

Luxembourg, 5<sup>th</sup> June 2025

## Environmental and Social Data Sheet

### Overview

Project Name: MADRID ALLOCATION GREEN ENERGY FL 20200212  
 Project Number: 2024-0447  
 Country: Spain  
 Project Description: Financing of a photovoltaic project in the Spanish airport of Madrid Barajas (142MWp). This is the first allocation under the framework loan (FL) AENA COVID-19 GREEN ENERGY LOAN FL (2020-0212).

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 is an allocation under the framework loan (FL) 2020-0212 AENA COVID-19 GREEN ENERGY LOAN FL. The Project consists of the construction and operation of a ground-mounted solar photovoltaic (PV) plant and associated infrastructure with a total planned capacity of 142 MWp. The plant is located in the Spanish Community of Madrid, entirely on the premises of the airport Adolfo Suárez Madrid-Barajas and occupies an area of approximately 176 ha.

The plant connects via approximately 6 km long underground 45kV lines to a new 45/220kV substation called ‘SE PSFV MAD 120 MW’ -to be built by the promoter-, where the voltage of the generated electricity will be increased to 220kV. The produced electricity is then injected into the grid at 220 kV via an existing TSO substation, ‘SE REE AENA 220/45kV L1’, which is adjacent to the promoter’s substation. The two substations will be connected through an approximately 240m long underground cable.

Due to its technical characteristics, the PV plant and associated grid connection infrastructure falls under Annex II of the European EIA Directive, leaving it to the national competent authority to determine according to Annex III of said Directive whether an environmental impact assessment is required. The PV plant, including its grid connection infrastructure, was presented to the competent authorities, and based on national and regional environmental regulations, it was initially subject to an ordinary Environmental Impact Assessment (EIA), as required by Spanish *Ley 21/2013 de Evaluación Ambiental (Annex I, Group 3, Item J)*. An Environmental Impact Assessment report (EIA report) was prepared and was presented for public consultation. Subsequently, Spanish *Real Decreto-ley 6/2022* was adopted, introducing measures to streamline renewable energy projects amidst the energy crisis related to the

<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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Ukraine war. The decree was applicable to all projects regardless of their processing status. The Project met the criteria outlined in Article 6 of this regulation, requiring the Project to transition to a simplified environmental assessment procedure and requiring the preparation of an Executive Summary quantifying the Project's environmental impacts. The *Directorate General for Environmental Quality and Assessment* issued a favourable opinion on the Project through a Resolution on 21/06/2022, concluding the environmental permitting process based on updated documentation, as well as on the original EIA report and stakeholder input.

Following the initial EIA process and comments received during the related public consultation process, design modifications were made to mitigate potential impacts of the Project, including relocating specific PV fields to avoid significant environmental effects. More specifically, two sections of the Project which were originally located adjacent to the border of SAC "Cuencas de los ríos Jarama y Henares", were relocated to ensure a minimum distance of 100 m from the SAC and to ensure a minimum distance of 200 m between PV modules and water bodies that may serve as potential breeding sites for insects. The changes made to the Project are captured in the required Executive Summary submitted under the accelerated permitting process.

The Project site does not overlap with any protected areas and according to the Resolution no direct or indirect impacts are expected. The closest Natura 2000 sites to the Project are: SAC "Cuencas de los ríos Jarama y Henares" (ES3110001) at 410 m, SPA "Estepas Cerealistas de los ríos Jarama y Henares" (ES0000139) at 6.7 km, SAC "Vegas, cuevas y páramos del sureste de Madrid" (ES3110006) at 8.5 km and SPA "Cortados y Cantiles de los ríos Jarama y Manzanares" (ES0000142) at 8.5 km. In the immediate vicinity of the airport there are several areas declared as IBAs (Important Bird Areas); the closest are the following: IBA nº74 (Talamaca – Camarma) at 1.6 km, IBA nº 73 (Cortados y Graveras del Jarama) at c. 10 km and IBA nº 71 (El Pardo – Vinuelas) at 5.8 km. The closest natural area of regional protection to the Project is the Regional Park of the Upper Manzanares Basin, located 5.7 km to the north. The nearest wetland is the Lagunas de Belvis lagoon complex, located 1 km north of the Project. In the vicinity of the Project, there are two special regime forests, as included in the Catalogue of Public Forests of the Community of Madrid.

A wildlife survey conducted prior to the start of construction identified several threatened species in the Project's surrounding areas, including Red Kite (*Milvus milvus*), listed as endangered in the national catalogue and vulnerable in the Community of Madrid's catalogue of threatened species. The Eagle Owl (*Bubo bubo*) and White Stork (*Ciconia ciconia*), both classified as vulnerable in the Community of Madrid's catalogue of threatened species; and the Black Vulture (*Aegypius monachus*) and Spanish Imperial Eagle (*Aquila adalberti*), both classified as endangered in both the national and Community of Madrid's catalogues of threatened species. Impacts expected are due to increased noise levels related to construction activities. The probability that threatened species will be encountered in areas where Project activities take place is considered low, as stated in the EIA report.

