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Public

Environmental and Social Data Sheet

Overview

Project Name:	STM SMART SEMICONDUCTOR R&D
Project Number:	2019-0341
Country:	France - Italy
Project Description:	The project relates to the promoters semiconductor RDI activities for the development of the next generation of energy efficiency, resources saving and environment protection semiconductor technologies, devices and solutions. The project, to be carried out at the promoter's locations in France and Italy, includes both RDI activities as well as investments in pilot lines and in advanced manufacturing capabilities for Key Enabling Technologies.
EIA required:	No
Project included in Carbon Footprint Exercise[1]:	No

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

Environmental and Social Assessment

Environmental Assessment

Semiconductor manufacturing facilities and RDI for semiconductors are not specifically covered by Annexes I & II of EU Directive 2014/52/EU amending the EIA Directive 2011/92/EU, and therefore not subject to mandatory environmental impact assessment.

The proposed RDI activities will take place mainly inside buildings at existing RDI or manufacturing facilities already being used for similar activities, and are not expected to have a significant environmental impact on the surroundings.

For the manufacturing component of the project, the proposed investment programme includes lines capacity increase and clean room expansions within existing manufacturing facilities as well as the construction and fit out of a new manufacturing facility to host a pilot line. All of these manufacturing related investments will also be performed within existing industrial sites already used for similar activities, and are not expected to have a significant environmental impact on the surroundings.

[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.

A large part of the products resulting from the projects RDI activities will induce energy efficiency gains in their area of application. From the large technological portfolio the promoter has, the project includes those technology and product developments that are best placed to achieve the goal of improved energy efficiency, resources saving and environment protection. The technologies will allow bringing more processing power & features to the devices, while at the same time expand the connectivity options and improve power consumption at every level: Technology, Integration, Software and Application systems.

As an example, the development of the new GaN based driver devices will allow reaching very efficient converters at high switching frequencies, resulting in several kg weight saving (in the magnetic components and cooling system) for hybrid and low speed pure electric vehicles. Another example would be the development of new low power, very dense embedded non-volatile-memories (NVM) for low power IoT and secure controllers offering significant area and power consumption advantage compared to the previous generations of IoT and secure controllers.

Other Environmental and Social Aspects

The Promoter fulfils the requirements of the ROHS Directive (Restriction of Hazardous Substances) for its products. All of the promoters manufacturing operations are OHSAS18001 certified, and the sites included in the investment programme are ISO14001 certified and their environmental status validated under EMAS (Eco-Management and Audit Scheme) regulation.

The promoter is an active member of the Electronics Industry Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI) and implements all the actions and procedures developed by this joint working group aimed at sourcing conflict-free minerals. These actions include the implementation of conflict-free Smelter and due diligence programs to verify the supply chain of the promoter, as well as to support in-region sourcing schemes to enable future legitimate trade from the region.

In addition of the improved energy efficiency of the new developed technologies and devices (the so-called “greening of”), the availability of such, more powerful, solutions will allow for the development of applications aiming at CO2 emission reduction, energy efficiency, etc…, such as the smart grid or electrical vehicles (the so-called “greening by”).

Conclusions and Recommendations

Semiconductor manufacturing facilities and RDI for semiconductors are not specifically covered by Annexes I & II of EU Directive 2014/52/EU amending the EIA Directive 2011/92/EU, and therefore not subject to mandatory environmental impact assessment.
A large part of the products resulting from the projects RDI activities will induce energy efficiency gains in their area of application.

Overall, the project is eligible for EIB financing in environmental and social terms.