

## Environmental and Social Data Sheet

### Overview

Project Name:	UZBEKISTAN DISTRICT HEATING LOAN
Project Number:	2018-0199
Country:	Uzbekistan
Project Description:	The Project includes reconstruction and modernization of the district heating system in Nukus city. Modern CCGT units allowing co-generation of heat and power will replace the obsolete heat-only gas boilers and pre-insulated pipelines will be installed to rehabilitate the district heating network and to reduce losses.
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

##### Compliance with applicable Environmental Legislation

The Promoter of this district heating (DH) Project is the Komunalagency of the Ministry of Housing and Communal Services (MHCS). The project is part of a countrywide investment programme to improve the efficiency and quality of heating and hot water services in selected cities of Uzbekistan. The objective will be achieved through rehabilitation and renovation of district heating and hot water systems.

The environmental protection authority at national level is the State Committee for Ecology and Environmental protection (Goskompriroda).

The Project is located in Nukus, the capital city of the autonomous republic of Karakalpakstan in the western part of Uzbekistan.

The EIB will request the Promoter to implement the Project in line with relevant national legislation and in accordance with EIB's Social and Environmental Standards. The key national legislation of relevance includes:

- Law on Environmental Expertise (2001, last amended 2009) and the Regulation on State Environmental Expertise (SEE): relevant for EIA.
- Law on environmental control (2013); relevant for the Environmental Monitoring.
- Law on nature protection (1992); states legal, economic, and organizational bases for the conservation of the environment.

---

<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.

Luxembourg, 05/02/2020

If implemented inside the EU, this DH rehabilitation Project would fall under Annex II of the Directive 2011/92/EU as amended by 2014/52/EU (i.e. subject to screening by the Competent Authority). The Promoter in the feasibility study provided the necessary technical information as defined in Annex II.A of the EIA Directive. Based on the preliminary evaluation included in the feasibility study and the criteria listed in Annex III of the EIA Directive, the characteristics and the location of the Project and the potential impacts do not determine a need of an environmental impact assessment.

Despite this, pursuant to the Regulation on the State Environmental Expertise (SEE) the Promoter must conduct a process evaluating the environmental impacts of the Project ("OVOS" according to the national acronym). SEE approval is a mandatory requirement for the Project.

Technical Assistance arranged by the EIB is foreseen to support the Promoter in preparation of the relevant environmental and social impact evaluation documents in accordance with the applicable national legislation and EIB's Environmental and Social Standards. The evaluation process of environmental and social impact, the relevant documentation and authorizations will be checked by the EIB before disbursement of EIB funds. In particular, the Bank will require the Promoter to provide the all the project related decisions from local Competent Authorities, the environmental and social impact studies and environmental and social management plan (ESMP).

#### Environmental Impacts

The Project is expected to have minor and mainly temporary environmental impacts. The anticipated adverse impacts during construction relate to noise, vibration, dust, and traffic disruption. During operation, the emissions of greenhouse gases and airborne pollutants by the combined-cycle gas turbines are the main potential environmental impact. The Bank will require the implementation of appropriate emissions abatement measures for CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>es and dust from flue gases. The Project is expected to reduce emissions in comparison with the current situation. Possible hazards associated with waste handling are to be considered during both construction and operation. Implementation of appropriate mitigation measures can minimise all those mentioned negative environmental impacts. The measures should be defined in an Environmental and Social Management Plan and their implementation has to be thoroughly monitored during construction and operation.

The project related works will take place in a consolidated urban environment along the existing district heating network pipeline routes and on the existing heat generation site. Therefore, the Project is not likely to have negative impacts on nature conservation areas. Nevertheless, compliance with the Biodiversity and Habitats National Legislation and its alignment with the Habitats and Birds EU Directives (92/43/EEC, 2009/147/EC), international conventions to which Uzbekistan is party and EIB E&S Standards will be further checked, before disbursing EIB funds and will be monitored during the implementation of the Project.

#### **EIB Carbon Footprint Exercise**

Estimated annual absolute emissions of the Project in a standard year of operation amount to 340 kt of CO<sub>2</sub>e/year. This estimation includes direct emissions, which physically occur from combustion of gas in the new CCGT units generating heat and electricity. The emission savings after the implementation of the Project are expected to reach 75 kt of CO<sub>2</sub>e/ year. The baseline taken for comparison includes emissions of the current non-efficient obsolete gas-fired hot water boilers in operation serving the heat demand, considering the significant losses in the network and emissions from the assumed country level power generation producing the same amount of electricity as foreseen by the project.

