



Luxembourg, 28 March 2018

## Environmental and Social Data Sheet

### Overview

Project Name:	FIGUEIRA MILL OPTIMISATION
Project Number:	2017-0270
Country:	Portugal
Project Description:	The project consists of the modernization of an existing pulp mill in Portugal. The upgrading process is expected to improve the emission abatement systems to fully align the plant with the specifications established in the Best Available Techniques (BAT) for the pulp and paper industry and will also allow a nominal pulp production capacity increase by 70,000 tpa. The project will result in increased overall resource efficiency, energy efficiency and competitiveness of the company's production site which is located in a less developed region of the EU.
EIA required:	no
Project included in Carbon Footprint Exercise <sup>1</sup> :	yes

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

### Environmental and Social Assessment

#### Environmental Assessment

The project falls under the scope of Annex II of EIA Directive 2011/92/EU (modification of an industrial facility for the production of pulp). The existing plant, operational since 1984, 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, Best Available Technologies so as to improve the mill's environmental performance and, in addition, to increase the mill's overall resource efficiency.

The current environmental permit was granted under the provisions of the EIA and IPPC directives in 2012 (no. 426/0.1/2012). The competent authorities concluded that the project did neither add any environmental impact nor exceed emission thresholds established in the national environmental legislation for pulp and paper mills. Therefore, the project was screened out in March 2017 and no EIA was required by the competent environmental authority. As the modernization of the plant has been classified by the competent authorities as a minor change (it does not add environmental impact and emissions are kept within the permitted levels), the amendment followed a simplified procedure.

---

<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.



Luxembourg, 28 March 2018

Nevertheless, in line with Industrial Emissions Directive (IED) 2010/75/EU, within 4 years of publication of decisions on BAT Conclusions by the EC for the pulp and paper industry (Decision 2014/687/EC), the competent authority is to update all the permit conditions and ensure that the installation complies with those permit conditions. The targeted emission limits for the modernized plant are aligned with the latest BAT and the updated environmental permit is expected by March 2018. After the environmental license has been issued, the relevant local authorities will emit the updated operational permit for the plant. For this reason, the mill will be operating in line with the requirements of the IED after the project is concluded.

The Promoter is certified under ISO9001, ISO14001 and OHAS18001 for all their industrial facilities and comply with the SEVESO requirements and the REACH Directives for the storage and transport of chemicals.

### **EIB Carbon Footprint Exercise**

The modernisation of the Figueira Mill will bring specific energy efficiency gains of about 142.7 kWh heat per tonne of pulp, down from current heat consumption of 4.671 kWh tonne of pulp. In addition, the oxygen delignification will allow a reduction in the use of chemicals required for the bleaching process. This in turn will reduce specific energy use in the pulping process. The total specific power requirement for the production of one tonne of pulp will reduce from 1 067 kWh (current) to 886.6 kWh. At an aggregate level the project would result in average energy savings of 100.1 GWh power and 63.2 GWh thermal input (heat) per year over the remaining economic lifetime estimated for the prior to the project facility (8 years).

Following the EIB Carbon Footprint Methodology, the total GHG emissions after the modernization process are estimated at 392.8 kt CO<sub>2</sub>-eq. Without the investment, pulp mill's emissions are of 414.0 kt CO<sub>2</sub>-eq. Therefore, the net annual emission savings of the modernized pulp mill in a standard year of operation is estimated at 21.2 kt CO<sub>2</sub>-eq.

Calculations are based on the International Financial Institutions (IFI) Technical Working Group (TWG)<sup>2</sup> common approach (November 2015) of accounting for net GHG emissions for investments bringing reductions in energy intensity through the rehabilitating, retrofitting and/or replacing the existing by more efficient technologies at the recipient facility modernisation project. Following this methodology, the calculation focuses on the pulp mill complex at the project site in the cases of without and with the investment. The baseline scenario is a combination of the emissions from the existing pulp mill during its estimated residual economic life and those due to a best in kind greenfield competitor BAT mill for the additional capacity. The scope 3 (out of project boundary) power use for the production of the chemicals used in the bleaching process are substantial and their reduced specific input into the pulping process will offset the increased power requirements at the mill level (due to the installation of an oxygen generation unit) and the associated increased emission due to lower renewable power exports from the pulp and paper mill. .

