

Environmental and Social Data Sheet

Overview

Project Name:	TECH-EU ADVANCED SEMICONDUCTOR R&D MANUFACTURING
Project Number:	2024-0068
Country:	France, Italy
Project Description:	The Project relates to the Promoter's semiconductor RDI and manufacturing activities for the development of the next generation of energy efficiency, resources saving and environment protection semiconductor technologies, devices and solutions.
E&S Risk categorisation	Low
Project included in Carbon Footprint Exercise ¹ :	Yes

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

Environmental and Social Assessment

The E&S Risk has been set as Low as no EIA screening decision is needed for the different project components as they are below the relevant thresholds as defined in the national EIA legislation.

Environmental Assessment

Semiconductor RDI and manufacturing activities are not specifically covered by Annexes I & II of EU Directive 2014/52/EU amending the EIA Directive 2011/92/EU but the extension of the production facilities fall under Annex 2 in respect to industrial developments. The project components are below the relevant thresholds mentioned in the Italian National EIA Decree (D.Lgs. 152/2006 (Testo Unico Ambientale) as amended by D.Lgs. n.104 dtd.16.06.2017) and therefore do not require an EIA process.

For the RDI component, 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, the project includes the extension of existing manufacturing capacity including the construction of new facilities on two sites in Italy, as well as the fitting out of an existing facility in France.

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.



In Italy, the project relates to the expansion of one manufacturing site as well as the construction of a new site. Both activities fall under the Industrial Emission Directive (IED) and require an update of the operating permits. The promoter will undertake to deliver the updated operating permits to the Bank.

The manufacturing component in France does not include the construction of a new facility but is limited to the fitting out of an already existing facility. The "Demande d'Autorisation Environnementale" for the facility has already been granted by the competent authority.

Semiconductors are the basic components for the digitalisation of all sectors of the economy. They are therefore essential to enable the deployment of low carbon and decarbonisation scenarios leading to significant sustainability benefits across the whole economy and fulfil the Paris Alignment criteria as set out in the EIB's CBR (Climate Bank Roadmap).

The commencement of operations at the new site in Catania is expected to result in a substantial increase in water consumption. Prior to the disbursement of the proportional share of financing, the Promoter shall be required to furnish to the Bank satisfactory evidence that contractual arrangements are in place to ensure the availability of the required water supply.

EIB Carbon Footprint Exercise

The estimated annual absolute CO₂ emissions of project in a standard year of operation amount to 108 kt CO₂ eq. The two main contributors to the CO₂ emissions are the use of perfluorinated compounds (PFCs) in the manufacturing of the semiconductors and the use of gas and electricity for the operation and cooling/heating of the manufacturing equipment. The estimated annual relative CO₂ emissions amount to zero as the promoter will make use of the most advanced equipment, abatement systems and energy efficiency tools. 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.

EIB Paris Alignment for Counterparties (PATH) Framework

The counterpart is in scope, but it is screened out of the PATH Framework because it is neither a high emitting nor a highly vulnerable entity.

Other Environmental and Social Aspects

The promoter fulfils the requirements of the ROHS Directive (Restriction of Hazardous Substances) for its products. All of the promoter's manufacturing operations are OHSAS18001 certified, and the sites included in the investment programme are certified under EMAS (Eco-Management and Audit Scheme) regulation.

Two of the manufacturing sites covered by the project fall under the Seveso III directive as upper tier establishment and have the relevant emergency plans and risk management in place. The third one is likely to fall under the Seveso III directive with the expansion of the site, the relevant procedures will be put in place if required.

The promoter has been a signatory to the United Nations Global Compact (UNGC) since 2000 and a member of the Responsible Business Alliance since 2005. Regarding the EU Conflict Minerals Regulation (EU Regulation 2017/821), the promoter has been confirmed as fully compliant as from 2022. The promoter is also part of the Responsible Minerals Initiative and publishes a combined conflict minerals report in accordance with the US SEC and the EU reporting framework.



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 electric vehicles (the so-called “greening by”).

Conclusions and Recommendations

The manufacturing activities included in the project do not require an EIA process but fall under the Industrial Emissions Directive (IED). For the manufacturing sites included in the project, the relevant operating permits are already in place and there will be a contractual undertaking to provide the required updates to the Bank.

For the Catania manufacturing site, the operations will result in a substantial increase in water consumption. The promoter will have to provide proof of the relevant water supply contracts.

The products to be manufactured by the project will support the improved energy efficiency of new technologies and devices.

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