

## Environmental and Social Data Sheet

### Overview

Project Name:	THERMAL REHABILITATION OF KRAKOW HEATING
Project Number:	2016-0213
Country:	Poland
Project Description:	Investments aimed at energy efficiency, modernisation and extension of heating system in the Krakow District
EIA required:	no
Project included in Carbon Footprint Exercise <sup>1</sup> :	no, below the thresholds

### Environmental and Social Assessment

#### Environmental Assessment

The project aims at increasing the overall energy efficiency of the district heating system of Krakow district by densifying the grids through new connections and upgrading equipment and control systems which will also result in the replacement of - currently used - inefficient coal-stoves.

The project consists of four types of investments, namely:

- Extension and densification of the district heating network substituting coal ovens and boilers.
- Renovation and replacement of piping and related network equipment.
- New substations (high-pressure delivery systems) replacing old and inefficient ones.
- Extension of the network to newly developed areas of the city.

New extensions and new connections will be installed underground in the city of Krakow and will not affect any environmentally sensitive or protected areas. The extension work does not include any main trunk lines i.e. between heat plants and distribution centres, but consists of low capacity distribution pipes to existing and new buildings.

The project's components 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, a screening decision has not yet been made by the competent authorities. Due to the project's type of activity, its location in urban areas outside cultural heritage sites and protected sites, the typically low impacts and suitable mitigation measures for this type of activities, EIA processes are not likely to be required. The works are expected to be subject to building permits to be provided by the local authorities.

Replacement of old piping is expected to reduce primary energy consumption in these facilities by 36,900 GJ/y due to the use of better insulation material and installation

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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.

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techniques. The current inefficient system of heat distribution stations with high heat losses and high consumption of energy for pumping will be replaced with high-pressure delivery system including the installation of individual substations.

In addition, the project will contribute to the substitution of residential coal stoves and consequently save further energy and reduce local air pollution emissions in residential areas.

The total energy saving is estimated to reach 49,110 GWh/y after completion of all project's components in 2023. In addition the project will reduce the emission of greenhouse gases for heating purposes in Krakow.

No significant negative environmental impacts are expected from the project. The promoter has demonstrated sound practice with respect to environmental management. In addition to procedures to meet regulatory requirements, the promoter has implemented an environmental management system which is applied to new projects and monitors ongoing operations. The main negative impact from the foreseen investments usually come from construction works, which are temporary and expected to be mitigated in line with national legislation.

When renovated and well maintained, the district heating system is expected to efficiently distribute low cost heat from existing coal fired cogeneration plants, as well as from a newly constructed waste-to-energy incinerator. The investments in the heat distribution networks are considered to be supportive of the long term environmental sustainability of heat supply to the Krakow District.

## Conclusion and Recommendations

At the time of appraisal, the project's authorisation process has not been pursued yet. Therefore, the following loan conditions are proposed:

- The promoter undertakes not to allocate the Bank's funds to any project component that requires an EIA until such assessment is approved by the competent authority, the building permit issued, and both (EIS and permit) are satisfactory to the Bank. An electronic copy of the Environmental Impact Studies (EIS) and their Non-Technical Summary (NTS) or a link must be provided to the Bank when the NTS is made available to the public. A copy of the final consent from the competent authority must be provided to the Bank prior to start of construction.
- The promoter undertakes not to allocate the Bank's funds to any project component that requires an Appropriate Assessment under article 6.3 and 6.4 for impacts on Natura 2000 sites, until such assessments have been approved by the competent authority and the requirements under articles 6.3 and 6.4 are met and are satisfactory to the Bank. An electronic copy of the Appropriate Assessments must be submitted to the Bank when available.
- The promoter undertakes to submit screening out decisions by the competent authority if required for any project component according to the ANNEX II and based on the criteria to ANNEX III of the EIA directive 2014/52/EU amending the directive 2011/92/EU.

With the above conditions in place, this project is considered to be acceptable for Bank financing from an environmental perspective.