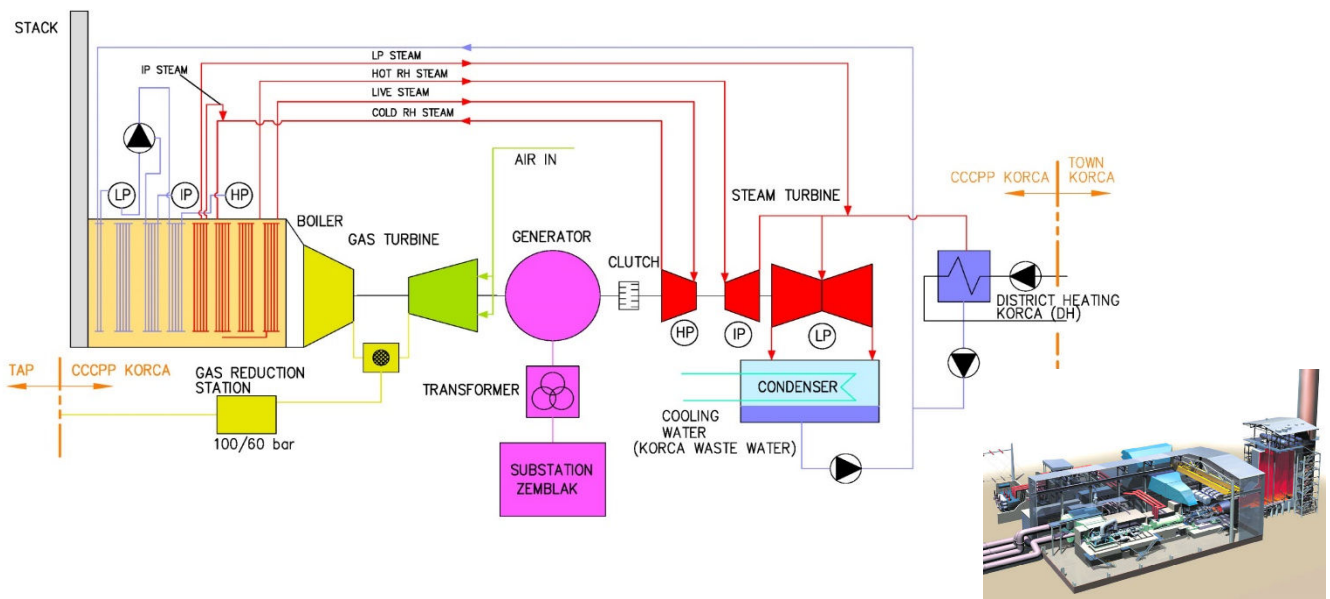


# Combined Cycle Cogeneration Power Plant Korça

Project information  
Leaflet  
May 2018

GPP Korca plans to construct a Combined Cycle Cogeneration Power Plant in the city of Korca, in an industrial area, two kilometers from the edge of the residential area of construction, poor urbanization and population density.

Cogeneration is the use of a heat engine or power station to generate electricity and useful heat at the same time.



The growth of power generation from renewable sources leads to new challenges as all the consumers and electrical power generators connected to a grid need to be in balance. Since the generation from renewable sources is subject to natural phenomena fluctuations (wind is blowing or not sun is shining or not etc), the requirements for the other electrical sources regarding operational flexibility get inevitably more demanding. They need to balance out not only the inconsistent demand from the consumers, but also the non constant power generation from renewable sources.

As the most efficient of the currently available thermal power generation technologies, gas turbine based combined cycle power plants are the BAT, best available technology for power generation.

Optimization of the process of production of electrical and heat energy will result in significant reduction of the environmental emissions, below the limit values, high efficiency factor will enable maximum fuel conversion, and the overall concept will ensure reliability and future availability of the plant. What is most important, by construction of this state-of-the-art project Albania will get a reliable energy source, without neglecting the local community interests.

## Why Gas Power Plant?

### No baseload plant in Albania

- In Albania import is used as a base load
- Lack of generation capacity to meet growing demand
- Lack of diversity and adequacy of the generation capacities

### Why gas-advantages of gases vs coal?

- Using gas significantly reduces greenhouse gas emissions.
- Gas combustion does not produce harmful sulfur oxide compounds (SO<sub>x</sub>) as the cause of acid rains. Significant reductions in nitrogen oxide (NO<sub>x</sub>) and carbon dioxide (CO<sub>2</sub> and CO) emissions are below the permitted values of the Act.
- Natural gas does not cause dust emission (PM particles between 10 and 2,5 µm)
- Proven high efficiency of the cogeneration system.

