

Environmental and Social Data Sheet

Overview

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| Project Name: | CARL ZEISS RDI FINANCING |
| Project Number: | 2020-0568 |
| Country: | Germany |
| Project Description: | The project, to be implemented in the promoter's location in Oberkochen, Germany, relates to the investments in RDI activities to further develop the current EUV (extreme ultraviolet) based semiconductor lithography technology. |
| EIA required: | No |
| Project included in Carbon Footprint Exercise ¹ : | No |

Environmental and Social Assessment

Environmental Assessment

RDI on optical equipment for semiconductor manufacturing is not specifically covered by Annexes I or II of the EIA Directive 2014/52/EU amending the Directive 2011/92/EU, and therefore not subject to mandatory environmental impact assessment. The proposed investments will take place mainly inside buildings at R&D facilities already being used for similar activities, and are not expected to have a significant environmental impact on the surroundings.

The improved EUV lithography systems lead to a cost reduction in chip production through higher throughput, reduced overlay and greater availability. Design rules for smaller process nodes in the semiconductor devices will lead to smaller and more efficient chips, with lower power consumption.

Availability of efficient semiconductor devices is paramount for the transition of several sectors to a low carbon and climate resilient economy. Electronic chips are the basic infrastructure that enables the deployment of low-carbon and decarbonisation scenarios, such as Smart Grids, Smart Agriculture, and Smart Cities leading to significant sustainability benefits across the whole economy and fulfil the Paris Alignment criteria set out in the EIB's CBR (Climate Bank Roadmap).

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.

Luxembourg, 12 July 2021

Other Environmental and Social Aspects

The promoter has indicated that the site included in the project is ISO 14001 certified and that all of the products sold in Europe are compliant with the ROHS Directive.

Conclusions and Recommendations

RDI on optical equipment for semiconductor manufacturing is not specifically covered by Annexes I or II of the EIA Directive 2014/52/EU amending the Directive 2011/92/EU. The results of the RDI will lead to smaller chip and more efficient chips, with lower power consumption, which in turn are needed for the deployment of low-carbon and decarbonisation scenarios.

Considering the above, the project is considered acceptable for EIB financing from an environmental and social point of view.