

Luxembourg, 27 December 2019

Public

Environmental and Social Data Sheet

Overview

Project Name: HUSUM REFURBISHMENT

Project Number: 20190488
Country: Sw eden

Project Description: Replacement of recovery boiler, turbine generator and the

installation of a black liquor superconcentrator at Promoter's pulp

mill at Husum, Sweden.

EIA required: yes

Project included in Carbon Footprint Exercise¹: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

Environmental Assessment

The project consists of modernization of Promoter's pulp and containerboard mill complex. The project aims at (i) the replacement of the recovery boilers and turbines with modern, more efficient equipment (i.e. a larger recovery boiler, a larger turbine and a super concentrator), (ii) the repurposing of the distributed control system including central control room of the pulp mill, and (iii) associated infrastructure required for the connection to the integrated carton-board mill. The project will not draw an increase in the overall mill capacity.

The project falls under the scope of Annex II of EIA Directive 2014/52/EU (amending 2011/92/EU), (modification of an industrial facility for the production of pulp) as well as the Industrial Emissions Directive IED 2010/75/EU. The existing plant, operational since 1919, has continuously undergone adaptations and modernization cycles to incorporate the best available technology. Upgrading and modernization measures foreseen in the project include the adoption of new technologies to improve mill's overall resource efficiency and generation of renewable energy; the equipment will follow the BAT set for the sector. The Promoter submitted the application for an EIA to the local authorities, which decided to screen the project in and refer it to the Swedish Land and Environment Court for assessment and decision.

The current environmental permit was granted under the provisions of the EIA and IED directives, with the latest permits and amendments from 2012 (M1726-12 from 18/12/2012), 2015 (M1726-12 from 18/12/2012), and 2016 (M173-15 from 31/03/2016). The Promoter is certified under ISO50001, ISO9001, and ISO14001 for this industrial facility and complies with the SEVESO requirements and the REACH Directives for the storage and transport of chemicals.

¹ 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 CO2e/year absolute (gross) or 20,000 tonnes CO2e/year relative (net) – both increases and savings.



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The project will result in a substantial increase in the renewable energy generated at the mill, without an increase in the overall plant capacity. The impact on the environment is expected to be positive, as the quantity of renewable energy generated due to energy efficiency gains at the level of the recovery boiler and with the same renewable resource input will increase. Most of the electricity currently sourced from the grid will be replaced by renewable one. The steam generated will cover 100 % of the internal demand of the integrated pulp and carton-board plant, and the site will reach over 90 % self-sufficiency in terms of electricity. The entire mill will continue to be within the BAT- compliant parameters.

The energy efficiency gains at the level of the recovery boiler are derived from higher combustion temperatures which bring about higher emission of NO_x. Although higher, these emissions are expected to be within the values established in the current environmental permit of the plant. The additional abatement of NOx will require advanced techniques that are being currently assessed by the sector. The regulator is well aware of this issue which is also typified in the IED BREF for the Pulp and Paper Industries and which is experienced in new, advanced pulp mills that use highly concentrated black liquor in their recovery boilers. The Swedish competent authority normally applies a collaborative approach to such issues. It establishes challenging investigative emissions limits in the environmental permit that will be revised regularly within a period of 2-3 years giving the Promoter time to find an economically viable set up that is within the currently permitted levels. The Promoter has extensive experience in implementing similar projects, and is currently assessing a series of available technological options. All other emission values will be within BAT.

EIB Carbon Footprint Exercise

The project will generate energy to maintain 100 % self-sustainability of the plant in terms of steam demand. On top of this it will generate additional electricity. This electricity may be exported or used on site. It is assumed that this additional electricity will replace power generated at other present and future sites elsewhere in Sweden. As the Swedish electricity market is only growing moderately (i.e. <5 %), following the EIB GHG footprint methodology it is assumed that this electricity would have to be generated at a 50 % share between Operating Margin (46 t CO₂/MWH) and Built Margin (353 t CO₂/MWh). The annual absolute estimated emissions are 31.9 kT CO₂e/year.

In the without the project scenario, it is assumed that the additionally produced electricity will replace power generated at other present and future sites elsewhere in Sweden. As the Swedish electricity market is only growing moderately (i.e. <5 %), following the EIB GHG footprint methodology it is assumed that this electricity would have to be generated at a 50 % share between Operating Margin (46 t CO2/ MWH) and Built Margin (353 t CO2/MWh). The baseline estimated emissions are 125.5 kT CO2e/year.

Therefore, estimated emissions savings are 93.6 kT CO₂e/year.

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

The Promoter has stringent Occupational, Health and Safety Management System (OHSMS) in place and is certified OHSAS18001. Due to their activities, they are subject to frequent internal and external audits as well as inspections by the local Swedish competent authorities.



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The Promoter has put in place a programme for improving the safety measures at the plant by adopting a proactive approach at all stages of their operations. This programme includes training initiatives related to safety at work (e.g. safety sessions, safety rounds, safety inspections, risk analysis and meetings), as well as quarterly safety internal monitoring and external safety audits.

Public Consultation and Stakeholder Engagement

In line with the provisions of the relevant Swedish legislation, which transposes the EIA Directive, public consultation was required for the project. The consultation took place at Husumgården on September 23th, 2019.

Other Environmental and Social Aspects

All wood used by Promoter comes from either PEFC or FSC certified or PEFC or FSC controlled forest sources and is 100 % traceable.

Through its Management System Policy, the Promoter guarantees that the wood supplied is not associated with: illegal activities; violation of human rights; destruction of high conservation value forests; introduction of genetically modified organisms in forestry operations; significant conversion of forests to plantations or non-forest use; violation of any of the ILO Core Conventions, as defined in the ILO Declaration on Fundamental Principles and Rights at Work, 1998.

The Promoter follows Swedish laws and regulations, including Systematic Work Environment Management (AFS 2001:1).

Conclusions and Recommendations

The following conditions need to be satisfied by the Promoter:

- The proposed project is subject to an EIA. Any disbursement will be conditioned to the prior receipt by the Bank of an electronic copy of the EIA decision.
- Sourcing of forest biomass from forests that are either certified by internationally
 accredited forest certification systems, such as FSC and PEFC or considered to be
 controlled wood according to the same standards than those used in these
 certification schemes. Forest management and chain of custody practices in sourcing
 areas that are not certified yet, must be aligned with the same standards to be
 considered controlled wood.
- Exclude sourcing biomass from areas with natural forest conversion and logging from primary moist and tropical forests.
- Comply with the EU Forest Law Enforcement Governance and Trade (FLEGT) and EU Timber Regulation (995/2010), when applicable.
- To submit to the Bank the relevant, amended, Industrial Emissions/operating permits of the project before starting operating the new facilities.
- Provide proof of compliance with the final decision of the Environmental Protection Agency in respect of emission levels.

Subject to the E&S conditions that are proposed to be included in the financial contract, and taking into account Promoter's capability and the systems in place to manage environmental and social impacts and issues, the project is considered acceptable for financing by the Bank from environmental and social perspectives.