PROJECT CHARTER

SECTION 1. PROJECT INFORMATION	
Project name	"Construction of cogeneration units for combined heating and power generation in the city of Bukhara".
Interrelation of the project with the Development Concept (name of the concept and the problem(s) the project solves within the concept)	The Decree of the President of the Republic of Uzbekistan RP-1072 dated 12.03.2009. "On the Program of measures on development of the most important projects on modernization, technical and technological re-equipment of production for 2009-2014" and meets the tasks and objectives of the "Strategy for Further Development and Reform of Electric Power Industry of the Republic of Uzbekistan" approved by the Decree of the President of the Republic of Uzbekistan PP4249 dated 27.03.2019. Decree of the President of the Republic of Uzbekistan №4542 "On additional measures to improve the heating supply system and the financial recovery of heating supply enterprises" dated 2.12.2019. The aim of the project is to introduce modern resource-saving technologies in the field of combined generation of electricity and heating on the basis of cogeneration. Implementation of the project will allow to solve the following tasks: Reliable supply of heating and electricity to consumers in Bukhara. - Release of electric capacity of existing thermal power plants; - Ensuring the prospective development of the production sector and economy of the republic through the construction of the Bukhara region's own sources of generating capacity - a thermal power plant in the city of Bukhara; - Increasing the profitability of the enterprise by improving the quality and expanding the volume of products sold, introducing modern resource-saving technologies and equipment, reducing specific consumption of energy resources for product sales. - Creation and development of the market of independent power producers in the Republic.
The industry in which the project is implemented	Housing and communal services. Heating supply.
Project location	Bukhara city, 5 Alpomish str. (Bukharaenergomarkaz JSC)
Initiator (customer) of the project (name, TIN, address, phone number, date of establishment)	Ministry of Housing and Communal Services of the Republic of Uzbekistan TIN: 304931516 Tashkent, No.1 Niyozbek Yuli str. +998 71 235-85-79 info@mjko. uz Registration Date: 18.04.2017.
Project Sponsor (name, TIN, address, phone number)	IFI
Project manager (project office)	Ministry of Housing and Communal Services of the Republic of Uzbekistan
Other project participants	IFIs, foreign investors
Date of document creation	25.12.2019г.

SECTION 2. PROJECT DESCRIPTION	
Reasons for initiating the project (business or other reasons for initiating the project)	The existing deficit in power supply and the lack of own generating capacity in the Bukhara region.
Reasons for initiating the project (including the legal act that is the basis for initiating the project)	The Decree of the President of the Republic of Uzbekistan PP-1072 dated 12.03.2009. "On the Program of measures on development of the most important projects on modernization, technical and technological re-equipment of production for 2009-2014" and meets the tasks and objectives of the "Strategy of further development and reform of electric power industry of the Republic of Uzbekistan" approved by the Decree of the President of the Republic of Uzbekistan PP4249 dated 27.03.2019. , Decree of the President of the Republic of Uzbekistan №4542 "On additional measures to improve the heating supply system and the financial recovery of heating supply enterprises" dated 2.12.2019.
Goal and expected results of the project	The purpose of this project is to introduce modern resource-saving technologies in the field of combined heating and power generation based on cogeneration. Taking into account the world experience, it is planned to reconstruct the existing scheme of thermal energy production of JSC "Bukharaenergomarkaz" and to increase the efficiency of energy conversion in the process of thermal and electrical energy production. The implementation of the project through the installation of 2 CCGT provides annual savings of natural gas for electricity generation in the amount of 123.0 million m3. Conditional volume of reduction of emissions of harmful substances annually will be 241.8 thousand tons in CO2 equivalent.
Project content	CCGT for combined heating and power generation is a modern high-tech and resource-saving complex currently used in all developed countries of the world. The CCGTs envisaged by the project for installation at Bukharaenergomarkaz JSC are simple in principle and have a high degree of automation. In addition, they are more compact than traditional plants. The transition to new technology will lead to savings of natural gas, will increase the efficiency of fuel use and significantly reduce emissions of pollutants into the atmosphere, thereby improving the environmental situation in the city and region.
Criteria for achieving project goals (measurable criteria for achieving project goals)	This project can be implemented if foreign direct investment is attracted or other alternative sources of funding are found.
Project boundaries (description of the work included in the project)	Installation of two sets of power generating equipment Gas turbine (GTU) of unit capacity up to 85 MW and Steam condensate turbine (SGTU) of unit capacity up to 17 MW with total electric capacity of 187 MW. Erection of two transformer substation 110/10(6) kV on the territory of JSC "Bukharenergomarkaz". 2x80 MW. Construction of two 110kV HV lines from 220kV SS. Bukhara to PS 110kV. JSC "Bukharaenergomarkaz"
Project Limitations	Not available

(description of factors limiting the execution of the project (legal, financial, resource, schedule, as well as those imposed by other projects, etc.)	
Project Assumptions (alternative options for project implementation mechanisms)	Three options for the layout of CCGT power units and four options for the scheme of power supply to the power system of the Republic of Uzbekistan are under consideration.
Expected risks of the project	There is a risk of increasing the cost of construction due to rising prices of imported equipment and materials, the increase in the cost of construction and installation work more than provided by the project.