Social Assessment

#### Environmental Assessment

The Project consists of the following major types of components:

- Reconstruction and modernization of the existing district heating system (heat generation assets, pipelines and substations);
- Construction of two new biomass heat only generation plants (20 MW<sub>th</sub> each);
- Connecting new customers;
- Construction of strategic transmission pipelines to connect individual "islands" of the existing district heating network allowing optimization of use of heat sources, more efficient network operation and making available the district heating service in new areas of the city, like in the central districts;
- Substation upgrades to allow remote control operation;
- IT reconstruction, modernization and developments, including cyber security improvements;
- Other investments related to the buildings, equipment, tools and instruments of the Promoter including building energy efficiency improvements (insulation, replacement of windows, modernization of lighting, etc.).

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

Luxembourg, 17/07/2018

The rehabilitation of the existing district heating assets and the construction of new network components will be carried out in the urban area of Budapest and will not affect any environmentally sensitive or protected areas.

The extension works include all kind of pipelines i.e. new transmission lines; medium size distribution and smaller connection pipelines as well.

Installation of biomass heat generation plants will be brown field investments within existing industrial areas. The boilers will be fuelled by woodchips. The regionally sourced forest and industrial residue will provide sustainable fuel supply. The proposed units will make use of advanced, yet well-proven technology with environmental emissions compliant with the Directive on the limitation of emissions from medium combustion plants 2015/2193/EU.

The works will take place in different locations in Budapest, a city with significant archaeological and urban heritage. In case of archaeological discoveries the relevant authorities are involved and due care is taken when areas of potential interest are discovered. The Promoter has processes in place to ensure that the reinstatement of excavated areas is carried out rigorously and that the surface disturbance is minimised.

Two Project components (the two new biomass heating plants) fall under Annex II of the Environmental Impact Assessment Directive (2014/52/EU amending the 2011/92/EU) leaving it to the national competent authority to determine whether an environmental impact assessment is required according to criteria defined in Annex III of the Directive. At the time of appraisal the competent authority has already issued a screening decision for one of the biomass plants concluding that no EIA is required. The other plant with similar technical characteristics will go through the screening process later. For the other Project components due to their type of activity, their location in urban areas outside cultural heritage sites and protected nature sites, the typically expected low impacts and available suitable mitigation measures EIA processes are not likely to be required. The works are subject to building permits to be provided by the local authorities.

The development and optimization of the district heating system will allow the Promoter to increase the off take of heat generated by already existing waste to energy (WTE) and high efficiency cogeneration plants (CHP), as well as from the new biomass plants. This will lead to the optimisation of the heat supply mix and to the reduction in the consumption of fossil fuels.

### **EIB Carbon Footprint Exercise**

The estimated annual absolute emissions of the Programme in a standard year of operation are 40 kt CO<sub>2</sub>eq and the estimated emissions savings are 38 kt CO<sub>2</sub>eq/year. The absolute emissions include the emissions related to fuel burnt to meet the incremental demand served by the new district heating connections as well as the emissions related to the losses in the newly constructed pipelines. The baseline comprises of emissions related to fuel burnt in individual boilers displaced by the district heating extension and in the gas-fuelled heat generation plants replaced by the new biomass generation.

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.

Luxembourg, 17/07/2018

## **Other Environmental and Social Aspects**

The Promoter has demonstrated sound practice with respect to environmental, health and safety management. In addition to procedures to meet regulatory requirements, the Promoter has a comprehensive environmental management system, which is applied to new Projects and monitors ongoing operations.

The Promoter is certified to meet the requirements of standards of ISO 9001; ISO 14001 and OSHAS 18001. The Promoter is also certified and registered EMAS (EU Eco-Management and Audit Scheme) organization.

## **Conclusions and Recommendations**

The Project will reduce emissions of greenhouse gases and other air pollutants by replacing individual heat sources in residential and public buildings with centralised heat generation, by adding new renewable heat generation, by modernising existing heat generation assets and by increasing the overall efficiency of the district heating system. The substitution of individual coal, oil or gas fuelled boilers and ovens with subsequent reduction of air pollutants is very important for Budapest in view of its long-lasting and significant problems with the air quality, especially in the densely populated central areas of the city.

The Bank reviewed the environmental and social capacity of the Promoter including its organisation, processes and procedures, and deemed them to be good. Based on the information available, the Project is expected to have minor negative residual impacts and thus is acceptable for Bank financing from an environmental and social perspective subject to the following conditions.

The Promoter undertakes to send to the EIB copies of all EIA screening decisions concerning the Programme components issued by the competent authority for nature and environment as soon as they are available. The Promoter shall send to the Bank the preliminary environmental studies as well, which were submitted to the authorities to support the screening requests.

The Promoter undertakes not to allocate the Bank's funds to distribution Programme components that require an Environmental Impact Assessment (EIA) until the EIA and the biodiversity assessment as well as the environmental permitting process have been finalised, to the satisfaction of the Bank. When the EIA is made available to the public, an electronic copy of the full EIA study shall be sent to the Bank.

The Promoter undertakes to take into account and implement conditions expressed in any screening-out decision or EIA consent granted by the competent authority for nature and environment.