For the purposes of the annual Carbon Footprint accounting concerning the EIB project, the emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project investment cost.

---

<sup>2</sup> The TWG for this methodology includes technical specialists from ADB, AfDB, AFD, EBRD, EIB, GEF, GIB, NIB, NEFCO, IDB, IFC, and WB, with support from the UNFCCC secretariat; to be widened to include more IFIs as work progresses. This note will be reviewed and updated periodically by the IFIs.



Luxembourg, 28 March 2018

Based on EU-ETS (EU Emissions Trading System) the reduction of CO<sub>2</sub>eq. emissions is expected to be from 346 kt CO<sub>2</sub>-eq /year to 262 kt CO<sub>2</sub>-eq /year (-34%). This accounting is validated annually by external auditors and according to the EU rules.

### **Social Assessment, where applicable**

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

The promoter has put in place a programme for improving the safety measures with the target of reducing the frequency of accidents by 70% by 2020 (4 accidents/million work-hours) compared to 2013 (14 accidents/million work-hours). In September 2017, the frequency of accidents was 40% less than 2013 figures. This improvement programme includes training and mind-set changing initiatives related to safety at work, as well as quarterly safety internal monitoring and external safety audits.

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

In line with the provisions of the relevant Portuguese legislation which transposes the EIA and the IED Directives, no public consultation was required for the project.

For the renovation of the IPPC/IED license, the legal permitting procedure foresees a mandatory consultation period in which project documentation is available to the public. A specific project undertaking will be added to the finance contract for the Promoter to provide documentary evidence to the Bank about the renewed operation license under the provision of IED 2010/75/EC and the associated consultation process to be obtained (and carried out) before the expiry of the current IPPC licence.

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

The project shall use wood sourced locally as well as from international wood markets under strict chain of custody systems and produced from forests managed under or in compliance with international recognised certification systems (FSC/PEFC). The Promoter uses only Eucalyptus wood in its production process. In 2016, the promoter sourced wood mainly from Spain and Portugal (86%), but also from South America (14%). The acquisition of wood chips from these sources is made mostly through FSC and PEFC certified suppliers, using either (i) 100% or mixed PEFC/FSC certified wood (48% of the total consumption); (ii) FSC controlled wood; or (iii) controlled material. Part of the wood comes from the promoter's sustainably managed forests (120,000 ha) in Portugal, for which full FSC and PEFC forest certification has been achieved and maintained. The company has a strong focus on biodiversity and ecosystems conservation. Full formal certification in Portugal is not achieved yet due to a fragmented private forest ownership structure.

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.



Luxembourg, 28 March 2018

## **Conclusions and Recommendations**

- i. The project is considered acceptable for financing by the Bank from environmental and social perspectives subject to the following E&S undertaking conditions that are proposed to be included in the financial contract.
- ii. 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..
- iii. Exclude sourcing biomass from areas with natural forest conversion and logging from primary moist and tropical forests.
- iv. Comply with the EU Forest Law Enforcement Governance and Trade (FLEGT) and EU Timber Regulation (995/2010), when applicable.
- v. Upon the expiry of the current IPPC licence, submission to the Bank of the new operation license granted under the provisions of IED 2010/75/EC together with documentary evidence of the associated consultation process.
- vi. Within one year from start-up of the upgraded pulp mill, the promoter shall provide proof of compliance with the maximum noise levels, as agreed by the environmental authorities.
- vii. Provide proof of compliance with the final decision of the Environmental Protection Agency in respect of Sulphur and NOx emission levels.