

Environmental and Social Data Sheet

Overview

Project Name: *Biomasse Descartes*
 Project Number: 2013-0500
 Country: France
 Project Description: Sub-Project under FRANCE BIOMASSE COGENERATION VALORISATION (2012-0084) consisting in a 20MWe / 40 MWth biomass-fired CHP plant in Descartes awarded under a CRE tender.

EIA required: Yes

Project included in Carbon Footprint Exercise¹: Yes

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

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

The operation contributes to an increased utilisation of renewable energy sources. Heat and power generation from sustainably supplied forest-based biomass consumes less fossil energy resources and emits less greenhouse gases than conventional heat and power generation from fossil fuels. Further, the use of regional forest residues helps the sustainable management of EU forests.

The project falls under Annex II of the Environmental Impact Assessment (EIA) Directive 2011/92/EU. Therefore it is subject to an EIA on a case by case basis decision or defined criteria set by the competent authority and Annex III of the Directive. Based on the criteria defined in France ("Code de l'Environnement") the project requires an EIA in order to get an environmental authorization for operation. The project will comply with emission limit values which are equal to or below (dust, NOx) those defined by French law and by the Industrial Emissions Directive (2010/75/EC). The project will be implemented in existing industrial sites and not in the vicinity of Natura 2000 sites or other conservation sites.

The scheme consumes annually 200,000 tonnes forest-based biomass from the region. Sourcing of biomass is subject to annual monitoring by French authorities. The project is based on a biomass mix which is primarily sourced from the local forests following sustainable forest management practices, as defined by internationally accredited certification schemes (PEFC). The supply of biomass to the plant is organized by a subsidiary of one of the shareholders of the promoter with substantial experience in forest biomass sourcing. Detailed biomass availability and sustainability studies were carried out revealing sufficient feedstock quantities for the plants. The planned biomass sourcing has been endorsed by regional prefectures. Biomass transports will take place by trucks.

The scheme generates electricity at "high efficiency" as defined by the Energy Efficiency Directive 2012/27/EU and provides for 11 % of primary energy savings over a full year when compared to a separate generation of heat and electricity from the same fuel.

The scheme is currently undergoing the final stages of the permitting process with positive result of public consultation executed in the beginning of 2014. Based on the environmental management capacity of the promoters, the techniques chosen, and the location of the sites, the project is considered not to have any significant negative environmental and social impacts and therefore this sub-project is acceptable for Bank's financing provided that the following requirements are complied with:

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

The FI undertakes not to allocate the Bank's funds to the project until the full EIA process has been completed and approved by the competent authority. An electronic copy of the opinion of the result of the public consultation, the NTS and the operating permit must be submitted to the Bank as soon as is made available to the public.

The project shall be based on forest biomass from forests that are certified by internationally accredited forest certification systems, such as FSC and PEFC. The sourcing areas that are not yet certified, have to comply with the same standards so as to be certifiable.

The project shall exclude sourcing of biomass from areas with natural forest conversion and logging of primary moist and tropical forests.

The project shall comply with the EU Forest Law Enforcement Governance and Trade (FLEGT) Regulation.

Environmental and Social Assessment

Environmental Assessment

The scheme follows an environmental authorisation process which is defined by French law ("Code de l'Environnement") for this particular category of projects (combustion plant above 20 MWth). Under French law a construction permit could be granted at a relatively early stage but it only allows for construction to start after:

- A full impact study and risk study have been carried out and submitted to the authorities
- The competent authority ("Direction régional de l'environnement, de l'aménagement et du logement") has analysed the impact and risk studies and the environmental aspects of the project and issued its favourable opinion which is added to the studies for the public consultation.
- A public consultation in line with the "Code de l'Environnement" has been concluded.

An operating permit is granted in a subsequent step by the departmental prefecture, based upon the outcome of the public consultation as concluded by a "Commissaire Enquêteur" and after consultation of relevant authorities including the "Commission Départementale de l'Environnement et des Risques Sanitaires et Technologiques" (CODERST).

The Bank has received and reviewed the Environmental Impact Study (EIS). The EIS concludes that the CHP plant will have no significant negative environmental and social impacts. The most relevant residual impacts originate from initial construction works and, during operation, from pollutant emissions of the combustion process and increased traffic due to the transport of the biomass t.

The project is located in existing industrial sites not in direct vicinity of a Natura 2000 site or conservation sites. The project combusts forest-based biomass with only 0.2% of fuel input anticipated as fossil fuel for auxiliary purpose.

The CHP plant has a thermal input capacities above 50 MWth which is the threshold for the the Industrial Emissions Directive (2010/75/EC). The plant applies best-available-technique boiler systems and flue gas cleaning and complies with emission limit values which are equal to or below (dust, NOx) those defined by French law.

EIB Carbon Footprint Exercise

The direct emissions of the project are estimated at around 6 kt CO₂e/year. This emission is caused by the combustion of fossil fuel for ramping up processes in the biomass CHP plants.

In accordance with the Bank's Carbon Footprint methodology it is calculated that the total relative effect of the biomass CHP plant is a net reduction in CO₂ equivalent emissions by 115 kt CO₂e/year. This calculation assumes that 50% of generated electricity substitute power generation in existing fossil fuel based power plants whilst 50% substitute power generation in new gas-fired combined cycle power plants. It is further assumed that

cogenerated heat substitutes heat generation in industrial gas fired boiler at consumers' sites. 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

Occupational and community health and safety issues are deemed appropriately addressed in the authorisation process. The promoter has a health and safety policy in place.

The project makes a substantial contribution to securing jobs in the regional forestry sectors. The operation serves as an example on how to substitute fossil fuel generation with regional renewable energy resources in an industrial site.

Public Consultation and Stakeholder Engagement, where required

Consultation of the public and relevant authorities is an integral part of the authorisation process. Amongst others, full project documentation, including the NTS, is published locally for a period of 4 weeks. Responses from public and consulted authorities are accounted for in the authorisation process.

Other Environmental and Social Aspects

The project is constructed at an already existing industrial facility, and therefore no land expropriation is required.

Comprehensive monitoring and reporting requirements are included in the environmental authorisations.

The promoter has substantial experience in the implementation and operation of energy infrastructure. The promoter's capacity to manage environmental and social impacts and risks is considered to be high.

The promoter has to report the CHP plants' efficiency, availability, and biomass consumption to the regional prefecture on an annual basis. The promoter has only limited rights to deviate from performance standards that were proposed initially in its bids under the CRE (Commission de Régulation de l'Énergie) tender programme.