Luxembourg, 05/02/2020

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.

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

Overall, the project is expected to have positive social impacts. Improved heating services would be particularly beneficial for poorer households, with affordability problems to ensure adequate level of heating services and vulnerable groups of women, children, and the elderly, who spend more time in their homes than adult men. The project will have particularly beneficial impacts on women who often carry the primary responsibility of heating provision inside their homes and perform numerous household tasks requiring hot water. Women also perform key functions as apartment caretakers including for example the payment of non-automated utility bills.

The planned rehabilitation and upgrading works are expected to take place on existing infrastructure and on land, which is owned by the state and managed by the municipality administration. The proposed investments are not anticipated to cause any permanent physical displacement or expropriation. However, the exact locations and the scale of physical works have yet to be finalized and minor land acquisition or potentially temporary involuntary resettlement might be required. As the technical design is finalized, if necessary a Resettlement Action Plan (RAP) will be prepared.

### **Public Consultation and Stakeholder Engagement**

A public survey conducted in the framework of the countrywide DH services improvement programme run by the MHCS confirmed the interest and support of the concerned population for the DH modernization projects. Some ongoing pilot projects of the programme foresee further surveys to measure the project impacts on welfare, human development, and labour market outcomes on the poor, unemployed youth, and female-headed household among other vulnerable groups. Following the first baseline survey further surveys will be conducted during midterm, and once the DH system is operational by the end of the pilot projects.

The EIB will require the Promoter to disclose the results of the evaluation of the environmental and social impacts of the Project (i.e. environmental and social impact studies, ESMP and RAP, if any) and to consult all interested stakeholders and local population in Nukus in accordance with the Bank's E&S Standards and the national EA regulations.

### **Other Environmental and Social Aspects**

The local DH company is experienced mainly in operation and maintenance of the DH system. The available local expertise of investment projects is limited and relates to smaller projects, financed by the state and municipal budgets. The local specialists are not familiar with the environmental and social requirements of International Financial Institutions and have not been involved in monitoring and reporting of ESMPs implementation.

The Promoter of the Project (central project coordination agency of the MHCS), however, is responsible for the coordination and implementation of several ongoing projects financed by different IFIs. The established separate Project Implementation Units within the agency are continuously gaining the necessary expertise. A separate Project Implementation Unit (PIU) is planned to be created to manage the implementation of this Project. Technical Assistance support is planned to ensure proper project preparation and implementation in accordance to EIB's policies and procedures, in particular with respect to social and environmental aspects.

Luxembourg, 05/02/2020

EIB will require the Promoter to ensure that EMP provisions will form part of the tendering requirements and will be included in construction contracts for proposed activities, both in the specifications and bills of quantities. Furthermore, all contractors will be required to include these costs in their financial bids and comply with the EMP provisions while implementing the project activities.

## Conclusions and Recommendations

The Project will generate positive socio-economic benefits due to the improvement of hot water supply and heating services for the population along with improved environmental conditions in Nukus. Replacement of old inefficient gas fired boilers by new state-of-the-art combined cycle gas turbines and reduction of losses after the rehabilitation of the district heating network will lead to energy savings and reduction of CO<sub>2</sub> and pollutants emissions, which will have positive effect on the health of population. Overall, the Project is expected to create minor environmental and social risks.

The formation of the Project Implementation Unit with appropriate capacity and resources has to be completed before the first disbursement of the EIB loan.

The process of evaluation of environmental and social impacts of the Project and the related authorization procedure have to be finalized to the satisfaction of the Bank before the first disbursement.

The Promoter shall undertake to send to the EIB copies of all the decisions issued by the competent authority for nature and environment concerning the Project as soon as they are available. The Promoter shall send to the Bank the environmental and social impact studies, submitted to the authorities during the authorization process as well as the ESMP and RAP, if any. The promoter shall consult all interested stakeholders and local population concerning the Project and its potential impacts in accordance with the Bank's E&S Standards and the national EA regulations.

The Promoter shall undertake to take into account and implement conditions expressed in any decisions or consents granted by the competent authority for nature and environment.

Subject to these conditions, the Programme is acceptable for EIB financing in E&S terms.