

Environmental and Social Completion Sheet (ESCS)

Overview

Project Name:	FORTUM CHP PLANT STOCKHOLM
Project Number:	2013-0324
Country:	Sweden
Project Description:	The project comprises the design, construction, and operation of a new biomass combined heat and power (CHP) plant including the necessary biomass handling facilities and an upgrading of port facilities. The plant will be located in the city of Stockholm. It delivers heat to the existing district heating system in Stockholm and electricity to the public grid.

Summary of Environmental and Social Assessment at Completion

EIB notes the following key Environmental and Social outcomes at Project Completion.

The CHP plant was implemented in full compliance with the permits of the plant. The project fell under Annex I of the Environmental Impact Assessment (EIA) Directive 2011/92/EU, therefore a full EIA was obligatory in order to get an environmental authorisation for operation.

The plant's permits allow for a fuel mix of biomass, peat and coal, with the last two to be used mainly as a back-up and reserve option. The potential over-use of peat and coal, as well as the sustainability and traceability of the sourced biomass were identified as project risks during appraisal. In order to mitigate these risks and to ensure environmental protection, a comprehensive set of undertakings were deemed necessary. All the undertakings as imposed by the Bank to the Promoter and their status at completion are described below:

At appraisal	At completion
<p><u>Restricting the use of peat and coal in the fuel mix:</u></p> <ul style="list-style-type: none"> - The promoter undertakes to run the project primarily on the basis of biomass. The use of peat and coal shall be limited to back-up and reserve applications. 	<p>The promoter indeed limited the use of the peat and coal for back-up and reserve applications. The share of the CHP fuel mix input was 97% biomass and 3% coal/peat.</p>
<p><u>Sustainability of forest biomass:</u></p> <ul style="list-style-type: none"> - <i>Before commissioning of the power plant:</i> <ul style="list-style-type: none"> o The Promoter is to present a biomass sustainability policy, satisfactory to the Bank, with terms imposed on forest biomass sourcing, ensuring that best practices are followed in forest management of the sourcing areas. Examples of acceptable internationally accredited certification systems are Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC). 	<p>Before commissioning of the power plant the promoter presented to the Bank a satisfactory biomass sustainability policy. The information supplied was sufficient to reveal that the promoter implements a biomass sourcing policy ensuring the best practices are followed in forest management of sourcing areas.</p>

<ul style="list-style-type: none"> - <i>During operation:</i> <ul style="list-style-type: none"> o Concerning sourcing areas that are not yet certified, an independent external audit report on compliance with the best practices is to be submitted to the Bank annually. The best practices are defined by the existing most relevant forest management and chain of custody standards of internationally accredited forest management certification schemes. The report is subject to the satisfaction of the Bank's Services. - <i>Exclusion of natural forest conversion and logging of primary moist forests.</i> 	<p>As of today, no audit report has been submitted to the Bank concerning sourcing areas that are not yet certified. However, given the fact that during the first operational year 96% of the biomass was sourced from EU and Norway and 94% was originated from certified forest, no risks embedded in complying with the Bank's sustainability criteria are foreseen. In agreement with the promoter no post-monitoring of the undertaking is deemed necessary.</p> <p>No biomass was sourced from primary moist forest.</p>
<p><u>Pending Court Case (as described in the ESDS):</u></p> <ul style="list-style-type: none"> - The promoter undertakes to inform the Bank, immediately after a court decision regarding the pending appeal against the project's construction permit, about the contents of this decision and potential consequences to the project. 	<p>The promoter informed the Bank that the pending appeal was turned down by court decision and the project's construction permit was approved without consequences. The appeal had already been cleared before the signature of the Finance Contract.</p>

Moreover, the emissions limit values for the CHP plant in the environmental permit are more stringent than the limit values in the Industrial Emission Directive (IED) 2010/75/EC. Boiler and biomass handling equipment complies with Best Available Technique (BAT) standards. In accordance with the Bank's Carbon Footprint methodology, the operation of the biomass CHP plant results in a net reduction in CO₂ equivalent emissions by 406 kt CO₂e/yr. At the time of appraisal, the relative emission savings were assumed to be ca.15% greater i) because a higher average plant efficiency during operations was assumed and ii) because the baseline emission was chosen differently, following the Bank's carbon footprint methodology at that point in time.

EIB notes the following key Environmental and Social aspects to be monitored during operations:

In November 2014, a serious workplace accident took place under the responsibility of the subcontractor, performing the assembly of the plant's boiler. Two persons died and one was injured. Works on the site were temporarily stopped and the promoter summoned a crisis group in order to implement corrective measures and to avoid similar incidents in the future.

An investigation of the accident was also initiated right after by the police. However the preliminary investigation by the Swedish public Prosecutor's Office has been on hold for the last two years, awaiting a decision by the Polish prosecutor on whether a prosecution should be initiated in Poland or not. The Swedish public Prosecutor's Office has assisted the Polish investigation with fact finding and securing evidence but a decision to prosecute in Poland may result in a decision to suspend the preliminary investigation in Sweden.



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The Bank has informed the promoter on its intention to keep receiving updates regarding this matter also after project completion.

Summary opinion of Environmental and Social aspects at completion:

EIB is of the opinion based on reports and correspondence with the promoter, during construction and at the completion stage of the Project, that the Project has been implemented in line with EIB Environmental and Social Standards, applicable at the time of appraisal.