No protected plant species are located in the Project area.

The impacts during the construction phase relate to the increase of dust, noise and gaseous emissions mainly related to earth works, as well as increased traffic in the surrounding areas, soil erosion due to the loss of vegetational cover, and loss or fragmentation of habitats. During implementation works there is low risk of accidental spills of oils and hydrocarbons. During the operational phase, the main impacts are related to vegetation clearing and the presence of an additional lighting system on the site perimeter. Light pollution can affect wildlife behaviour in the environments adjacent to the airport premises. Other minor impacts during the operational phase are related to the presence of machinery for maintenance works which can cause a temporary increase in dust, noise and gaseous emissions. During maintenance works there is low risk of contamination due to accidental spills. According to the original EIA report, these impacts are considered compatible with the land use planned for the plots in the Airport Master



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Plan and current urban planning and insignificant considering the low environmental values of vegetation and landscape found in the study area.

Specific measures foreseen in the original EIA report can be summarised as follows:

- Prevention and mitigation measures during construction for dust and noise emissions, e.g. by applying water to surfaces and use of well-maintained machinery;
- Protection of soil and groundwater against spills, e.g. by proper storage of materials, use of containment systems and removing damaged machinery from site;
- Management of removed topsoil, for later reuse, and restoration, e.g. by removing unwanted material from stockpiles and applying periodic irrigation;
- Water quality monitoring, measures to avoid accidental spills of oils and hydrocarbons to the ground and to water bodies;
- Implementation of a proper waste management system on site;
- Fauna and flora pre-construction surveys to identify the need for relocation, if needed;
- Preservation of vegetation where possible and vegetation cover restoration in areas not permanently used by the Project, and limiting paving or use of concrete;
- Considering the air traffic related to the airport activities, it should be avoided to create attractive areas for fauna within the solar PV plant, such as water bodies;
- Planning of construction activities outside of breeding and nesting seasons;
- Avoiding light pollution to nearby sensitive areas by avoiding scattering of light.

According to the Directorate General for Environmental Quality and Assessment's Resolution, which is based on the analysis of (a) the Executive Summary provided by the promoter and (b) the EIA report originally submitted, there are no significant impacts on the environment to be expected from this Project.

The Project substantially contributes to the climate change mitigation objective. The Project has been assessed for Paris alignment and is considered to be aligned both against low carbon and resilience goals against the policies set out in the Climate Bank Roadmap and the Bank's Energy Lending Policy. Residual risks from physical climate hazards are deemed low.

### **EIB Carbon Footprint Exercise**

In accordance with the Bank's current Carbon Footprint methodology it is calculated that based on the avoidance of electricity generation from a combination of existing and new power plants in Spain (combined margin for intermittent generation), the total relative effect of the Project is a net reduction of CO<sub>2</sub> equivalent emissions by ca. 72 kt CO<sub>2</sub>e/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, Aena, is in scope and screened into the PATH framework, because it is considered high emitting. The counterparty is not considered as highly vulnerable to physical climate change according to the PATH framework.

The counterparty already meets the requirements of the EIB PATH framework with its existing alignment plan, which is publicly available<sup>2</sup>.

<sup>2</sup> <https://www.aena.es/en/corporative/environment-sustainability/climate-change/climate-action-plan.html>



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## **Social Assessment, where applicable**

The implementation of the Project will not lead to involuntary physical or economic displacement or resettlement. The Project is being implemented within the premises of the airport Adolfo Suárez Madrid-Barajas.

Public reports are pointing out the possibility of use of forced labour in the supply chain of solar PV panels. This issue was still unknown at the time of approving the framework loan and the procurement of PV modules for the project by the EPC contractor was already finalized at the time of appraisal of this allocation. However, a list of main sub-suppliers was provided by the selected PV module supplier and reviewed by the promoter in an effort aligned with the status of procurement.

The promoter and selected PV module supplier have relevant policies in place, rejecting the use of forced labour within their organization and throughout their supply chains

## **Public Consultation and Stakeholder Engagement**

Public consultation was carried out as part of the initial ordinary EIA process, with announcements published in the Official State Gazette on and the regional gazette of Madrid.

## **Other Environmental and Social Aspects**

The promoter is known to the Bank from previous operations and has experience in the construction and operation of solar PV plants at various airports. The promoter has a solid organisational structure and is also ISO 9001 and ISO 14001 certified. It has the experience and the capacity to implement this Project in line with the Bank's requirements.

## **Conclusions and Recommendations**

Based on the information available and with appropriate conditions (listed below), the Project is expected to be acceptable in environmental and social terms for the Bank's financing:

- The Project shall comply with the relevant provisions of the Bank's labour standard, which foresees zero tolerance for the use of forced labour.
- The promoter shall store and keep up to date all documents relevant for the Project supporting the compliance with the provisions of EU environmental legislation, permits and environmental approvals, and shall promptly upon request deliver such documents to the EIB.