

Luxembourg, 15 November 2023

### **Environmental and Social Data Sheet**

# **Overview**

Project Name: METRO DE MADRID ROLLING STOCK

Project Number: 2019-0113
Country: SPAIN

Project Description: The Project consists of the acquisition of 80 new electrically powered trainsets: 40 of them will be narrow-gauge for use on Madrid Metro Line 1. The other 40 new trains to be purchased will be wide-gauge trainsets, 33 to replace existing units of different ages, and another 7 new trainsets to cope with the future increase of capacity of the Madrid Metro network due to the latest extensions of the metro lines.

EIA required: no
Project included in Carbon Footprint Exercise<sup>1</sup>: yes

### **Environmental and Social Assessment**

#### **Environmental Assessment**

The Promoter, Metro de Madrid, is subject to the Spanish national law 21/2013 and law 9/2018 for environmental assessments.

Spanish National law 21/2013 transposes the SEA Directive 2001/42/CE and the EIA Directive 2011/92/EU. Law 9/2018, amending law 21/2013, transposes the amended EIA Directive 2014/52/EU.

Manufacturing of rail rolling stock does not fall under Annex I nor Annex II of the Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by Directive 2014/52/EU). Therefore, no EIA is required for the Project.

Benefits of the Project. The Project will promote a modal shift from private and bus users to cleaner underground metro. The Project will also improve the reliability and the quality of the public transport service in the city, helping thus reduce reliance on private cars and maintain and/or increase public transport share. The Project is expected to reduce the Green House Gases (GHG) emissions associated to the current transport modal shift in the city, reducing the air pollution, noise and traffic congestion. The Project is expected to produce time savings to passengers by improving the mobility patterns in the city of Madrid. The new rolling stock will be equipped with modern technology that will reduce the electricity consumption -supplied by third parties-, by 20% on average, therefore reducing the indirect CO2 emissions.

*Environmental impacts*: The negative impacts of the project, mainly due to the production and manufacturing of the trains, are limited and therefore acceptable when compared to the overall benefits of the Project.

In addition, with the observation of the legal requirements for the scrapping and decommissioning of the old trainsets to be replaced, there are no significant residual negative environmental impacts for this Project.

<sup>&</sup>lt;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 CO2e/year absolute (gross) or 20,000 tonnes CO2e/year relative (net) – both increases and savings.



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The new metro trains will not require an expansion of the existing depots. No major changes or upgrades are needed in the depots to accommodate the new trainsets.

Biodiversity: There are no identified negative biodiversity impacts for this Project.

GHG emissions. The project is included in the EIB Carbon Footprint Exercise on the following basis:

- -The estimated annual greenhouse gas emissions from the use of the project in a standard year of operation:
- Forecast absolute (gross) emissions are about 21,000 tonnes of CO2 equivalent; and
- Forecast relative (net) emissions are about 4,000 tonnes of CO2 equivalent.
- -The project assessment boundaries are:
- In the absolute case: the new rolling stock operating in the metro network.
- In the baseline case: the existing rolling stock operating in the metro network that will be replaced by the new rolling stock

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.

Physical climate risks: Project addresses minimum requirements to address physical climate risks for rolling stock. The project takes into consideration the climate vulnerabilities identified. Temperature increase due to climate change, is the major risk identified that may impact on the new trains -that will operate in an underground metro-. The Promoter will take into consideration the appropriate temperature range for the design of the rolling stock (trains designed to operate with 50 degrees Celsius air temperature), so that this risk may have an occasional and low impact in the metro operation.

Paris Alignment: The Project has been assessed for Paris alignment and is aligned with low carbon and resilience goals and with the policies set out in the Climate Bank Roadmap. This Project contributes 100% to Climate Action – Mitigation objectives. The Project consists of the purchase of new electrically powered metro rolling stock, which is essential for the operation of the metro system that qualifies as a clean public transport system.

#### **EIB Paris Alignment for Counterparties (PATH) Framework**

The counterparty, Metro de Madrid S.A., is in scope and screened out of the PATH framework, because it is not considered high emitting or high vulnerability.

### Social Assessment, where applicable

The Project will improve the mobility patterns in the City of Madrid, offering citizens a better public transport system and therefore proving access to more work opportunities that were not an option without the Project because they were far away and travel times were a constrain.

The new trains financed under this Project will comply with the specifications for accessibility for persons with disabilities and persons with reduced mobility.

### Other Environmental and Social Aspects

The Promoter, Metro de Madrid, has a Corporate Social Responsibility (RSC) policy in place, and is aligned with the sustainable development goals (SDGs) of the UN Agenda 2030.



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Madrid city council also adhered to the Majors Agreement in 2008, with the aim to reduce the GHG emissions by 20% before 2020.

In addition, Metro de Madrid, as future operator of the new metro line, is certified under ISO 14001:2015.

# **Conclusions and Recommendations**

The Project is an urban public passenger transport project and has a substantial contribution to Environmental Sustainability (Pollution Prevention, including noise reduction).

The relevant national legislation the Project is subject to is compliant with the applicable EU Directives.

Due to the nature of this Project, no EIA was required, as it does not fall into the scope of the EU EIA Directives.

The Project will promote a modal shift from private and bus users to cleaner underground metro. This will contribute to reduce the Green House Gases (GHG) emissions.

The Promoter is deemed experienced and has enough capacity to successfully implement the Project according to all the environmental requirements.

#### Project Undertakings:

The Promoter for the Project, Metro de Madrid, shall provide an updated version of the document "Risk Analysis of Climate Change Impact in Madrid Metro" (Análisis Aproximativo sobre el impacto del cambio climático en Metro de Madrid) when finally approved by Metro de Madrid, or when amended during project implementation.

As such, the Project is acceptable for EIB financing in E&S terms.