## Why Korça as location?

- Trans Adriatic Pipeline TAP is two km away from the CCCPP location
- Grid connection to Existing Zemblak SS, which is owned and operated by Albanian TSO
- District heating for the city of Korça
- Greenhouse warm up by one stream of district heating

## Defining the Project

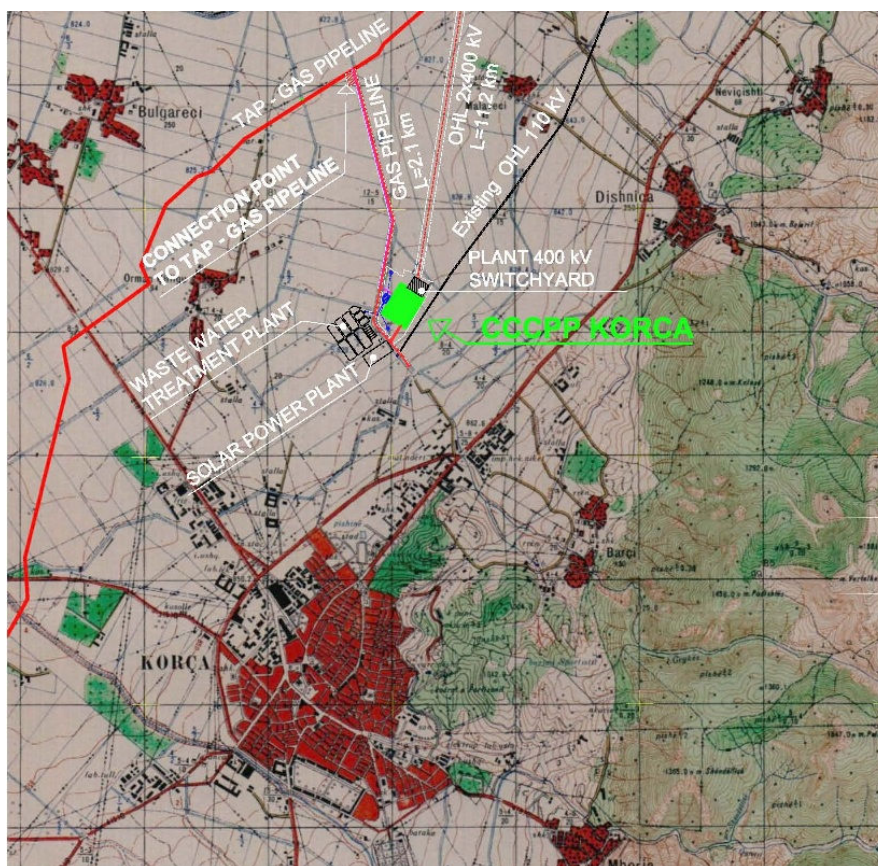
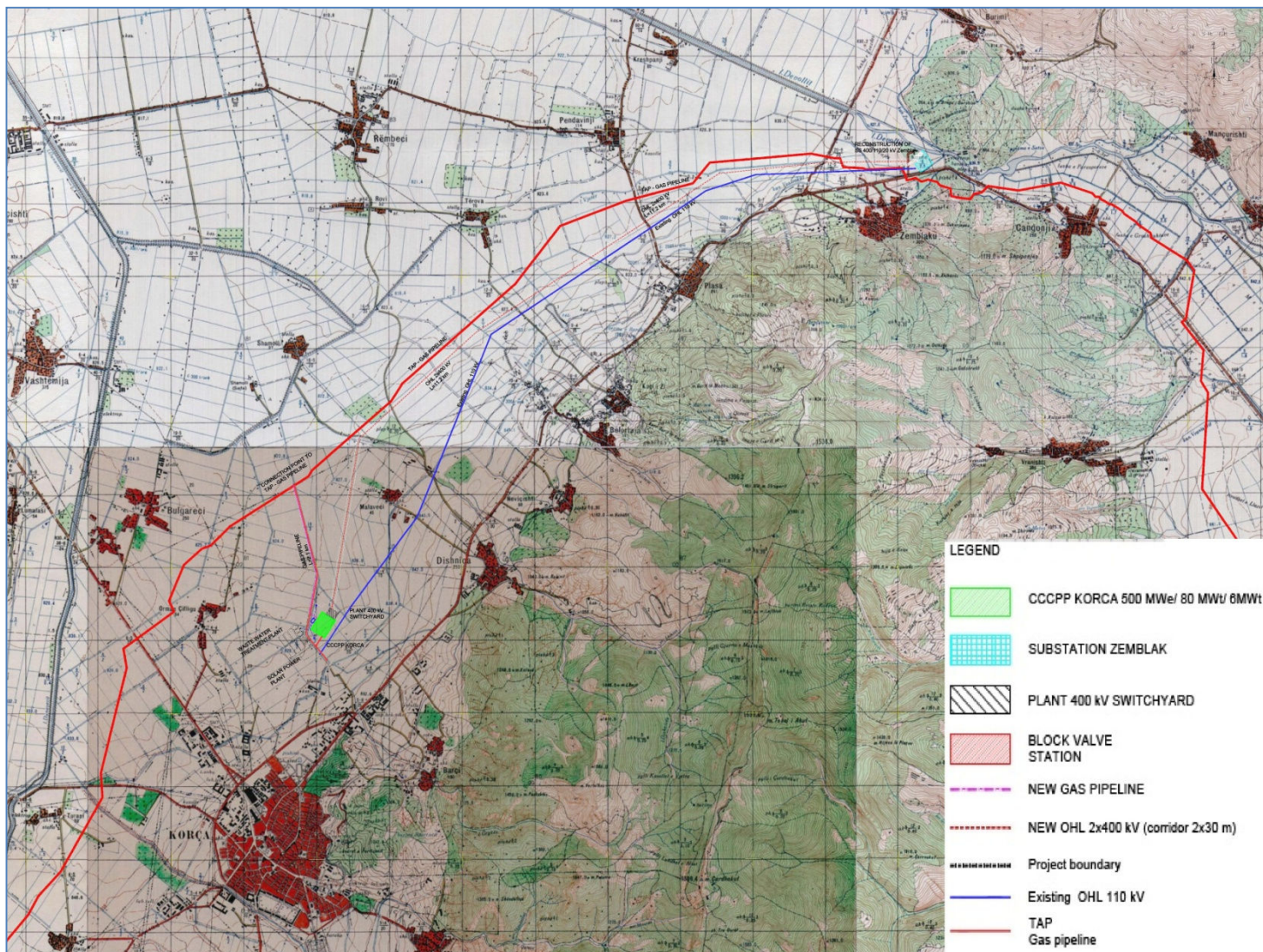
Project is about construction of the Cogeneration Combine Cycle Power Plant Korça 500 MWe/ 80 MWt/ 6 MWt:

