

## Environmental and Social Data Sheet

### Overview

Project Name:	VOESTALPINE RDI AND ADVANCED MANUFACTURING
Project Number:	20180753
Country:	Austria
Project Description:	Financing of the promoter's RDI programme over a three year period and a new advanced manufacturing technology (AMT) plant for stainless and special steels in Kapfenberg, Austria.
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 comprises two components: (a) investments in R&D activities and (b) a new special steel plant.

#### a) Investments in R&D activities of the group:

The project encompasses the promoter's R&D activities in its different business divisions. The R&D activities focus among others on the development of new steel products and solutions, more efficiency and low carbon steel manufacturing processes, innovative steel forming and coating technologies, improved steel rails as well as new special steel products.

The activities included in this component do not fall under any Annex of the EIA Directive 2014/52/EU amending the Directive 2011/92/EU; moreover, they will be carried out in existing already authorised facilities that will not change their scope due to this project component.

Minor residual impacts will remain, deriving from the laboratory and industrial scale tests of production processes. However, the expected products and process improvements resulting from various R&D activities are expected to bring some positive environmental impacts as for example; by improving the energy and resource efficiency of both, the manufacturing facilities and downstream applications; by developing lightweight steel solutions and new electrical steels crucial for the transformation towards low carbon and electric mobility; and by developing new hydrogen based low carbon steelmaking processes.

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<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, 14 March 2019

b) **Investments in a new advanced manufacturing technology (AMT) special steel plant:**

The new AMT 'plant' will replace the melting and casting areas of the old special steel plant not increasing the manufacturing capacity of 205 000 tons per year. The old plant relies on structures sometimes older than 70 years even though equipment is very modern. This old plant footprint makes further modernisation impossible and hence a replacement is required. Such an implementation falls under Annex II of the EIA Directive 2014/52/EU and has been screened out by the competent authorities.

The new manufacturing machinery and equipment will be implemented in a new building within the existing plant facility. As far as applicable, the new plant is in line with Best Available Techniques (BAT) conclusions and in several cases goes far beyond BAT requirements. The new plant is expected to have the following main environmental impacts by reducing GHG or air emissions and water consumption

- Recovery of waste heat from electrical arc furnace (EAF) and Argon oxygen decarburisation (AOD) furnaces.
- Considerable reduction of refractory material consumption
- Considerable reduction of graphite electrodes consumption
- Considerable reduction of industrial gases consumption, i.e.: Nitrogen, Oxygen and Argon
- Considerable reduction of dust emissions to air
- Considerable reduction of water consumption

The waste heat recovery system will supply heat to the local district heating and dry the scrap used as raw material in the steel plant. The new plant will as well entail operational safety improvements.

**EIB Carbon Footprint Exercise:**

The carbon footprint exercise is limited to the second component of the project i.e. the new AMT plant: The manufacturing capacity of the new steel plant will be identical to the old one, i.e.: 205 kt/y. After project implementation the estimated annual nominal emissions of the project will amount to 154 kt of CO<sub>2</sub> per year. The project's baseline scenario represents a realistic scenario that delivers the same output as the proposed project considering comparable quantities, quality and geographical area. The baseline scenario is based on the assumption that the existing plant continues to operate as today but without the waste heat recovery systems. This is justified due to the specificity of the special steel plant of the promoter. In fact, in the special steel business the manufacturers have very specific and distinct product portfolios and thus their GHG emissions performance is not comparable. The recovered heat will be used to supply heat to the local district heating (20 GWh per year) and to dry the scrap in the new steel plant (4 GWh per year) replacing the consumption fossil fuels.

Based on the bank's carbon footprint exercise methodology it is estimated that the overall project will thus result in yearly emission saving of 4 848 tons of CO<sub>2</sub>.

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.

Luxembourg, 14 March 2019

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

Active environmental protection is a core element of the promoter's corporate philosophy. It is part of all segments of the production chain and is directed toward a very economical use of resources (especially raw materials and energy) and a minimisation of the environmental impact of processes and products. 56% of the facilities that are most from an environmental point of view, are certified ISO 14001 and are monitored in the Group's environmental data base.

In accordance with ISO 14046, voestalpine takes an integrated life cycle assessment approach to the water circulation systems at all its manufacturing locations.

All companies of the promoter's two major divisions are already certified OHSAS 18001 (Occupational health and safety management systems). In addition, OHSAS 18001 certifications are actually rolled out throughout the entire Group. The company has a clear view on environmental, social and governance matters and additional information is published in the group's corporate responsibility report: [http://reports.voestalpine.com/2018/cr-report/servicepages/downloads/files/entire\\_va\\_cr18.pdf](http://reports.voestalpine.com/2018/cr-report/servicepages/downloads/files/entire_va_cr18.pdf)

The two facilities where the project primarily takes place (Kapfenberg and Linz, Austria) are certified according ISO 14001, ISO 50001 (energy management system) and OHSAS 18001.

### **Conclusions and Recommendations**

The direct environmental impact of the project's R&D component is expected to be limited, whereas some outcomes and products of the project are likely to contribute to more efficient/or low carbon steel manufacturing and will support for example the transformation towards electric mobility.

The installation of the new steel plant (melting and casting areas) falls under Annex II of the EIA Directive and has been screened out by the competent authorities. Thus, the project does not require an EIA according to Directive 2014/52/EU amending the Directive 2011/92/EU. The project adheres to the conclusions of Best Available Techniques (BAT) as identified by the European Commission for the iron and steel production industries.

The project is thus acceptable for financing by the Bank in environmental and social terms.

#### **Contractual undertaking:**

In case the promoter is notified by one of the competent environmental authorities that – contrary to current knowledge and expectation – one of the components constituting the project should require an EIA or equivalent, a copy of such EIA needs to be sent to the EIB once established.