

**Public**

## **Environmental and Social Data Sheet**

### **Overview**

Project Name:	MEGATEM HEATING CAPEX PROGRAMME
Project Number:	2018-0379
Country:	Poland
Project Description:	The project concerns the financing of a biomass-fired combined heat and power (CHP) unit in Lublin, Poland. The unit will generate heat for the district heating system and electricity which will be supplied to the grid.
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 comprises the design, construction, operation and maintenance of a 11.5 MW<sub>e</sub> and 33 MW<sub>th</sub> (plus maximum 6.2 MW<sub>th</sub> from a flue gas condenser) biomass power plant located within the existing heat and power plant in Lublin, Poland, belonging to the promoter. The power plant feedstock comprises woodchips. The electricity produced will be fed into the public grid while the heat will be supplied to the municipality's district heating grid. The project comprises a bubbling fluidised bed boiler, a steam cycle with extraction-condensing steam turbine with air cooling system, a flue gas condenser to recover the latent heat of water, and an air pollution abatement system consisting of an electrostatic precipitator and a system for non-catalytic selective reduction of NO<sub>x</sub> emissions. A flue gas condenser will contribute not only to the overall efficiency of the unit but also to removal of pollutants from flue gases remaining after passing through the pollution abatement system, such as the particles not removed by the electrostatic precipitator, as well as aerosols, heavy

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<sup>1</sup> Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO<sub>2</sub>e/year absolute (gross) or 20,000 tonnes CO<sub>2</sub>e/year relative (net) – both increases and savings.

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metals and acid compounds, like HCL and SO<sub>2</sub>. The flue gases will be evacuated by a 60 m high stack.

By virtue of its technical characteristics, the project falls under Annex II of the EIA Directive (Directive 2014/52/EU amending 2011/92/EU). The promoter undertook a simplified environmental assessment, which was submitted to the competent authority to determine whether a full Environmental Impact Assessment (EIA) was required. Based on the characteristics of the project, location and the likely impacts and mitigation measures presented, the competent authority screened out the project from the requirement of a full EIA. The assessment undertaken and the opinion of the competent authority indicated that no significant residual impacts would result from the project during construction and operation. This includes also an impact on Natura 2000 sites. The competent authorities subsequently issued the construction authorisation for the investment.

Potential impacts during construction are expected to be temporary in nature and will be minimised or avoided by preventive measures e.g. proper waste management and noise mitigation. During operation, the main impacts are expected to result from air-borne emissions and solid waste produced by the combustion process. The air-borne emissions will be brought to the levels complying with the EU legislation in the air pollution abatement system. The solid waste will be dealt with by the subcontracted companies licenced to undertake such tasks. During the construction and operation of the plant, the streams of waste water will be brought to compliance with the permitted parameters through the neutralisation and cleaning operations.

The plant's fuel input capacity will be below 50 MW<sub>th</sub> and as such, the project falls under the Directive (EU) 2015/2193 *on the limitation of emissions of certain pollutants into air from medium combustion plants*. The plants emissions will comply with this Directive.

The Directive applies to new plants from 20 December 2018. It was the subject of the recent *Report from the Commission to the European Parliament and the Council COM(2020) 351* from 3/08/2020. The Report indicated that the small number of examples of the implementation of the current compliance rules does not allow for the assessment of the need for their update, and they remain like they are defined in the Directive.

#### *Biomass*

The annual biomass consumption in the plant will be around 140 000 t. The feedstock will be ensured – from certified sources under Forest Stewardship Council (FSC) and/or Programme for the Endorsement of Forest Certification (PEFC) schemes – by the selected contractors. The biomass will be supplied by train and, only in case of technical problems with the main supply channel, by trucks.

## **EIB Carbon Footprint Exercise**

In accordance with the Bank's current Carbon Footprint Methodology, the carbon footprint calculations are based on the comparison of project emissions with the emissions resulting from electricity generation by a combination of existing and new power plants in Poland (50 % operating margin and 50 % build margin), and the emissions resulting from heat generation in a gas-fired heat-only boiler. The total relative effect of the project is a net reduction of CO<sub>2</sub> equivalent emissions by 120 kt CO<sub>2</sub>e/yr.

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.

## **Conclusions and Recommendations**

Based on the environmental information provided by the Promoter, the project is deemed to be acceptable for Bank financing in environmental terms. The Bank will require the promoter to submit project monitoring reports in line with Bank requirements during project implementation and for the first year of operations.

The promoter will be requested to comply with the following contractual undertakings:

1. The Promoter undertakes to take into account and implement conditions expressed in the screening-out decision or EIA consent granted by the competent authority for nature and environment.
2. All the biomass sourced as a fuel for the project need to align with the EU biomass sustainability criteria principles as defined in Directive EU 2018/2001 (Article 29) and with the EU Timber Regulation (EU/995/2010).
3. Wood supply chain and the underlying forest management practices are to be certified, or if not yet certified, they have to be aligned with the standards so as to be certifiable by internationally accredited certification schemes (e.g. FSC or PEFC).