

## Environmental and Social Data Sheet

### Overview

Project Name: *EFFICIENT UTILITY INFRASTRUCTURE KLAGENFURT*  
 Project Number: *20140216*  
 Country: *Austria*  
 Project Description: *Extension and refurbishment of the City's district heating and water networks, including replacement of fuel oil heat supply with gas and biomass installations.*

EIA required: no

Project included in Carbon Footprint Exercise<sup>1</sup>: no

### Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project comprises multiple components. Most investments fall under Annex II of the EIA Directive 2011/92/EU, requiring the Competent Authority to screen projects and determine whether an EIA is required or not. None of the proposed investments has an impact on Natura 2000 sites.

Refurbishment and extension measures of district heat distribution systems do not require an EIA under Austrian national law. These activities take primarily place inside urban areas without any significant environmental impacts. Only the grid connection to the biomass cogeneration plant in the East of the city will also cross a small river and partly cut through agricultural areas at the Eastern outskirts of the city. However, it does not affect any sites of nature conservation importance. Construction permits for district heat distribution related activities typically contain provisions in order to minimise noise and dust emissions and traffic disturbances during construction. The grid connection of the biomass cogeneration plant in the East of the city still awaits a permit related to the crossing of a local stream (Glan). A corresponding undertaking has been proposed.

The refurbishment of the Fernheizkraftwerk (FHKW) aims to reduce the operation of this large thermal plant in central urban location substantially. The competent authority (municipality of Klagenfurt) concluded that on the basis of the promoter's impact assessment and after consultation of external experts that the planned refurbishment of the FHKW is compliant with Best Available Technique for Large Combustion Plants as requested by the Industrial Emissions Directive 2010/75/EU and that no significant negative impacts on the environment were expected and therefore no full EIA was required. The permit is conditional to minimisation of noise and dust emissions during construction and to pollutant exhaust emissions and noise emissions during operation. It is expected that after refurbishment, the FHKW generates all electricity from high-efficient cogeneration in-line with the Energy Efficiency Directive 2012/27/EU.

The biomass cogeneration plants will be installed and operated by a third party, outside the scope of this project. Biomass will be sourced from local forests, most electricity will be generated in high-efficient cogeneration. There have been local concerns regarding the authorisation process of one of these cogeneration plants because the installation is sized just below the threshold of the Industrial Emissions Directive and its corresponding national law. In first instance the corresponding permit had already been granted. Most recently, this

<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.

permit was however legally challenged by the independent administrative senate of Carinthia (unabhängiger Verwaltungssenat Kärnten) and was transferred back to the competent authority to complete the decision. A confirmation of the decision in second instance is pending (Landesverwaltungsgericht).

Investments in the water sector predominantly concern the rehabilitation or replacement of existing pipes. All works are screened by the Competent Authority regarding their environmental impact before a construction permit is issued.

The project promoter is a local utility and has a sufficient capacity to manage environmental and social impacts and risks. The project is deemed acceptable from an environmental and social perspective.

## **Environmental and Social Assessment**

### **Environmental Assessment**

The large cogeneration plant in Klagenfurt city (Fernheizkraftwerk, FHKW) has a valid environmental permit in place that allows for its operation until the end of 2015. The FHKW is fuelled with heavy fuel oil and natural gas and it is located in the centre of the city of Klagenfurt. The promoter has decided to substantially reorganise district heat supply for the period commencing end of 2015.

The FHKW refurbishment aims at a reduction of local pollutant emissions by more than 80% and a significant reduction of cooling water consumption. Key measures include: i) taking three out of four old boilers out of operation, ii) renovating a fourth existing boiler, iii) adding three new gas boilers, implementing a fuel switch from heavy fuel oil and natural gas to natural gas only, iv) amending the operating regime from base load operation to peak load and reserve operation only, v) and terminating any condensing mode power generation at this site. The promoter applied for authorisation on the basis of a comprehensive technical project description including external expert's analyses of noise and pollutant emissions. The consent demands that pollutant emissions must respect defined limits and be permanently monitored.

The heating plant "West" and the other small distributed heat generators included in this operation will be fired with natural gas, fuel oil, or pellets. The FHKW will solely be fired on natural gas basis. The use of coal in any of these installations is excluded.

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

Being part of the FHKW authorisation process, a public consultation took place in December 2013 for two weeks. Procedural concerns against the screening decision were raised during public consultation but rejected by the competent authority on legal considerations.

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

The promoter has originally planned to construct and operate a large gas-fired CCGT cogeneration plant in the East of the city to take over this role. This plan was however terminated in 2012 by the Austrian "Umweltsenat" upon third party appeals against the granted permit. Subsequently, the promoter has run a technology neutral heat supply tender and ultimately decided that base and medium load district heat shall be supplied by biomass cogeneration plants. However, third party concerns have also been raised against this solution (e.g. forest based industries being concerned about wood availability) and against the authorisation process of the scheme located in the East of the city. The project promoter has engaged external experts to moderate the controversial local discussions about the right district heat supply solution and related permitting processes.