



Luxembourg, 14 December 2022

## Environmental and Social Data Sheet

### Overview

Project Name:	DANIELI RDI AND AMT INVESTMENTS
Project Number:	2022-0054
Country:	Italy, Croatia
Project Description:	The project comprises (a) different investments in innovative, first-of-a-kind breakthrough technologies and advanced manufacturing technologies (AMT) in the promoter's steel plants in Italy and in Croatia. It includes also (b) innovative circular economy investments and (c) covers the promoter's investments in RDI activities. The project is located in the north of Italy and north of Croatia and covers a three to four year period (2022 until 2025).
EIA required:	yes
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 is a multi-component project and comprises the following main different components: (a) different investments in innovative, first-of-a-kind, breakthrough technologies and advanced manufacturing technologies (AMT) in two of the promoter's steel plants; (b) innovative circular economy investments in one of its plants; (c) investments in RDI activities as well as (d) investments in photovoltaic installations on some of its industrial buildings. The largest part of the project will be implemented in two different existing steel manufacturing plants of the promoter, one near Udine (Italy) and one in Sisak (Croatia). The RDI activities will be carried out in the existing industrial and R&D facilities of the promoter near Udine (Italy).

**a) Investments in first-of-a-kind breakthrough technologies and advanced manufacturing technologies (AMT):** This component encompasses the promoter's investments in two new major steel manufacturing lines and some smaller investments to upgrade the promoter's existing equipment and manufacturing lines in its plant in Italy.

**a.2) Near Udine (Italy):** The item encompasses the installation of a new innovative electric arc furnace (EAF) which falls under Annex II of the EIA Directive 2011/92/EU amended by Directive 2014/52/EU. Hence, this new line requires a screening decision from the competent authorities. The EIA process for this new EAF, has started and the environmental authorities provided their

initial feedback to the promoter and asked for additional studies. Based on current knowledge and expectations the promoter expects that this project component will be screened out and

<sup>1</sup> 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 CO<sub>2</sub>e/year absolute (gross) or 20,000 tonnes CO<sub>2</sub>e/year relative (net) – both increases and savings.



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will not require a full EIA. According to the latest information, the screening decision is expected to be issued by the competent authorities by mid-November (2022).

**a.2)** Furthermore, the promoter will implement various AMT upgrades on existing equipment and lines. These measures involve minor modifications of different existing and authorised lines. One modification is related to the replacement of the conventional transformer system of its EAFs with a new high tech system that enables direct usage of renewable energy sources, increasing energy efficiency and reducing grid disturbances. Another modification will implement AMT measures on the existing continuous casting equipment that will increase operational safety of these installations. Based on the promoter's current knowledge and expectations these modifications of the existing and already authorised manufacturing lines are not considered to have significant adverse effects on the environment. Therefore, these investments are not considered to fall under Annex II of the EIA Directive 2011/92/EU amended by Directive 2014/52/EU, thus no screening is required.

**a.3) In Sisak (Croatia):** The item encompasses the installation of a new mini mill including an electric arc furnace (EAF) and continuous rebar rolling mill. This project item falls under Annex II of the EIA Directive 2011/92/EU amended by Directive 2014/52/EU. Hence, this new line is subject to a screening decision from the competent authorities.

**b) Investment in innovative circular economy facilities:** The promoter intends to implement a new scrap treatment and preparation plant and to relocate the existing scrap treatment facilities. Furthermore, the promoter plans to expand and relocate the existing by-product (slag) treatment facilities in order to fit the new steel manufacturing capacity of the plant. The aim of this component is to increase the circularity of the promoter's steel manufacturing operations. It leads among others to increased in-house scrap and by-product treatment capacities and capabilities. This will cause an increased usage of scrap in its raw material mix and the increased recovery of valuable materials from the scrap treatment. The new facility will be installed in an industrial area adjacent to the existing plant near Udine. The installation is used for the recovery, treatment and preparation of non-hazardous wastes and by-products, with a total capacity exceeding 10 tons per day. Therefore the installation falls under Annex II of the EIA Directive 2011/92/EU amended by Directive 2014/52/EU, hence, this component is subject to a screening decision from the competent authorities.

**c) RDI activities:** This type of activities do neither fall under Annex I nor Annex II of the EIA Directive 2011/92/EU amended by Directive 2014/52/EU; therefore, these activities are neither subject to screening or require an EIA.

**d)** The installation of the photovoltaic (PV) electricity generation (approximately 5 MWp in total) will be installed on rooftops of the promoter's existing industrial buildings within the different manufacturing facilities in Italy and as such, no EIA is required.

As far as applicable, all components of the project will be in line with the relevant Best Available Techniques (BAT) conclusions.

The project's activities are fully aligned with the Paris Agreement on climate change according to the Bank's definition (Annex B of the climate bank roadmap). Furthermore, both project sites are considered acceptable in terms of the resilience against physical climate change risks. .