- CCCPP will produce 500MWe including up to max. 80 MW steam extraction for district heating
- Permanent extraction will be about 6 MW for hot sanitary water
- Fuel gas will be supplied from Trans Adriatic Pipeline (TAP) passing location two kilometers in north direction
- Raw water for supplement of cooling towers demand and demi water production will be supplied from municipal waste water plant in the neighborhood
- District heating of max 80 MWt will provide the city of Korça heating
- Grid connection will be double 400 kV transmission line to SS Zemblak long about 11km

The project is intended to be developed on the area of Korça, Pojan, Kuç i zi, Belorta, Dishnice, Barç, Zernblak, Malavec, Nevicisht for the power plant, TAP connection, water system connection, the transmission line piles and the construction of Zernblak sub-station. Only 27% of project area is needed for permanent use.

Location of Project is presented on maps below.







## Social and Environmental Impact

In accordance with Albanian legislation and IFC requirements following studies will be developed:

- Environmental and Social Impact Assessment Study

### **Objective of the ESIA**

The objective of the ESIA is to assess the potential impacts of the project and project-related activities on the environment (including biophysical and socio-economic resources) and, where applicable, to design mitigation or enhancement measures to avoid, remove or reduce negative impacts to the environment, in line with IFC standards and in compliance with Albanian legislation for the Developer's Project.

- Stakeholder Engagement Plan
- Land acquisition and Livelihood Restoration Plan

### **Regulatory framework**

#### Albanian legislation

1. Annex II of the Decision of the Council of Ministers No. 686, dated 29.07.2015 "On the adoption of rules, responsibilities and deadlines for the development of the Environmental Impact Assessment procedure (EIA) and the procedure for the transfer of the Declaration of the Environmental Declaration"

#### IFC Requirements

1. Assessment and Management of Environmental and Social Risks and Impacts
2. Labor and Working Conditions
3. Resource Efficiency and Pollution Prevention
4. Community Health, Safety, and Security
5. Land Acquisition and Involuntary Resettlement
6. Biodiversity Conservation and Sustainable Management of Living Natural Resources Performance
7. Indigenous Peoples Performance
8. Cultural Heritage

## Contact Details

Stakeholders can be individuals or organizations that may be directly or indirectly affected by the Project or may be interested in the Project. Anyone may ask for information and may comment on the proposed Project. All comments will be considered. This document will be available on web page [www.gppkorca.com](http://www.gppkorca.com)

All comments or enquiries should be directed to:

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