Overall, the project will have among others the following beneficial environmental impacts:

- Improve the scrap utilisation rates of the promoter's steel manufacturing processes and increase the recovery of manufacturing by-products and valuable materials from steel



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scrap. This will significantly contribute to circular economy initiatives, support the 'zero pollution' targets and reduce the GHG emissions intensity of the promoter's steel manufacturing activity.

- Increase the specific energy efficiency of the promoter's steel manufacturing.
- Decrease the specific carbon footprint and specific emissions of the promoter's steel manufacturing.
- Increase operational safety inside the promoter's steel plants
- In relation to the R&D activities, the activities will introduce to the market new innovative steel manufacturing equipment with the potential to increase sustainability and operational safety for commercial customers worldwide.
- Increase the recovery of valuable raw materials leading to resource efficiency improvements, for example the recovery of non-ferrous metals from the steel scrap.
- Increase renewable electricity generation through the implementation of photovoltaic installations on multiple rooftops of the existing manufacturing facilities for use in-house.

### **EIB Carbon Footprint Exercise**

The carbon footprint is based on the estimation of the GHG emissions related to the project. The majority of the emissions stem from the two new EAFs and the installation of AMT equipment on the two existing EAFs. Electrical power, natural gas and other fuel consumption have been considered to estimate the absolute emissions of the project.

After the project's implementation, the estimated annual nominal GHG emissions of the project will amount to 467.4 kt of CO<sub>2</sub> per year. The project will lead to considerable specific GHG emission savings when compared to the promoter's existing manufacturing assets, which are state-of-the-art, modern and energy efficient. 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 assumes that the new capacities would be manufactured or treated by competitors using state-of-the-art, modern and energy efficient equipment with similar GHG emission performances as the promoter's existing manufacturing lines. With regard to the modernisation measures of the existing lines (AMT equipment) the baseline scenario corresponds to the promoter's GHG emissions of today. For the photovoltaic electricity generation the baseline scenario assumes the GHG emissions factor of the combined margin for intermittent electricity generation in Italy.

Based on the Bank's carbon footprint exercise methodology it is estimated that the overall project will thus result in emission savings of 123.1 kt of GHG per year. 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 counterparty 'Danieli & C. Officine Meccaniche Spa' is in scope and screened in the PATH framework, because it is considered to operate partially in a high emitting sector. The counterparty already meets the requirements of the EIB PATH framework.

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

The promoter has clear corporate governance structures and practices with regard to corporate social responsibility and this is entrenched in the company's culture. 80% of the company's employees are located in subsidiaries with an occupational health and safety management



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system certified by international standards ISO 45001 and OHSAS 18001. The promoter's major manufacturing site near Udine, covering 65% of the promoter's steel manufacturing output, is in compliance with ISO 14001 – environmental management system and ISO 50001 – energy management system.

## Conclusions and Recommendations

The environmental impact of the project's R&D component and the modifications on the existing manufacturing lines are expected to be limited. These components are likely to contribute to more resource and energy efficient steel manufacturing as well as the design of new innovative steel manufacturing equipment with a reduced environmental footprint and increased productivity. The remaining components covering increases in manufacturing capacity will increase the environmental impact to some extent. However, the increased usage of scrap and the innovative new electric arc furnace plants to be implemented will further decrease the specific carbon footprint, emissions and energy consumption of the promoter's steel manufacturing. The in-house renewable electricity generation will also contribute to GHG emission savings.

The project adheres to the conclusions of Best Available Techniques (BAT) as identified by the European Commission for the iron and steel production industry and the ferrous metals processing industry. The AMT upgrades on existing lines (a.2) and the R&D activities (c) do not fall under the EIA Directive.

The following project components are subject to a screening decision by the competent authorities: the new EAF based steel plant in Sisak (a.3); the new EAF in the promoter's plant near Udine (a.1); and the new and relocated scrap treatment facility in the promoter's plant near Udine (b). The promoter expects that the competent authorities will screen out the installation of the new EAF on its site near Udine (a.1).

All project components are independent from each other. The financing of the separate tranches of the sub-components that are subject to a screening decision will be subject to disbursement conditions. Therefore, the project is considered acceptable for the Bank's financing in environmental and social terms.

### Disbursement conditions:

1. Considering the implementation of the new EAF in the promoter's plant near Udine (Italy) the disbursement of the corresponding tranche is subject to the decision of the competent authorities, either that a copy of the screening decision is provided to the Bank or if an EIA is required, the disbursement is subject to the reception of the full EIA report.
2. Considering the implementation of the new mini mill in the promoter's plant near Sisak (Croatia) the disbursement of the corresponding tranche is subject to the decision of the competent authorities, either that a copy of the screening decision is provided to the Bank or if an EIA is required, the disbursement is subject to the reception of the full EIA report.
3. Considering the implementation of the new scrap preparation and treatment facility in the promoter's plant near Udine the disbursement of the corresponding tranche is subject to the decision of the competent authorities, either that a copy of the screening decision is provided to the Bank or if an EIA is required, the disbursement is subject to the reception of the full EIA report.